SANTA BARBARA LOCAL AGENCY FORMATION COMMISSION
EXECUTIVE OFFICER'S REPORT

OUT-OF-AGENCY SERVICE AGREEMENT (OASA)

December 12, 2024 (Agenda)

LAFCO 24-04 City of Santa Maria to provide potable Water to Santa Maria Bonita Elementary School site.

PROPONENT: City of Santa Maria on behalf of Santa Maria Bonita School District.

ACREAGE & LOCATION: Approximately 5.01 acres located 2715 West Main Street, Santa Maria, CA. 93458, approximately three miles from the nearest City boundary Includes: APN 113-050-007 **(Attachment A).**

PURPOSE: Bonita Elementary School is requesting a domestic water connection from the City of Santa Maria since the existing well water source has been tested to have nitrate levels exceeding the State-mandated maximum contaminant level, upper secondary MCLs for total dissolved solids, and has been cited by Santa Barbara County Environmental Health Services (SBC EHS) for noncompliance. The school has been utilizing bottled water for domestic purposes due to these issues.

HISTORY: According to the citation issued on June 20, 2017, Santa Barbara County Health Services determined ongoing nitrate concentrations above the MCL. The Compliance Order required a written explanation of the situation and a plan for corrective action. An operations plan for the school's water system was put in place with a water monitoring schedule, and a Water Quality Emergency Notification Plan was subsequently issued by SBCEHS. **(Attachment B).**

The School's water system consists of a well, two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator, per the Bonita School Operations Plan. The well was constructed in 2000 and is 430 feet deep with an 8-inch diameter PVC casing. The school is a transitional kindergarten through 6th grade public school with approximately 600 students and staff members.

The school has provided proper notification to the water system users, and has posted nitrate exceedance notifications at all sinks and fountains in the facility. Santa Maria Bonita School District is required to submit a plan to EHS for approval. The applicant

is requesting a domestic water connection to best mitigate the violation, since there is nearby existing water main that runs along W. Betteravia Road.

The State Water Resources Control Board has identified the Santa Maria Bonita Elementary School in need of meeting regulatory compliance and has identified the system as a public health threat. MKN and Associates, Inc. (MKN) completed a feasibility study evaluating water supply options to serve Bonita Elementary School. Of the six options analyzed, the requested out-of-agency domestic water service agreement would best allow the school to connect to the City of Santa Maria's water supply to mitigate the water violations. Other option studied were Wellhead Treatment, Point-of-Entry/Point-of-Use Treatment, New Source of Supply, Consolidation with City of Santa Maria. MKN acknowledges that the alternatives presented are by no means representative of all possible alternatives. The presented alternatives were estimated to be the best potential options to efficiently mitigate the issues experienced by the School. The Feasibility Study is included in Attachment B.

OUT-OF-AGENCY SERVICE AGREEMENTS:

Much of the following information was included in the City of Santa Maria's OASA Application to LAFCO **(Attachment C).** It is repeated here as pertinent information for the Commission' s consideration:

"Santa Maria-Bonita Elementary School is currently served by one well two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator. The treatment vessels are Culligan chloride cycle anion exchangers (Model Number CA-302) with a maximum capacity of 190 gpm each. The treatment process generates brine waste which is stored onsite. The School has a service contract with Culligan which includes maintenance of the treatment system, replacement or regeneration of treatment media, and brine disposal. There are approximately 600 students and staff. Bonita School has distributed notification or made direct contact to all personnel.

The applicant is requesting a domestic water connection to best mitigate the violation. Six other options were considered to mitigate the violation including Wellhead Treatment, Point-of-Entry/Point-of-Use Treatment, New Source of Supply, Consolidation with City of Santa Maria. After reviewing the options. the cost and potential ineffectiveness of mitigating the violation for each alterative led to the determination that out-of-agency service agreement connecting to the City's existing water system was the most reliable course of action.

This property is located outside of city limits and the City's sphere of influence. Staff believes that a domestic water connection would be the logical solution to Bonita Elementary Schools water quality violation affecting public health and safety.

Annexation of the property into the City's boundary is not possible at this time, Bonita school is located in an area of prime ag land and is approximately 2.9 miles from the nearest City boundary, excepting the Wastewater Treatment Plant and is thus not a good candidate for annexation. The request for domestic water service is an urgent need. The request for domestic water service is not intended for development or expansion purposes. but solely to address an emergency health and safety situation."

The pertinent section of LAFCO's Authorization to Approve Out of Agency Service Agreement is included in **Attachment D**.

GENERAL ANALYSIS:

1. Description of Project

Since the parcels are in the unincorporated area, land use authority within the County of Santa Barbara is Educational Facility and zoned Agriculture-II (minimum lot size - 40 acres gross; AG-II-40). The County' s Comprehensive Plan Designation is Rural Area.

The existing site consist of elementary school on the 5.01-acre site, in compliance with Section 35.21.030 of the County Land Use and Development Code;

The property is currently served by a well that has a documented existing or impending threat to the public health and safety.

2. Requirement for LAFCO Approval

LAFCO regulates boundary changes and extensions of service without boundary changes. Government Code Section 56133 states that "A city or a district may provide new or extended services by contract or agreement outside its boundaries only if it first requests and receives written approval from the commission in the affected county."

It further provides that LAFCO "may authorize a city or district to provide new or extended services outside its jurisdictional boundaries but within its sphere of influence in anticipation of a later change of organization."

3. Sphere of Influence

The area proposed for the Out-of-Agency Agreement is outside the City of Santa Maria's sphere of influence **(Attachment A).** The proposed service area is approximately 2.9 miles from the nearest City boundary and the sphere of influence. Section 56133(c) also allows service if outside a sphere of influence to respond to an existing or impending threat to the public health and safety of residents of the affected territory if both of the following requirements are met:

> (1) The entity applying for the contract approval has provided the commission with documentation of a threat to the health and safety of the public or the affected residents.
>
> (2) The commission has notified any alternate service provider, including any water corporation as defined in Section 241 of the Public Utilities Code, or sewer system corporation as defined in Section 230.6 of the Public Utilities Code, that has filed a map and a statement of its service capabilities with the commission.

The current Municipal Service Review and Sphere of Influence update does not discuss the Santa Maria Bonita Elementary School site. The City's Land Use Element of the General Plan, indicate possible annexation efforts are focused on the East side of Santa Maria with the intent of annexing as little prime ag land as possible. Given Bonita school's location to the West of the City and its location within prime ag land, it is unlikely that the territory will be annexed in the future. Staff recommendation is to maintain the existing City's SOI. As a result of this application for an Out-of-Agency service agreement under an existing public health and safety threat, the OASA should be authorized. The District is seeking Drinking Water State Revolving Funds (DWSRF) for capital and associated startup costs. Operating and maintenance costs will be funded by the District. The connection of the Bonita school and City system would resolve the compliance order. The City would extend a new 2-inch diameter pipe and service connection. If future annexation is requested or conditioned amending the sphere would be necessary.

4. Plan for Services: The City of Santa Maria provided the following statement in response to LAFCO staffs Plan for Service request: a domestic water connection with the City of Santa Maria water system, involving the connection of a new two-inch diameter service line for 1.7-miles north along Black Road from the City of Santa Maria Wastewater Treatment Plant to the intersection of Black Road and West Main

Street, and then extending west to the intersection of West Main Street and Bonita School Road. This solution also involves the installation of a hydropneumatic tank to address peak demands and maintain the existing storage tank and wells for fire suppression and irrigation.

"The proposed project consists of Bonita Elementary School connecting via 8,100 feet of new 2-inch diameter pipe meter to the City's water distribution system in front of the Wastewater Treatment Plant. All water lines and associated infrastructure after the meter would be private and would be the responsibility of the Bonita Elementary School (Santa Maria Bonita School District) to operate and maintain.

5. Landowner Consent to Annex in Order to Receive Services

Commission policy states that when property may ultimately be annexed to a city or a district, approval of an Out-of-Agency Service Agreement should require the landowner to agree to annex the territory with a consent to annex form. This is a condition of approval. No specific timeframe has been required. The City has indicated Bonita school is located in an area of prime ag land and is approximately 2.9 miles from the nearest City boundary, excepting the Wastewater Treatment Plant and is thus not a good candidate for annexation.

6. Environmental Impact of the Proposal

The SMBSD is the Lead Agency responsible for the completion of environmental review. The SMBSD has prepared an Initial Study-Mitigated Negative Declaration (IS-MND) for the project pursuant to the State California Environmental Quality Act (CEQA) Guidelines Section 15000 et seq.

The purpose of the environmental review process is to provide information about the environmental effects of the actions and decisions made by LAFCO and to comply with the California Environmental Quality Act (CEQA). In this case, the SMBSD acting as Lead Agency completed a Mitigated Negative Declaration under the State Guidelines. The IS-MND includes mitigation measures for the environmental impacts identified in the initial study in the topic areas of Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise and Transportation **(Attachment F)**.

Conclusion:

The City of Santa Maria, on behalf of Santa Maria Bonita School District, the property owner is requesting approval of an Out-of-Agency Service Agreement. The Commission has the authority to approve OASA' s pursuant the Government Code Section 56133(c), outside of an agencies sphere of influence to respond to an existing or impending threat to the health or safety of the public or the residents of the affected territory. The property is outside the City of Santa Maria's sphere of influence. In addition, the application is in response to an existing or impending threat to the public health and safety and would be approvable under this determination.

The well has been determined to be in violation of the California Safe Drinking Water Act, due to surveys indicating nitrate levels exceeding the maximum contaminant level and upper secondary MCLs for total dissolved solids. The City has an existing water distribution system in front of the Wastewater Treatment Plant and is willing to connect the property for potable water for students and staff.

The main CEQA issue for this project is whether the provision of potable water services to Bonita Elementary School would cause growth inducing impacts. This extension of services can be found to NOT be growth inducing for the following reasons:

• The connection of a new two-inch diameter service line would run 1.7-miles north along Black Road from the City of Santa Maria Wastewater Treatment Plant to the intersection of Black Road and West Main Street, and then extending west to the intersection of West Main Street and Bonita School Road;

• The new infrastructure needed for the project would be private and would be the responsibility of the Bonita Elementary School.

• The project area and school community to be served by this project is already receiving waters. The project would not include housing or development in areas that could induce growth and would also not remove any barriers that could result in population growth.

• Provision of services to Bonita Elementary School site would be limited to the

properties listed above in this general industry area due to the unique threat to health and safety caused by the failure of the onsite well that previously provided potable water to Bonita Elementary School.

• Provision of potable water services to the Bonita Elementary School use sources under an out of agency service agreement must meet the findings of Government Code section 56133(c), which is that services may be extended outside of a city's or district's boundaries only if the property is to respond to an existing or impending threat to the health or safety of the public or the residents of the affected territory.

ATTACHMENTS

Attachment A - Map of the Proposed Out-of-Agency Service Area
Attachment B - Documentation of Existing Threat to Public Health and Safety
Attachment C - City of Santa Maria Resolution of Application
Attachment D - LAFCO Authorization to Provide Out-of-Agency Services
Attachment E - Santa Maria Bonita School Environmental Determination
Attachment F - LAFCO Notice of Determination
Attachment G - LAFCO Out of Agency Service Agreement

ALTERNATIVES FOR COMMISSION ACTION

After reviewing this report and any testimony or materials that are presented, the Commission can follow one of the following options:

OPTION 1 - APPROVE the request for an Out-of-Agency Service Agreement **(Attachment G)**, subject to the following terms and conditions:

a) The City's provision of water services shall be limited to the 5.01 acres located at 2715 West Main Street, Santa Maria, CA. 93458 (APN 113-050-007).
b) The landowners shall execute and record an agreement approved by the Executive Officer that consents to any future annexation of the territory, which agreement shall enure to and bind all successors in interest to the property.
c) Said out-of-agency service agreement is for potable water service only shall remain in effect until such time as an annexation is approved by the Commission.

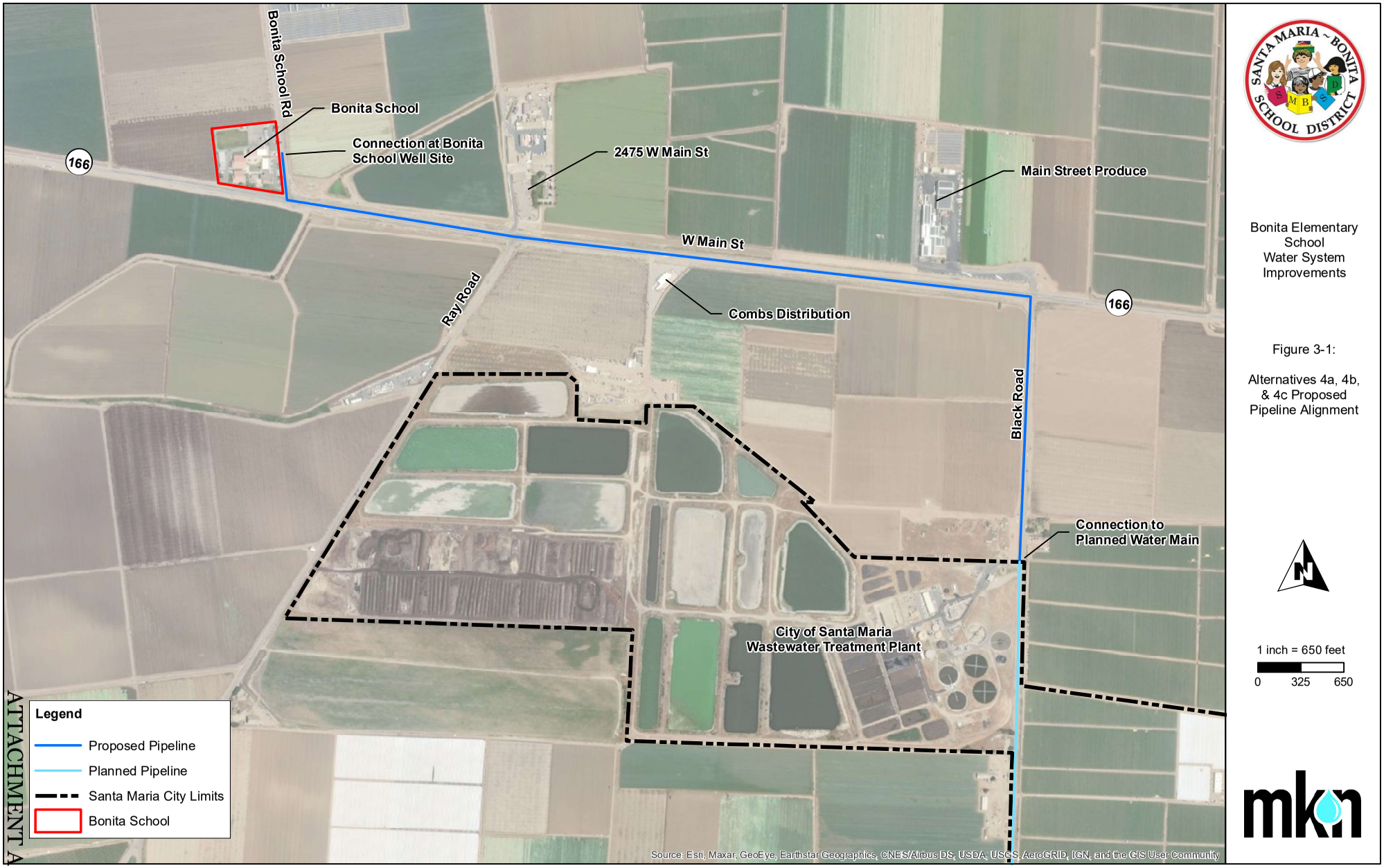
OPTION 2 - Deny the request.

OPTION 3 - Continue the item to obtain additional information.

RECOMMENDED ACTION:

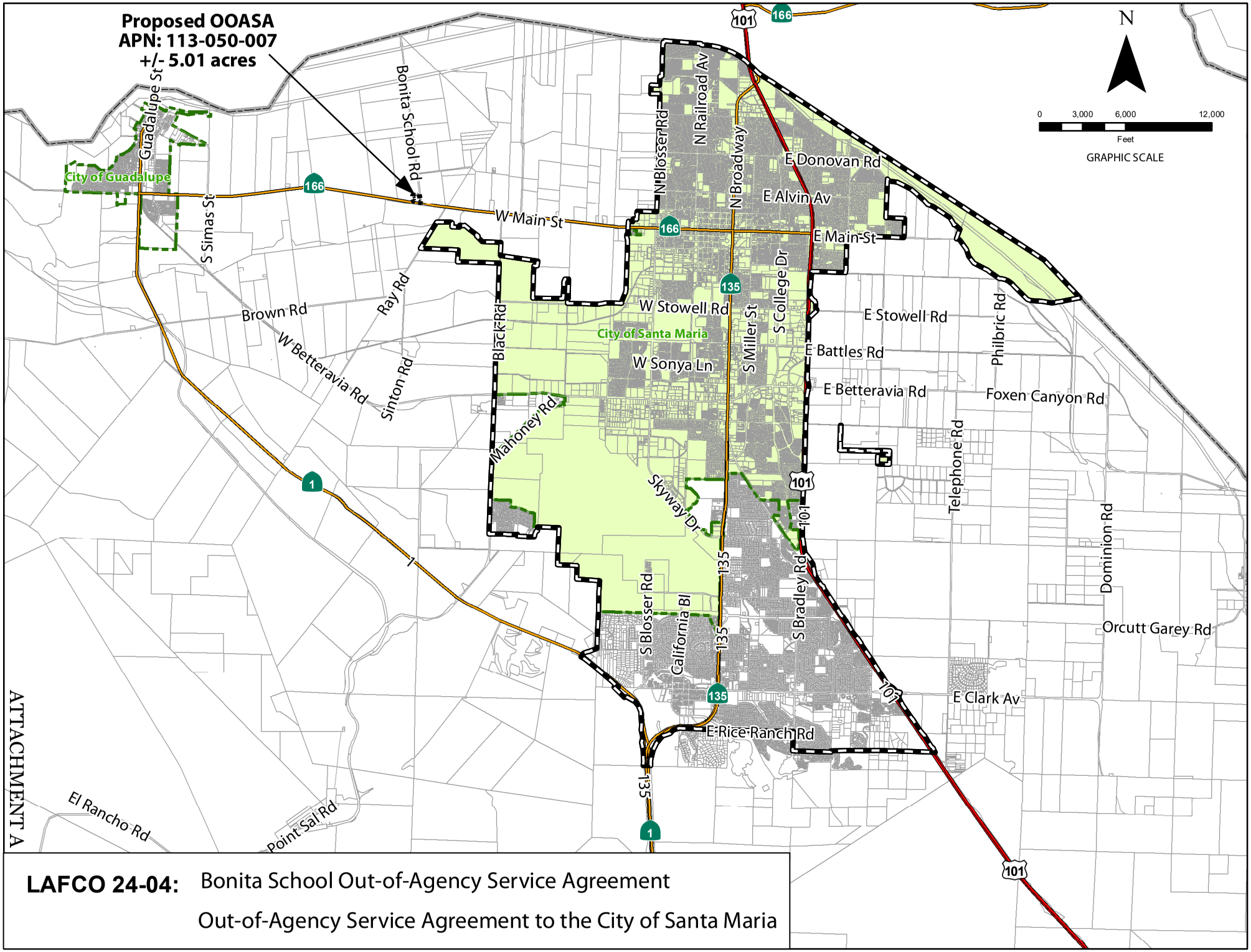
Approve OPTION 1.

Mike Prater
Executive Officer
LOCAL AGENCY FORMATION COMMISSION



ATTACHMENT A

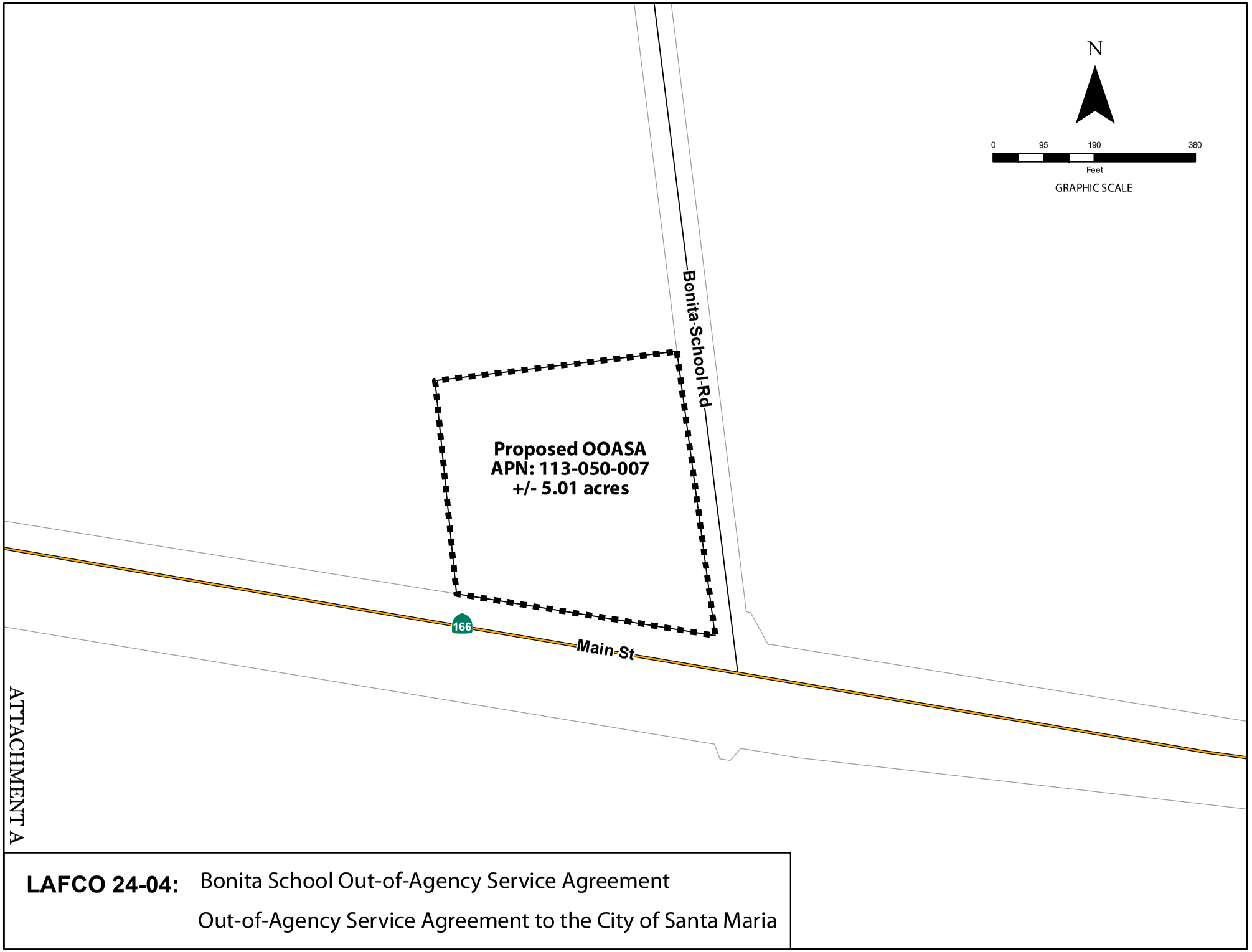
Attachment A



ATTACHMENT A

LAFCO 24-04: Bonita School Out-of-Agency Service Agreement

Out-of-Agency Service Agreement to the City of Santa Maria



ATTACHMENT A

LAFCO 24-04: Bonita School Out-of-Agency Service Agreement

Out-of-Agency Service Agreement to the City of Santa Maria

Santa Barbara County
PUBLIC Health
DEPARTMENT

Environmental Health Services

225 Camino del Remedio • Santa Barbara, CA 93110
805/681-4900 • FAX 805/681-4901

Takashi M. Wada, MD, MPH Director/*Health Officer*
Susan Klein-Rothschild, MSW Deputy *Director*

2125 S. Centerpointe Pkwy. #333 • Santa Maria, CA 93455-1340
805/346-8460 • FAX 805/346-8485

Lawrence Fay, REHS Director *of Environmental Health*

June 20, 2017

Scott Roy, Coordinator MOFT
Santa Maria-Bonita School District
708 S. Miller
Santa Maria, CA. 93454

Water System No: CA4200833

CITATION NO. 04_72_17C_008
NITRATE MAXIMUM CONTAMINANT LEVEL VIOLATION
FOR JUNE 2017

Dear Mr. Roy,

Enclosed is a Citation issued to the Bonita School public water system.

Your receipt of this notice indicates that your water system has exceeded the Maximum Contaminant Level (MCL) **for Nitrate on June 6, 2017.** The Health and Safety Code requires that you immediately notify the water consumers of these test failures and associated health risks. A Tier 1 Notification template has been provided to you at the time this department was notified of the exceedance. Additionally, the State Water Resources Control Board, Division of Drinking Water requires that our department issue a formal Enforcement Action, e.g. a citation or compliance order, in such circumstances.

The following are the instructions on how to complete the noticing and what information will need to be returned to this office:

A. The Tier 1 Notification must be issued to the public (all water users) as soon as possible within 24 hours of learning of the MCL exceedance, in a manner designed to reach residential, transient, and non-transient users of the water system, using one of the following forms at minimum: (1) Radio or television; (2) Posting in conspicuous locations throughout the area served by the water system; (3) Hand delivery to persons served by the water system; or (4) Other method approved by EHS.

B. A copy of the signed and dated notice must be returned to this office by July 6, 2017.

C. A written explanation of the situation and plan for corrective action must be returned to this office by July 20, 2017.

Please find the Citation for this incident attached, carefully read the "Directives" section for further required action, and note the relevant regulation sections included for your reference.

If you have any questions regarding this matter, please contact me at (805) 346-8475 or Deanna.Talerico@sbcphd.org

Sincerely,

Deanna Talerico

Deanna Talerico
Senior Environmental Health Specialist
EHS Drinking Water Systems Program, Santa Barbara County

Enclosures
Certified Mail No. [Cert. Number]

cc:

Citation No. 04_72_17C_008

COUNTY OF SANTA BARBARA

DEPARTMENT OF PUBLIC HEALTH

ENVIRONMENTAL HEALTH SERVICES

Name of Public Water System: Bonita School

Water System No: CA42000833

Attention: Scott Roy, Coordinator MOFT
Santa Maria-Bonita School District
708 S. Miller
Santa Maria, CA. 93454

Issued: June 20, 2017

CITATION FOR NONCOMPLIANCE

NITRATE MAXIMUM CONTAMINANT LEVEL VIOLATION

CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64431

JUNE 2017

The California Health and Safety Code (hereinafter "CHSC"), CCR Title 22, Chapter 14, Article 4, Section 64258 authorizes the Local Primacy Agency, in this case the Santa Barbara County Environmental Health Services department (hereinafter "SBC EHS") to conduct enforcement actions and issue citations to a public water system under the jurisdiction of the local primacy agency when EHS determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing

with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

SBC EHS, acting by and through its delegation from the State Water Resources Control Board, Division of Drinking Water, hereby issues this citation pursuant to Section 116650 of the CHSC to the Bonita School for violation of Title 22, California Code of Regulations (CCR), Section 64431.

A copy of the applicable statutes and regulations are included in Appendix 1, which is attached hereto and incorporated by reference.

STATEMENT OF FACTS

The Bonita School is classified as a Non-Transient, Non-Community water system serving a school campus with approximately 575 students and staff. The Bonita School water system has one active well, and is equipped with an ion exchange water treatment system designed to remove excesse nitrates from the raw water, in order to comply with the Maxmimum Contaminant Level (MCL) of 10 ppm and provide safe, potable treated water to the students and users. SBC EHS received laboratory results, submitted and notified by the Bonita School contract Certified Operator staff within 24 hours of their receipt of the results as required, that report a result of 10.8 ppm for Nitrate (as NO3-N) in the Bonita School Water System on June 6, 2017, exceeding the MCL of 10 ppm. According to the Bonita School, the water treatment company had visited the facility for routine equipment servicing (canister exchange) the day prior. The Bonita School conducts internal nitrate testing in order to carefully monitor their nitrate levels, as they have had several treatment failures and resulting exceedances in the last 18 months. The Bonita School has already issued a Tier 1 Notification to the

water system users, and posted required Nitrate MCL exceedance notifications at all sinks and fountains in the facility.

DETERMINATION

The Bonita School water system is in violation of Title 22, California Code of Regulations (CCR), Section 64431: Specifically, Bonita School exceeded the Primary Maximum Contaminant Level (MCL) of 10 ppm for Nitrate listed in Table 64431-A, in the water supplied to the public.

DIRECTIVES

The Bonita School is hereby directed to take the following actions:

1. As soon as possible within 24-hours after learning of a nitrate MCL exceedance, notify the public (all water users) of the acute nitrate MCL violation. The notification must contain the Tier 1 required health effects languages and a description of the incident.
2. A copy of the completed consumer notification and proof of notification shall be submitted to EHS no later than July 6th, 2017.
3. By July 20, 2017, submit to EHS a written explanation of why the treatment system failed and the high nitrate result occurred, and a detailed corrective action plan to address how this will be prevented from occurring in the future.
4. Coordinate with contract treatment company(s) to ensure the treatment system is being operated in a manner that maintains the nitrate levels below the MCL of 10 ppm at all times. If necessary, research other treatment options or companies. Obtain approval from EHS prior to any changes to the water system.

5. Maintain consumer notification signage posted until further notice, or approval by EHS to remove.

All submittals required by this Citation shall be electronically submitted to the SBC EHS at the following address. The subject line for all electronic submittals corresponding to this citation shall include the following information: Water System name and number, citation number and title of the document being submitted.

Deanna Talerico
Deanna.Talerico@sbcphd.org

SBC EHS reserves the right to make such modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

Nothing in this Citation relieves the Bonita School of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Citation shall apply to and be binding upon the Bonita School, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Citation are severable, and the Bonita School shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

_____ _____

Deanna Talerico — Date
Senior Environmental Health Specialist
EHS Drinking Water Systems Program
Santa Barbara County Public Health Department

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Appendices:

1. Applicable Statutes and Regulations
2. Tier 1 Public Notification for Nitrates template (English and Spanish)

Certified Mail No. [Cert. Number]

APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS FOR CITATION NO. 04_72_17C_008

NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.

California Health and Safety Code (CHSC):

Section 116271 states in relevant part:

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

(1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
(2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
(3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
(4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
(5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
(6) Chapter 7 (commencing with Section 116975).
(7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
(8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
(9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
(10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
(11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
(12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

(k) (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.

(2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116555 states in relevant part:

(a) Any person who owns a public water system shall ensure that the system does all of the following:
(1) Complies with primary and secondary drinking water standards.
(2) Will not be subject to backflow under normal operating conditions.
(3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Section 116650 states in relevant part:
(a) If the state board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the state board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
(c) A citation may specify a date for elimination or correction of the condition constituting the violation.
(d) A citation may include the assessment of a penalty as specified in subdivision (e).
(e) The state board may assess a penalty in an amount not to exceed one thousand dollars ($1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation and shall be in addition to any liability or penalty imposed under any other law.

California Code of Regulations, Title 22 (CCR):

Section 64431 states in relevant part:
Article 4. Primary Standards--Inorganic Chemicals
§64431. Maximum Contaminant Levels--Inorganic Chemicals. Public water systems shall comply with the primary MCLs in table 64431-A as specified in this article

Table 64431-A
Maximum Contaminant Levels
Inorganic Chemicals

Chemical	*Maximum Contaminant Level, mg/L*
Aluminum	1.
Antimony	0.006
Arsenic	0.010
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Hexavalent chromium	0.010
Mercury	0.002
Nickel	0.1
Nitrate (as nitrogen)	10.
Nitrate+Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Perchlorate	0.006
Selenium	0.05
Thallium	0.002

* MFL=million fibers per liter; MCL for fibers exceeding 10 µm in length.

Section 64432 states in relevant part:
§64432. Monitoring and Compliance--Inorganic Chemicals
(a) All public water systems shall monitor to determine compliance with the nitrate and nitrite MCLs in table 64431-A, pursuant to subsections (d) through (f) and Section 64432.1. All community and nontransient-noncommunity water systems shall monitor to determine compliance with the perchlorate MCL, pursuant to subsections (d), (e), and (l), and section 64432.3. All community and nontransient-noncommunity water systems shall also monitor to determine compliance with the other MCLs in table 64431-

A, pursuant to subsections (b) through (n) and, for asbestos, section 64432.2. Monitoring shall be conducted in the year designated by the State Board of each compliance period beginning with the compliance period starting January 1, 1993.

§64432.1. Monitoring and Compliance--Nitrate and Nitrite.
(a) To determine compliance with the MCL for nitrate in Table 64431-A, all public water systems using groundwater and transient-noncommunity systems using approved surface water shall monitor annually, and all community and nontransient-noncommunity systems using approved surface water shall monitor quarterly.
(1) The water supplier shall require the laboratory to notify the supplier within 24 hours whenever the level of nitrate in a single sample exceeds the MCL, and shall ensure that a contact person is available to receive such analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any acute nitrate MCL exceedance if the laboratory cannot make direct contact with the designated contact person within 24 hours. Within 24 hours of notification, the water supplier shall: (A) Collect another sample, and
(B) Analyze the new sample; if the average of the two nitrate sample results exceeds the MCL, report the result to the State Board within 24 hours. If the average does not exceed the MCL, inform the State Board of the results within seven days from the receipt of the original analysis.
(C) If a system is unable to resample within 24 hours, it shall notify the consumers by issuing a Tier 1 Public Notice pursuant to section 64463.1 and shall collect and analyze a confirmation sample within two weeks of notification of the results of the first sample.
(2) For public water systems using groundwater, the repeat monitoring frequency shall be quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. After four consecutive quarterly samples are less than the MCL, a system may request that the State Board reduce monitoring frequency to annual sampling.
(3) For public water systems using approved surface water, the repeat monitoring frequency shall be quarterly following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. After four consecutive quarterly samples are less than 50 percent of the MCL, a system may request that the State Board reduce monitoring frequency to annual sampling. A system using approved surface water shall return to quarterly monitoring if any one sample is greater than or equal to 50 percent of the MCL.
(4) After any round of quarterly sampling is completed, each community and nontransient-noncommunity system which initiates annual monitoring shall take subsequent samples during the quarter which previously resulted in the highest analytical results.

Section 64463 states in relevant part:
§64463.1. Tier 1 Public Notice.
(a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs: (1) Violation of the total coliform MCL when: (A) Fecal coliform or E. coli are present in the distribution system; or (B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or E. coli in the repeat sample; (2) Violation of the MCL for nitrate, nitrite, or total nitrate and nitrite, or when the water system fails to take a confirmation sample within 24 hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL.

(b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the State Board that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall: (1) Give public notice pursuant to this section; (2) Initiate consultation with the State Board within the same timeframe; and (3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health. (c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms: (1) Radio or television; (2) Posting in conspicuous locations throughout the area served by the water system; (3) Hand delivery to persons served by the water system; or (4) Other method approved by the State Board, based on the method's ability to inform water system users.

Section 64465 states in relevant part:
§64465. Public Notice Content and Format.
(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:
(1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s); (2) The date(s) of the violation or occurrence; (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G; (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water; (5) Whether alternative water supplies should be used; (6) What actions consumers should take, including when they should seek medical help, if known; (7) What the water system is doing to correct the violation or occurrence; (8) When the water system expects to return to compliance or resolve the occurrence; (9) The name, business address, and phone number of the water system owner,

operator, or designee of the water system as a source of additional information concerning the public notice; (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: "Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail."; and (11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time."

(c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements: (1) For a Tier 1 public notice: (A) The notice shall be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the public water system, and the notice shall include a telephone number or address where such individuals may contact the public water system for assistance; and (B) If any non-English-speaking group exceeds 1,000 persons served by the public water system, but does not exceed 10 percent served, the notice shall include information in the appropriate language(s) regarding the importance of the notice, and the telephone number or address where such individuals may contact the public water system to obtain a translated copy of the notice from the public water system or assistance in the appropriate language;

(d) Each public notice given pursuant to this article shall: (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level; (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and (3) Not contain language that minimizes or contradicts the information being given in the public notice.

Appendix 64465-D.

Health Effects Language Inorganic Contaminants.

Nitrate: "Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women".

Citation No. 04_72_17C_008

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

DRINKING WATER WARNING

[System] water has high levels of nitrate

DO NOT GIVE THE WATER TO
INFANTS UNDER 6 MONTHS OLD OR PREGNANT WOMEN
OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 10 milligrams per liter. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- **DO NOT GIVE THE WATER TO INFANTS.** *Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin.* Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.

- **PREGNANT WOMEN SHOULD NOT CONSUME THE WATER.** *High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.*

- Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.

- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.

- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems, storm water run-off, and fertilizers). Levels of nitrate in drinking water can vary throughout the year. We will let you know if the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- *SCHOOLS: Must notify school employees, students, and parents (if the students are minors).*
- *RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.*
- *BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.*

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

INFORMACIÓN IMPORTANTE SOBRE SU AGUA POTABLE

Este aviso contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

ADVERTENCIA SOBRE EL AGUA POTABLE

El agua de [System] tiene altos niveles de nitratos

NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES O A MUJERES EMBARAZADAS. TAMPOCO USE ÉSTA AGUA PARA PREPAPAR FORMULA INFANTIL

Los resultados de las pruebas del agua recibidas el [date] mostraron niveles de nitrato de [level and units]. Estos niveles exceden el estándar o nivel máximo de contaminante (MCL) de 10 milígramos por litro. Los nitratos en el agua potable son una preocupación seria en bebés menores de seis meses.

¿Qué debe hacer?

- **NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES.** *Los bebés menores de 6 meses que toman agua con nitrato en exceso del nivel máximo de contaminante (MCL), se pueden enfermar seriamente y rápidamente. Y si los bebés no reciben atención médica, pueden morir debido a que los altos niveles de nitratos pueden interferir con la capacidad de la sangre de los bebés para transportar oxígeno. Los síntomas incluyen falta de aire y coloración azulada de la piel.* Los síntomas en los bebés se pueden desarrollar rápidamente y la salud se deteriora en cuestión de días. Si hay síntomas de intoxicación por altos niveles de nitratos, busque atención médica de inmediato.

- **LAS MUJERES EMBARAZADAS NO DEBEN CONSUMIR AGUA CON ALTOS NIVELES DE NITRATOS.** *Los altos niveles de nitrato también pueden afectar la capacidad de la sangre de mujeres embarazadas para transportar oxígeno.*

- No use agua de la llave para preparar jugo, agua, y formula para bebés menores de 6 meses. Use agua embotellada u otra agua baja en nitratos para los bebés menores de 6 meses hasta nuevo aviso.

- **NO HIERVA EL AGUA.** Hervir, congelar, filtrar, o dejar reposar el agua, no reduce el nivel de nitratos. Hervir el agua en exceso puede causar que los nitratos se concentren

más, porque los nitratos se quedan cuando el agua se evapora.

- Si tiene otros problemas de salud por el consumo de ésta agua, usted debería consultar con su doctor.

¿Qué sucedió? ¿Qué se está haciendo al respecto?

El nitrato en el agua potable puede originar de fuentes naturales, industriales, o agriculturales (incluyendo sistemas sépticos, escorrentía de agua de lluvia, y fertilizantes). Los niveles de nitrato en el agua potable pueden variar a través del año. Le informaremos si el nivel de nitratos vuelve a estar debajo del límite.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

Para más información, por favor contacte a [name of contact] al [phone number] o [mailing address]

Por favor comparta esta información con todas las demás personas que tomen de esta agua, especialmente aquellos que no hayan recibido éste aviso directamente (por ejemplo, las personas en apartamentos, asilos, escuelas, y negocios). Puede hacerlo poniendo este aviso en un lugar público o distribuyendo copias en persona o por correo.

Requisitos de Notificación Secundaria

Al recibir la notificación de alguien que opere un sistema de agua público, se debe dar la siguiente notificación dentro de 10 días conforme a la Sección 116450(g) del Código de Salud y Seguridad:

- *ESCUELAS: Deben notificar a los empleados de la escuela, estudiantes, y a los padres (si los estudiantes son menores).*
- *DUEÑOS O GERENTES DE PROPIEDAD PARA ALQUILER RESIDENCIAL (incluyendo asilos e instituciones de cuidado): Deben notificar a sus inquilinos.*
- *DUEÑOS DE PROPIEDAD DE NEGOCIOS, GERENTES, U OPERADORES: Deben notificar a los empleados de los negocios situados en la propiedad.*

Este aviso es enviado por [system].

Núm. de Identificación del Sistema Estatal de Agua: _____.

Fecha de distribución: _____.

CITY OF SANTA MARIA
COMMUNITY DEVELOPMENT
DEPARTMENT

110 S. PINE STREET #101 (ON HERITAGE WALK) • SANTA MARIA, CALIFORNIA 93458-5082 • 805-925-0951 • TDD 925-4354

October 17, 2024

Michael Prater, Executive Officer
Santa Barbara LAFCO
105 East Anapamu Street Room 407
Santa Barbara CA 93101

Subject: Proposed Out of Agency Service Agreement
Bonita Elementary School, 2715 West Main Street, Santa Maria, CA 93458

Dear Mr. Prater,

The City of Santa Maria hereby requests approval of the Local Agency Formation Commission for an out-of-agency service agreement as described by the attached materials. It is proposed to process this request under the provisions of the Cortese/Knox/Hertzberg Local Government Reorganization Act.

Enclosed with regard to this proposal are the following:

1. Resolution of application approved by the City Council on June 4, 2024 and Resolution approved by the School District on May 8, 2024.

2. Seven (7) copies of the Application for Out-of-Agency Service Agreement.

3. Seven (7) copies of a map or sketch of the requested service area.

4. A receipt of the application payment made by the School District to LAFCO in the amount of $3500 to cover the processing fee

5. A copy of all pertinent staff reports, minutes and other material concerning this proposal.

6. Signed Cost Accounting Agreement

If you have any questions regarding this proposal, you should contact me at (805) 925-0951, ext. 2244 or via email at deady@cityofsantamaria.org.

Sincerely,

Dana Eady
Interim Community Development Director
City of Santa Maria

ATTACHMENT C

RESOLUTION NO. 2024-79

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA MARIA, CALIFORNIA, AUTHORIZING AND APPROVING AN APPLICATION TO THE SANTA BARBARA LOCAL AGENCY FORMATION COMMISSION FOR AN OUT-OF-AGENCY WATER SERVICE AGREEMENT WITH SANTA MARIA BONITA SCHOOL DISTRICT FOR THEIR BONITA ELEMENTARY SCHOOL SITE

WHEREAS, the applicant, Santa Maria Bonita School District, in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 and Santa Barbara County LAFCO Policies and Procedures, requested an out-of-agency service agreement with the City of Santa Maria for domestic water at Bonita Elementary School located at 2715 West Main Street; and

WHEREAS, Bonita Elementary School is located outside the city boundary of Santa Maria; and

WHEREAS, Bonita Elementary School is currently served by a ground well water; and

WHEREAS, the water quality has been determined by the County of Santa Barbara Department of Public Health Environmental Health Services to be in excess of maximum nitrate contaminant levels and in violation of the California Safe Drinking Water Act, as stated in a compliance order to Bonita Elementary School, dated June 20, 2017; and

WHEREAS, Government Code Section 56133 states that LAFCO may authorize a city or district to provide new or extended services outside its jurisdictional boundary to respond to an existing or impending threat to the health and safety of the public or the residents of the affected territory, if the entity applying for approval has provided LAFCO with documentation of a threat to the health and safety of the public or the affected residents; and

WHEREAS, provision of domestic water from the City of Santa Maria to Bonita Elementary School, through connection, would mitigate the identified health and safety threat to the public; and

WHEREAS, the City Council considered the proposed request for an application to the Santa Barbara LAFCO on June 4, 2024; and

WHEREAS, the proposed water connection would not result in additional impacts since there will be no change in use. The water connection would be provided solely to mitigate a threat to the health and safety of the public.

NOW THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Santa Maria, California, as follows:

1. That the Director of Community Development is authorized to apply and submit an application to the Santa Barbara Local Agency Formation Commission for an out-of-agency domestic water service agreement with Santa Maria Bonita School District; and

2. The Chief Deputy City Clerk is hereby authorized to make minor changes herein to address clerical errors, so long as substantial conformance of the intent of this document is maintained. In doing so, the Chief Deputy City Clerk shall consult with the City Manager and City Attorney concerning any changes deemed necessary.

PASSED AND ADOPTED at a regular meeting of the City Council of the City of Santa Maria held this 4th day of June 2024.

Al[redacted] Posada (Jun 7, 2024 16:38 PDT)
Mayor

ATTEST:

AV (Jun 11, 2024 07:39 PDT) 06/11/2024
Chief Deputy City Clerk

APPROVED AS TO FORM:
Heather Whitham
BY: Heather Whitham (Jun 6, 2024 13:10 PDT)
CITY ATTORNEY

CONTENTS:
Dana Eady
BY: Dana Eady (Jun 7, 2024 06:53 GMT+2)
DEPARTMENT DIRECTOR

ALEX POSADA
BY:
CITY MANAGER

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA) ss.
CITY OF SANTA MARIA)

I, **Alexandra R.E. Valadez**, Assistant City Clerk of the City of Santa Maria and ex officio Clerk of the City Council **DO HEREBY CERTIFY** that the foregoing is a full, true, and correct copy of **Resolution No. 2024-79** which was duly and regularly introduced and adopted by said City Council at a regular meeting held **June 4, 2024,** and carried on the following vote:

AYES:	Councilmembers Aguilera-Hernandez, Escobedo,Cordero, and Mayor Patino.
NOES:	None.
ABSENT:	Councilmember Soto.
ABSTAIN:	None.

Assistant City Clerk
City of Santa Maria

SANTA MARIA-BONITA SCHOOL DISTRICT
RESOLUTION 23-23
ADOPTING THE MITIGATED NEGATIVE DECLARATION, CEQA FINDINGS, MITIGATION MEASURES, AND THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE BONITA ELEMENTARY SCHOOL DRINKING WATER SUPPLY IMPROVEMENTS PROJECT ("PROJECT").

WHEREAS, the Santa Maria-Bonita School District ("District") seeks to install a connection of the City's water system to Bonita Elementary School via approximately 8,100 linear feet of a two-inch diameter service line from the planned terminus of the City's water system ("Project"); and

WHEREAS, pursuant to the California Environmental Quality Act (Public Resources Code, §21000 et seq.) and the California Environmental Quality Act Guidelines (California Code of Regulations, Title 14, §15000 et seq.) (collectively, "CEQA"), an Initial Study analyzing all potential impacts of the Project was prepared for the District's consideration as the lead agency under State CEQA Guidelines Section 15063; and

WHEREAS, on the basis of the Initial Study, which indicated that all potential environmental impacts from the Project would be less than significant with the incorporation of the mitigation measures in the Mitigation Monitoring and Reporting Program ("MMRP"), District staff determined that a Mitigated Negative Declaration ("MND") should be prepared; and

WHEREAS, the Draft Initial Study-MND was prepared in accordance with CEQA and circulated for public review and comment between January 26, 2024, and ending February 26, 2024; and

WHEREAS, the District Board of Education held a publicly noticed meeting on February 14, 2024, to accept any public comment on the Draft Initial Study-MND; and

WHEREAS, pursuant to Public Resources Code Section 21081.6 and State CEQA Guidelines Section 15074(d), the MMRP has been prepared and includes mitigation measures for biological resources, hydrology/water quality, noise, cultural resources, transportation, air quality, hazards and hazardous materials and mandatory filings of significance, and

WHEREAS, all comments on the Draft Initial Study-MND submitted by members of the public as well as any responsible, trustee, and interested agencies during the public review period for the Draft Initial Study-MND were received, considered and responded to ; and

WHEREAS, the Final Initial Study-MND consists of the responses to comments and the Initial Study-MND; and

WHEREAS, the District Board of Education conducted a duly noticed public meeting on May 8, 2024, to consider the proposed Project and its potential environmental impacts, the Final Initial Study-MND, MMRP, and all oral and written evidence presented to it during all meetings; and

WHEREAS, all of the findings and conclusions made by the District Board of Education pursuant to this Resolution are based upon the oral and written evidence before it as a whole; and

WHEREAS, the District Board of Education has reviewed the Final Initial Study-MND, the MMRP, and all other relevant information contained in the administrative record regarding the Project, and no comments or additional information submitted to the Board of Education, and no other circumstances have produced substantial new information requiring substantial revisions that would trigger recirculation of the Draft Initial Study-MND or additional environmental review of the Project under State CEQA Guidelines Section 15073.5; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Education of the Santa Maria-Bonita School District do hereby finds as follows:

Section 1. The District Board of Education has reviewed and considered the information contained in the Final Initial Study-MND, and administrative record, including all oral and written comments received during the comment period, which is on file with the District and available for review. The Board of Education finds that the Final Initial Study-MND has been completed in compliance with CEQA.

Section 2. As lead agency pursuant to CEQA, the District Board of Education finds that the Final Initial StudyMND contains a complete and accurate reporting of the environmental impacts associated with the Project. The Board of Education finds on the basis of the whole record before it that there is no substantial evidence supporting a fair argument that the Project will have a significant effect on the environment and that the Final Initial Study-MND reflects the District's independent judgment and analysis. The District Board of Education further determines that the Draft Initial Study-MND has not been substantially revised after public notice of its availability, nor have there been new significant environmental effects identified in the Final Initial Study-MND in response to comments, and thus recirculation is not required under State CEQA Guidelines Section 15073.5. Finally, the Board of Education finds that the Final Initial Study-MND reflects the independent judgment and analysis of the Santa Maria-Bonita School District.

Section 3. Pursuant to Public Resources Code Section 21080, subdivision (c)(2), the District Board of Education approves and adopts the Final Initial Study-MND prepared for the Project.

Section 4. Pursuant to Public Resources Code Section 21081.6, the District Board of Education approves and adopts the MMRP prepared for the Project and makes the MMRP a condition of Project approval.

Section 5. The District Board of Education approves the Project as described in the Final Initial Study-MND.

Section 6. The documents or other materials which constitute the record of proceedings upon which this decision is based are located at the District's office at 708 South Miller Street, California. The custodian of these documents or other material is the Deputy Superintendent for Business Services of the Santa Maria-Bonita School District.

Section 7. The District Board of Education directs staff to file a Notice of Determination with the County of Santa Barbara and the State Clearinghouse within five (5) working days of approval of the Project.

PASSED AND ADOPTED at a regular meeting of the Board of Education of the Santa Maria-Bonita School District on May 8, 2024, by the following vote:

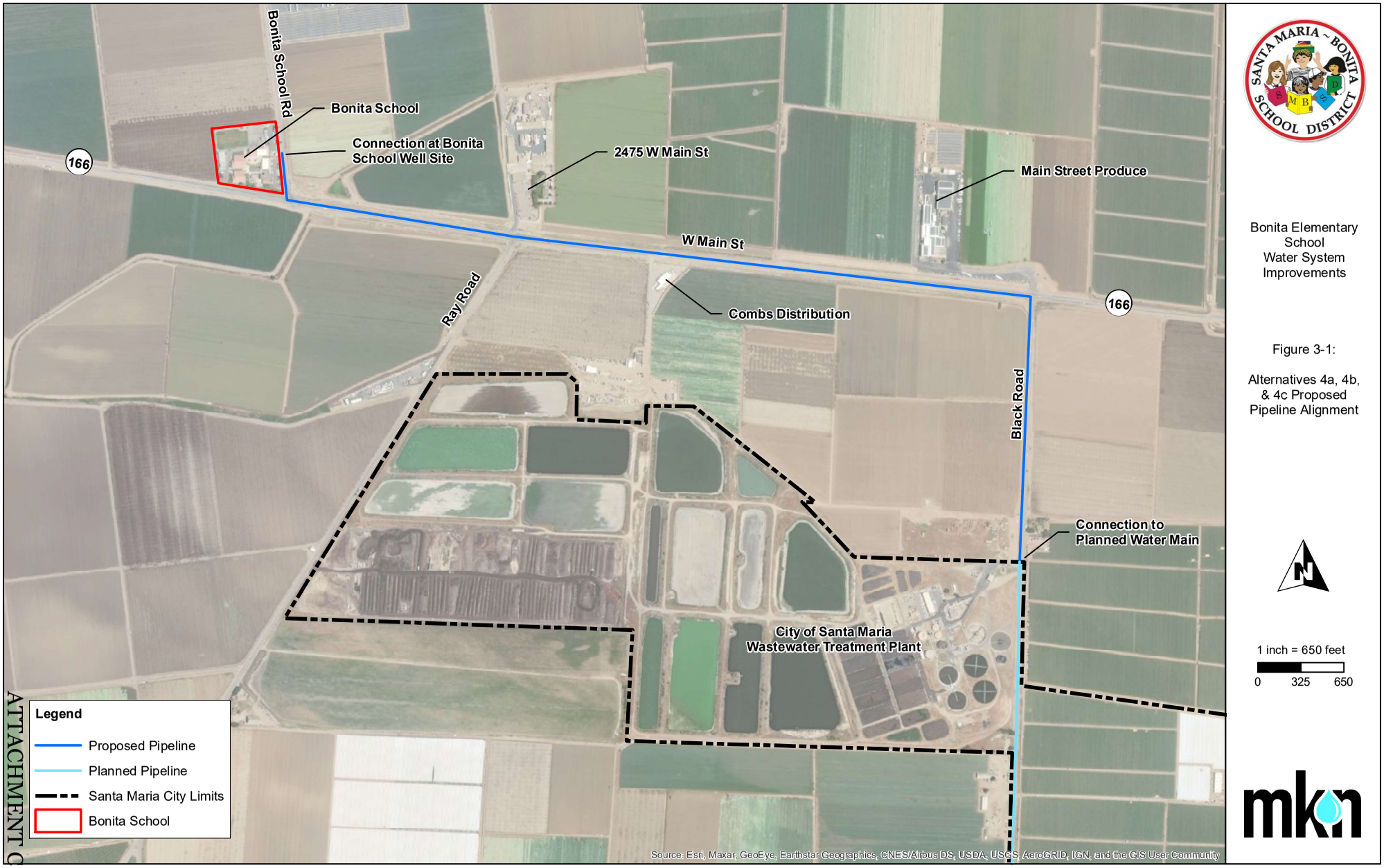
AYES: R. Valencia, L. Cordero, L. Cabral, R. Lara, J. Hollinshead

NOES: Ø

ABSENT: Ø

ABSTAIN: Ø

APPROVED: _____



Bonita Elementary School Water System Improvements

Figure 3-1:

Alternatives 4a, 4b, & 4c Proposed Pipeline Alignment

1 inch = 650 feet

0 325 650

ATTACHMENT C

Attachment A

Ricardo Valencia, Board President

I, Linda Cordero, Vice President of the Board of Education of the Santa Maria-Bonita School District, Santa Barbara County, California, do hereby certify that the foregoing is a full, true and correct copy of the Board of Education Resolution 23-23, adopted by the said Board at a regular place of meeting on May 8, 2024.

Linda Cordero, Vice President

ATTACHMENT C

SANTA BARBARA LOCAL AGENCY FORMATION COMMISSION

Application for Out-of Agency Service Agreement
(Attach additional sheets as necessary)

1. City or District City of Santa Maria

   Who should be contacted if there are questions about this application?

   Dana Eady
   Interim Community Development Department Director
   110 South Pine Street Suite 101
   Santa Maria, CA 93458
   (805) 925-0951 X 2240

2. Affected Property Owners

   Santa Maria-Bonita School District (SMBSD)
   708 S Miller St
   Santa Maria, CA 93454
   Matthew E. Beecher, Deputy Superintendent for Business Services
   Mbeecher@smbsd.net
   (805) 928-1783

3. Address/location/size of property: 5.0ac Parcel number: 113-050-07

   Bonita School
   2715 W Main St
   Santa Maria, CA 93458

Complete all relevant questions

4. Is the property within the service agency's sphere of influence? Yes X No _____

5. What types of services are to be provided under contract?

   The City will provide potable water service to Bonita Elementary School.

6. Discuss the justification for the service agreement. Is this an emergency health and safety situation? Why is annexation not possible at this time?

   Per SBCPH citation 04_72_17C_008 SBCPH dated June 20, 2017, the existing water system exceeded the Maximum Containment Level (MCL) for Nitrate on June 6, 2017.

   The School's water system consists of a well, two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator, per the Bonita School Operations Plan. The well was constructed in 2000 and is 430 feet deep with an 8-inch diameter PVC casing.

The treatment vessels are Culligan chloride cycle anion exchangers (Model Number CA-302) with a maximum capacity of 190 gpm each. The treatment process generates brine waste which is stored onsite. The School has a service contract with Culligan which includes maintenance of the treatment system, replacement or regeneration of treatment media, and brine disposal.

Operations and maintenance of the water system requires special training and expertise and cannot be solely handled by School District maintenance staff. All water system operations and maintenance services are currently outsourced to certified service providers Fluid Resources Management and Culligan. Recent water quality violations have resulted in the issuance of emergency notifications and the purchase of bottled water for drinking while violations are mitigated.

Despite the diligent efforts of Fluid Resources Management and Culligan to operate and maintain the water system per the operating plans, water quality violations continue to occur and disrupt normal school functions. Currently, the School has been utilizing bottled water for their potable needs. While not an emergency at this time, current mitigation efforts are insufficient.

Bonita school is located in an area of prime ag land and is approximately 1.9 miles from the nearest City boundary, excepting the Wastewater Treatment Plant and is thus not a good candidate for annexation.

7. Is annexation of the territory anticipated at some future time? Yes X
No _____ If yes, when? If no, why not?

Based upon community feedback on the Land Use Element of the General Plan, possible annexation efforts are focused on the East side of Santa Maria with the intent of annexing as little prime ag land as possible. Given Bonita school's location to the West of the City and its location within prime ag land, it is unlikely that the territory will be annexed in the future

8. What is the existing use of the site? Be specific.

The site is the home of Bonita School, a transitional kindergarten through 6th grade public school with just under 600 students and staff members.

9. If a change in use is proposed, provide a description of the change.

No change is proposed or anticipated.

10. Describe in detail how services will be extended to the property:

A. Describe needed improvements including distance for connections.

Water service will be extended to the School via 8,100 feet of new 2-inch diameter pipe. Bonita Elementary School would connect via a meter to the City's water distribution system. This solution also involves instillation of a hydropneumatic tank onsite to address peak demands and maintaining the existing storage tank and wells for fire suppression and irrigation. All water lines and associated infrastructure after the meter would be private and would be the responsibility of the Bonita Elementary School (Santa Maria Bonita School District) to operate and maintain.

COUNCIL AGENDA REPORT

TO: City Council

FROM: Interim City Manager Alex Posada

BY: Interim Director of Community Development Dana Eady

SUBJECT: **Adoption of a Resolution Authorizing an Application to Santa Barbara Local Agency Formation Commission For An Out-Of-Agency Domestic Water Service Agreement with Santa Maria Bonita School District**

Description:
The City Council will consider approving a request to apply to Santa Barbara County Local Agency Formation Commission for an out-of-agency domestic water service agreement with the Santa Maria Bonita School District to provide water to the District's Bonita Elementary School site.

Environmental Notice: Environmental Review for this project was completed by the Santa Maria Bonita School District through the preparation of an Initial Study/Mitigated Negative Declaration (SCH #2024010761) pursuant to the California Environmental Quality Act State Guidelines. The Santa Maria-Bonita School Board of Education adopted the MND on May 8, 2024.

RECOMMENDATION:

Adopt a Resolution authorizing and approving an application to the Santa Barbara Local Agency Formation Commission (LAFCO) for an out-of-agency water service agreement with Santa Maria Bonita School District for their Bonita Elementary School site.

BACKGROUND:

Bonita Elementary School is located at 2715 West Main Street in an agricultural area and is approximately three miles from the nearest City boundary (see Attachment A – Vicinity Map). The school is a transitional kindergarten through 6th grade public school with approximately 600 students and staff members. Domestic water for the school is provided by a water well.

The Santa Barbara County Department of Public Health Environmental Health Services (SBCEHS) issued a citation of noncompliance on June 20, 2017, for exceedances of state maximum contaminant levels in the water supply for the school. The water supply currently exceeds the maximum contaminant level (MCL) for nitrate and the recommended and upper secondary MCLs for total dissolved solids. The school has been utilizing bottled water for domestic purposes due to these issues. The citation required a

written explanation of the situation and a plan for corrective action. An operations plan for the school's water system was put in place with a water monitoring schedule, and a Water Quality Emergency Notification Plan was subsequently issued by SBCEHS.

MKN and Associates, Inc. (MKN) completed a feasibility study evaluating water supply options to serve Bonita Elementary School. Of the options analyzed, the requested out-of-agency domestic water service agreement would allow the school to connect to the City of Santa Maria's water supply to mitigate the water violations and ensure that students and staff have access to safe drinking water. The City of Santa Maria's provision of water to properties outside the City boundary requires approval from LAFCO for an out-of-agency service agreement.

DISCUSSION:

The applicant is requesting a domestic water connection with the City of Santa Maria water system, involving the connection of a new two-inch diameter service line for 1.7-miles north along Black Road from the City of Santa Maria Wastewater Treatment Plant to the intersection of Black Road and West Main Street, and then extending west to the intersection of West Main Street and Bonita School Road. This solution also involves the installation of a hydropneumatic tank to address peak demands and maintain the existing storage tank and wells for fire suppression and irrigation.

Bonita Elementary School would connect via a meter to the City's water distribution system in front of the Wastewater Treatment Plant. All water lines and associated infrastructure after the meter would be private and would be the responsibility of the Bonita Elementary School (Santa Maria Bonita School District) to operate and maintain. The connection would provide a clean, reliable long-term water source to Bonita Elementary School students and staff.

Government Code Section 56133 states that LAFCO may authorize a city or district to provide new or extended services outside its jurisdictional boundary to respond to an existing or impending threat to the health and safety of the public or the residents of the affected territory, if the entity applying for approval has provided LAFCO with documentation of a threat to the health and safety of the public. The Santa Barbara County Environmental Health citation serves as the documentation of the threat.

Alternative(s)

The City Council can choose not to submit an application to LAFCO for an out-of-agency water service agreement; however, the applicant would need to pursue one of the other alternatives to address the violation of safe drinking water standards occurring at the Bonita Elementary School site.

Environmental Review

The SMBSD is the Lead Agency responsible for the completion of environmental review. The SMBSD has prepared an Initial Study-Mitigated Negative Declaration (IS-MND) for the project pursuant to the State California Environmental Quality Act (CEQA) Guidelines Section 15000 et seq. The document was circulated for public review from January 26, 2024, to February 26, 2024, and was adopted by the SMBSD Board of Education on May

8, 2024. The IS-MND includes mitigation measures for the environmental impacts identified in the initial study in the topic areas of Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise and Transportation. The Final IS-MND is included for reference as Attachment C.

Fiscal Considerations

All costs for the project will be paid by the SMBSD. The SMBSD is seeking Drinking Water State Revolving Fund (DWSRF) grant funding through the State Water Resources Control Board (SWRCB) Division of Financial Assistance to fund the construction of a long-term, affordable solution to mitigate further water quality violations. The grant funding would cover the capital and associated startup costs. Operating and maintenance costs will be funded by the SMBSD.

Impact to the Community

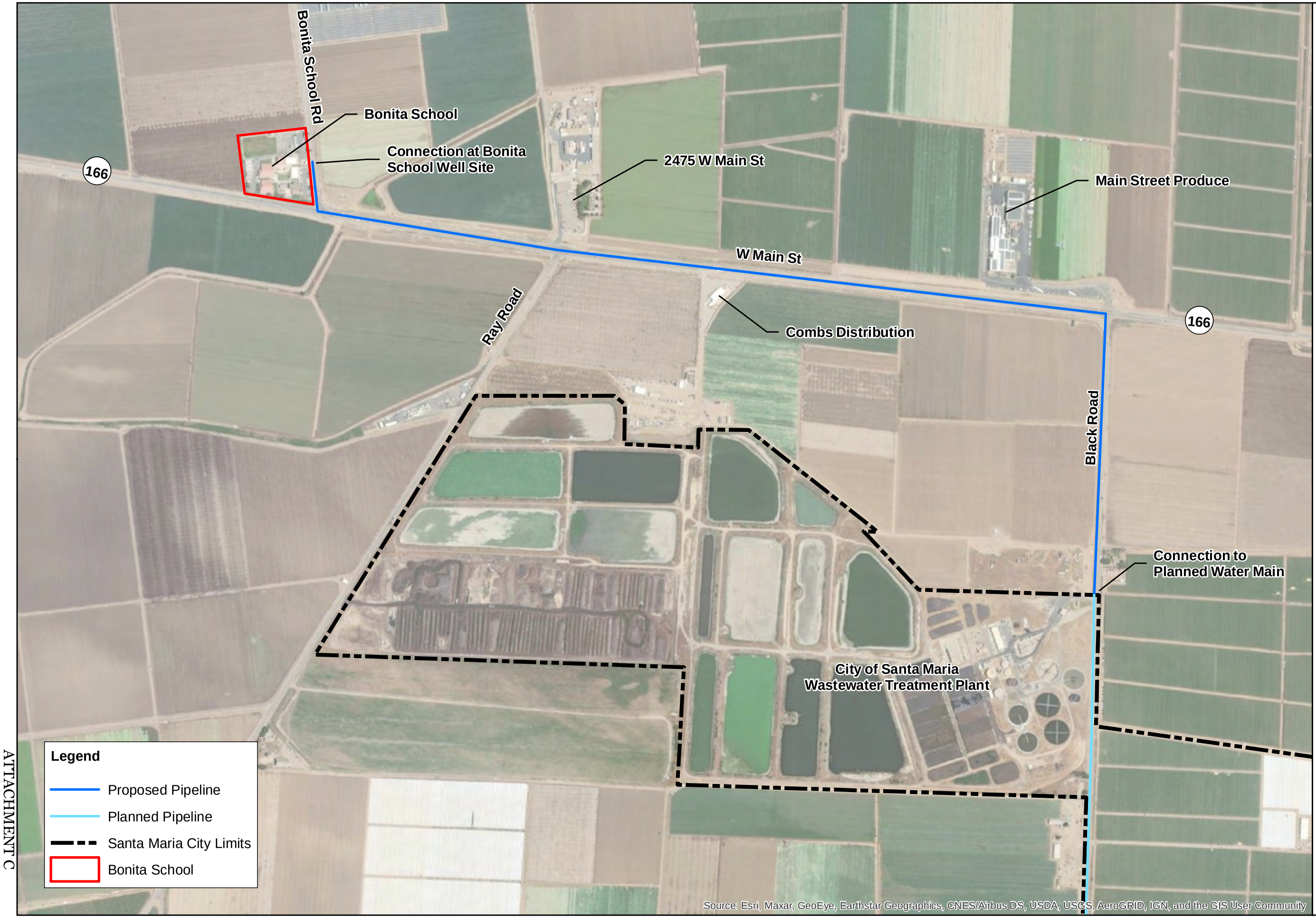
The project would have a positive impact on the community by providing clean drinking water to elementary school age students and staff at Bonita Elementary School. No known impacts to capacity for City facilities are anticipated to occur.

Other Agency Review

If LAFCO approves the out-of-agency service agreement, Caltrans will require an encroachment permit for the water line extension work to occur within Main Street (State Route 166). Funding for the project will require approval from the SWRCB. The specific scope of this project, the Out-of-Agency Service Agreement, requires approval from LAFCO as discussed above.

ATTACHMENTS

Attachment A – Vicinity Map
Attachment B – Compliance order dated June 20, 2017, from SB County Environmental Health Services
Attachment C – Final Initial Study/Mitigated Negative Declaration



ATTACHMENT C

Bonita Elementary School
Water System Improvements

Figure 3-1:

Alternatives 4a, 4b, & 4c Proposed Pipeline Alignment

1 inch = 650 feet

0 325 650

BONITA ELEMENTARY SCHOOL WATER SYSTEM IMPROVEMENTS FEASIBILITY STUDY

MARCH 2023

PREPARED FOR:

Santa Maria-Bonita School District

708 S. Miller Street

Santa Maria, CA 93454

&

Rural Community Assistance Corporation

3120 Freeboard Drive, Suite 201

West Sacramento, CA 95691

PREPARED BY:

MKN & Associates

121 North Fir Street, Unit G

Ventura, CA 93001

(805) 947-4971

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1.0 INTRODUCTION AND OVERVIEW

1.1 Background

MKN and Associates, Inc. (MKN) was retained by the Rural Community Assistance Corporation (RCAC) to complete a feasibility study evaluating water supply options to serve Bonita Elementary School (the School) located in an unincorporated area of Santa Barbara County approximately 2.85 miles west of the City of Santa Maria, California. Santa Maria Bonita School District owns and operates the School and site. Per the Education Data Partnership[1], the School has served an average of 567 students ranging from kindergarten through 6th grade with a staff of 26 since 2017. An onsite well currently provides water to the School for potable, fire protection, and irrigation uses.

Notices of violation have been issued by the Santa Barbara County Environmental Health for exceedances of state maximum contaminant levels in the water supply. The School is seeking to obtain Drinking Water SRF grant funding through the California State Water Resources Control Board (SWRCB) Division of Financial Assistance to fund the construction of a long-term, affordable solution to mitigate further water quality violations and replace the School's lead service lines in the Kindergarten Building.

1.2 Historical Water Quality Concerns

The School's water supply currently exceeds the maximum containment level (MCL) for nitrate and the recommended and upper total dissolved solids (TDS) customer acceptance contaminant level (secondary MCL) of 500 and 1,000 mg/L (respectively). According to recent consumer confidence reports, the School has encountered elevated sulfate and hexavalent chromium levels, which are common in the groundwater in this area as well as for surrounding water purveyors. Groundwater pumped in neighboring communities blend with other supply sources to reduce the hexavalent chromium levels. Groundwater supply also exhibits a high calcium carbonate hardness. Due primarily to nitrate MCL exceedances, in recent years the School has been utilizing bottled water for their potable needs. A table of recent water quality data is provided as **Table 1-1**.

[1] Ed-Data, Education Data Partnership. Site accessed May 18, 2022.
http://www.ed-data.org/school/Santa-Barbara/Santa-Maria--Bonita/Bonita-Elementary

Table 1-1 – Current Water Quality at Bonita School

Constituent	2019 Detection	2020 Detection	MCL/ Action Levels (AL)	Limit Exceeded?
Detection of Lead and Copper (K Building)				
Lead (ppb)	2.65	37	15	Yes
Copper (ppm)	0.155	0.23	1.3	No
Sodium and Hardness				
Sodium (ppm)	110	110	None	No
Hardness (ppm)	740	810	None	No
Primary Drinking Water Standards				
Cyanide (ppb)	*	9.1	150	No
Gross Alpha Particle Activity (pCi/L)	4.53	4.53	15	No
Fluoride (ppm)	0.44	0.44	2	No
Nitrate (as N)	30.3	14.1	10	Yes
Selenium (ppb)	5.5	4.7	50	No
THMs - Total Trihalomethanes (ppb)	2.9	28	80	No
Secondary Drinking Water Standards				
Chloride (ppm)	93	91	500	No
Color (units)	10	10	15	No
Specific Conductance (µS/cm)	1900	1800	1600	Yes
Sulfate (ppm)	560	540	500	Yes
TDS - Total Dissolved Solids (ppm)	1400	1400	1000	Yes
Turbidity (NTU)	0.23	0.23	5	No
Zinc (ppb)	0.11	*	100	No
Unregulated Contaminants				
Hexavalent Chromium (ppb)	1.3	1.3	None	No
*Result not included in CCR				

The School is operated from a single groundwater well and has no redundant source of supply. The School District is considering a new water supply source, consolidation with nearby municipal water systems, and treatment as potential long-term solutions.

Lead and Copper Rule

The Kindergarten Building (Building K) is known to contain lead pipes. Per a 2018 sample, lead concentration in Building K is 37 ppb, which exceeds the MCL of 15 ppb. Replacement of lead piping in the Kindergarten building is recommended to operate within the MCL.

Compliance

Per the State Water Resources Control Board, CA Drinking Water Watch website[2], Bonita School has been cited for water quality violations six times since 2002, as shown in **Table 1-2**. Historical nitrate exceedances continue to occur and were also experienced in 2019 and 2020 as shown in **Table 1-1**. The 2002 and 2007 coliform violations did not recur.

Table 1-2 – Summary of Water Quality Violations

Violation No.	Violation Name	Contaminant
2020-600006	STATE VIOLATION-M&R (MAJOR)	COLIFORM (TCR)
2017-600005	MCL, SINGLE SAMPLE	NITRATE
2007-600004	MCL (TCR), MONTHLY	COLIFORM (TCR)
2005-500003	MONITORING, CONFIRMATION/CHECK MINOR	NITRATE
2002-200002	CCR REPORT	CONSUMER CONFIDENCE RULE
2002-200001	MCL (TCR), MONTHLY	COLIFORM (TCR)

[2] https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=9544&tinwsys_st_code=CA&wsnumber=CA4200833

2.0 EXISTING FACILITIES

2.1 School Water System Summary

Bonita Elementary School opened in 1980 at the corner of Bonita School Road and West Main Street in Santa Barbara County. The School has six (6) buildings serving grades kindergarten through sixth grade and enrolls around 560 students. On the eastern edge of the School property sits a well site that was built, along with the water system, with the intent to serve all six (6) school buildings and irrigation for the property.

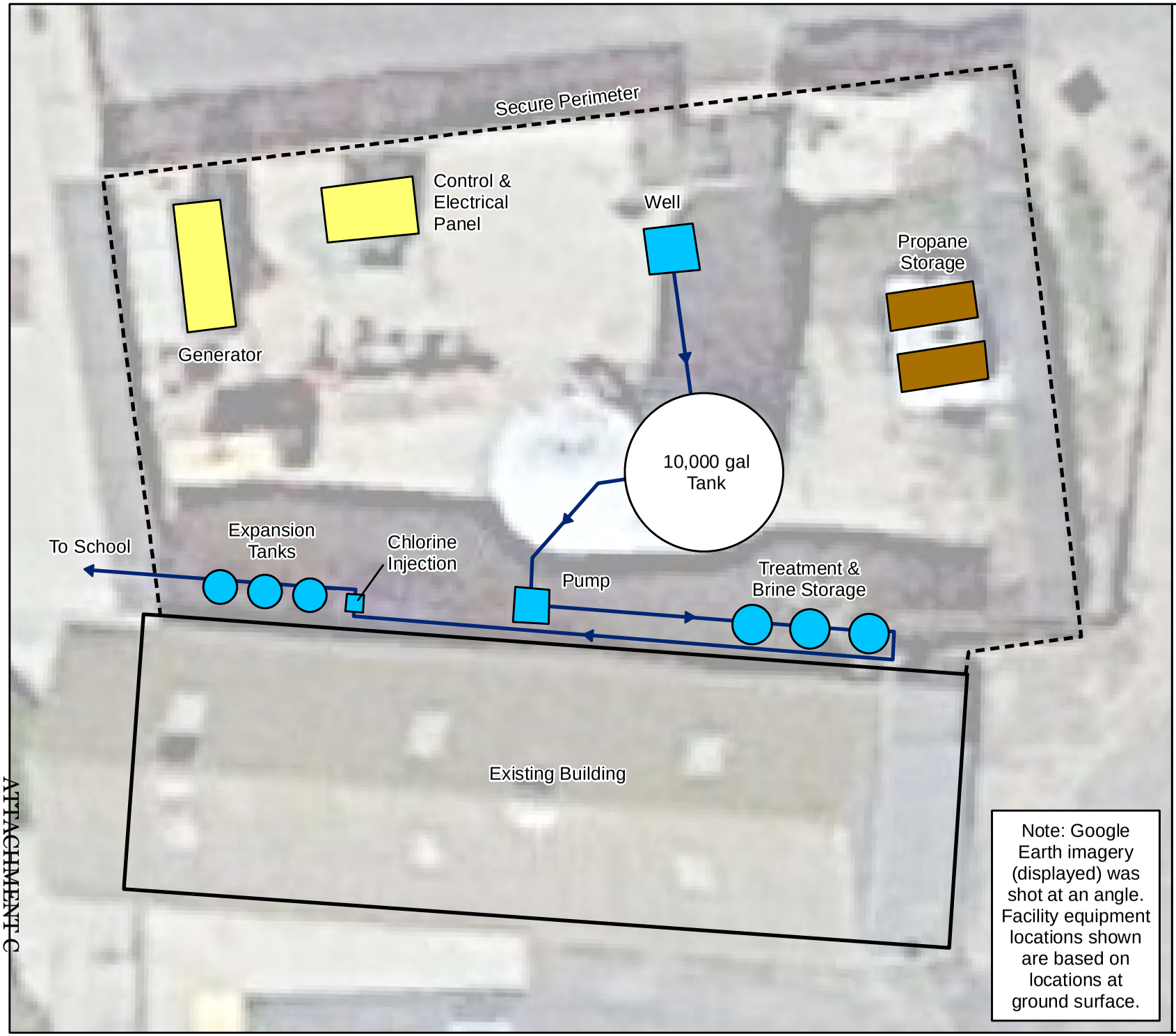
2.1.1. Water System Description

The School's water system consists of a well, two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator, per the Bonita School Operations Plan.

The well was constructed in 2000 and is 430 feet deep with an 8-inch diameter PVC casing.

The treatment vessels are Culligan chloride cycle anion exchangers (Model Number CA-302) with a maximum capacity of 190 gpm each. The treatment process generates brine waste which is stored onsite. The School has a service contract with Culligan which includes maintenance of the treatment system, replacement or regeneration of treatment media, and brine disposal.

Figure 2-1 shows a plan view of the School's existing site layout. **Figure 2-2** shows a process flow diagram of the existing water system.



Bonita Elementary School
Water System Improvements

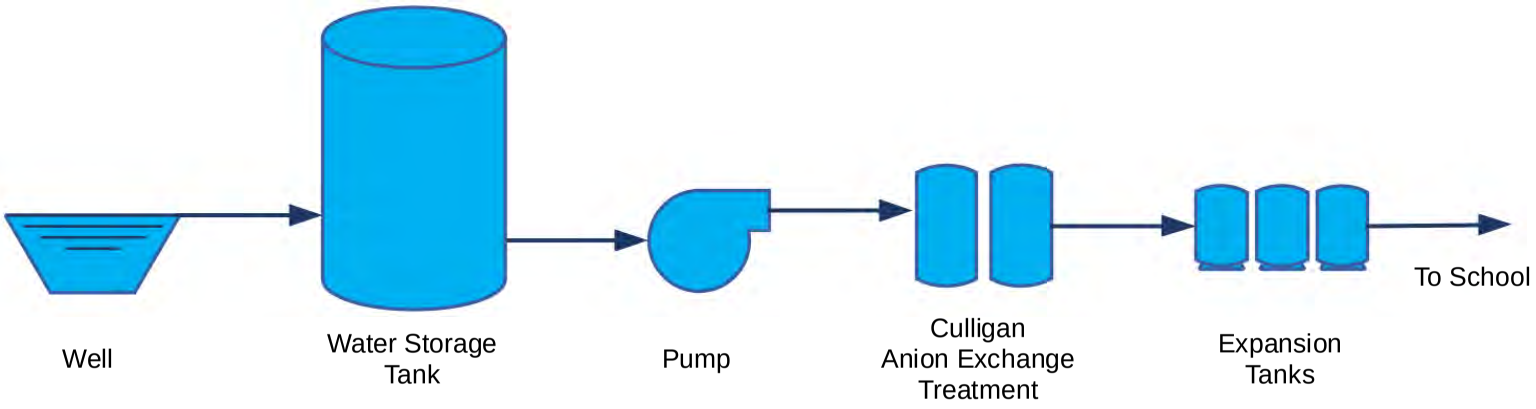
Figure 2-1:

Existing Site Layout

1 inch = 10 feet

0 5 10

ATTACHMENT C



Bonita Elementary School
Water System Improvements

Figure 2-2:

Existing Water System Process Flow Diagram

ATTACHMENT C

2.1.2. System Deficiencies

The Bonita School Operations Plan, the Water Quality Monitoring Schedule, the Disinfection Byproduct Rule Monitoring Plan, and the Water Quality Emergency Notification Plan can be found in Appendices B through E.

Operations and maintenance of the water system requires special training and expertise and cannot be solely handled by School District maintenance staff. All water system operations and maintenance services are currently outsourced to certified service providers Fluid Resources Management and Culligan. Recent water quality violations have resulted in the issuance of emergency notifications and the purchase of bottled water for drinking while violations are mitigated.

Despite the diligent efforts of Fluid Resources Management and Culligan to operate and maintain the water system per the operating plans, water quality violations continue to occur and disrupt normal school functions.

2.2 City of Santa Maria Water System

2.2.1. System Description

The City of Santa Maria is the closest public water system to the school site. The City owns and operates a public water system that provides potable water to the City as well as a few smaller areas outside of City limits. The City receives the majority of its water from Central Coast Water Authority through the State Water Project and also pumps water from the Santa Maria Valley Groundwater Basin. The City's production facilities include seven (7) wells, the Blending and Disinfection Facility, and the State Water Turnout.

2.2.2. System Deficiencies

No significant deficiencies have been identified within the City of Santa Maria water system. The City has adequate water supply and facilities to serve existing customers.

2.3 Demand Analysis

2.3.1. Background and Definitions

Water demand varies on a seasonal basis and over the course of the day. Demand for irrigation tends to be higher during the summer than during the winter, and domestic demand tends to be higher during school hours than during the night. In addition, the school schedule has an impact on demand since the school is closed on weekend, holidays, and other scheduled breaks. For planning and design purposes, the following parameters quantify demand and demand variation and will be used throughout the report to demonstrate that proposed alternatives can satisfy the needs of the school:

- **Average Day Demand (ADD):** total demand of a year divided by 365 days

  ADD is used to verify that the school has adequate access or rights to groundwater relative to management of the local aquifer. ADD also serves as a baseline for scaling demand variation.

- **Maximum Day Demand (MDD): demand for the highest demand day of the year**

  MDD is used to verify adequacy of supply and storage. There must be sufficient supply to meet MDD and there must be sufficient storage to reconcile the difference between supply and demand on the maximum day.

- **Peak Hour Demand (PHD): highest instantaneous demand**

  PHD represent the highest stress the distribution system will experience. The distribution system must have adequate capacity to deliver PHD.

- **Fire Flow (FF): the demand required for fire suppression**

  The Fire Department sets the standards for fire suppression requirements. These standards vary based on access to supply, type and size of structures, proximity of structures to each other, availability of fire sprinklers, and other parameters at the discretion of the Fire Department. Typical standards are expressed as a flow rate for a set duration at a minimum residual pressure.

2.3.2. Current Demand and Demand Variation

Based on review an interpretation of historical records, current demand and demand variation is as follows:

- ADD: 921 gpd (0.64 gpm)
- MDD: 2,040 gpd (1.4 gpm)
- PHD: 5.7 gpm
- FF: 158 gpm

ADD is the total production in 2019 per the 2019 Electronic Annual Report (EAR) to the Small Water System Drinking Water Program. **Table 2-1** provides a summary 2019 demand broken down by month.

Table 2-1 – 2019 Demand per EAR

Month	Demand (CCF)	Demand (gpd)	Demand (gpm)
January	26.7	644	0.45
February	41.3	1,103	0.77
March	38.0	917	0.64
April	45.2	1,127	0.78
May	52.2	1,260	0.88
June	24.5	611	0.42
July	10.7	258	0.18
August	48.2	1,163	0.81
September	54.4	1,357	0.94
October	35.5	857	0.60
November	36.3	905	0.63
December	36.4	878	0.61
Annual Total or Annual Average	449.4	921	0.64

The maximum month demand per the 2019 EAR was September at 1,357 gpd. MDD is the maximum month demand assuming the school was in session 20 out of 30 days.

$$MDD = \frac{30}{20}(1{,}357\ gpd) \cong 2{,}040\ gpd$$

PHD is the MDD assuming school is in session for six hour per day.

$$PHD = \frac{24}{6}(2{,}040\ gpd)\left(\frac{day}{24 \cdot 60\ minutes}\right) \cong 5.7\ gpm$$

Fire Flow is taken from the Hydraulics Summary Sheet prepared by S&M Fire Protection, Inc. in 2000. The sprinkler flow was stated as 58 gpm and flow to the onsite hydrant was stated as 100 gpm for a maximum system requirement of 158 gpm. Under these conditions, the system provides a residual pressure of 5 psi.

Current demands apply to any alternatives where the school continues to administer an independent public water system operating permit.

In addition to utilizing the historical demand, a water fixture unit count and instantaneous demand of the school was calculated utilizing the California Plumbing Code, Appendix A. Table 2-2 below summarizes the plumbing fixture count for the school. Based on this fixture count and Chart A103.2(2) of the California Plumbing Code, the corresponding demand is 90 gpm. This demand will be used for instantaneous, or short term flow rate to ensure any alternative considered in this report has the capacity to deliver water to each fixture unit in the school.

Table 2-2 – Plumbing Fixture Count

Fixture Name	Fixture Unit Factor	Total Fixture Count	Total Fixture Units
Drinking Fountain	0.5	24	12
Kitchen Sink	1.5	3	4.5
Washup Sink, each set of faucets	2.0	19	38
Lavatory	1.0	17	17
Service, or Mop Basin Sink	3.0	3	9
Urinal, 1.0 GPF Flushometer Valve	4.0	4	16
Water Closet, 1.6 GPF Gravity Tank	2.5	4	10
Water Closet, 1.6 GPF Flushometer Valve	5.0	20	100
	Total Count:	94	206.5

City of Santa Maria Demand Requirements

In the event the school is consolidated with the City of Santa Maria, a higher set for design requirements will be applied per City standards. Based on review of City documents and standards, demand and demand variation following consolidation would be as follows:

- ADD: 6,240 gpd (4.3 gpm)
- MDD: 10,360 gpd (7.2 gpm)
- PHD: 28.8 gpm
- FF: 1,125 gpm for 2 hours at 20 psi residual pressure

ADD represents application of City demand factors from the City's 2012 Utility Capacity Study. The study provides a demand factor of 1,200 gpd per acre for public facilities and institutional land uses.

$$ADD = (5.1\ acres)\left(\frac{1{,}200\ gpd}{acre}\right) = 6{,}240\ gpd$$

MDD is the ADD multiplied by the City's MDD peaking factor of 1.66.

$$MDD = 1.66(6{,}240\ gpd) \cong 10{,}360\ gpd$$

PHD is the MDD assuming school is in session for six hour per day.

$$PHD = \frac{24}{6}(10{,}360\ gpd)\left(\frac{day}{24 \cdot 60\ minutes}\right) \cong 28.8\ gpm$$

The Fire Department has a higher standard[3] for customers who receive municipal water. This standard defers to Appendix B and Table B105.1 of the California Fire Code for structures larger than 3,600 square feet.

Assuming the school buildings are Construction Type IIA, each individual building is less than 12,700 square feet, and each building is sprinklered allowing for a 25% reduction, the fire flow is calculated at:

$$(1 - 0.25)(1{,}500\ gpm) = 1{,}125\ gpm$$

[3] Santa Barbara County Fire Department. (September 25, 2009). *Fire Hydrant Spacing and Flow Rates, Development Standard #2.*

3.0 PROJECT ALTERNATIVES

3.1 Summary of Analysis

This feasibility study analyzes potential project alternatives utilizing criteria such as engineering and construction feasibility, operations and maintenance (O&M), and regulatory considerations. MKN reviewed the following information in preparation of this feasibility study:

- Bonita Elementary School Water Systems
  - Water Quality Information
  - O&M Records
  - Photographs of Infrastructure
  - Verbal Accounts by Water System Operators
- Santa Maria Water System
  - Service Maps
  - Water Quality Information
  - Rate Structure

For the purposes of this evaluation, MKN developed six alternatives:

- Alternative No. 1 – Wellhead Treatment
- Alternative No. 2 – Point-of-Entry/Point-of-Use Treatment
- Alternative No. 3 – New Source of Supply
- Alternative No. 4a – Consolidation with City of Santa Maria
- Alternative No. 4b – Connection to the City of Santa Maria System and On-Site Storage

MKN acknowledges that the alternatives presented herein are by no means representative of all possible alternatives. The presented alternatives were estimated to be the best potential options to efficiently mitigate the issues experienced by the School.

3.2 Alternative No. 1 – Wellhead Treatment

Alternative No. 1 includes the demolition of the existing anion treatment vessels and replacement with a wellhead treatment system. This alternative would utilize the existing well, however the pressure vessels, brine storage tank, pump station, chemical storage and injection facilities, and instrumentation and control systems will require replacement. Three treatment alternatives were analyzed for this alternative and the recommended wellhead treatment alternative (ion exchange, as discussed below) was analyzed further throughout the report.

3.2.1. Engineering and Constructability

Ion Exchange

The ion exchange alternative employs a physical-chemical process using specially treated media (resin). The resin contains positively charged "active sites" that initially are loaded with chloride anions. As nitrate-laden water passes through the media, nitrate in the water exchanges with chloride on the resin, thus removing the nitrate from the water. Ultimately, the resin is exhausted of chloride and must be regenerated with a sodium

chloride (salt) solution. This solution, brine, is typically two to three percent of the water run through the system.

An ion exchange system would consist of the following components:

- Pressure vessels (typically two or more vessels active with one in standby) loaded with ion exchange media
- Brine tank and pump station (commonly referred to as a "brine maker")
- Dilution water control valve system
- Rinse and brine water softener
- Waste brine storage and disposal infrastructure
- Chemical storage and injection facilities
- Instrumentation and control systems

A potential limitation of this alternative is disposal of the waste stream. The School currently operates on a septic system. The highly saline brine would need to be disposed of at a suitable wastewater treatment facility.

Reverse Osmosis

Reverse osmosis (RO) is a treatment method that removes a wide variety of waterborne contaminants, including nitrate, from water by forcing the water across a semi-permeable membrane. Two water streams are produced: a permeate stream with reduced dissolved solids content, and a concentrate stream containing the removed dissolved solids. A typical brackish water RO system will "recover" 60 to 85 percent of the influent water as permeate, with 15 to 40 percent becoming the waste concentrate.

A reverse osmosis (RO) system would consist of the following components:

- Single two-stage RO train
- Forced draft degasifier
- Clearwell and product water pump station
- Clean-in-place system
- Concentrate and "off-spec" water disposal infrastructure
- Chemical storage and injection facilities
- Instrumentation and control systems

The concentrate for a standard two-stage RO configuration can have TDS concentrations four to five times higher than the feed water. The percentage of RO feed water converted to permeate is defined as the "recovery." Recovery is limited by water chemistry, although in some cases it is possible to increase recovery by improved (and more costly) pretreatment or chemical treatment. For inland locations without access to a suitable receiving water body, the primary limitation of this alternative is concentrate disposal. While RO processes typically produce a much less saline brine than ion exchange treatment systems, the volume of RO brine is much greater. Disposal of large volumes of brine can be problematic for collection systems and receiving wastewater treatment plants of small communities due to inadequate wastewater conveyance and treatment capacity. As discussed previously, this could potentially affect a receiving wastewater treatment plant's ability to meet its permitted electrical conductivity, nitrate, and/or chloride receiving and discharge limits.

Biological Treatment

MKN analyzed the biological treatment system provided by Microvi MNE which would consist of the following components:

- Microvi MNE Bioreactor
- Ultrafiltration system (feed pump, strainer, and membrane modules)
- Ultrafiltration backwash and clean-in-place systems
- Clearwell and product water pump station
- Waste disposal infrastructure
- Chemical storage and injection facilities
- Instrumentation and control systems

The Microvi process is estimated to reduce the nitrate concentration to approximately 8.0 mg/L (as NO_3). Acetic and phosphoric acids are first added to the raw water to feed the bacteria. The pre-treated raw water is passed through a Microvi MNE bioreactor tank, where it is mixed in a continuously stirred tank reactor with proprietary Microvi biocatalysts to reduce the influent nitrate concentration through denitrification, ultimately converting nitrates to nitrogen gas. Clarified effluent from the bioreactor is filtered by a downstream ultrafiltration system to remove residual solids. After the filtrate and raw water bypass are combined and disinfected in a clearwell to remove residual bacteria, a pump station discharges the blended product water into the distribution system.

For the Microvi system, the only waste streams produced by the treatment process consist of reject, backwash, and spent cleaning solution flows from the ultrafiltration system. No waste is produced directly from the Microvi bioreactor.

3.2.2. Operation and Maintenance

Ion Exchange

Operations and maintenance of this system would require an operator. The School would likely need to continue using a third-party operator to operate this system.

Reverse Osmosis

Operations and maintenance of this system would require an operator. The School would likely need to continue using a third-party operator to operate this system.

The primary concern for operation of an RO system is concentrate disposal. Concentrate volumes could be as much as 50% or more of the treated water volume and will require disposal to a suitable receiving facility.

Additionally, one concern for RO systems is the increased pumping power requirements. The additional power demand required for the RO Feed Pump and the Product Water Pump Station may exceed existing electrical infrastructure capacities.

Biological Treatment

Operations and maintenance of this system would require an operator. The School would likely need to continue using a third-party operator to operate this system.

The turndown capabilities of biological treatment systems are specific to the product line, but most systems are fairly limited in their ability to handle flow variations. Microvi has demonstrated through pilot installations that 50% turndown is achievable.

Biological systems introduce operational and maintenance complexity. The health of the organisms used in the treatment process must be a consideration when operating the system. Biological treatment systems typically demand continuous flow and can be upset after lengthy shutdowns.

3.2.3. Environmental and Permitting Considerations

Ion Exchange

Concentrated waste brine must be disposed of at a certified wastewater processing facility. This will likely require an agreement with a facility such as South San Luis Obispo County Sanitation District or others that can accept brine.

Reverse Osmosis

Concentrated waste brine must be disposed of at a certified wastewater processing facility as described above.

Biological Treatment

While biological treatment has been considered a viable process for over 20 years, concerns about bacterial contamination of a potable water supply has limited regulatory acceptance of the process for drinking water. Only in the last few years has this technology been conditionally accepted by regulatory agencies as a viable process for removing nitrate from potable water. It should be noted that if this option is further evaluated, it is likely that the State Water Resources Control Board Division of Drinking Water (SWRCB DDW) will require a comprehensive pilot testing period to verify the performance of the treatment system.

3.2.4. Recommended Wellhead Treatment

Ion exchange is the recommended wellhead treatment alternative. Ion Exchange is proven technology which effectively treats nitrates. It has a smaller energy requirement than reverse osmosis and produces a smaller amount of more saline brine.

The system would consist of two 200 gpm vessels which would provide redundancy as one vessel would be in operation while the other vessel was offline. This system would bring the nitrate levels down to approximately 80% the MCL.

3.3 Alternative No. 2 – Point-of-Entry/ Point-of-Use Treatment

Alternative No. 2 involves the installation of decentralized water treatment units at buildings (point-of-entry, aka POE) and/or at fixtures (point-of-use, aka POU). There are numerous available technologies for POE/POU treatment; however, only reverse osmosis and ion exchange are rated for nitrate removal. Per EPA[4]:

> *POU and POE treatment devices rely on many of the same treatment technologies that have been used in central treatment plants. However, while central treatment plants treat all water distributed to consumers to the same level, POU and POE treatment devices are designed to treat only a portion of the total flow. POU devices treat only the water intended for direct consumption (drinking and cooking), typically at a single tap or limited number of taps, while POE treatment devices are typically installed to treat all water entering a single home, business, school, or facility. The cost savings achieved through selective treatment may enable some systems to provide more protection to their consumers than they might otherwise be able to afford. Ultimately, POU or POE treatment devices may be an option for public water systems where central treatment is not affordable.*

3.3.1. Engineering and Constructability

Ion Exchange

Ion exchange (IX) can consist of anion exchange (AX) or cation exchange (CX). IX achieves the selective removal of charged inorganic species from water using an ion-specific resin. As water containing undesired ions passes through a column of resin media, charged ions on the resin surface are exchanged with the undesired ions in the water.

An IX system would consist of the following components:

- Particulate prefilter
- IX cartridge

Reverse Osmosis

In reverse osmosis (RO), water dissolves into and through a membrane, while contaminant ions are rejected and discharged in a concentrated waste stream. As such, RO units need to be provided with a means of discharging reject water to a drain. RO used as POE or POU typically has a low production rate (around 40% or less), and storage is typically needed for a POU RO application. High levels of water hardness tend to reduce membrane efficacy and result in more frequent replacement of the RO membrane. Additionally, RO units may not be the optimal treatment technology in arid or water-limited regions since RO units have low recovery rates.

[4] Environmental Protection Agency. (April 2006).
Point-of-Use or Point-of-Entry Treatment Options for Small Drinking Water Systems.
https://www.epa.gov/sites/default/files/2015-09/documents/guide_smallsystems_pou-poe_june6-2006.pdf

An RO system would consist of the following components:

- Particulate prefilter
- GAC prefilter
- RO membrane
- Brine discharge to waste
- Treated water storage tank
- Post-treatment GAC filter
- UV disinfection (optional)

3.3.2. POE vs. POU

For POE, a high-capacity device would be installed at the water supply to each building. As a result, water used for irrigation would be untreated and all other water would be treated. There would be smaller number of devices to maintain, but operational costs would be higher due to more frequent replacement of filter, membrane and media capacity.

For POU, a low-capacity device would be installed on each drinking water plumbing fixture. As a result, water used at drinking and food preparation would be treated and all other water would be untreated. There would be larger number of devices to maintain, but operational costs would be lower due to less frequent replacement of filter, membrane and media capacity.

3.3.3. Operation and Maintenance

Ion Exchange

Particulate pre-filters must be replaced periodically. Resin may be replaced or regenerated onsite with a salt solution. Regeneration will produce a concentrated brine which must be hauled offsite for processing.

Reverse Osmosis

Exhausted membranes, particulate pre-filters, and pre- and post- treatment GAC filters must be replaced periodically. Storage tanks must be maintained and cleaned periodically. The distribution system must be sufficiently pressurized for RO to function efficiently. Increased pressure may increase the cost of pumping.

3.3.4. Environmental and Permitting Considerations

POE and POU devices are essentially attachments to the existing plumbing pipes and fixtures. Less than significant environmental impacts are foreseen during device installation activities.

RO will produce a low concentration brine waste stream. This waste may be discharged to septic, to an evaporation basin, or to a collection tank for offsite disposal. For discharge to septic, an amendment to the School's septic system permit may be required. For onsite evaporation, an onsite wastewater treatment system (OWTS) permit may be required.

Pursuant to California Health and Safety Code §116552:

> *The State Water Resources Control Board shall not issue a permit to a public water system or amend a valid existing permit to allow the use of point-of-use or point-of-entry treatment unless the State Water Resources Control Board determines, after conducting a public hearing in the community served by the public water system, that there is no substantial community opposition to the installation of the treatment devices. The issuance of a permit pursuant to this section shall be limited to not more than three years or until funding for centralized treatment is available, whichever occurs first.*

3.3.5. Recommended POE/POU

The school has 63 sinks and drinking fountains throughout the buildings. POU entry would become a costly solution for this many fixtures. POE could be installed on each building, limiting the number of devices, but operational costs would be higher due to more frequent replacement of filter, membrane and media capacity

3.4 Alternative No. 3 – New Source of Supply

Alternative No. 3 includes identifying a new supply source for the School. The new supply would involve drilling a new well whose production is isolated from local nitrate and salinity concentrations seen in the School's existing well production data.

3.4.1. Engineering and Constructability

To determine the feasibility of this alternative, a hydrogeological study is required. The study will estimate water quality at various depths of the aquifer and identify the best location to seal off the poor water quality zone(s) with blank casing(s) and extend annual seal(s). During drilling, water quality testing will be done to map the zone(s) of poor water quality to assist in design and construction of the casing.

Construction of a new source of supply at the School will require the following components:

- Well siting
- Well drilling
- Well casing, seal and screens
- Well pump and motor
- Electrical, controls and instrumentation
- Discharge piping

The hydrogeological study may find a new supply source outside of the School's property. If this is the case the School will need to purchase land and easements to bring the new water supply source to the school site. Construction will include drilling, testing and equipping the new well, installation of a new transmission pipeline to the existing pressure tank, upgrades to the instrumentation and controls, and may include installation of a new electrical service if the supply is located outside of the School's property.

3.4.2. Operation and Maintenance

Well operations would include electricity, management of pump instrumentation and controls, reporting of production totals, and water quality monitoring and testing. Maintenance would include annual pump efficiency testing, and inspection and repair of mechanical components.

3.4.3. Environmental and Permitting Considerations

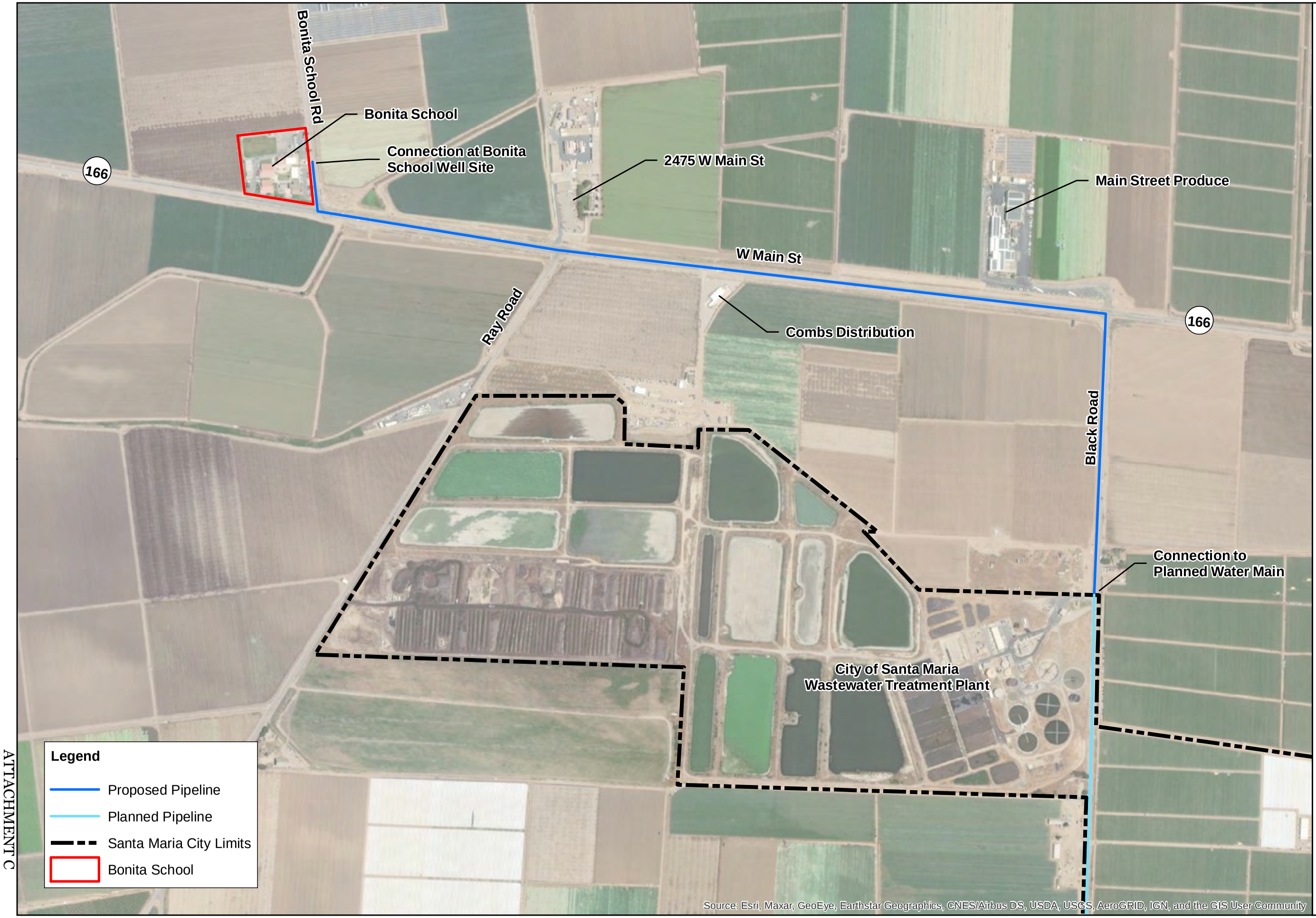
The School currently owns and operates a well, so bringing a new well online would be consistent with the water system operating permit. A non-agricultural well drilling permit may be required.

3.5 Alternative No. 4a – Consolidation with City of Santa Maria

Alternative No. 4a includes consolidation with the City of Santa Maria. The City is currently in the design phase of extending City water service to the City's Wastewater Treatment Plant which is approximately 1.7 miles from the School. The City is designing a 12-inch diameter main which will end in Black Road 2,200 feet south of the intersection of Black Road and Highway 166.

3.5.1. Engineering and Constructability

Alternative 4a includes extending a 12-inch diameter main for 1.7 miles to the School. The proposed alignment for the new pipeline is shown in **Figure 3-1**.



ATTACHMENT C

Bonita Elementary School
Water System Improvements

Figure 3-1:

Alternatives 4a, 4b, & 4c Proposed Pipeline Alignment

1 inch = 650 feet

0 325 650

The School will receive supply via a meter and there will be two fire hydrants connected to the main spaced at 300 feet for fire protection. Per SWRCB, there must be sufficient supply capacity at the School for maximum day demand plus fire flow at a residual pressure of 20 psi.

Supply capacity at the School is estimated at 1,500 gpm which exceeds maximum day demand plus fire flow. See Appendix F for the supply capacity estimate.

3.5.2. Operation and Maintenance

Maintenance of the pipeline would include periodically exercising isolation valves, fire hydrants and other appurtenances. The School's meter would be periodically inspected and calibrated as part of the City's meter maintenance program.

The City has expressed concern about water age in the dead-end pipeline. Extending the 12-inch diameter main an additional 1.7 miles to the School will increase water quality concerns. The City's water supply uses chloramines as a secondary disinfectant, which may lead to nitrification as the chloramine residual decays. The City has stated that flushing the 1.7 miles of pipe will be the responsibility of the School, and the School will be charged for the flushing volume at the current commodity rate.

3.5.3. Environmental and Permitting Considerations

The pipe alignment crosses State Route 166 and approximately 5,700 feet of the alignment is in or adjacent to State Route 166. A Caltrans Encroachment Permit will be required. Additionally, coordination of a formal agreement with the City would be required as the school is located outside the City boundary.

As stated above, water quality concerns related to regulatory compliance would require consideration and possibly mitigation.

3.6 Alternative No. 4b – Connection to the City of Santa Maria System and On-site Storage

Alternative No. 4b, similarly to 4a, includes connecting to the City of Santa Maria system. Alternative 4b includes the connection of a 4-inch diameter service line from the Wastewater Treatment Plant to the School and the repurposing of on-site storage to meet fire flow requirements.

The pipe would be capable of delivering peak hour demands estimated at 60 gpm at minimum pressure of 60 psi. However, it would not be capable of delivering max day demand plus fire flow to the site; therefore, onsite fire storage would be required. Under this alternative, it would also be necessary to install sprinklers in all four (4) remaining buildings to bring the School up to code, or to request a variance from the Fire Chief to maintain the fire prevention standard associated with the current operating permit

3.6.1. Engineering and Constructability

Alternative 4b includes extending a 4-inch diameter line for 1.7 miles to the School. The School will receive supply via a meter and existing onsite 10,000-gallon storage tank will be adapted for fire protection, pending approval by the Fire Chief. Per Development Standard #3[5], the capacity of the fire storage tank must exceed

[5] Santa Barbara County Fire Department. (July 8, 2009). *Stored Water Fire Protection Systems, Development Standard #3.* https://s3.amazonaws.com/siteninja/multitenant/assets/29011/files/original/3-Stored-Water-Fire-Protection-Systems.pdf

2,500 gallon plus domestic storage requirements. The tank will not be used for domestic purposes, so domestic storage is zero.

3.6.2. Operation and Maintenance

Maintenance of the pipeline would include periodically exercising isolation valves, fire hydrants and other appurtenances. The School's meter would be periodically inspected and calibrated as part of the City's meter maintenance program. The fire storage tank would be inspected bi-annually and recoated as needed to prevent corrosion.

The City has expressed concern about water age in the dead-end pipeline. Extending the 4-inch diameter main an additional 1.7 miles to the School will increase water quality concerns. The City's water supply uses chloramines as a secondary disinfectant, which may lead to nitrification as the chloramine residual decays. The City has stated that flushing the 1.7 miles of pipe will be the responsibility of the School, and the School will be charged for the flushing volume at the current commodity rate. It is anticipated that the 4-inch diameter main included in this alternative would have a lower probability of experiencing residual decays and nitrification, as the water in this smaller-diameter pipe would move at a higher velocity and cycle more frequently compared to the 12-inch diameter pipeline. However, water quality would still need to be monitored and flushing performed as necessary.

3.6.3. Environmental and Permitting Considerations

The pipe alignment crosses State Route 166 and approximately 5,700 feet of the alignment is in or adjacent to State Route 166. A Caltrans Encroachment Permit will be required. Additionally, coordination of a formal agreement with the City would be required as the school is located outside the City boundary.

Per the Santa Barbara County Fire Department, a private fire storage tank is not allowed when a development is served by a water purveyor unless approved by the Fire Chief or designee. Approval is contingent upon the water purveyor notifying the Fire Department in writing that it cannot provide fire service to the proposed development without onsite storage.

3.7 Alternative No. 4c – Connection to the City of Santa Maria System and On-site Hydropneumatic Tank

Alternative No. 4c, similarly to 4a and 4b, includes connecting to the City of Santa Maria system. Alternative 4c includes the connection of a 2-inch diameter service line from the connection point to the City's water system near the Wastewater Treatment Plant to the School, repurposing of on-site storage to meet fire flow requirements and irrigation demands, and the addition of a hydropneumatic tank to meet the instantaneous flow rate of 90 gpm described in Section 2.3 of this report.

The pipe would be capable of delivering peak hour demands estimated at 5.7 gpm at minimum pressure of 60 psi. However, it would not be capable of delivering max day demand plus fire flow to the site; therefore, onsite fire storage would be required. While the 2-inch pipe diameter can meet most other flow scenarios, it cannot deliver the instantaneous flow rate per the California Plumbing Code at a reasonable pressure. Therefore, a hydropneumatic tank system will be required to meet demand during peak demand periods. The hydropneumatic tank is anticipated to be a maximum storge volume of 1,000 gallons.

3.7.1. Engineering and Constructability

Alternative 4c includes extending a 2-inch diameter line for 1.7 miles to the School. The School will receive supply via a metered connection to the City and serve the schools irrigation demand and fire suppression system by utilizing existing onsite 10,000-gallon storage tank and wells. The tank will not be used for domestic purposes, so domestic storage in the existing tank is not required. Minor piping modifications to the existing system will be required to disconnect the proposed potable, domestic supply from the existing system. The new domestic supply shall also have an air gap connection to the existing tank in the event the existing wells are inoperable, or the proposed 2-inch line requires flushing which is discussed in section 4.7 of this report.

The introduction of a hydropneumatic tank system will maintain pressure during extreme peak demands for a short duration and requires an air compressor, additional above grade piping and isolation valves. Staff has indicated there is sufficient space on site for these additional appurtenances and the existing domestic system and be isolated from the irrigation and fire suppression systems.

3.7.2. Operation and Maintenance

Maintenance of the pipeline would include periodically exercising isolation valves, fire hydrants and other appurtenances. The School's meter would be periodically inspected and calibrated as part of the City's meter maintenance program. The existing fire storage tank would be inspected bi-annually and recoated as needed to prevent corrosion as well as the proposed hydropneumatic system.

The City has expressed concern about water age in the dead-end pipeline. Extending the 2-inch diameter main an additional 1.7 miles to the School will increase water quality concerns, however are much less than alternative 4b discussed above. The City's water supply uses chloramines as a secondary disinfectant, which may lead to nitrification as the chloramine residual decays. The City has stated that flushing the 1.7 miles of pipe will be the responsibility of the School, and the School will be charged for the flushing volume at the current commodity rate. It is anticipated that the 2-inch diameter main included in this alternative would have a lower probability of experiencing residual decays and nitrification, as the water in this smaller-diameter pipe would move at a higher velocity and cycle more frequently compared to the 4-inch diameter pipeline. However, water quality would still need to be monitored and flushing performed as necessary.

3.7.3. Environmental and Permitting Considerations

The pipe alignment crosses State Route 166 and approximately 5,700 feet of the alignment is in or adjacent to State Route 166. A Caltrans Encroachment Permit will be required. Additionally, coordination of a formal agreement with the City would be required as the school is located outside the City boundary.

Per the Santa Barbara County Fire Department, a private fire storage tank is not allowed when a development is served by a water purveyor unless approved by the Fire Chief or designee. Approval is contingent upon the water purveyor notifying the Fire Department in writing that it cannot provide fire service to the proposed development without onsite storage and that it is the intent of the School to maintain its existing fire suppression system.

4.0 EVALUATION OF ALTERNATIVES

4.1 Summary

This section presents an evaluation and comparison of the alternatives presented in Section 3. Alternatives are presented with an opinion of probable capital cost. For cost estimating purposes, totals are rounded to the nearest $1,000.

4.2 Alternative No. 1 – Wellhead Treatment

The wellhead treatment project alternative is a more robust and reliable version of the current treatment system. This alternative would aim to remove nitrate from the existing supply.

4.2.1. Advantages

The following items are key advantages related to Alternative No. 1:

- Wellhead Treatment provides a reliable and effective means to bringing the well water to meet drinking water standards.
- The School currently uses a wellhead treatment system, so this would not present a significant change.

4.2.2. Disadvantages

The following items are key disadvantages related to Alternative No. 1:

- School would likely need to continue using a third-party operator to operate this system.
- Wellhead treatment has a high capital cost as well as continuing O&M costs to cover the treatment system and brine disposal.
- Increased energy consumption at the School.
- Bonita School would continue to operate and maintain the water system. The School has indicated that this would be an additional strain on their focus of child education.

4.2.3. Opinion of Probable Capital Cost

An opinion of probable capital cost was developed for the wellhead treatment alternative. The anticipated cost is described below.

Construction Costs

Construction will include installation of the ion exchange system, a brine tank, interconnecting piping, fittings and appurtenances, minor site work, and instrumentation and controls. Replacement of lead piping in Kindergarten building is recommended but is not included in the cost opinion. A construction cost estimate is provided in **Table 4-1**.

Table 4-1 – Wellhead Treatment Construction Cost Estimate

Item	QTY	Unit	Unit Cost	Subtotal
Ion Exchange	1	LS	$750,000	$750,000
Brine Tank	1	EA	$8,000	$8,000
4-inch dia. pipe	40	LF	$120	$4,800
Pipe fittings and appurtenances	1	LS	$4,000	$4,000
Sitework	1	LS	$4,000	$4,000
Electrical and I&C	1	LS	$50,000	$50,000
Subtotal				$821,000

Assumptions:

- Ion exchange system costs are based on firm experience designing and installing prepackaged units of similar size and complexity.
- The 5,000-gallon brine tank will be installed inside the existing water system enclosure.
- Upgrades will be required for electrical, instrumentation and controls.

Project Costs and Other Related Costs

Project Costs and other related costs are broken down into three categories:

- Construction Cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. A project cost estimate is provided in **Table 4-2**.

Table 4-2 – Wellhead Treatment Project Cost Estimate

Item	Cost
Construction Subtotal	$821,000
Planning, Engineering, Construction Management (30%)	$246,300
Contingencies (30%)	$246,300
Total	$1,314,000

Annual Operations and Maintenance Costs

Operations and maintenance consist of media regeneration, media replacement, energy, brine disposal, and general upkeep of equipment.

Based on firm's experience estimating O&M unit costs for comparable systems, treatment equipment O&M is estimated at $180 per acre-foot of treated water. Brine disposal including hauling and processing is estimated at $1,000 per acre-foot of treated water.

Annual demand is estimated at 6,240 gpm or 7.1 acre-feet.

$$O\&M = \left(\frac{\$180 + \$1{,}000}{AF}\right)\left(\frac{7.1\ AF}{year}\right) \cong \$8{,}400\ per\ year$$

Annual O&M costs are provided in **Table 4-3**.

Table 4-3 – Wellhead Treatment Annual O&M Costs

Item	Annual O&M Cost
Treatment	$1,300
Brine Disposal	$7,100
Total Annual O&M Cost	$8,400

Lifecycle Cost Analysis

The 20-year lifecycle cost analysis is provided in **Table 4-4**. A 2.25% discount rate is applied per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

Table 4-4 – Wellhead Treatment Lifecycle Cost

Item	Cost
Net-Present Value of 20-Year O&M Costs	$134,000
Total Project Capital Cost	$1,314,000
Present 20-Year Life Cycle Cost	$1,448,000

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in **Table 4-5**.

Table 4-5 – Wellhead Treatment Life Cycle Cost Analysis

Item	Cost
Present 20-Year Life Cycle Cost	$1,448,000
Present 30-Year Life Cycle Cost	$3,567,000
Present 40-Year Life Cycle Cost	$3,605,000
Present 50-Year Life Cycle Cost	$6,901,000
Present 60-Year Life Cycle Cost	$6,926,000

Assumptions:

- Ion exchange system will be replaced at 20 years
- Electrical and I&C equipment will be replaced at 20 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

4.3 Alternative No. 2 – Point-of-Entry/ Point-of-Use Treatment

Point-of-entry/point-of-use project alternative would provide treatment to each individual building or drinking water plumbing fixture. This alternative would aim to remove nitrate where it may pose a health risk but allow nitrate to remain for non-potable uses such as irrigation and toilet flushing.

4.3.1. Advantages

The following items are key advantages related to Alternative No. 2:

- Treatment is focused on only those uses where nitrate poses a risk to health making the system low cost and compact
- All components are commercially available and can be purchased and installed quickly
- This is a lower cost alternative for bringing the small school water system into compliance

4.3.2. Disadvantages

The following items are key disadvantages related to Alternative No. 2:

- Since a portion of groundwater production will not be treated, students and faculty may still come into contact with water that exceeds the MCL for nitrate. The School would need to make special efforts to educate consumers on only using water from taps that are treated.
- SWRCB considers POE/POU to be a temporary solution.
- All options rated for nitrate removal generate waste brine. Low concentration waste brine could be disposed of in the septic system pending approval of an Onsite Wastewater Treatment System (OWTS) permit by County Public Health.
- The school has 63 fixtures which would require POU devices or multiple building which would require POE. Operational maintenance on multiple devices would be costly to the School.
- Space inside the school buildings for POE/POU devices and brine disposal collection may be limited. Certain options require a storage tank, a brine tank, multiple taps and additional piping, which may create congestion inside the classrooms.
- The School would continue to operate and maintain the water system. The School has indicated that this would be an additional strain on their focus of child education.

4.3.3. Opinion of Probable Capital Cost

Reverse osmosis and ion exchange are both rated for nitrate removal. This results in four options for implementation:

- Reverse osmosis at point-of-entry
- Ion exchange at point-of-entry

- Reverse osmosis at point-of-use
- Ion exchange at point-of-use

Following is an economic analysis of these four options to assist in determining the most appropriate choice for the School.

Assumptions:

Water use breakdown based on the design average day demand

- Total Water Use: 6,240 gpd
    - Outdoor Use (50% of total use): 3,120 gpd
    - Indoor Use (50% of total use): 3,120 gpd
        - Indoor Drinking Water (25% of total use): 1,560 gpd
        - Indoor Non-Potable (25% of total use): 1,560 gpd

Efficiency

- Reverse osmosis: 40%
- Ion exchange: 98%

Number of Units

- Point-of-entry: 6
- Point-of-use: 20

Unit Installation Costs (materials and labor)

- Reverse osmosis at point-of-entry: $10,000 per unit
- Ion exchange at point-of-entry: $10,000 per unit
- Reverse osmosis at point-of-use: $1,000 per unit
- Ion exchange at point-of-use: $700 per unit

Annual Unit O&M Costs

- Reverse osmosis at point-of-entry: $420 per unit per year
- Ion exchange at point-of-entry: $80 per unit per year via replacement media
- Reverse osmosis at point-of-use: $120 per unit per year
- Ion exchange at point-of-use: $50 per unit per year via replacement media

Operating pressure requirement:

- Reverse osmosis: 60 psi
- Ion exchange: 40 psi

Construction Costs

Construction will include installation of POE/POU devices. Replacement of lead piping in Kindergarten building is recommended but is not included in the cost opinion. A construction cost estimate is provided in Table 4-6.

Table 4-6 – POE/POU Treatment Construction Cost Estimate

Option	POE RO	POE IX	POU RO	POU IX
QTY	6	6	63	63
Unit	EA	EA	EA	EA
Unit Cost	$10,000	$10,000	$1,000	$700
Subtotal[6]	$60,000	$60,000	$63,000	$44,100

Project Costs and Other Related Costs

Project Costs and other related costs are broken down into three categories:

- Construction Cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. Note that POE/POU is essentially an enhancement to the plumbing system; therefore, the project costs are lower than those for an engineering solution for a capital project. A project cost estimate is provided in Table 4-7.

Table 4-7 – POE/POU Treatment Project Cost Estimate

Option	POE RO	POE IX	POU RO	POU IX
Construction Subtotal	$60,000	$60,000	$63,000	$44,100
Planning, Engineering, Construction Management (30%)	$18,000	$18,000	$18,900	$13,230
Contingencies (30%)	$18,000	$18,000	$18,900	$13,230
Total Construction Cost[7]	$96,000	$96,000	$101,000	$71,000

[6] For cost estimating purposes, the subtotals were rounded to 2 significant figures.
[7] For cost estimating purposes, the totals were rounded to 2 significant figures.

Annual Operations and Maintenance Costs

Annual O&M costs are provided in Table 4-8.

Table 4-8 – POE/POU Treatment Annual O&M Costs

Option	POE RO	POE IX	POU RO	POU IX
Device O&M	$2,520	$480	$27,200	$2,400
Power	$460	$260	$1,260	$780
Total O&M	$2,980	$740	$8,4600	$3,180

Present Worth Analysis

The present worth analysis is provided in Table 4-9.

Table 4-9 – POE/POU Treatment Present Worth Value

Option	POE RO	POE IX	POU RO	POU IX
Net-Present Value of 20-Year O&M Costs	$47,600	$11,800	$135,000	$50,700
POU/POE Unit Replacement	$120,500	$120,500	$120,600	$82,800
Total Project Capital Cost	$96,000	$96,000	$101,000	$66,000
Present 20-Year Life Cycle Cost	$264,100	$228,300	$236,000	$121,000

Assumptions:

- POU/ POE units will be replaced at 10 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in Table 4-10.

Table 4-10 – POE/POU Treatment Life Cycle Cost Analysis

Option	POE RO	POE IX	POU RO	POU IX
Present 20-Year Life Cycle Cost	$264,100	$228,300	$236,000	121,000
Present 30-Year Life Cycle Cost	$432,300	$383,800	$284,000	$139,000
Present 40-Year Life Cycle Cost	$756,400	$697,700	$300,000	$183,200
Present 50-Year Life Cycle Cost	$1,398,100	$1,331,300	$520,500	$331,600
Present 60-Year Life Cycle Cost	$2,680,900	$2,607,500	$953,500	$626,600

Assumptions:

- POU/ POE units will be replaced at 10 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

4.4 Alternative No. 3 – New Source of Supply

Alternative No. 3 involves drilling a new well whose production is isolated from local nitrate and salinity concentrations.

4.4.1. Advantages

The following items are key advantages related to Alternative No. 3:

- This project has a small footprint and if a viable location is found on the School's property no additional land acquisition would be required.
- Drilling a new well has relatively lower capital costs to the other alternatives.
- If a suitable groundwater location is found no wellhead treatment may be required which would bring down the School's current O&M costs.

4.4.2. Disadvantages

The following items are key disadvantages related to Alternative No. 3:

- A new well in the vicinity of the existing well is likely to develop similar poor water quality results.
- Looking outside of the School's property may be required to find a suitable well site. This would result in additional costs for land acquisition, piping, and electrical service.
- Public perception may not be satisfied with this alternative as the public is aware of the local groundwater quality issues.
- The School would continue to operate and maintain the water system. The School has indicated that this would be an additional strain on their focus of child education.

4.4.3. Opinion of Probable Capital Cost

Construction Costs

Prior to construction, a hydrogeological study will assist in confirming the viability of eliminating nitrate contamination and properly siting the new well. The cost of this study included in this cost opinion. Construction will include drilling, testing and equipping the new well, and installation of a new transmission pipeline to the existing pressure tank. Replacement of lead piping in Kindergarten building is recommended but is not included in the cost opinion. A construction cost estimate is provided in **Table 4-11**.

Table 4-11 – Well Construction Cost Estimate

Item	QTY	Unit	Unit Cost	Subtotal
Hydrogeological Study	1	LS	$20,000	$20,000
Well Drilling	1	LS	$600,000	$600,000
Well Equipping	1	LS	$50,000	$50,000
6-inch dia. pipe	600	LF	$150	$90,000
Pipe fittings and appurtenances	1	LS	$4,000	$4,000
Sitework	1	LS	$4,000	$4,000
Electrical and I&C	1	LS	$50,000	$50,000
Subtotal				$818,000

Assumptions:

- Well to be located on School property but outside of the current utility enclosure

Project and Other Related Costs

Project costs and other related costs are broken down into three categories:

- Construction Cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. A project cost estimate is provided in **Table 4-12**.

Table 4-12 – Well Project Cost Estimate

Item	Cost
Construction Subtotal	$818,000
Planning, Engineering, Construction Management	$245,400
Contingencies	$245,400
Total	$1,309,000

Annual Operations and Maintenance Costs

A new well with limited use is very inexpensive to operate and maintain. Annual O&M costs are provided in **Table 4-13**.

Table 4-13 – Well Annual O&M Costs

Item	O&M
Energy	$500
Facility Maintenance	$2,000
Total Annual O&M	$2,500

Assumptions:

- Energy: $0.26 per kWh and 200 feet of lift
- Maintenance includes annual inspection and efficiency testing

Cost Effective Present Worth Analysis

The costs effective present worth analysis is provided in **Table 4-14**.

Table 4-14 – Well Present Worth Value

Item	Cost
Net-Present Value of 20-Year O&M Costs	$40,000
Total Project Capital Cost	$1,309,000
Present 20-Year Life Cycle Cost	$1,349,000

Assumptions:

- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in **Table 4-15**.

Table 4-15 – Well Life Cycle Cost Analysis

Item	Cost
Present 20-Year Life Cycle Cost	$1,349,000
Present 30-Year Life Cycle Cost	$1,615,000
Present 40-Year Life Cycle Cost	$1,627,000
Present 50-Year Life Cycle Cost	$2,033,000
Present 60-Year Life Cycle Cost	$2,041,000

Assumptions:

- Well pump and motor will be replaced after 20 years
- Electrical and I&C will be replaced after 20 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

4.5 Alternative No. 4a – Consolidation with City of Santa Maria

Alternative 4a involves extending municipal water service to the School via 8,100 feet of new 12-inch diameter pipe.

4.5.1. Advantages

The following items are key advantages related to Alternative No. 4a:

- The School is no longer responsible for operating a water system. These responsibilities are transferred to the City. The School will benefit from the City's reliable water supply and experienced management and operations staff.
- Fire protection improves from a rural fire flow of 100 gpm to an urban fire flow of 1,250 gpm from two hydrants.
- Nitrate contamination is eliminated. The School will enjoy water treated to a higher quality standard.
- The operating costs of a pipeline are extremely low.
- The average service life of a pipeline is 50 years or more.
- Following demolition and salvage of the School's existing water infrastructure, the School may repurpose the recovered area for educational purposes.
- The City is already planning to extend municipal water service as far as the Wastewater Treatment Plant greatly reducing the length of pipe needed to connect the School to the distribution system.

4.5.2. Disadvantages

The following items are key disadvantages related to Alternative No. 4a:

- Preparation and implementation of water quality mitigation measures may be required to streamline operations in the vicinity of the School.
- The pipeline has a high capital cost.
- A long dead-end pipeline lacks distribution resiliency and redundancy. If the pipeline is shut down for an emergency at any point in West Main Street, Black Road or portions of Stowell Road, the School will be without water supply until the emergency is mitigated.
- A flushing program would be required to mitigate impacts of water age, and the City will charge the School for the volume of water used in the flushing program at the current commodity rate.

4.5.3. Opinion of Probable Capital Cost

An opinion of probable capital cost was developed for the 12-inch diameter pipeline alternative. The anticipated cost is described below.

Construction Costs

Construction will include installation of 8,100 feet of 12-inch diameter pipe connecting the School to the planned 12-inch main in Black Road in the vicinity of the Wastewater Treatment Plant as itemized in **Table 4-16**.

Negotiation with Caltrans will be required to determine traffic control and pavement repair requirements. In the table below, a pavement removal and repair cost has been developed assuming one full lane width of pavement is replaced.

Replacement of lead piping in Kindergarten building is recommended but is not included in the cost opinion.

Table 4-16 – 12-inch Pipeline Construction Cost Estimate

Item	QTY	Unit	Unit Cost	Cost
Mobilization (5% of Construction Cost)	1	LS	$96,000	$96,000
Demolition of Existing Equipment	1	LS	$15,000	$15,000
Clearing, Stripping, Grubbing	1	LS	$20,000	$20,000
Traffic Control	1	LS	$15,000	$15,000
Pavement Removal and Repair	1	LS	$325,000	$325,000
12-inch Dia. C900 PVC Pipe	8,100	LF	$180	$1,458,000
12-inch Dia. Gate Valve	6	EA	$6,000	$36,000
4-inch Dia. Blowoff	1	EA	$4,000	$4,000
3-inch Dia. Air-Vac Valve	1	EA	$5,000	$5,000
Fire Hydrant	2	EA	$8,000	$16,000
Connection at Bonita School	1	LS	$3,000	$3,000
Connection to City System	1	LS	$3,000	$3,000
2-inch Dia. Water Service Meter	1	EA	$15,000	$15,000
2-inch Dia. Meter Commercial Connection Fee	1	LS	$20,000	$20,000
2-inch Dia. Meter State Water Connection Fee	1	LS	$84,000	$84,000
Subtotal				$2,115,000

Project Costs and Other Related Costs

Project Costs and other related costs are broken down into three categories:

- Construction Cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. A project cost estimate is provided in **Table 4-17**.

Table 4-17 – 12-inch Diameter Pipeline Project Cost Estimate

Item	Cost
Construction Subtotal	$2,115,000
Planning, Engineering, Construction Management (30%)	$634,500
Contingencies (30%)	$634,500
Total[8]	$3,384,000

Annual Operations and Maintenance Costs

New pipeline tends to require very limited maintenance. Extension of the dead-end main to the School will have an incremental impact on water quality management. Annual O&M costs are provided in **Table 4-18**.

Table 4-18 – 12-inch Diameter Pipeline Annual O&M Costs

Item	O&M
Water Service & Flushing Program	$77,000
Maintenance	$8,000
Total Annual O&M	$85,000

Assumptions:

- Maintenance will likely be limited to inspection and exercising of valves, hydrants, meters, and other appurtenances at a rate of $1,000 per year per 1,000 feet of pipe.

Present Worth Analysis

The costs effective present worth analysis is provided in **Table 4-19**.

Table 4-19 – 12-inch Diameter Pipeline Present Worth Value

Item	Cost
Net-Present Value of 20-Year O&M Costs	$1,357,000
Total Project Capital Cost	$3,384,000
Present 20-Year Life Cycle Cost	$4,741,000

Assumptions:

- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

[8] For cost estimating purposes, the subtotals were rounded to 3 significant figures.

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in **Table 4-20**.

Table 4-20 – 12-inch Diameter Pipeline Life Cycle Cost Analysis

Item	Cost
Present 20-Year Life Cycle Cost	$4,741,000
Present 30-Year Life Cycle Cost	$5,229,000
Present 40-Year Life Cycle Cost	$5,615,000
Present 50-Year Life Cycle Cost	$5,930,000
Present 60-Year Life Cycle Cost	$6,178,000

Assumptions:

- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.
- Air-Vac valve will be replaced at 20 years

4.6 Alternative No. 4b – Connection to City of Santa Maria System and On-site Storage

Alternative 4b involves extending water service to the School via 8,100 feet of new 4-inch diameter pipe and providing onsite fire storage. This alternative also involves preparation and implementation of a Water Quality Management Plan.

4.6.1. Advantages

The following items are key advantages related to Alternative No. 4b:

- The School is no longer responsible for the water supply. These responsibilities are transferred to the City. The School will benefit from the City's reliable water supply and experienced management and operations staff.
- Nitrate contamination is eliminated. The School will enjoy water treated to a higher quality standard.
- The operating costs of a pipeline are extremely low.
- The average service life of a pipeline and a tank is 50 years or more.
- The City is already planning to extend municipal water service as far as the Wastewater Treatment Plant greatly reducing the length of pipe needed to connect the School to the distribution system.

4.6.2. Disadvantages

The following items are key disadvantages related to Alternative No. 4b:

- The pipeline has a high capital cost.
- An operating permit amendment is required for fire storage and the School is responsible for maintenance of the pipeline and the fire protection infrastructure.

- A long dead-end pipeline lacks distribution resiliency and redundancy. If the pipeline is shut down for an emergency at any point in East Main Street, Black Road or portions of Stowell Road, the School will be without water supply until the emergency is mitigated. This risk is low for new substructure.
- A flushing program would be required to mitigate impacts of water age, and the City will charge the School for the volume of water used in the flushing program at the current commodity rate.
- Additional water treatment will likely still be required due to water age.

4.6.3. Opinion of Probable Capital Cost

An opinion of probable capital cost was developed for 4-inch diameter pipeline and onsite storage alternative. The anticipated cost is described below.

Construction Costs

Construction will include installation of 8,100 feet of 4-inch diameter pipe connecting the School to the planned 6-inch diameter main in Black Road in the vicinity of the Wastewater Treatment Plant as itemized in **Table 4-26**.

Negotiation with Caltrans will be required to determine traffic control and pavement repair requirements. In the table below, a pavement removal and repair cost has been developed assuming one full lane width of pavement is replaced.

Replacement of lead piping in Kindergarten building is recommended but is not included in the cost opinion.

Table 4-21 – 4-inch Diameter Pipeline and Onsite Storage Construction Cost Estimate

Item	QTY	Unit	Unit Cost	Cost
Mobilization (5% of Construction Cost)	1	LS	$65,000	$65,000
Demolition of Existing Equipment	1	LS	$10,000	$10,000
Clearing, Stripping, Grubbing	1	LS	$20,000	$20,000
Traffic Control	1	LS	$15,000	$15,000
Pavement Removal and Repair	1	LS	$211,000	$211,000
4-inch Dia. C900 PVC Pipe	8,100	LF	$120	$972,000
4-inch Dia. Gate Valve	6	EA	$1,500	$9,000
4-inch Dia. Blowoff	1	EA	$4,000	$4,000
3-inch Dia. Air-Vac Valve	1	EA	$5,000	$5,000
Fire Hydrant	2	EA	$8,000	$16,000
Connection at Bonita School	1	LS	$2,500	$2,500
Connection to City System	1	LS	$3,000	$3,000
2-inch Dia. Water Service Meter	1	EA	$15,000	$15,000
2-inch Dia. Meter Commercial Connection Fee	1	LS	$20,000	$20,000
2-inch Dia. Meter State Water Connection Fee	1	LS	$84,000	$84,000
Subtotal				$1,452,000

Project costs and Other Related Costs

Project costs and other related costs are broken down into three categories:

- Construction cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. A project cost estimate is provided in Table 4-27.

Table 4-22 – 4-inch Diameter Pipeline and Onsite Storage Project Cost Estimate

Item	Cost
Construction Subtotal	$1,452,000
Planning, Engineering, Construction Management (30%)	$435,600
Contingencies (30%)	$435,600
Total	$2,324,000

Annual Operations and Maintenance Costs

New substructure tends to require very limited maintenance. Extension of the dead-end main to the School will have an incremental impact on water quality management. Annual O&M costs are provided in Table 4-28.

Table 4-23 – 4-inch Diameter Pipeline and Onsite Storage Annual O&M Costs

Item	O&M
Water Service & Flushing Program	$14,000
Maintenance	$5,000
Tank Inspection	$1,000
Total Annual O&M	$20,000

Additionally, it is assumed the tank will be recoated every 10 years at an estimated 2022 cost of $10,000.

Assumptions:

- Maintenance will be limited to inspection and exercising of valves, hydrants, meters, and other appurtenances at a rate of $1,000 per year per 1,000 feet of pipe.
- The tank will be inspected bi-annually.

Present Worth Analysis

The present worth analysis is provided in Table 4-29.

Table 4-24 – 4-inch Diameter Pipeline and Onsite Storage Present Worth Value

Item	Cost
Net-Present Value of 20-Year O&M Costs	$319,000
Total Project Capital Cost	$2,324,000
Present 20-Year Life Cycle Cost	$2,643,000

Assumptions:

- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.
- Tank will be recoated after 10 years

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in Table 4-30.

Table 4-25 – 4-inch Diameter Pipeline and Onsite Storage Life Cycle Cost Analysis

Item	Cost
Present 20-Year Life Cycle Cost	$2,643,000
Present 30-Year Life Cycle Cost	$2,772,000
Present 40-Year Life Cycle Cost	$2,873,000
Present 50-Year Life Cycle Cost	$2,961,000
Present 60-Year Life Cycle Cost	$3,029,000

Assumptions:

- Tank will be recoated at 10 years
- Air-Vac valve will be replaced at 20 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

4.7 Alternative No. 4c – Connection to City of Santa Maria System and On-site Hydropneumatic Tank

Alternative 4c involves extending water service to the School via 8,100 feet of new 2-inch diameter pipe. This alternative also involves instillation of a hydropneumatic tank onsite to address peak demands and maintaining the existing storage tank and wells for fire suppression and irrigation.

4.7.1. Advantages

The following items are key advantages related to Alternative No. 4c:

- The School is no longer responsible for the water supply. These responsibilities are transferred to the City. The School will benefit from the City's reliable water supply and experienced management and operations staff.
- Nitrate contamination is eliminated. The School will enjoy water treated to a higher quality standard.
- The operating costs of a pipeline are extremely low.
- The average service life of a pipeline and a tank is 50 years or more.
- The City is already planning to extend municipal water service as far as the Wastewater Treatment Plant greatly reducing the length of pipe needed to connect the School to the distribution system.
- Less frequent flushing of the pipeline due to smaller size.

4.7.2. Disadvantages

The following items are key disadvantages related to Alternative No. 4c:

- The pipeline and hydropneumatic tank have a high capital cost.
- An operating permit amendment is required for fire storage and the School is responsible for maintenance of the pipeline and the fire protection infrastructure.
- A long dead-end pipeline lacks distribution resiliency and redundancy. If the pipeline is shut down for an emergency at any point in East Main Street, Black Road or portions of Stowell Road, the School will be without water supply until the emergency is mitigated. This risk is low for new substructure.
- A flushing program or additional water treatment would be required to mitigate impacts of water age, and the City will charge the School for the volume of water used in the flushing program at the current commodity rate.

4.7.3. Opinion of Probable Capital Cost

An opinion of probable capital cost was developed for 2-inch diameter pipeline and onsite storage alternative. The anticipated cost is described below.

Construction Costs

Construction will include installation of 8,100 feet of 2-inch diameter pipe connecting the School to the planned 12-inch diameter main in Black Road in the vicinity of the Wastewater Treatment Plant as well as the proposed hydropneumatic tank as itemized in Table 4-26.

Negotiation with Caltrans will be required to determine traffic control and pavement repair requirements. In the table below, a pavement removal and repair cost has been developed assuming one full lane width of pavement is replaced.

Table 4-26 – 2-inch Diameter Pipeline and Onsite Hydropneumatic Tank Construction Cost Estimate

Item	QTY	Unit	Unit Cost	Cost
Mobilization (5% of Construction Cost)	1	LS	$65,000	$65,000
Demolition of Existing Equipment	1	LS	$10,000	$10,000
Clearing, Stripping, Grubbing	1	LS	$20,000	$20,000
Traffic Control	1	LS	$15,000	$15,000
Pavement Removal and Repair	1	LS	$211,000	$211,000
2-inch C900 PVC Pipe	8,100	LF	$110	$891,000
2-inch Gate Valve	6	EA	$1,250	$7,500
2-inch Blowoff	1	EA	$3,750	$3,750
1-inch Air-Vac Valve	1	EA	$4,000	$4,000
Fire Hydrant	2	EA	$8,000	$16,000
Connection at Bonita School	1	LS	$2,500	$2,500
Connection to City System	1	LS	$3,000	$3,000
1,000 Gallon Hydropneumatic Tank	1	LS	$100,000	$100,000
2-inch Water Service Meter	1	EA	$15,000	$15,000
2-inch Meter Commercial Connection Fee	1	LS	$20,000	$20,000
2-inch Meter State Water Connection Fee	1	LS	$84,000	$84,000
Subtotal				$1,468,000

Project costs and Other Related Costs

Project costs and other related costs are broken down into three categories:

- Construction cost
- Planning, Engineering, Construction Management
- Contingencies

Each category is estimated at 30% of construction costs. A project cost estimate is provided in **Table 4-27**.

Table 4-27 – 2-inch Diameter Pipeline and Onsite Hydropneumatic Tank Project Cost Estimate

Item	Cost
Construction Subtotal	$1,468,000
Planning, Engineering, Construction Management (30%)	$440,400
Contingencies (30%)	$440,400
Total	$2,349,000

Annual Operations and Maintenance Costs

New substructure tends to require very limited maintenance. Extension of the dead-end main to the School will have an incremental impact on water quality management. Annual O&M costs are provided in **Table 4-28**.

Table 4-28 – 2-inch Diameter Pipeline and Onsite Hydropneumatic Tank Annual O&M Costs

Item	O&M
Water Service & Flushing Program	$6,000
Maintenance	$8,000
Operations	$2,000
Tank Inspection	$1,000
Total Annual O&M	$17,000

Additionally, it is assumed the tank will be recoated every 10 years at an estimated 2022 cost of $10,000.

Assumptions:

- Maintenance will be limited to inspection and exercising of valves, hydrants, meters, and other appurtenances at a rate of $1,000 per year per 1,000 feet of pipe.
- The tank will be inspected bi-annually.

Present Worth Analysis

The present worth analysis is provided in Table 4-29.

Table 4-29 – 4-inch Diameter Pipeline and Onsite Storage Present Worth Value

Item	Cost
Net-Present Value of 20-Year O&M Costs	$271,000
Total Project Capital Cost	$2,349,000
Present 20-Year Life Cycle Cost	$2,620,000

Assumptions:

- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.
- Tank will be recoated after 10 years

Life-Cycle Cost Analysis

The life-cycle cost analysis for 20 years, 30 years, 40 years, 50 years and 60 years is provided in Table 4-30.

Table 4-30 – 4-inch Diameter Pipeline and Onsite Storage Life Cycle Cost Analysis

Item	Cost
Present 20-Year Life Cycle Cost	$2,620,000
Present 30-Year Life Cycle Cost	$2,732,000
Present 40-Year Life Cycle Cost	$2,819,000
Present 50-Year Life Cycle Cost	$2,896,000
Present 60-Year Life Cycle Cost	$2,956,000

Assumptions:

- Tank will be recoated at 10 years
- Air-Vac valve will be replaced at 20 years
- 2.25% discount rate per the Bureau of Reclamation 2022 interest rate for the formulation and evaluation of plans for water resources.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Comparison of Alternatives

As previously documented, the alternatives have various advantages and disadvantages related to cost, complexity, operation, and water quality. **Table 5-1** has been prepared to present the comparison of project capital cost, 20-year present value and 60-year lifecycle costs:

Table 5-1 – Cost Comparison

Alternative	Present Value 20-Year O&M Cost	Total Project Capital Cost	Present Value 20-Year Life Cycle Cost
1. Wellhead Treatment	$134,000	$1,314,000	$1,448,000
2. POE/POU Treatment*	$168,100	$96,000	$264,100
3. New Source of Supply	$40,000	$1,309,000	$1,349,000
4a. Consolidation with City	$1,357,000	$3,384,000	$4,741,000
4b. Connection to the City & On-Site Fire Storage	$319,000	$2,324,000	$2,643,000
4c. Connection to the City & On-Site Hydropneumatic Tank	$271,000	$2,349,000	$2,620,000
*For comparison purposes, RO at POE was selected since it represented the most conservative cost.			

5.2 Recommended Project

Alternative No. 4c, connection of the Bonita Elementary School system to the City of Santa Maria using a 2-inch diameter line is the preferred alternative. This alternative is recommended for the following reasons:

- **Water Quality:** Current concerns with water quality violations will be addressed. City water meets state and federal requirements without requiring any significant ongoing operational effort by School District staff, unlike the existing onsite treatment system. However, potential for nitrification should be considered and the 2-inch diameter water line should be sampled and included in a flushing program to mitigate impacts of water age but is far less of a risk than larger diameter pipelines. Flushing will likely only need to occur after the school is unoccupied for prolonged periods of time such as the summer months. During final design, a desktop analysis of water age and water quality will be conducted based on input from the City and the water age/quality from the proposed 2-inch and City's proposed pipeline to the WWTP.

- **Supply Reliability:** The new water main, repurposed storage tank, and hydropneumatic tank provide both flow and emergency storage in the event of power failure at the School. As long as the City water system is in service, the School will be supplied with water unless a main break occurs. This is less likely than a mechanical or power failure of the existing onsite treatment system.
- **Reduced Maintenance:** Some maintenance will be required as part for maintaining the hydropneumatic tank and pipeline, but this will be less effort than the existing treatment system. Regular inspections and recoating of the onsite storage tank will be required but will be less effort

and cost than operation of the existing treatment system. The proposed pipeline is anticipated to have a 50-to-80-year life span and should require minimal, if any maintenance during this time.

A schematic map showing the recommended proposed pipeline alignment can be found in Section 3, **Figure 3-1**. A schematic map showing the location of existing storage tank for repurposing can be found in Section 2, **Figure 2-1**.

5.3 Approvals and Permitting Considerations

The most significant concerns are receiving approval for service from the City and negotiating with Caltrans for placement of a pipeline in state highway right-of-way. This could affect schedule and construction cost. Additional approval from Santa Barbara County Local Agency Formation Commission (LAFCo) is required for any consolidation option and this process shall be completed in conjunction with the design of the pipeline. No connection to the City of Santa Maria will be made prior to LAFCo approval.

5.4 Project Schedule

It is anticipated that the project can be implemented in accordance with the following schedule:

Table 5-2 – Project Schedule

Task	Anticipated Duration
Secure Funding for Construction Project	6 Months
Coordination with City of Santa Maria	3 Months
Planning Project (Design, CEQA, Technical Package for Construction Funding)	9 Months
Caltrans & Permitting Coordination	Concurrent with Planning Project (9 Months)
Development and Execution of Construction Funding Agreement	9 Months
Bid Phase	2 Months
Project Construction	12 Months
Total	**41 Months (3 Years and 5 Months)**

Appendix A
Violation Citation

Appendix A
Violation Citation

Santa Barbara County
PUBLIC Health
DEPARTMENT

Environmental Health Services

225 Camino del Remedio • Santa Barbara, CA 93110
805/681-4900 • FAX 805/681-4901

Takashi M. Wada, MD, MPH Director/Health Officer
Susan Klein-Rothschild, MSW Deputy Director

2125 S. Centerpointe Pkwy. #333 • Santa Maria, CA 93455-1340
805/346-8460 • FAX 805/346-8485

Lawrence Fay, REHS Director of Environmental Health

June 20, 2017

Scott Roy, Coordinator MOFT
Santa Maria-Bonita School District
708 S. Miller
Santa Maria, CA. 93454

Water System No: CA4200833

CITATION NO. 04_72_17C_008
NITRATE MAXIMUM CONTAMINANT LEVEL VIOLATION
FOR JUNE 2017

Dear Mr. Roy,

Enclosed is a Citation issued to the Bonita School public water system.

Your receipt of this notice indicates that your water system has exceeded the Maximum Contaminant Level (MCL) **for Nitrate on June 6, 2017.** The Health and Safety Code requires that you immediately notify the water consumers of these test failures and associated health risks. A Tier 1 Notification template has been provided to you at the time this department was notified of the exceedance. Additionally, the State Water Resources Control Board, Division of Drinking Water requires that our department issue a formal Enforcement Action, e.g. a citation or compliance order, in such circumstances.

The following are the instructions on how to complete the noticing and what information will need to be returned to this office:

A. The Tier 1 Notification must be issued to the public (all water users) as soon as possible within 24 hours of learning of the MCL exceedance, in a manner designed to reach residential, transient, and non-transient users of the water system, using one of the following forms at minimum: (1) Radio or television; (2) Posting in conspicuous locations throughout the area served by the water system; (3) Hand delivery to persons served by the water system; or (4) Other method approved by EHS.

B. A copy of the signed and dated notice must be returned to this office by July 6, 2017.

C. A written explanation of the situation and plan for corrective action must be returned to this office by July 20, 2017.

Please find the Citation for this incident attached, carefully read the "Directives" section for further required action, and note the relevant regulation sections included for your reference.

If you have any questions regarding this matter, please contact me at (805) 346-8475 or Deanna.Talerico@sbcphd.org

Sincerely,

Deanna Talerico

Deanna Talerico
Senior Environmental Health Specialist
EHS Drinking Water Systems Program, Santa Barbara County

Enclosures
Certified Mail No. [Cert. Number]

cc:

Citation No. 04_72_17C_008

COUNTY OF SANTA BARBARA

DEPARTMENT OF PUBLIC HEALTH

ENVIRONMENTAL HEALTH SERVICES

Name of Public Water System: Bonita School

Water System No: CA42000833

Attention: Scott Roy, Coordinator MOFT
Santa Maria-Bonita School District
708 S. Miller
Santa Maria, CA. 93454

Issued: June 20, 2017

CITATION FOR NONCOMPLIANCE

NITRATE MAXIMUM CONTAMINANT LEVEL VIOLATION

CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64431

JUNE 2017

The California Health and Safety Code (hereinafter "CHSC"), CCR Title 22, Chapter 14, Article 4, Section 64258 authorizes the Local Primacy Agency, in this case the Santa Barbara County Environmental Health Services department (hereinafter "SBC EHS") to conduct enforcement actions and issue citations to a public water system under the jurisdiction of the local primacy agency when EHS determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing

with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

SBC EHS, acting by and through its delegation from the State Water Resources Control Board, Division of Drinking Water, hereby issues this citation pursuant to Section 116650 of the CHSC to the Bonita School for violation of Title 22, California Code of Regulations (CCR), Section 64431.

A copy of the applicable statutes and regulations are included in Appendix 1, which is attached hereto and incorporated by reference.

STATEMENT OF FACTS

The Bonita School is classified as a Non-Transient, Non-Community water system serving a school campus with approximately 575 students and staff. The Bonita School water system has one active well, and is equipped with an ion exchange water treatment system designed to remove excesse nitrates from the raw water, in order to comply with the Maxmimum Contaminant Level (MCL) of 10 ppm and provide safe, potable treated water to the students and users. SBC EHS received laboratory results, submitted and notified by the Bonita School contract Certified Operator staff within 24 hours of their receipt of the results as required, that report a result of 10.8 ppm for Nitrate (as NO3-N) in the Bonita School Water System on June 6, 2017, exceeding the MCL of 10 ppm. According to the Bonita School, the water treatment company had visited the facility for routine equipment servicing (canister exchange) the day prior. The Bonita School conducts internal nitrate testing in order to carefully monitor their nitrate levels, as they have had several treatment failures and resulting exceedances in the last 18 months. The Bonita School has already issued a Tier 1 Notification to the

water system users, and posted required Nitrate MCL exceedance notifications at all sinks and fountains in the facility.

DETERMINATION

The Bonita School water system is in violation of Title 22, California Code of Regulations (CCR), Section 64431: Specifically, Bonita School exceeded the Primary Maximum Contaminant Level (MCL) of 10 ppm for Nitrate listed in Table 64431-A, in the water supplied to the public.

DIRECTIVES

The Bonita School is hereby directed to take the following actions:

1. As soon as possible within 24-hours after learning of a nitrate MCL exceedance, notify the public (all water users) of the acute nitrate MCL violation. The notification must contain the Tier 1 required health effects languages and a description of the incident.
2. A copy of the completed consumer notification and proof of notification shall be submitted to EHS no later than July 6th, 2017.
3. By July 20, 2017, submit to EHS a written explanation of why the treatment system failed and the high nitrate result occurred, and a detailed corrective action plan to address how this will be prevented from occurring in the future.
4. Coordinate with contract treatment company(s) to ensure the treatment system is being operated in a manner that maintains the nitrate levels below the MCL of 10 ppm at all times. If necessary, research other treatment options or companies. Obtain approval from EHS prior to any changes to the water system.

5. Maintain consumer notification signage posted until further notice, or approval by EHS to remove.

All submittals required by this Citation shall be electronically submitted to the SBC EHS at the following address. The subject line for all electronic submittals corresponding to this citation shall include the following information: Water System name and number, citation number and title of the document being submitted.

Deanna Talerico
Deanna.Talerico@sbcphd.org

SBC EHS reserves the right to make such modifications to this Citation as it may deem necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

Nothing in this Citation relieves the Bonita School of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Citation shall apply to and be binding upon the Bonita School, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Citation are severable, and the Bonita School shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

_____ _____

Deanna Talerico — Date
Senior Environmental Health Specialist
EHS Drinking Water Systems Program
Santa Barbara County Public Health Department

11

Appendices:

1. Applicable Statutes and Regulations
2. Tier 1 Public Notification for Nitrates template (English and Spanish)

Certified Mail No. [Cert. Number]

APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS FOR CITATION NO. 04_72_17C_008

NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.

California Health and Safety Code (CHSC):

Section 116271 states in relevant part:

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

(1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).

(2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.

(3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.

(4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).

(5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.

(6) Chapter 7 (commencing with Section 116975).

(7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).

(8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).

(9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.

(10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).

(11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).

(12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

(k) (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.

(2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116555 states in relevant part:

(a) Any person who owns a public water system shall ensure that the system does all of the following:
(1) Complies with primary and secondary drinking water standards.
(2) Will not be subject to backflow under normal operating conditions.
(3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Section 116650 states in relevant part:
(a) If the state board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the state board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
(c) A citation may specify a date for elimination or correction of the condition constituting the violation.
(d) A citation may include the assessment of a penalty as specified in subdivision (e).
(e) The state board may assess a penalty in an amount not to exceed one thousand dollars ($1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation and shall be in addition to any liability or penalty imposed under any other law.

California Code of Regulations, Title 22 (CCR):

Section 64431 states in relevant part:
Article 4. Primary Standards--Inorganic Chemicals
§64431. Maximum Contaminant Levels--Inorganic Chemicals. Public water systems shall comply with the primary MCLs in table 64431-A as specified in this article

Table 64431-A
Maximum Contaminant Levels
Inorganic Chemicals

Chemical	*Maximum Contaminant Level, mg/L*
Aluminum	1.
Antimony	0.006
Arsenic	0.010
Asbestos	7 MFL*
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Hexavalent chromium	0.010
Mercury	0.002
Nickel	0.1
Nitrate (as nitrogen)	10.
Nitrate+Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Perchlorate	0.006
Selenium	0.05
Thallium	0.002

* MFL=million fibers per liter; MCL for fibers exceeding 10 µm in length.

Section 64432 states in relevant part:
§64432. Monitoring and Compliance--Inorganic Chemicals
(a) All public water systems shall monitor to determine compliance with the nitrate and nitrite MCLs in table 64431-A, pursuant to subsections (d) through (f) and Section 64432.1. All community and nontransient-noncommunity water systems shall monitor to determine compliance with the perchlorate MCL, pursuant to subsections (d), (e), and (l), and section 64432.3. All community and nontransient-noncommunity water systems shall also monitor to determine compliance with the other MCLs in table 64431-

A, pursuant to subsections (b) through (n) and, for asbestos, section 64432.2. Monitoring shall be conducted in the year designated by the State Board of each compliance period beginning with the compliance period starting January 1, 1993.

§64432.1. Monitoring and Compliance--Nitrate and Nitrite.
(a) To determine compliance with the MCL for nitrate in Table 64431-A, all public water systems using groundwater and transient-noncommunity systems using approved surface water shall monitor annually, and all community and nontransient-noncommunity systems using approved surface water shall monitor quarterly.
(1) The water supplier shall require the laboratory to notify the supplier within 24 hours whenever the level of nitrate in a single sample exceeds the MCL, and shall ensure that a contact person is available to receive such analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any acute nitrate MCL exceedance if the laboratory cannot make direct contact with the designated contact person within 24 hours. Within 24 hours of notification, the water supplier shall: (A) Collect another sample, and
(B) Analyze the new sample; if the average of the two nitrate sample results exceeds the MCL, report the result to the State Board within 24 hours. If the average does not exceed the MCL, inform the State Board of the results within seven days from the receipt of the original analysis.
(C) If a system is unable to resample within 24 hours, it shall notify the consumers by issuing a Tier 1 Public Notice pursuant to section 64463.1 and shall collect and analyze a confirmation sample within two weeks of notification of the results of the first sample.
(2) For public water systems using groundwater, the repeat monitoring frequency shall be quarterly for at least one year following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. After four consecutive quarterly samples are less than the MCL, a system may request that the State Board reduce monitoring frequency to annual sampling.
(3) For public water systems using approved surface water, the repeat monitoring frequency shall be quarterly following any one sample in which the concentration is greater than or equal to 50 percent of the MCL. After four consecutive quarterly samples are less than 50 percent of the MCL, a system may request that the State Board reduce monitoring frequency to annual sampling. A system using approved surface water shall return to quarterly monitoring if any one sample is greater than or equal to 50 percent of the MCL.
(4) After any round of quarterly sampling is completed, each community and nontransient-noncommunity system which initiates annual monitoring shall take subsequent samples during the quarter which previously resulted in the highest analytical results.

Section 64463 states in relevant part:
§64463.1. Tier 1 Public Notice.
(a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs: (1) Violation of the total coliform MCL when: (A) Fecal coliform or E. coli are present in the distribution system; or (B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or E. coli in the repeat sample; (2) Violation of the MCL for nitrate, nitrite, or total nitrate and nitrite, or when the water system fails to take a confirmation sample within 24 hours of the system's receipt of the first sample showing an exceedance of the nitrate or nitrite MCL.

(b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the State Board that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall: (1) Give public notice pursuant to this section; (2) Initiate consultation with the State Board within the same timeframe; and (3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health. (c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms: (1) Radio or television; (2) Posting in conspicuous locations throughout the area served by the water system; (3) Hand delivery to persons served by the water system; or (4) Other method approved by the State Board, based on the method's ability to inform water system users.

Section 64465 states in relevant part:
§64465. Public Notice Content and Format.
(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:
(1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s); (2) The date(s) of the violation or occurrence; (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G; (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water; (5) Whether alternative water supplies should be used; (6) What actions consumers should take, including when they should seek medical help, if known; (7) What the water system is doing to correct the violation or occurrence; (8) When the water system expects to return to compliance or resolve the occurrence; (9) The name, business address, and phone number of the water system owner,

operator, or designee of the water system as a source of additional information concerning the public notice; (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: "Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail."; and (11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time."

(c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements: (1) For a Tier 1 public notice: (A) The notice shall be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the public water system, and the notice shall include a telephone number or address where such individuals may contact the public water system for assistance; and (B) If any non-English-speaking group exceeds 1,000 persons served by the public water system, but does not exceed 10 percent served, the notice shall include information in the appropriate language(s) regarding the importance of the notice, and the telephone number or address where such individuals may contact the public water system to obtain a translated copy of the notice from the public water system or assistance in the appropriate language;

(d) Each public notice given pursuant to this article shall: (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level; (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and (3) Not contain language that minimizes or contradicts the information being given in the public notice.

Appendix 64465-D.

Health Effects Language Inorganic Contaminants.

Nitrate: "Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women".

Citation No. 04_72_17C_008

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

DRINKING WATER WARNING

[System] water has high levels of nitrate

DO NOT GIVE THE WATER TO
INFANTS UNDER 6 MONTHS OLD OR PREGNANT WOMEN
OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 10 milligrams per liter. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- **DO NOT GIVE THE WATER TO INFANTS.** *Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin.* Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.

- **PREGNANT WOMEN SHOULD NOT CONSUME THE WATER.** *High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.*

- Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.

- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.

- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems, storm water run-off, and fertilizers). Levels of nitrate in drinking water can vary throughout the year. We will let you know if the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- *SCHOOLS: Must notify school employees, students, and parents (if the students are minors).*
- *RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.*
- *BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.*

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

INFORMACIÓN IMPORTANTE SOBRE SU AGUA POTABLE

Este aviso contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

ADVERTENCIA SOBRE EL AGUA POTABLE

El agua de [System] tiene altos niveles de nitratos

NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES O A MUJERES EMBARAZADAS. TAMPOCO USE ÉSTA AGUA PARA PREPAPAR FORMULA INFANTIL

Los resultados de las pruebas del agua recibidas el [date] mostraron niveles de nitrato de [level and units]. Estos niveles exceden el estándar o nivel máximo de contaminante (MCL) de 10 milígramos por litro. Los nitratos en el agua potable son una preocupación seria en bebés menores de seis meses.

¿Qué debe hacer?

- **NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES.** *Los bebés menores de 6 meses que toman agua con nitrato en exceso del nivel máximo de contaminante (MCL), se pueden enfermar seriamente y rápidamente. Y si los bebés no reciben atención médica, pueden morir debido a que los altos niveles de nitratos pueden interferir con la capacidad de la sangre de los bebés para transportar oxígeno. Los síntomas incluyen falta de aire y coloración azulada de la piel.* Los síntomas en los bebés se pueden desarrollar rápidamente y la salud se deteriora en cuestión de días. Si hay síntomas de intoxicación por altos niveles de nitratos, busque atención médica de inmediato.

- **LAS MUJERES EMBARAZADAS NO DEBEN CONSUMIR AGUA CON ALTOS NIVELES DE NITRATOS.** *Los altos niveles de nitrato también pueden afectar la capacidad de la sangre de mujeres embarazadas para transportar oxígeno.*

- No use agua de la llave para preparar jugo, agua, y formula para bebés menores de 6 meses. Use agua embotellada u otra agua baja en nitratos para los bebés menores de 6 meses hasta nuevo aviso.

- **NO HIERVA EL AGUA.** Hervir, congelar, filtrar, o dejar reposar el agua, no reduce el nivel de nitratos. Hervir el agua en exceso puede causar que los nitratos se concentren

más, porque los nitratos se quedan cuando el agua se evapora.

- Si tiene otros problemas de salud por el consumo de ésta agua, usted debería consultar con su doctor.

¿Qué sucedió? ¿Qué se está haciendo al respecto?

El nitrato en el agua potable puede originar de fuentes naturales, industriales, o agriculturales (incluyendo sistemas sépticos, escorrentía de agua de lluvia, y fertilizantes). Los niveles de nitrato en el agua potable pueden variar a través del año. Le informaremos si el nivel de nitratos vuelve a estar debajo del límite.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

Para más información, por favor contacte a [name of contact] al [phone number] o [mailing address]

Por favor comparta esta información con todas las demás personas que tomen de esta agua, especialmente aquellos que no hayan recibido éste aviso directamente (por ejemplo, las personas en apartamentos, asilos, escuelas, y negocios). Puede hacerlo poniendo este aviso en un lugar público o distribuyendo copias en persona o por correo.

Requisitos de Notificación Secundaria

Al recibir la notificación de alguien que opere un sistema de agua público, se debe dar la siguiente notificación dentro de 10 días conforme a la Sección 116450(g) del Código de Salud y Seguridad:

- *ESCUELAS: Deben notificar a los empleados de la escuela, estudiantes, y a los padres (si los estudiantes son menores).*
- *DUEÑOS O GERENTES DE PROPIEDAD PARA ALQUILER RESIDENCIAL (incluyendo asilos e instituciones de cuidado): Deben notificar a sus inquilinos.*
- *DUEÑOS DE PROPIEDAD DE NEGOCIOS, GERENTES, U OPERADORES: Deben notificar a los empleados de los negocios situados en la propiedad.*

Este aviso es enviado por [system].

Núm. de Identificación del Sistema Estatal de Agua: _____.

Fecha de distribución: _____.

Appendix B
Bonita School Operations Plan

BONITA SCHOOL DISTRICT OPERATIONS PLAN

SYSTEM OVERVIEW AND HISTORY

The Bonita Water System is a small public water system with a 10,000-gallon welded steel storage tank and distribution system serving 589 non-transient users. Santa Maria-Bonita School District is the legal owner of the water system. Fluid Resource Management (FRM) is the contracted certified operator for the water system; FRM conducts weekly site visit and collects samples each month. The water system gets its groundwater from Well 2. The well was constructed in 2000 and is 430-feet deep with a 8-inch PVC casing. The storage tank is a 10,000-gallon welded steel tank and is what maintains the water pressure. The distribution system consists of 2 ½-inch steel mains and ¾ -inch steel service laterals. There is a flow meter located between the storage tank and the distribution system to record water usage. In the event of an emergency, a back-up propane generator is stored on-site to power the well.

OPERATIONAL PROCEDURES

Bonita School contracts with FRM for operation, sampling and reporting for the water system and with Culligan for operation and maintenance of the nitrate treatment system. FRM's current roster of certified water operators may be requested at any time by contacting FRM directly.

WEEKLY

- Visual inspection of **WELL**
  a) Check the well for leaks and proper operation.
  b) Record the well meter read.
- Visual inspection of **STORAGE TANK**
  a) Check the storage tank for leaks.
  b) Record the tank level.
- Visual Inspection and Operation of **CHLORINE PUMP**
  a) Check the chlorine pump for leaks or damage; please see the *Emergency Operational Practices* section of this plan for a list of spare parts kept on-site.
  b) Add chlorine to the system on an as needed basis. All chemicals and direct additives are NSF/ANSI 60 certified. Chlorine is dosed base on production with a target rate of 1/2-gallon per hour and target residual of 1.0 – 1.5 mg/L in distribution.
  c) Verify proper operation of the chlorine pump.
- **DISTRIBUTION SYSTEM**
  a) Record the chlorine residual from distribution system
  b) Collect routine samples per the current Domestic Water Supply Permit/current monitoring schedule and deliver to an ELAP certified laboratory for analysis.

MAINTENANCE PROCEDURES

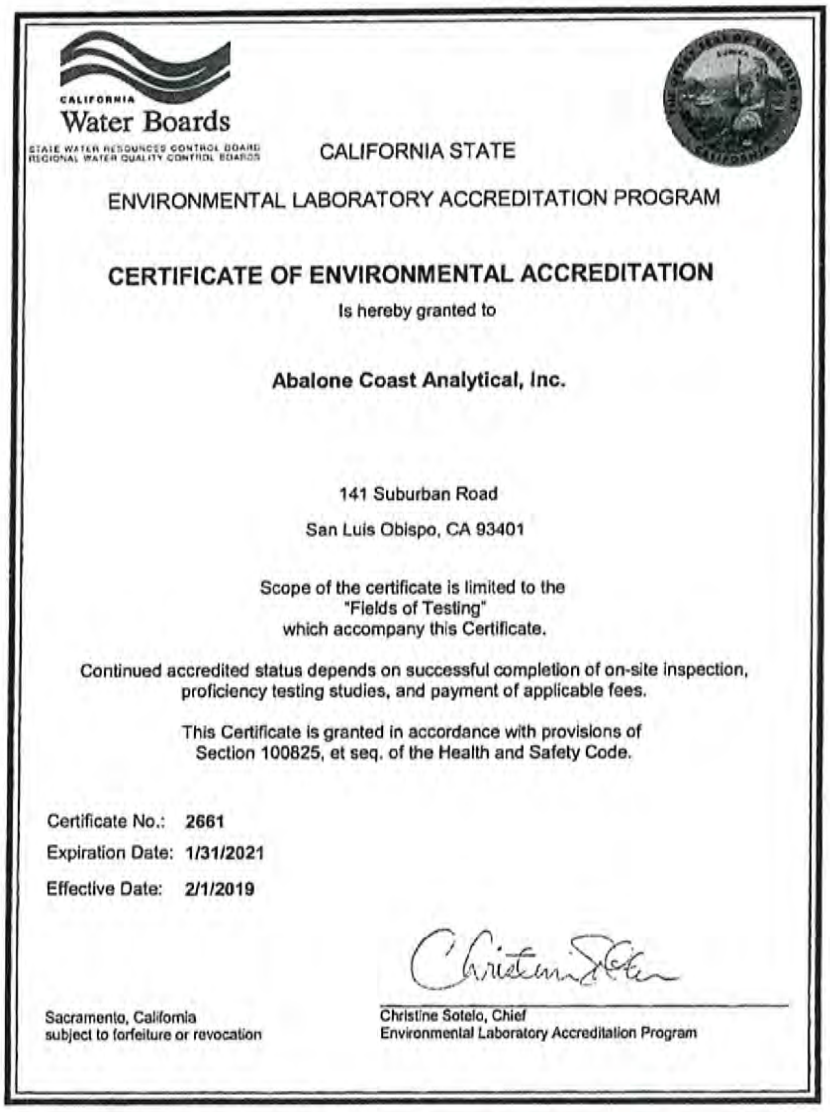
WEEKLY

- Maintenance of **NITRATE TREATMENT SYSTEM**

a) Per Culligan staff, Culligan changes out tanks for nitrate treatment weekly; replacement resin filters are provided by Culligan and are not stored onsite. Nitrate resin is blown out of the tanks into its own funnel and backwashed until clean, new resin is added as needed to fill tanks to proper level, and regenerated with 100% brine, and rinsed till water is free of brine with soft water. Tanks are then tested for hardness, and then considered ready for the next exchange. The resin has no end of usefulness date as its purpose is a site for ion exchange. As the beads wear down, and are backwashed out of the bed, they are replaced and the tanks are topped off with new resin on an as needed basis.

ANALYTICAL LABORATORY

FRM staff take required samples on an as needed basis, but no less than monthly. Samples are analyzed by ELAP certified analytical laboratory Abalone Coast Analytical (certification provided below):



CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

CERTIFICATE OF ENVIRONMENTAL ACCREDITATION

Is hereby granted to

Abalone Coast Analytical, Inc.

141 Suburban Road

San Luis Obispo, CA 93401

Scope of the certificate is limited to the "Fields of Testing" which accompany this Certificate.

Continued accredited status depends on successful completion of on-site inspection, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2661**

Expiration Date: **1/31/2021**

Effective Date: **2/1/2019**

Sacramento, California
subject to forfeiture or revocation

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

MONITORING

- Bonita School staff use nitrate test strips to monitor **NITRATES** in-house on a bi-weekly basis; results are recorded in a logbook kept on-site.
- **BACTERIOLOGICAL MONITORING** samples are collected per an approved Sample Siting Plan (BSSP) on a monthly basis:
    1. If a sample comes back positive, take four repeat samples at once.
    2. Take five routine samples the month following a positive sample.
    3. Keep bacteriological results for five years.
    4. Keep any corrective action for sampling for three years.
- FRM staff review the water system's **REQUIRED TESTING/SAMPLING** using the State/County monitoring schedules annually. After review, FRM staff compile the following year's sample schedule.

REPORTING

- FRM staff prepare the **TREATMENT REPORT** monthly
    a) Submit the treatment report to the client for input, review and approval
    b) Once approved by the client, submit the report to the designated Santa Barbara County regulator
- FRM staff prepare the **CONSUMER CONFIDENCE REPORT (CCR)** and **CCR CERTIFICATION FORM** annually
    a) Submit both documents to the client for input, review, approval and distribution
    b) Once approved and distributed by the client, upload CCR and CCR Certification Form to the online State reporting system.
- FRM staff prepare the **ELECTRONIC ANNUAL REPORT (EAR)** annually
    a) Submit the report to the client for input, review, approval and signature
    b) Once approved, upload to the online State system.

RESPONSE TO VIOLATIONS

Public notification of violations will occur as per the "Emergency Notification Plan" method on record with the Santa Barbara County Environmental Health Services, or in a manner directed by Environmental Health Services. Notification shall state the issue and what corrective action has been completed to correct it. A copy of the notification is to be sent to the Santa Barbara Environmental Health Services Department.

CONSUMER COMPLIANT RESPONSE PROCEDURES

In the event of a consumer complaint, the following procedures would be followed:

1. Record complaint (name, address and nature of the problem).
2. Investigate the complaint.
3. Verify or dismiss the compliant.
4. Record the steps taken to address or correct the problem.
5. Notify complainant of action taken.
6. Keep complaint record with corrective action for five years.

EMERGENCY OPERATIONAL PRACTICES

Below is a list of equipment kept on site for emergency repairs and contact information to obtain parts that are not kept on site, please see *Emergency Notification Plan* and *Emergency Notification Form* for additional emergency preparedness information.

Equipment kept on hand by FRM for emergency repairs.

- Spare chlorine pump
- Spare chlorine pump parts including pump head, diaphragm, spring check, fittings and tubing
- Spare chemical injectors

Sources of needed equipment, not on hand.

- FRM
- Culligan
- All American Drilling, Inc.

Distributors or suppliers of replacement parts for the system

- FRM
- Culligan
- All American Drilling, Inc.

Emergency contact numbers:

Bonita School District, Scott Roy
(805) 361-8256 or (805) 878-2835
sroy@smbsd.net

Fluid Resource Management, Contract Operator
(805) 597-7100 or (805) 546-3618
compliance@frm-ops.com

Culligan, Andy DallaCosta
(805) 922-3585
andy@eculligan.com

All American Drilling, Inc., Scott Fisher
(805) 346-2422 or (805) 310-2576
info@allamericandrillingin.com

Last Updated: March 5, 2020
Prepared By: Fluid Resource Management (FRM)

Appendix C
Water Quality Monitoring Schedule

BONITA SCHOOL WATER SYSTEM
PERMIT # 0833
WATER QUALITY MONITORING SCHEDULE 4630
WELL #2

Chemical	Location	Frequency	Last Completed	Due Again
General Mineral/General Physical	**source**	Every 3 years	2/2017	2/2020
Inorganic Chemicals (IOCs) Se 4.2 F 0.45	**source**	Every 3 years	2/2016	**2/2019**
Nitrates (N) **RAW** 33, 36	**source**	Annually	2/2017	**2/2018**
Nitrates as N **Treated** **1.0,0, 1.0, 1.3, 0.9, .8, 8, ND, 1.4**	**distribution**	**Monthly**	5/2017	**6/2017**
Nitrites	**source**	Every 3 years	2/2014	2/2017
Volatile Organic Chemicals (VOCs)	**source**	Every 3 years	10/2015	10/2018
Synthetic Organic Chemicals (SOCs)	**source**	Every 6 years	7/2012	7/2018
Radiological 4.43±.26;3.65±.311;4.99±.348; 6.09+.397	**source**	**1 sample** 6 years	10/2012	10/2018
Radium-228 0.56 ± 0.17, 1.72 ± 0.23 ND + 0.50	**source**	Quarterly, 1 year	10/2007 3of 4	Waived
Unreg Organic Chemicals	**source**	**Once every 6 months**	4/2005	Completed
Disinfection By-Products TTHMs ND dwn 13 HAA5 ND dwn 7.3	**distribution**	**Annually warm months**	9/2016	9/2017
Lead and Copper * Pb ND, Cu 0.245	consumer taps	Every 3 years	9/2014	9/2017
MTBE	**source**	Quarterly	4/2004	Completed
CCR		**Annually**		**7/1/2017**
EAR		**Annually**		**4/1/2018**
Bacteriological	**primary tap**	Monthly		
Perchlorate(2)			ND, ND	**source**
		Every 3 years **2/2018**	2/2015	
Hex. Chrome 1.3	source	Every 3 years	2/2017	2/2020

Primary Bacteriological Location: Teacher's Lounge

- Samples for Lead and Copper are to be collected from consumer's tap. All other remaining analyses are to be taken from the well.
- This facility is now eligible for a three year waive for Lead and Copper testing. Complete the attached waiver form.
- State law requires all water systems that provide disinfection to their water systems to record the disinfection concentration at the time of each routine bacteriological sampling. This water system has failed to provide this information. Begin providing the disinfection reading on next routine sampling.

Insure that the DBP sample is taken from a point furthest from the point of chlorination in the distribution system. During the warmest month of the summer.

UPDATED 10/2015

ATTACHMENT C

Appendix D
Disinfection Byproduct Rule Monitoring Plan

DISINFECTION BYPRODUCT RULE (DBPR)
MONITORING PLAN

System Information:

Name of Facility: Bonita School District | System Number: CA4200833
Street Address: 2715 West Main Street, Santa Maria, CA 93455 | Phone Number: (805) 361-8256
Contact Person: Javier Cavazos | Email: jcavazos@smbsd.net
Type of Water System (circle all that apply): Surface Water (Groundwater) Both
Service Connections: 1 | Population Served: 589

Source:

Source Name(s): Well 2
Source Location(s): Well 2 is located next to the maintenance building on the campus of Bonita Elementary School at 2715 W. Main Street, Santa Maria, CA.
Seasonal Variability: N/A

Treatment Plant:

Type of Facility/Treatment: Culligan Nitrate Exchange Tanks
Plant Location: The culligan exchange tanks are located next to the maintenance building on the campus of Bonita Elementary School at 2715 W. Main Street, Santa Maria, CA.
Storage Tank(s) Number and Size: One 10,000-gallon steel storage tank
Storage Tank(s) Identification: Tank
Number of Pressure Zones: 1

TTHM/HAA5 Monitoring Frequency and Sampling:

All samples must be collected from locations representing maximum residence time in the distribution system and during the month with the warmest water temperature if only testing yearly

Routine Month(s) Sampled: September
Increased Frequency Month(s) Sampled: N/A
Reduced Frequency Month(s) Sampled: N/A
Note: Reduced frequency needs prior written approval from EHS.
Sample Location(s): Furthest Drinking Fountain
Sample Time: Most recent samples collected, as of 09/28/2020, were collected on 09/01/2020; THM was 0.028 mg/L and HAA5 was ND.

Calculating MCL Compliance: Compliance is based on the concentration of the annual sample result unless quarterly monitoring is required then it will be on the annual average.

TTHM MCL = 0.080 mg/L HAA5 MCL = 0.060 mg/L

Map of System:

A map of the distribution system showing the source (well, spring, etc.), storage tanks, treatment facilities, distribution piping, and sampling location(s) is required. Have you enclosed this map?

☒ YES ☐ NO

Distribution System Disinfectant Residuals Monitoring:

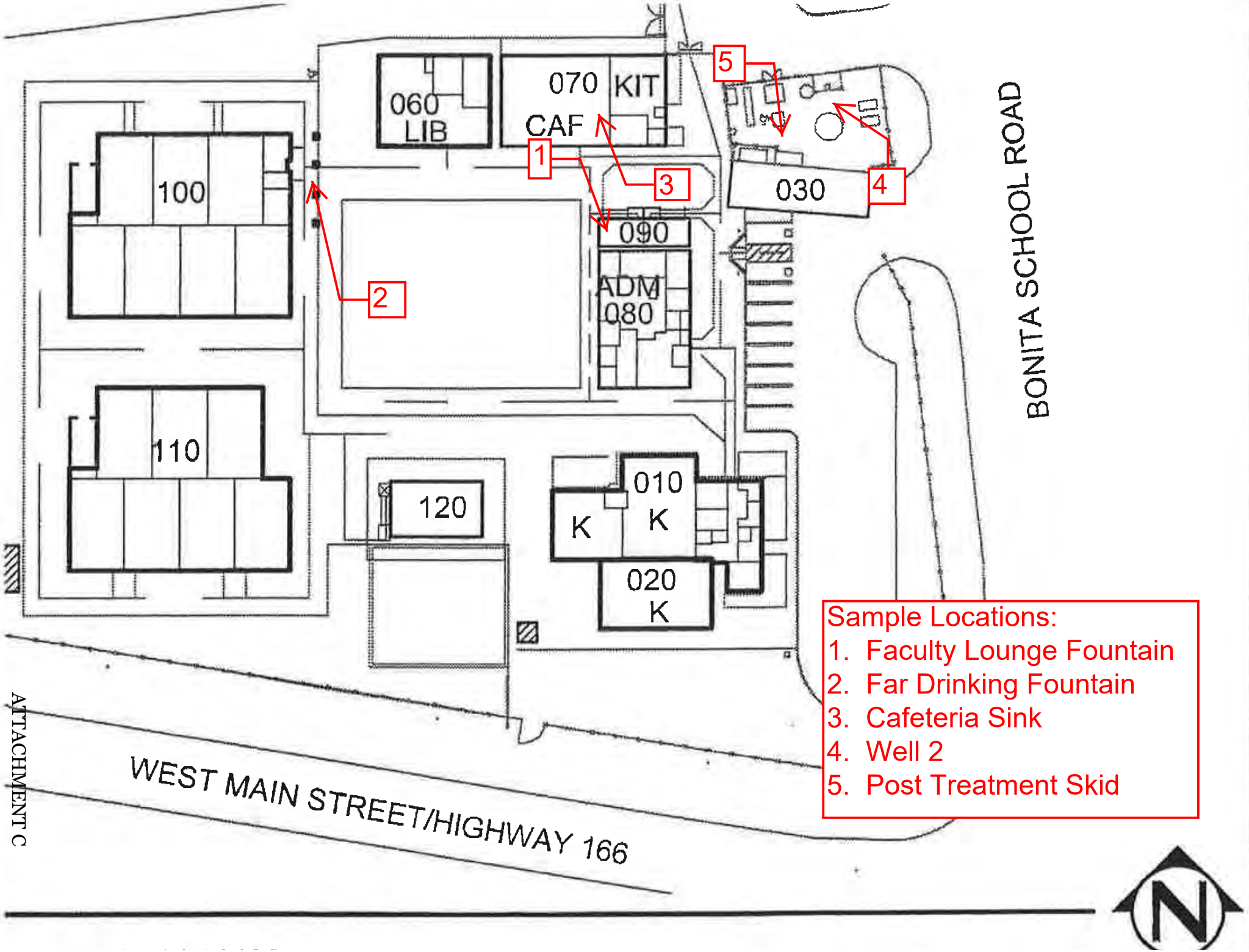
Water systems using chlorine or chloramines shall measure the residual disinfectant levels at the same points in the distribution system and the same time as coliform bacteriological monitoring that is outlined in the Bacteriological Sample Siting Plan (BSSP).

Do you have a BSSP on file that is less than 10 years old?
☒ YES ☐ NO
Has a copy of your BSSP been submitted to EHS?
☒ YES ☐ NO
Please contact EHS for more information if you answered no to either question above.

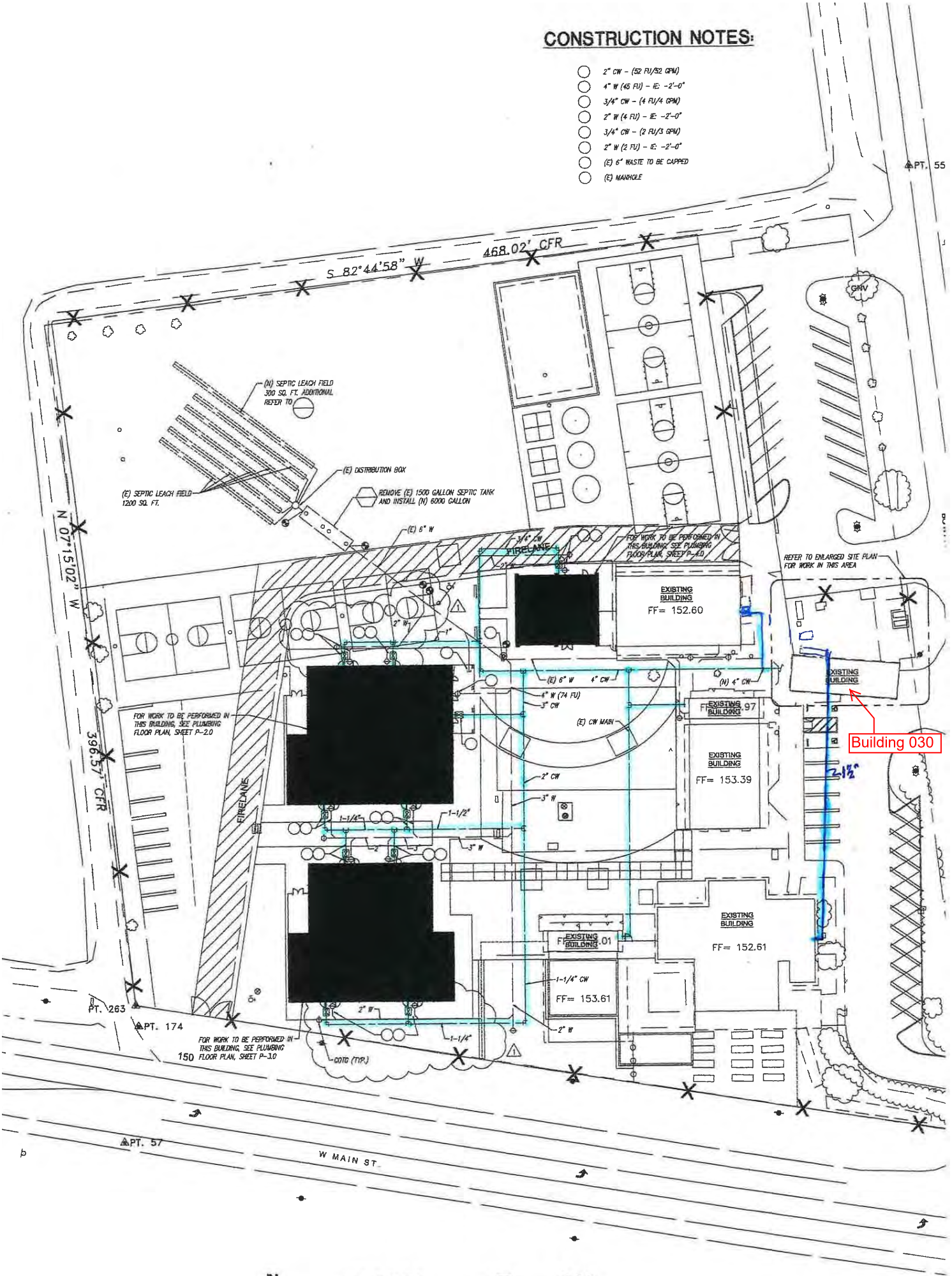
Refer to Title 22, CCR, Section 64530 for more information on DBPR monitoring and reporting requirements.

DBPR Plan Prepared By: Fluid Resource Management for Bonita School District

Signature and Title:  **Date: September 28, 2020**



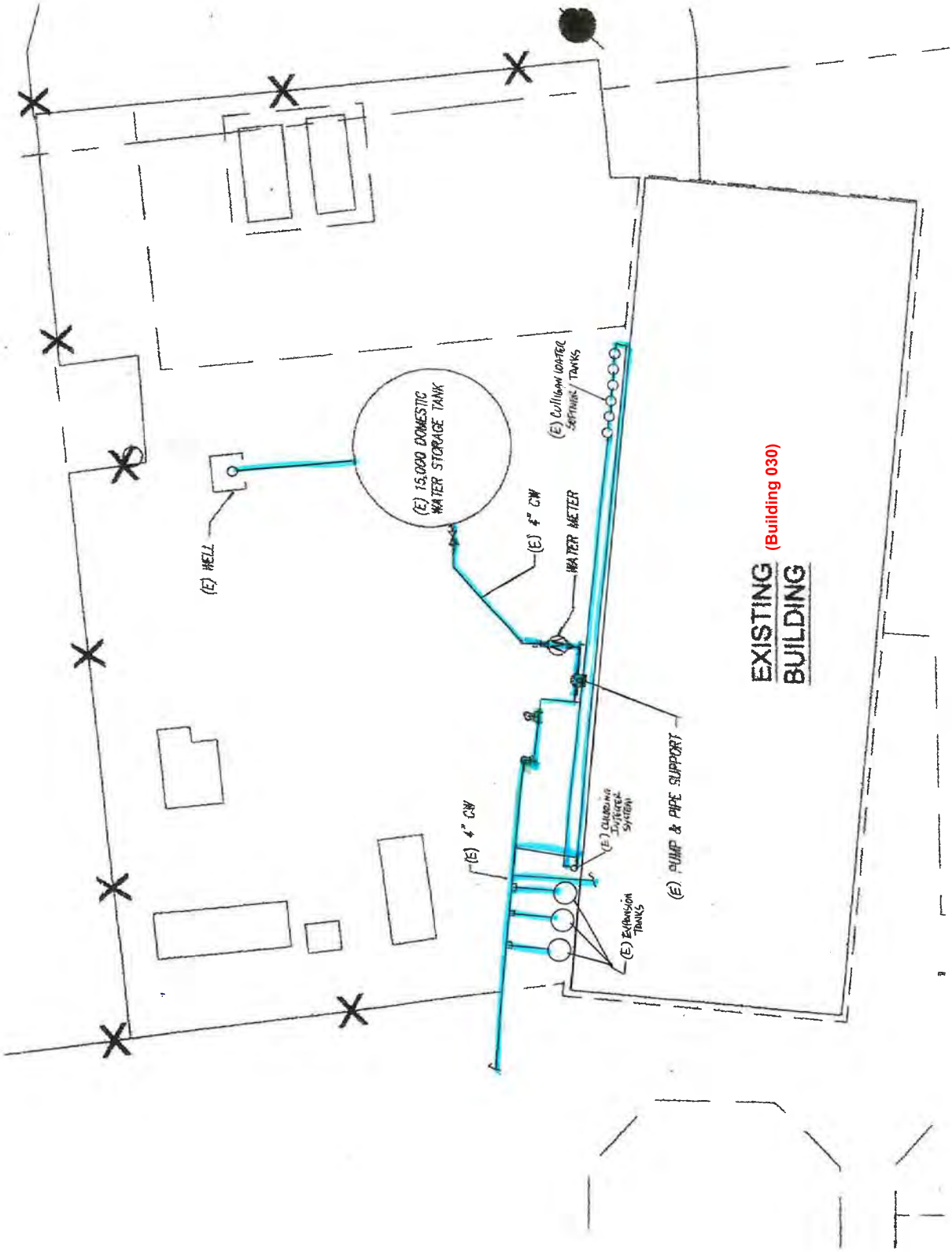
ATTACHMENT C



PLUMBING SITE PLAN

SCALE: 1" = 30'-0"

ATTACHMENT C



ATTACHMENT C

Appendix E
Water Quality Emergency Notification Plan

ATTACHMENT C

Santa Barbara County
PUBLIC Health
DEPARTMENT

Environmental Health Services

225 Camino del Remedio • Santa Barbara, CA 93110
805/681-4900 • FAX 805/681-4901

Takashi M. Wada, MD, MPH *Director/Health Officer*
Susan Klein-Rothschild, MSW *Deputy Director*

2125 S. Centerpointe Pkwy. #333 • Santa Maria, CA 93455-1340
805/346-8460 • FAX 805/346-8485

Lawrence Fay *Director of Environmental Health*

WATER QUALITY EMERGENCY NOTIFICATION PLAN

No person shall operate a public water system without an emergency notification plan which has been submitted to and approved by the department. Such an emergency notification plan shall provide for immediate notice to the customers of the public water system of any significant rise in bacterial count of the water or other failure to comply with any primary drinking water standard, which represents an imminent danger to the health of the water users.

WATER SYSTEM: Bonita School District (System #4200833)

LOCATION: 2715 West Main Street, Santa Maria, CA 93455

NOTIFICATION PLAN:
Describe methods to notify customers that an imminent danger to the health of the water users exists; for example, door-to-door, telephone, written handouts, radio, television, sound truck, etc.

Consumers will be notified by telephone and door-to-door

Describe action to be taken to remedy rise in bacterial count, failure to comply with a primary drinking water standard or water outage; for example, disinfection, alternative treatment scheme, switching to alternate supply, bringing in emergency equipment to provide temporary water, etc.

1. **All staff and students will be immediately notified.**
2. **Water System and storage tanks will be disinfected and an alternate water supply will be made available to all on campus.**

The following person(s) have been designated by the water purveyor to implement the plan:

Name	Title	Email	Telephone: Day	Telephone: Night
1. Fluid Resource Management;	Contract Operator	compliance@frm-ops.com	(805) 597-7100	(805) 546-3618
2. Scott Roy;	Bonita School District Maintenance	sroy@smbsd.net	(805) 361-8256	(805) 878-2835

Report prepared and authorized by:

Carinna Butler, FRM Operations Manager — Signature and Title

(805) 597-7100 — Telephone

Office Use Only

Approved by: _____ Date: _____

ATTACHMENT C

Appendix F
Alternative 4a Supply Calculation

Appendix F

Supply capacity at the School for Alternative 5a.

Description:

Extension of the 12-inch main will create a long dead-end pipe from the intersection of Stowell Road and Hanson Way (Point 1) to the School (Point 2).

Assumptions:

- Length from Point 1 to Point 2: 20,900 feet
- Diameter: 12 inches
- Hazen-Williams Coefficient: 120
- Elevation at Point 1: 195 feet
- Elevation at Point 2: 155 feet
- Pressure at Point 1: 60 psi
- Pressure at Point 2: 20 psi (i.e. allowable residual pressure)

Applying Bernoulli's Equation for headloss in a pipe, the allowable headloss for the above conditions is calculated at 132 feet:

$$H_{allowable} = Z_1 - Z_2 + \frac{P_1 - P_2}{\gamma_{water}} = 195\ ft - 155\ ft + \frac{(60-20)lbs}{in^2}\left(\frac{ft^3}{62.4\ lbs}\right)\left(\frac{12\ in}{ft}\right)^2 \cong 132\ ft$$

Applying the Hazen-Williams Equation for headloss in a pipe, the maximum flow for the above conditions is approximately 1,500 gpm.

Below is an excerpt from an online calculator[1] showing the application of the assumptions.

Online Hazens-Williams Calculator

Imperial Units

The calculators below can used to calculate the specific head loss (head loss per 100 ft (m) pipe) and the actual head loss for the actual length of pipe. Default values are from the example above.

20900	*l - pipe or tube length (ft)*
120	*c - roughness coefficient determined for the type of pipe or tube*
1495	*q - flow rate (gal/min)*
12	d_h *- inside hydraulic diameter (inch)*

Calculate!

- Specific Head Loss (ft H_2O / 100 ft pipe): **0.632**
- Specific Head Loss (psi / 100 ft pipe): **0.274**
- Actual Head Loss (ft H_2O): **132**
- Actual Head Loss (psi): **57.2**
- Velocity (ft/s): **4.24**

[1] https://www.engineeringtoolbox.com/hazen-williams-water-d_797.html

mkn

ATTACHMENT C

LAFCO Authorization for Approval of Out of Agency Service Agreements

Government Code Section 56133 (a) A city or district may provide new or extended services by contract or agreement outside its jurisdictional boundary only if it first requests and receives written approval from the commission.
(b) The commission may authorize a city or district to provide new or extended services outside its jurisdictional boundary but within its sphere of influence in anticipation of a later change of organization.
(c) If consistent with adopted policy, the commission may authorize a city or district to provide new or extended services outside its jurisdictional boundary and outside its sphere of influence to respond to an existing or impending threat to the health or safety of the public or the residents of the affected territory, if both of the following requirements are met:
(1) The entity applying for approval has provided the commission with documentation of a threat to the health and safety of the public or the affected residents.
(2) The commission has notified any alternate service provider, including any water corporation as defined in Section 241 of the Public Utilities Code, that has filed a map and a statement of its service capabilities with the commission.

STANDARDS FOR OUT-OF-AGENCY SERVICE AGREEMENTS

Considerations for Approving Agreements:

Annexations to cities and special districts are generally preferred for providing public services, however, out-of-agency service agreements can be an appropriate alternative. While each proposal must be decided on its own merits, the Commission may favorably consider such agreements in the following situations:

1. Services will be provided to a small portion of a larger parcel and annexation of the entire parcel would be inappropriate in terms of orderly boundaries, adopted land use plans, open space/greenbelt agreements or other relevant factors.
2. Lack of contiguity makes annexation infeasible given current boundaries and the requested public service is justified based on adopted land use plans or other entitlements for use.
3. Where public agencies have a formal agreement defining service areas, provided LAFCO has formally recognized the boundaries of the agreement area.
4. Emergency or health related conditions mitigate against waiting for annexation.
5. Other circumstances which are consistent with the statutory purposes and the policies and standards of the Santa Barbara LAFCO.

Agreements Consenting to Annex:

Whenever the affected property may ultimately be annexed to the service agency, a standard condition for approval of an out-of-agency service agreement is recordation of an agreement by the landowner consenting to annex the territory, which agreement shall inure to future owners of the property.

Bonita Elementary School Drinking Water Improvements Project

Final Initial Study – Mitigated Negative Declaration

prepared by

Santa Maria-Bonita School District
708 South Miller Street
Santa Maria, California 93454
Contact: Javier Cavazos, Coordinator of Maintenance,
Operations, Facilities, Transportation

prepared with the assistance of

Rincon Consultants, Inc.
319 East Carrillo Street, Suite 105
Santa Barbara, California 93101

April 2024

RINCON CONSULTANTS, INC. SINCE 1994

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Tables

Figures

Appendices

Initial Study

1. Project Title

Bonita School Drinking Water Improvements Project

2. Lead Agency Name and Address

Santa Maria Bonita School District (SMBSD)
708 South Miller Street
Santa Maria, California 93454

3. Contact Person and Phone Number

Javier Cavazos, Coordinator of Maintenance, Operations, Facilities, Transportation
(559) 399-7698

4. Project Location

The project site is located in an unincorporated area of Santa Barbara County approximately 2.9 miles west of Santa Maria, California. The project site includes an approximately 8,100-linear-foot pipeline alignment that would extend from the terminus of a planned water main in Black Road located at the northeast corner of the City of Santa Maria's (City) Wastewater Treatment Plant (WWTP), proceed north along Black Road, proceed west along State Route (SR) 166 (also known as West Main Street), proceed north on Bonita School Road, and connect to Bonita Elementary School at 2715 West Main Street, Santa Maria on Assessor's Parcel Number (APN) 113-050-007. The project site also includes portions of Bonita Elementary School that would be modified as part of the proposed project. Figure 1 shows the regional location of the project site, and Figure 2 shows the project site at a local scale.

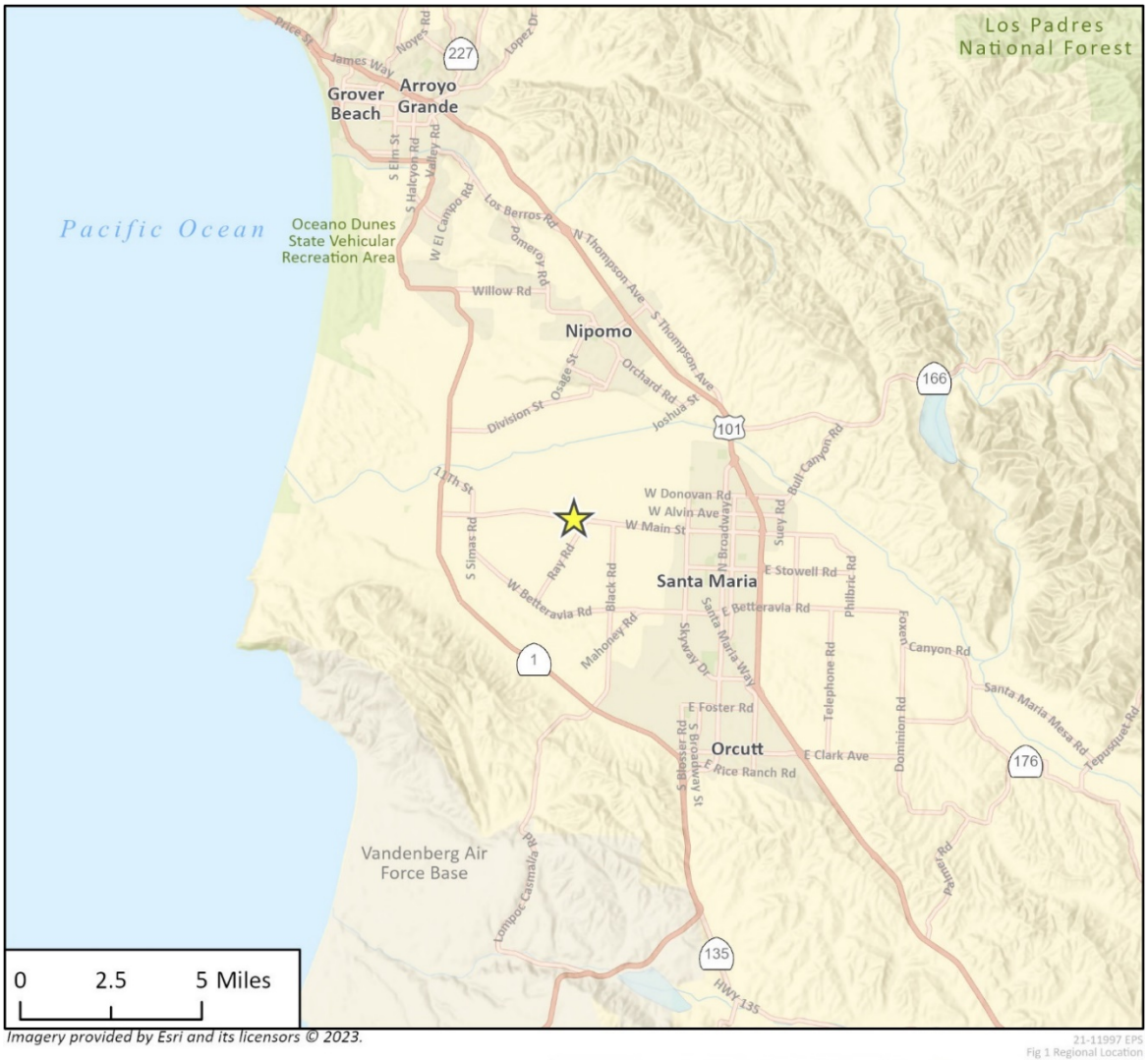
5. Project Sponsor's Name and Address

Santa Maria Bonita School District
708 South Miller Street
Santa Maria, California 93454

6. General Plan Designation

The portion of the project site at Bonita Elementary School on APN 113-050-007 has a General Plan designation of Educational Facility. The portion of the project site within existing public roadway rights-of-way (ROW) does not have a General Plan designation (County of Santa Barbara 2023a).

Figure 1 Regional Location



Project Location

N

Figure 2 Project Site

7. Zoning

The portion of the project site located at Bonita Elementary School on APN 113-050-007 has a zoning designation of Agriculture-II (minimum lot size - 40 acres gross; AG-II-40). The portion of the project site located within existing public roadway ROW does not have a zoning designation (County of Santa Barbara 2023a).

8. Description of Project

Background

Bonita Elementary School's water system currently consists of a 430-foot-deep well, two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator. The treatment process generates brine waste, which is stored on the site. Bonita Elementary School has a service contract for the system with Culligan, which includes maintenance of the treatment system, replacement or regeneration of treatment media, and brine disposal. All water system operations and maintenance services are currently outsourced to certified service providers Fluid Resources Management and Culligan.

The existing Bonita Elementary School water system is operated from a single groundwater well and has no redundant source of supply. Bonita Elementary School has encountered elevated sulfate and hexavalent chromium levels, which are common in groundwater in this area. Notices of violation have been issued by the Santa Barbara County Environmental Health for exceedances of state maximum contaminant levels in the water supply for the school. The water supply currently exceeds the maximum contaminant level (MCL) for nitrate and the recommended and upper secondary MCLs for total dissolved solids. In addition, the Kindergarten Building (Building K) is known to contain lead pipes, and lead concentrations in Building K currently exceed the lead MCL. As a result, Bonita Elementary School is seeking to obtain Drinking Water State Revolving Fund (DWSRF) grant funding through the State Water Resources Control Board (SWRCB) Division of Financial Assistance to fund the construction of a long-term, affordable solution to mitigate further water quality violations.

Project Description

The proposed project consists of the connection of the City's water system to Bonita Elementary School via approximately 8,100 linear feet of a two-inch diameter service line from the planned terminus of the City's water system near the northeast corner of the WWTP to Bonita Elementary School. (The City is currently in the design phase of extending City water service to the WWTP separately from the proposed project.) To meet peak demand, fire flow requirements, and irrigation demand, the project would also include repurposing the existing on-site 10,000-gallon storage tank and wells for non-potable use (i.e., irrigation and fire suppression) and potentially adding a hydropneumatic tank (up to approximately 1,000 gallons in capacity) with appurtenances such as an air compressor and additional above-grade piping and isolation valves.[1] Minor piping modifications

[1] At this time, it is uncertain whether the hydropneumatic tank will be included in the proposed project and if so, what the exact capacity may be. Therefore, this IS-MND conservatively evaluates inclusion of this project element with its maximum estimated capacity of 1,000 gallons.

to the existing system would be required to disconnect the proposed potable, domestic supply from the existing system. In addition, the project would involve replacing lead service lines in the school's Building K. Other improvements would include installation of blowoffs along the proposed pipeline and other appurtenances on Bonita Elementary School's property.

Construction

Construction of the project, including mobilization, would begin January 2025 and would occur over the course of approximately one year. Construction would occur from 7:00 a.m. to 3:00 p.m., Monday through Friday. No nighttime construction would be required. Construction on school property would primarily occur between June and September when school is not in session. Construction of the pipeline would occur within the existing disturbed roadways and road shoulders, and no construction activities would occur within or below the stormwater and agricultural ditches along Bonita School Road, SR 166, and Black Road. The pipeline would be installed primarily via horizontal directional drilling (HDD) pursuant to California Department of Transportation's (Caltrans) requirements. The HDD pits would be placed approximately 500 feet apart from each other and/or be placed at a horizontal end or deflection in the pipe. All pits would be located within the pavement limits or adjacent to the shoulders of SR 166 and Black Road. Open trench construction techniques may also be utilized for minor portions of the pipeline on Bonita School Road and Black Road. The maximum depth of excavation for pipeline installation would be approximately six feet. Up to approximately 4,500 cubic yards of soil would be exported from the site, and up to approximately 4,500 cubic yards of soil would be imported for use as fill. All on-site existing infrastructure would be repurposed, so demolition activities would be minor. No lead-based paints or asbestos-containing materials are known to be present in the limited facilities that would be demolished.

Water produced by flushing of the proposed pipeline and potential hydropneumatic tank would be placed in the on-site storage tank and re-used for non-potable irrigation and fire suppression purposes. With regard to this discharge, the District would comply with the applicable requirements of Order R3-2019-0089 (General Waiver for Specific Types of Discharges), issued by the Central Coast Regional Water Quality Control Board.

A partial lane closure for pipeline installation along portions of SR 166 and Black Road may be required. Traffic control measures would be implemented during the lane closures, including flaggers at both ends. Construction equipment staging would occur in the southwest corner of Bonita Elementary School's property. Construction workers would park along Bonita School Road on the eastern boundary of the school property. No tree trimming, or vegetation removal would be required.

Operation and Maintenance

Maintenance of the proposed pipeline would include periodically exercising isolation valves, blowoffs, and other appurtenances. The Bonita Elementary School's meter would be periodically inspected and calibrated as part of the City's meter maintenance program. The existing fire storage tank as well as the proposed hydropneumatic system would be inspected bi-annually and recoated as needed to prevent corrosion. In addition, water quality would be monitored, and flushing of the pipeline would occur as necessary. Overall, operation and maintenance activities would be less frequent than with the existing treatment system, and no new City or school employees would be required to operate the project.

The proposed pipeline is anticipated to have a lifespan of 50 years or more. The project would not require transportation or storage of hazardous materials on site. No project components would generate significant noise levels during operation, and no modifications to existing light sources at the Bonita Elementary School property would occur. In addition, project operation would not result in a net increase in the City's system-wide electricity consumption.

9. Surrounding Land Uses and Setting

As shown in Figure 2, surrounding land uses consist primarily of agricultural fields and agro-industrial facilities as well as the City's WWTP.

10. Other Public Agencies Whose Approval is Required

The proposed project would require the following approvals:

- Approval of service from and formal agreement with the City
- Approval of consolidation from the Santa Barbara County Local Agency Formation Commission
- Encroachment permit from Caltrans
- Funding from State Water Resources Control Board

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	■	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions	■	Hazards & Hazardous Materials
■	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
■	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	■	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	■	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" impact 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. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potential 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, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

1/12/2024
Date

Matthew E. Beecher
Printed Name

Deputy Superintendent for Business
Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	■
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	■

a. Would the project have a substantial adverse effect on a scenic vista?

The County of Santa Barbara (County) assigns areas with either low, moderate, or high scenic value, which takes into account the probability of a site containing a scenic vista (County of Santa Barbara 2009). The project site is not located in an area designated as high scenic value by the Santa Barbara County Comprehensive Plan (County of Santa Barbara 2009). In addition, the proposed new hydropneumatic tank and aboveground appurtenances would be visually consistent with existing water infrastructure on the project site, and the proposed pipeline would be located entirely underground. Therefore, the project would have no potential to result in an adverse effect on scenic vistas. No impact would occur.

NO IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No officially designated state scenic highways are present within two miles of the project site (Caltrans 2018). Given the distance from a designated or eligible state scenic highway and the nature of project activities, the project would not damage scenic resources within a state scenic highway. Therefore, no impact would occur.

NO IMPACT

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

According to Public Resources Code Section 21071(b), an unincorporated area is considered "urbanized" if 1) the area is completely surrounded by one or more incorporated cities, the total population of the unincorporated area and the surrounding cities is at least 100,000 persons, and the population density of the unincorporated area is at least equal to the population density of the surrounding cities; or 2) the area is located within an urban growth boundary and has an existing residential population of at least 5,000 persons per square mile. The project site is located in an unincorporated rural area that is not completely surrounded by incorporated cities and that does not have an existing residential population of at least 5,000 persons per square mile. Therefore, the project site would not be considered urbanized per Public Resources Code Section 21071(b).

The project would include installation of an underground pipeline in an existing roadway ROW and water storage on site at Bonita Elementary School. The proposed new hydropneumatic tank and aboveground appurtenances would be visually consistent with existing water infrastructure on the project site, and the proposed pipeline would be located entirely underground. Therefore, the project, as proposed, would not degrade the existing visual character or quality of public views of the site and its surroundings. No impact would occur.

NO IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

No nighttime construction or nighttime lighting would be required for the project because construction activities would be conducted from 7:00 a.m. to 3:00 p.m. In addition, the project does not involve the permanent addition of reflective surfaces, such as windows or car windshields, or lighting to the project site or its surroundings. Therefore, the project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area, and no impact would occur.

NO IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

The portion of the project site located at Bonita Elementary School is designated as Urban and Built-Up Land by the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (DOC 2022a). The proposed pipeline alignment is mapped as Prime Farmland (DOC 2022a). The project site is not subject to any Williamson Act contracts, but the portion of the project site located at Bonita Elementary School is zoned for agricultural use (AG-II-40) (DOC 2022b; County of

Santa Barbara 2023a). The portion of the project site zoned AG-II-40 is currently occupied by Bonita Elementary School and is not involved in active agricultural uses.

The proposed pipeline would be installed in the ROW of existing roadways and would not require construction activities (including equipment staging and materials laydown) within active agricultural fields located adjacent to the alignment. Furthermore, upon completion of construction, the proposed pipeline alignment would be located entirely underground. In addition, water system improvements at the Bonita Elementary School campus, which is zoned for agricultural use, would not change the current land use of the site. Therefore, the project would not convert Farmland to nonagricultural uses or conflict with existing zoning for agricultural uses or a Williamson Act contract. No impact would occur.

NO IMPACT

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The proposed pipeline alignment is located in an existing roadway ROW that does not have a General Plan or zoning designation. The portion of the project site at Bonita Elementary School has a land use of Educational Facility and a zoning designation of AG-II-40. The project site does not contain existing forest land or timberland. Therefore, the project would not conflict with existing zoning, or cause rezoning of, forest land or timberland and would not result in loss of forest land or conversion of forest land to non-forest uses. No impact would occur.

NO IMPACT

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

As discussed under thresholds (a) and (b), portions of the project site are located on land designated as Prime Farmland and/or are zoned for agriculture, and the project site is surrounded by agricultural land uses. However, the project site itself consists of an elementary school and public roadway ROWs, and construction and operational activities would not change these land uses. In addition, the project does not include components with the potential to directly or indirectly affect adjacent agricultural land uses such that Farmland would be converted to non-agricultural use. In addition, the project site does not contain forest land, so the project would not result in the conversion of forest land to a non-forest use. Therefore, no impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	■	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

The project site is located in the South Central Coast Air Basin (Basin), which covers San Luis Obispo, Santa Barbara, and Ventura counties. The Santa Barbara County Air Pollution Control District (SBCAPCD) monitors and regulates local air quality in Santa Barbara County. The analysis presented in this section is based on information found in the County's Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2021) and SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (Guidelines), adopted by the SBCAPCD in 2022.

Air quality is affected by stationary sources (e.g., industrial uses and oil and gas operations) and mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors, including the quantity and type of pollutants emitted locally and regionally as well as the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions, and topography. The climate of the Basin is strongly influenced by its proximity to the Pacific Ocean and the location of the high-pressure cell in the northeastern Pacific. With a Mediterranean climate, Santa Barbara County is characterized by warm, dry summers and cool winters with occasional rainy periods.

Air Quality Standards and Attainment

The SBCAPCD is required to monitor air pollutant levels to ensure National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the Basin is classified as being in "attainment." If the standards are not met, the Basin is classified as being in "nonattainment," and the SBCAPCD is required to develop strategies to meet the standards. Santa Barbara County is designated nonattainment for the ozone NAAQS and CAAQS and nonattainment for the CAAQS for particulate matter measuring 10 microns or less in diameter (PM_{10}) (County of Santa Barbara 2021).

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The most recent *2022 Ozone Plan* was adopted by SBCAPCD in December 2022 and is the tenth update to the initial state Air Quality Attainment Plan adopted by the SBCAPCD Board of Directors in 1991. The *2022 Ozone Plan* only addresses SBCAPCD's progress toward attaining the ozone CAAQS because SBCAPCD is designated "attainment" for the ozone NAAQS (SBCAPCD 2022b).

Air Pollutant Emission Thresholds

In January 2022, the SBCAPCD published the most recent update to its Guidelines, which establish criteria for determining the level of significance for project-specific impacts within its jurisdiction in accordance with the CEQA Guidelines Appendix G Checklist thresholds.

SBCAPCD has not adopted quantitative significance criteria for temporary construction emissions associated with conventional land development projects. However, the SBCAPCD Guidelines recommend quantification of construction-related emissions and uses 25 tons per year for reactive organic compounds (ROC) or nitrogen oxides (NO_X) as a guideline for determining the significance of construction impacts. This is a limit that requires offsets if the construction activity is for a project that requires SBCAPCD permits (SBCAPCD 2022a), but also provides guidance for other construction projects involving standard construction activities. In addition, SBCAPCD notes that consistency with the applicable air quality plan requires the implementation of mitigation measures during construction activities to minimize dust generation, regardless of the level of the impact (SBCAPCD 2022a).

Based on the criteria suggested by the SBCAPCD Guidelines (2022), project operation would have a significant effect on air quality if project operation would:

- Generate greater than 240 pounds per day of ROC from all project sources (both stationary and mobile);
- Generate greater than 240 pounds per day of NO_X from all project sources (both stationary and mobile);
- Generate greater than 80 pounds per day of PM_{10} from all project sources (both stationary and mobile);
- Generate greater than 25 pounds per day of ROC from motor vehicle trips only;
- Generate greater than 25 pounds per day of NO_X from motor vehicle trips only; or
- Exceed the public notification health risk thresholds adopted by the SBCAPCD of 10 excess cancer cases in a million for cancer risk or a Hazard Index of more than 1.0 for non-cancer risk.

The Guidelines state that due to the relatively low background ambient carbon monoxide levels in Santa Barbara County, localized carbon monoxide impacts associated with congested intersections are not expected to exceed the carbon monoxide NAAQS or CAAQS. As such, carbon monoxide hotspot analyses are no longer required.

Applicable SBCAPCD Rules and Regulations

The SBCAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution reduction measures that must be implemented during construction and operation of projects. Relevant rules and regulations to the project include the following:

- **Rule 345 (Control of Fugitive Dust from Construction and Demolition Activities).** This rule establishes fugitive dust control requirements for any activity associated with construction or demolition of a structure or structures.
- **Rule 323.1 (Architectural Coatings).** This rule establishes volatile organic content limits for architectural coatings that are manufactured, blended, repackaged, supplied, sold, or offered for sale within the SBCAPCD. Rule 323.1 limits the volatile organic content to 50 grams per liter for flat coatings and 100 grams per liter for nonflat coatings and traffic marking coatings.
- **Rule 329 (Cutback and Emulsified Asphalt Paving Materials).** This rule establishes ROC content limits pertaining to the manufacture, application, and sale of cutback and emulsified asphalt materials for paving, construction, and maintenance of streets, highways, parking lots, and driveways.

Methodology

Air pollutant emissions generated by project construction were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod uses project-specific information, including land use, square footage for different uses, and location, to model a project's construction and operational emissions.

Project construction would primarily generate temporary criteria pollutants from on-site construction equipment, construction worker vehicle trips to and from the site, and off-site export of materials. Construction of the proposed project was analyzed based on information provided by the project engineer, which includes the construction schedule, construction equipment list, and soil import/export quantities. The analysis assumes construction equipment would be diesel-powered and would be equipped with Tier 3 or Tier 4 engines, based on engineer-provided details. The project would be required to comply with applicable regulatory standards, in particular SBCAPCD Rules 345, 323.1, and 329.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

The SBCAPCD Guidelines (2022) state a project is consistent with the Clean Air Plan if 1) its direct and indirect emissions have been accounted for in the Clean Air Plan's emissions forecast assumptions and 2) it would incorporate the standard fugitive dust control measures recommended by SBCAPCD during construction activities. The 2022 Ozone Plan's direct and indirect emissions inventory for Santa Barbara County as a whole is reliant on population projections provided by the Santa Barbara County Association of Governments (SBCAG). The SBCAG generates population projections based on local General Plans. In this case, SBCAG utilized population projections contained in the County of Santa Barbara Comprehensive Plan, which are based on existing and anticipated land uses in the county. The project would not result in new residential uses because it is a water system improvements project that would serve the existing Bonita Elementary School and would not require a zoning change or expansion of school enrollment capacity that would result in additional employment opportunities beyond those anticipated for the site by the County's Comprehensive Plan. In addition, no new City or school employees would be required to operate the project. Therefore, the project would not directly or indirectly contribute to an unplanned increase in population and would be consistent with the population projections on which the emissions forecast of the 2022 Ozone Plan is based. Nevertheless, the SBCAPCD requires implementation of standard fugitive dust control measures during construction to achieve project consistency with air quality plans. Therefore, impacts related to consistency with applicable air quality plans would be potentially significant, and implementation of Mitigation Measure AQ-1 would be required to reduce impacts to a less-than-significant level.

Mitigation Measure

AQ-1 SBCAPCD Fugitive Dust Control Measures

SMBSD shall require the project contractor(s) to implement the following fugitive dust control measures during construction activities:

- During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site and from exceeding SBCAPCD's limit of 20 percent opacity for greater than three minutes in any 30-minute period. At a minimum, this shall include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency shall be required whenever the wind speed exceeds 15 miles per hour. Reclaimed water shall be used whenever feasible. However, reclaimed water shall not be used in or around crops for human consumption.
- The amount of disturbed area shall be minimized.
- On-site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- A track-out prevention device shall be installed and operated where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel washing systems.
- If stockpiling of material is involved, soil stockpiled for more than one day shall be covered, kept moist, or treated with soil binders to prevent dust generation.
- After clearing, grading, earth moving or excavation is completed, the disturbed area shall be treated by watering, or using roll-compaction, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All driveways and sidewalks to be paved/surfaced shall be completed as soon as feasible.
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SBCAPCD prior to the start of project construction activities.
- The project contractor(s) shall comply with SBCAPCD Rule 345: Control of Fugitive Dust from Construction and Demolition Activities, including all applicable standards and measures therein.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction activities would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and particulate matter measuring 2.5 microns or less in diameter [$PM_{2.5}$]), exhaust emissions from heavy construction vehicles, and ROC that would be released during the drying phase after application of coatings. Table 1 summarizes emissions that would be generated by project construction. As shown therein, construction emissions generated would not exceed the SBCAPCD-recommended threshold of 25 tons per year for ROC or NO_x. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant.

Table 1 Estimated Annual Construction Emissions

	Annual Emissions (tons per year)					
Construction Year	**ROC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
2025	<1	1	1	<1	<1	<1
2026	<1	<1	<1	<1	<1	<1
Maximum Annual Emissions	<1	**1**	**1**	**<1**	<1	**<1**
SBCAPCD Thresholds	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded?	No	No	N/A	N/A	N/A	N/A

ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns in diameter or less, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; SBCAPCD = Santa Barbara County Air Pollution Control District

Notes: All emissions modeling was completed using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data accounts for compliance with regulations (including SBCAPCD Rules 345, 323.1, and 329).

Operation

The project would require periodic maintenance and inspections but would not require any substantial new operations or maintenance activities. Overall, operation and maintenance activities would be less frequent than for the existing treatment system, and no new employees would be required to operate the project. Therefore, no new operational emissions would be generated, and project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. No impact would occur.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors are defined as facilities or land uses that include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. According to CARB, sensitive receptors are most likely to spend time at schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (CARB 2005). The closest sensitive receptors are Bonita Elementary School located partially within the project site, a single-family residence at 410 Black Road located approximately 60 feet west of the proposed pipeline, and a single-family residence at 2475 West Main Street located approximately 260 feet north of the proposed pipeline alignment. The potential for project construction to expose sensitive receptors to substantial pollutant concentrations is discussed in the following subsections. The project does not include any stationary sources of air pollutant emissions, and once construction is complete, the proposed project would not require additional operation and maintenance activities beyond those already occurring to operate and maintain the existing system. Therefore, project operation would not expose sensitive receptors to substantial pollutant concentrations and is not discussed further.

Criteria Pollutant and Fugitive Dust Emissions

As discussed under threshold (b), project construction would result in emissions of criteria pollutants, including fugitive dust, ROC, and NO_X. However, such emissions would be temporary in nature and would be reduced through compliance with existing regulations, such as SBCAPCD Rule 345. Furthermore, construction activities on school property would occur in June through September when school is not in session, and emissions at any given sensitive receptor along the proposed pipeline alignment would occur for only a limited portion of the overall construction timeframe because project construction would progress across the pipeline alignment, thereby limiting the exposure of any proximate individual sensitive receptors to substantial pollutant concentrations from active construction. Therefore, the project would not expose sensitive receptors to substantial concentrations of criteria pollutant and fugitive dust emissions, and impacts would be less than significant.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and perchloroethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and metals such as mercury, cadmium, chromium, and nickel. The primary TAC emitted by project implementation would be diesel particulate matter (DPM) generated by heavy-duty equipment and diesel-fueled delivery and haul trucks during construction activities. DPM was identified as a TAC by the CARB in 1998 and is primarily composed of PM_{10} and $PM_{2.5}$ exhaust emissions (CARB 2023).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur in phases over approximately one year. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that a person has to the substance. Dose is positively correlated with time, meaning a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., one year) is approximately 1.4 percent of the total exposure period used for health risk calculation. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (Bay Area Air Quality Management District 2023).

Maximum DPM emissions would occur during site preparation and grading construction activities. DPM emissions would be lower during other construction phases such as paving and site restoration because these phases would require less construction equipment. While the maximum DPM emissions associated with site preparation and grading would only occur for approximately one month, or 8.3 percent of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than 0.1 percent of the total exposure period for health risk calculation. Therefore, project construction activities would not

represent the type of long-term TAC emission sources typically subject to health risk assessments. Furthermore, all construction equipment would be equipped with Tier 3 or Tier 4 engines, which would minimize DPM emissions. Construction activities would also be required to comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes, which would reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. In addition, compliance with the standard construction measures required by the SBCAPCD would reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Lastly, construction activities on school property would occur in June through September when school is not in session, and TAC emissions at any given sensitive receptor along the proposed pipeline alignment would occur for only a limited portion of the overall construction timeframe because project construction would progress across the pipeline alignment, further limiting the exposure of any proximate individual sensitive receptors to TAC emissions from active construction. As such, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Project construction could generate odors associated with heavy-duty equipment operation, earth-moving and roadway paving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of the project site. Furthermore, these odors would dissipate rapidly with distance from in-use construction equipment. Project operation would involve conveyance of potable water via an underground pipeline and storage in aboveground tanks and would not result in the generation of odors. Therefore, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	■
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	■	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

This biological analysis is based on the results of a desktop and database review of the project region and a reconnaissance-level biological survey of the project site. The following analysis is based primarily on the Biological Resources Assessment (BRA) prepared for the project by Rincon Consultants, Inc. (Rincon) in 2023, which is included as Appendix B. The BRA evaluated biological resources within the biological study area (BSA), which encompasses the project site as well as a 50-foot buffer. The BSA is used in the analysis to inform existing baseline conditions and ecological context and to assist in informing the potential for the project site to support special status species.

Existing Conditions

The project site is located within the Santa Maria Valley in northern Santa Barbara County. The topography of the project site is generally flat with on-site elevations at approximately 150 to 180 feet above mean sea level. The predominant land use surrounding the project site is agriculture. Anthropogenic manipulated and maintained habitat types in the vicinity of the project site include row crop agriculture; ruderal areas associated with agricultural fields and support facilities such as materials storage yards, outbuildings, and machinery lots; developed areas; barren ground; irrigation ponds; industrial; irrigated pasture; and fallow agricultural fields that are vegetated by ruderal plant species and/or non-native grassland.

Four drainage ditches, which are man-made hydrologic features, occur within and immediately adjacent to the BSA and are located as follows:

- Along the east side of Bonita School Road
- Along the north side of SR 166
- Along the south side of SR 166
- Along the east side of Black Road

Drainage ditches in the region typically provide drainage for agricultural fields and flood control purposes. The ditches are a major collector of runoff from roadways as well as agricultural and agro-industrial areas in the region. Water flows west along SR 166 and drains into a series of ditches that flow southwesterly until they reach Guadalupe Dunes Natural Reserve where the water ultimately flows to the Santa Maria River. Very little vegetation occurs in the ditches, and the vegetation present is comprised of annual non-native species.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special Status Wildlife Species

Based on the database and literature review, 32 special status wildlife species are known to or have the potential to occur in the regional vicinity of the project site (Appendix B). Of those, one special status animal species - California red-legged frog (*Rana draytonii;* CRLF*;* Federally threatened and California Department of Fish and Wildlife [CDFW] Species of Special Concern [SSC]) - was determined to have moderate potential to occur within the project site. During the site reconnaissance surveys, no areas of standing water were of sufficient depth to support CRLF breeding. In addition, based on the design of the ditches within the project site, it is unlikely CRLF can utilize them for breeding due to flows, shallow water depth, and lack of cover. Therefore, the

project site does not contain suitable breeding habitat for CRLF. However, the ditches within the BSA (but outside the project footprint) may provide dispersal areas if water is present.

The ditches within the BSA are a part of the drainage ditch system that parallels SR 166 from Santa Maria west to the Santa Maria River. Multiple CRLF occurrences are documented within these ditch systems. Three CRLF occurrences have been recorded within one mile of the project site, all of which are located within or immediately adjacent to the ditch systems along SR 166. One occurrence was documented in an agricultural pond on private property on the north side of SR 166, just east of Bonita School Road and adjacent to and north of the project site. The other two occurrences were documented in the ditches on the south side of SR 166, approximately 0.5 mile and 0.8 mile east of the intersection of Black Road and SR 166, respectively. All three occurrences were of adult CRLF, and breeding was not documented. Because of the known use of these ditches by CRLF, the species could occur incidentally in upland portions of the BSA if conditions are conducive to CRLF leaving the ditches (e.g., sufficient moisture from a rain event). However, due to the high amounts of existing human activity and the active highway, movement into upland areas is unlikely.

No impacts to suitable breeding habitat for CRLF would occur during implementation of the project because the project would avoid the ditches along Bonita School Road, SR 166, and Black Road, and project activities would occur in previously-developed areas and disturbed road shoulders. In addition, impacts to individuals in upland areas at the Bonita Elementary School are unlikely because construction on the school property would occur during the dry season (between June and September) during daylight hours. However, construction of the pipeline along Bonita School Road, SR 166 and Black Road may occur outside of the dry season; therefore, individual CRLF may be encountered dispersing during conditions conducive to CRLF movement, such as during rain and shortly after rain events. The potential for direct impacts to dispersing CRLF is low considering project construction would be conducted during daylight hours when CRLF are less likely to move and would be more visible to construction workers and equipment operators. No indirect impacts to CRLF would occur because the amount of noise and activity from the project would not substantially increase the overall amount of activity around the ditches compared to existing agricultural operations and highway traffic. In addition, no nighttime construction would occur that would increase the amount of artificial light at night (Appendix B). Although no indirect impacts to CRLF are expected, direct impacts to CRLF would be potentially significant. Implementation of Mitigation Measures BIO-1 through BIO-4 would be required to reduce impacts to CRLF to a less-than-significant level.

Nesting Birds

Nesting birds are protected by the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. No bird nests were detected during the biological resources reconnaissance survey. Trees within the BSA providing suitable nesting habitat for bird species occur at Bonita Elementary School adjacent to the proposed staging area and at a residence on the east side of Black Road at the southern extent of the BSA in the form of landscape trees. In addition, wood utility poles located on both sides of SR 166 and along the eastern shoulder of Black Road may provide suitable nesting locations for bird species such as crows, ravens, and red-tailed hawks.

Project implementation would not result in direct impacts to nesting birds because no tree removal or trimming would occur and ground nesting species are not expected to be present. Indirect impacts to common bird species may occur if these species are nesting within the trees, structures, or power poles in the project site as a result of construction noise that may cause behavioral

changes that can result in failure of an established nest. This may be particularly notable at the portion of the project site at Bonita Elementary School if a nest is established when school is out of session and the amount of ambient activity is lower than during the school year (Appendix B). Therefore, impacts to nesting birds would be potentially significant. Implementation of Mitigation Measure BIO-5 would be required to reduce impacts to nesting birds to a less-than-significant level.

Special Status Plant Species

Based on the database and literature review, 41 special status plant species are known to or have the potential to occur within the regional vicinity of the project site. Of these, one special status plant species has a low potential to occur within the project site - La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*; Federally Endangered and State Candidate Threatened) based on the presence of marginally suitable habitat. Specifically, the ditch systems provide potentially suitable areas for La Graciosa thistle to establish because they provide suitable mesic soils. The California Natural Diversity Database notes occurrences of this species within the SR 166 man-made ditch systems west of the intersection of SR 166 and SR 1 approximately 3.8 miles west of the project site. The high amount of disturbance from maintenance and other anthropogenic activities within these ditch systems is likely a limiting factor for establishment of this species. No thistle plants were observed in the ditches within the project site during the reconnaissance survey, which was conducted during the species' blooming period. Therefore, based on the marginal suitability of the habitat within the project site as well as no observations during the reconnaissance survey, it is unlikely the species occurs in the project site. Furthermore, the project would avoid these ditches, thereby avoiding potentially suitable habitat for La Graciosa thistle (Appendix B). As such, the project would not directly or indirectly impact special plant species. No impact would occur.

Mitigation Measures

BIO-1 Worker Environmental Awareness Program Training

Prior to commencement of project construction activities, a qualified biologist shall provide a Worker Environmental Awareness Program training for all construction personnel. At a minimum, the training shall include a description of the biology of the CRLF and its habitats; the specific measures that are being implemented to avoid this species; the guidelines that must be followed by all construction personnel to avoid take of this species; and the boundaries within which the project may be accomplished. The qualified biologist shall appoint a designated person (e.g., the crew foreman) who will be responsible for ensuring all crewmembers comply with the guidelines. The training shall be conducted for all new personnel before they can participate in construction activities.

BIO-2 Pre-construction Surveys

A qualified biologist familiar with CRLF shall conduct a pre-construction survey of the project site within 48 hours prior to the start of construction. If CRLF are encountered during the survey or at any time during project construction, activities shall cease and the USFWS shall be notified to determine how to proceed. No work shall continue until authorized by the USFWS.

BIO-3 Construction Site Best Management Practices

The following construction site best management practices shall be implemented during construction activities:

- Work shall be conducted during dry weather conditions (days with less than 0.1 inch of predicted rainfall) and shall not occur within 48 hours after a rain event of 0.1 inch or more.
- All vehicles and equipment shall be in good working condition and free of leaks. A spill prevention plan shall be established in the event of a leak or spill.
- The number of access routes, numbers and sizes of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of project. Routes and boundaries shall be clearly demarcated.
- All areas outside of the project perimeter fence shall be designated as Environmentally Sensitive Areas where no construction activities shall occur.
- Water shall not be impounded in a manner that may attract CRLF.
- No pets or firearms shall be permitted on site.
- All food-related trash shall be disposed of in closed containers and removed from the project at least twice per week during the construction period to avoid attracting predators.
- Open excavations shall be covered at the end of each day and inspected for CRLF prior to backfilling.

BIO-4 Avoidance and Minimization Measures for Nesting Birds

Project-related activities shall occur outside of the bird breeding season (February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than two weeks prior to initiation of ground disturbance and/or vegetation removal, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300 feet for raptors), where accessible. If project construction is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird survey shall be conducted prior to each phase of construction, if occurring during the bird breeding season.

The pre-construction nesting bird survey shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform the survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to the SMBSD for review and approval within two weeks of survey completion.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 300 feet for raptors, depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms the breeding/nesting is complete and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction survey, no further action is necessary.

Significance after Mitigation

Mitigation Measures BIO-1 through BIO-4 would require implementation of a Worker Environmental Awareness Program training, pre-construction surveys and avoidance measures for CRLF and nesting birds, and construction site best management practices to minimize the potential for encountering CRLF during construction. Therefore, implementation of Mitigation Measures BIO-1 through BIO-4 would reduce impacts to special status species to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No sensitive natural communities or riparian habitats occur in the project site, and the project site is not located within federally designated critical habitat (Appendix B). Therefore, no impacts to sensitive natural communities, riparian habitats, or federally designated critical habitat would occur.

NO IMPACT

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

All activities associated with the project would occur outside of the ditches along Bonita School Road, SR 166, and Black Road, thereby avoiding potentially jurisdictional features. Given the limited amount of ground disturbance, the project is not anticipated to contribute to significant sediment erosion or surface water quality impacts during construction activities. Therefore, impacts to potentially jurisdictional waters and wetlands would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project site is not located within an Essential Connectivity Area for wildlife movement, and no wildlife nursery sites are located within the project site. The project site also occurs in a heavily-developed area with an elementary school and SR 166 within the project site as well as surrounding agricultural uses. Implementation of the project would not disturb or remove native vegetation communities. In addition, no aboveground components of the project would create new barriers to movement (Appendix B). Therefore, the project would not interfere substantially with the local or regional movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites. No would occur.

NO IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project would not conflict with local policies or ordinances protecting biological resources because the project site does not contain biological resources subject to any such local policies or ordinances (Appendix B). Therefore, no impact would occur.

NO IMPACT

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan because the project site is not subject to any such plans (Appendix B). Therefore, no impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources as well as human remains. A Cultural Resources Assessment was prepared for the project and is included as Appendix C. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

A search of the California Historical Resources Information System at the South Central Coastal Information Center located at California State University, Fullerton was completed on May 18, 2022. The search was performed to identify previously recorded cultural resources as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the National Register of Historic Places, the CRHR, the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File. Results of these searches indicated no known historical resources are located within or near the project site. The CCIC records search results identified four historic-era built environment resources and one historic-era trash refuse within a 0.5-mile radius of the project site. There are no historic resources recorded within the project site (Appendix C).

The pedestrian survey identified one property within the project site, the Bonita Elementary School campus, which includes historic-period development (i.e., development 45 years of age or older) - the Kindergarten Building. All other present buildings post-date the historic period. The Kindergarten Building is one-story in height, sits on a concrete base, has an irregular footprint, and integrates elements of the Spanish Revival Style. Indicative of its progressive development, roof forms are varied and include gabled and truncated hipped roof forms, sheathed in barrel clay tiles. The Bonita Elementary School campus, including the Kindergarten Building, was recorded, evaluated, and recommended ineligible for inclusion in the National Register of Historic Places or California Register of Historical Resources because it 1) is not associated with events important to the history of the city, region, state, or nation; 2) does not possess an association with any individual significant to the community, state, or nation; 3) does not embody a particular architectural style, represent the work of a master, or possess high artistic value; and 4) does not have potential to yield important information pertaining to the prehistory or history of the region, state, or nation (Appendix C). It is therefore not considered a historical resource pursuant to CEQA, and the project does not have the potential to impact historical resources. No impact would occur.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The CCIC records search conducted for the project did not identify any known archaeological resources within the project site or vicinity. The Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search was returned with positive results, which means the NAHC identified a potentially sensitive tribal cultural resource within the United States Geological Survey (USGS) quadrangle in which the project site is located. USGS quadrangles cover approximately 49 to 70 square miles, and a positive SLF result does not necessarily indicate the presence of a known archaeological resource on the project site.

The field survey of the portion of the project site along SR 166 and Black Road identified heavily-traveled paved roads lined with active agricultural fields that are highly disturbed by underground and aboveground utilities, including electrical poles, manholes, pipelines, and irrigation ditches.

Modern debris and trash, including clear and amber glass bottle fragments, plastic bottle caps, paper and plastic food wrappers, cardboard fragments, and metal fragments, were observed throughout this portion of the project site. Spare quantities of modern trash, including paper and plastic wrappers, plastic bottles, and caps, were also observed throughout the portion of the project site within the Bonita Elementary School campus. No archaeological resources were identified within the project site during the pedestrian field survey. Nevertheless, potential impacts to archaeological resources could occur in the vent archaeological resources are unexpectedly discovered during project construction. Implementation of Mitigation Measure CR-1 would be required to reduce impacts to archaeological resources to a less-than-significant level.

Mitigation Measure

CR-1 Unanticipated Discovery of Archaeological Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The SMBSD shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the CCIC pursuant to CEQA Guidelines Section 15126.4(b)(3)(C). ~~Impacts would be less than significant.~~

Significance after Mitigation

Mitigation Measure CR-1 would minimize the potential for impacts related to unexpected discoveries of archaeological resources to occur through the implementation of appropriate procedures for evaluation and treatment should any discoveries be made during construction. Therefore, implementation of Mitigation Measure CR-1 would reduce impacts to archaeological resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries? No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are unexpectedly found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98.

No human remains are known to be present within the project site (Appendix C). However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately by SMBSD. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a 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?	☐	☐	☐	■

As a state, California is one of the lowest per capita energy users in the United States, ranked 49th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2022). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. The project would not result in a net increase in electricity usage in the City's service area as compared to existing conditions and would not include natural gas connections. Therefore, electricity and natural gas consumption are not discussed further in this analysis.

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (California Energy Commission [CEC]2021). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 13.8 billion gallons sold in 2021 (CEC 2022a). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2022b).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, and construction worker

travel to and from the project site. Total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions for Section 3, *Air Quality,* and Section 8, *Greenhouse Gas Emissions* (Appendix A). Table 2 presents estimated energy consumption during project construction. As shown therein, construction equipment and haul trips would consume approximately 16,414 gallons of diesel fuel, and construction worker trips would consume approximately 654 gallons of gasoline.

Table 2 Project Construction Energy Usage

Source	Fuel Consumption (gallons)
Construction Equipment/Haul Trips	16,414
Construction Worker Vehicle Trips	654

See Appendix D for energy consumption calculations.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit off-road diesel vehicles and diesel-fueled commercial motor vehicles, respectively, from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency Construction Equipment Fuel Efficiency Standard, and haul trucks would be subject to the CARB Advanced Clean Trucks regulation, both of which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These regulations would result in the efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and no impact would occur.

Operational Energy Demand

As discussed in Section 3, *Air Quality*, the project would not require new operations and maintenance activities beyond existing conditions upon completion of construction activities. Therefore, no new operational energy consumption would occur, and project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. No impact would occur.

NO IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

SMBSD has not adopted any renewable energy or energy efficiency plans with which the project could comply. In addition, no state plans for renewable energy or energy efficiency would apply to the project. Therefore, no impact would occur.

NO IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
4. Landslides?	☐	☐	☐	■
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	■
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	■
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is not located on a mapped active fault or within an Alquist-Priolo Fault Zone. The closest fault is the Santa Maria fault, located approximately 3.4 miles east of the project site (United States Geological Survey [USGS] 2023; DOC 2023c).

While the project may be subject to strong ground shaking in the event of an earthquake, it would not be subject to unusual levels of ground shaking as compared to the rest of the region. Although the project site is located in a seismically active area, the proposed project involves installation of an underground pipeline and water storage components and would not involve any habitable structures. Design and construction of the proposed project would conform to the current seismic design provisions of the California Building Code (CBC; California Code of Regulations Title 24) to minimize this risk, to the extent feasible. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the proposed pipeline and/or tanks, failure of joints, and/or underground leakage from the pipeline and tanks. In the event an earthquake compromises the pipeline or tanks during operation, the SMBSD and/or the City would temporarily shut-off water conveyance processes and conduct emergency repairs as soon as practicable. Compliance with such requirements would reduce seismic ground shaking impacts to the maximum extent practicable with current engineering practices. Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground shaking. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, involving liquefaction?

Liquefaction is the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. This means liquefied soil acts more like a fluid than a solid when shaken during an earthquake. The project site is located not in a liquefaction zone (DOC 2023a). Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, involving liquefaction. No impact would occur.

NO IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is located in a relatively flat area that is not within or near an earthquake-induced landslide hazard zone (DOC 2023b). Therefore, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides. No impact would occur.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. The project site is relatively flat. Construction of the proposed pipeline would occur within the existing disturbed roadways and road shoulders, which would require grading and trenching. Water system improvements within the Bonita Elementary School campus would occur on previously-developed and paved areas.

Because the project disturbance area would be less than one acre in size and would therefore not be subject to the requirements of the NPDES Construction General Permit (Order No. 2009-0009-DWQ, as amended). Given the limited amount of ground disturbance, the project is not anticipated to contribute to significant erosion and topsoil loss from stormwater runoff during construction activities. Project operation would not result in soil erosion or loss of topsoil because no further soil disturbance would be required once construction is complete. Therefore, the project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Liquefaction is the sudden loss of soil shear strength due to a rapid increase of soil pore water pressures caused by cyclic loading from a seismic event. This means a liquefied soil acts more like a fluid than a solid when shaken during an earthquake. The project site is not located in a liquefaction zone (DOC 2023a). In addition, the project site is located in a low problem rating area for liquefaction according to the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan (County of Santa Barbara 2015a). In addition, the project involves construction of water infrastructure and would not involve placement of habitable structures within a liquefaction-prone area, thereby minimizing the potential to result in loss, injury, or death involving seismic-related ground failure due to liquefaction. The project also does not involve the extraction of groundwater or injection of water into the groundwater basin that could contribute to subsidence or liquefaction. As a result, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. No impact would occur.

NO IMPACT

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

According to the USDA NRCS Web Soil Survey of Santa Barbara County, California, Northern Santa Barbara Area, three soil map units are mapped within the project area: Sorrento Sandy Loam, 0 to 2 percent slopes, Sorrento Loam, 0 to 2 percent slopes, and Sorrento Loam, 2 to 9 percent slopes, all of which have relatively low clay content (United States Department of Agriculture 2023). In addition, the project site is located in an area classified as low potential for expansive soils according to the Seismic Safety and Safety Element of the Santa Barbara County Comprehensive Plan (County of Santa Barbara 2015b). Due to the low clay content of on-site soils, the potential for expansive soils to occur is low. In addition, the project does not include construction of habitable structures

and would be unmanned during operation. As a result, the project would not create substantial direct or indirect risks to life or property as a result of expansive soils. No impact would occur.

NO IMPACT

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project involves installation of water system improvements to interconnect Bonita Elementary School to the City's water system. The project does not involve the use of septic tanks or alternative wastewater disposal systems. As a result, no impact would occur.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. Based on these factors, it is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources and therefore evaluate the potential for impacts to those resources.

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site to assess the project's potential for significant impacts to scientifically important paleontological resources. The analysis was based on the results of a paleontological locality search and a review of existing information in the scientific literature regarding known fossils within geologic units mapped at the project site. According to the SVP (2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Using this system, a paleontological sensitivity classification was assigned to each geologic unit mapped within the project site following the literature review. This classification is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for the project to impact significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

The project site is located in the Transverse Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002) The Transverse Ranges extend approximately 275 miles west-east from Point Arguello in Santa Barbara County, east to the San Bernardino Mountains, and south to the Anacapa-Santa Monica-Hollywood-Raymond-Cucamonga fault zone (Yerkes and Campbell 2005). The Transverse Ranges are composed of Proterozoic to Mesozoic intrusive crystalline igneous and metamorphic rocks overlain by Cenozoic marine and terrestrial sedimentary deposits and volcanic rock (Norris and Webb 1976). The project

site is near the western end of the Transverse Ranges within the Santa Maria Valley, approximately 8.5 miles from the Pacific Ocean and 1.8 miles south of the Santa Maria River. The project site is mapped within the *Guadulupe* and *Santa Maria* USGS 7.5-minute topographic quadrangles.

The geology of the region surrounding the project site was mapped by Sweetkind et al. (2021), who identified a single geologic unit, Holocene alluvial fan and fluvial deposits, underlying the project site. Holocene alluvial fan and fluvial deposits consist of unconsolidated, silty sand to sandy gravel (Sweetkind et al. 2021). Holocene-aged geologic units are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources (SVP 2010). Therefore, Holocene alluvial fan and fluvial deposits have low paleontological sensitivity.

Rincon also requested a paleontological records search from the Santa Barbara Museum of Natural History, which recovered no known fossil localities within the project site (Hoffman 2023). The nearest known fossil localities occur in Pleistocene-aged alluvial sediments and occur at least six miles from the project site.

Excavations for the proposed project are anticipated to reach up to six feet below the surface and remove up to approximately 4,500 cubic yards of sediment. Although the geologic unit underlying the project site (i.e., Holocene alluvial fan and fluvial deposits) has a low paleontological sensitivity, it may be underlain by older alluvial sediments at an undetermined depth below the surface. Given the fossil-producing history of Pleistocene-aged alluvial sediments in Santa Barbara County (Hoffman 2023; Jefferson 2010), Pleistocene-aged alluvial sediments have high paleontological sensitivity. Knott and Eley (2006) reported radiocarbon dates from borehole samples taken near the mouth of the Santa Maria River, approximately 5.5 miles west of the project site, which indicate in general, sediments 48 to 92 feet below the surface are approximately 5,000 years old but that evidence of sediment reworking (i.e., older material within younger sediments) was also common. The project site is further from the mouth of the Santa Maria River than these samples, meaning the sedimentation rate in this area is likely lower, but sediment reworking is likely much less common as well. Given these findings, it is unlikely that 5,000-year-old or older sediments exist within six feet of the surface at the project site. Therefore, the presence of scientifically important paleontological resources at the project site is highly unlikely, and no impacts would occur.

NO IMPACT

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	■

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence that takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and from human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of a specific GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely these anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Emissions resulting from human

activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Natural Resource Agency 2019).

Significance Thresholds

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

SMBSD has not adopted thresholds for evaluating GHG emissions impacts under CEQA. However, the project site is located in unincorporated Santa Barbara County, and the County has adopted numerical significance thresholds for assessing impacts related to GHG emissions in its Environmental Thresholds and Guidelines Manual (2021). As a first step, the County recommends comparing project emissions against its screening threshold of 300 MT of CO_2e per year for non-industrial stationary source projects and plans. If GHG emissions for a project are less than the numeric screening threshold, the project would have a less-than-significant impact, and no further analysis would be required.

Methodology

GHG emissions associated with project construction were estimated using CalEEMod, version 2022.1, with the assumptions described under Section 3, *Air Quality*. Construction emissions typically occur for a limited portion of a project's lifetime; therefore, consistent with the County's Environmental Thresholds and Guidelines Manual (2021), GHG emissions from construction are amortized over the project's estimated lifetime. The proposed project is anticipated to have a lifespan of 50 years or more. Accordingly, GHG emissions from construction are amortized over a period of 50 years.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the project would generate GHG emissions. Because the project would not result in an increase in routine operations and maintenance activities, this analysis considers the impact of GHG emissions from construction only. Project construction activities would generate temporary GHG emissions primarily from the operation of construction equipment as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport materials. As shown in Table 3, construction associated with the project would generate approximately 176 MT of CO_2e. Amortized over the project's 50-year lifespan, project construction would generate approximately 4 MT of CO_2e per year, which would not exceed the County's screening threshold of 300 MT of CO_2e per year. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

Table 3 Construction GHG Emissions

Year	Emissions (MT of CO_2e)
2025	176
2026	<1
Total	**176**
Amortized over 50 years	4 per year
County Screening Threshold	**300 per year**
Threshold Exceeded?	No

MT = metric tons; CO_2e = carbon dioxide equivalents

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions of CalEEMod worksheets (Appendix A)

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Plans and policies have been adopted to reduce GHG emissions in Santa Barbara County, including the County's 2015 Energy and Climate Action Plan, the County's draft 2030 Climate Action Plan, and the State's 2022 Scoping Plan. As stated in the County's Environmental Thresholds and Guidelines Manual (2021), "the County considered projects or plans that have emissions below interim thresholds to be consistent with County GHG emission reduction plans. The interim thresholds are part of the County's GHG emissions reduction strategy and were informed by the County's 2030 target. The interim thresholds provide a pathway for projects and plans to show compliance with County goals… The County's interim GHG emission efficiency threshold is considerably lower than the State's 2030 per capita target. Therefore, analysts can apply the County's interim threshold with confidence that it aids the State in achieving its target, as well" (County of Santa Barbara 2023b).

As discussed under threshold (a), project construction would generate approximately 4 MT of CO_2e per year, which would not exceed the County's screening threshold of 300 MT of CO_2e per year. As such, based on County guidance, the project would not conflict with the County's 2015 Energy and Climate Action Plan, the County's draft 2030 Climate Action Plan, or the State's 2022 Scoping Plan. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and no impact would occur.

NO IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 0.25 mile of an existing or proposed school?	☐	■	☐	☐
d. Be located on a site that is included on a list of hazardous material 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 in an airport land use 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?	☐	☐	☐	■

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project construction would involve the use of potentially hazardous materials such as vehicle fuels and fluids. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers themselves. In addition, any use of potentially hazardous materials during construction of the proposed project would be required to comply with all local, state, and federal regulations regarding the handling of hazardous materials, which would minimize the potential for the project to create a significant hazard to the public or the environment. In addition, lead-based materials exposure is regulated by California Occupational Safety and Health Administration (CalOSHA) regulations. In particular, during removal of existing lead service lines from Building K, the District's contractor would be required to comply with California Code of Regulations, Section 1532.1, which requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards.

As a result of lead from vehicle exhaust emissions and historical and present-day agricultural use, elevated levels of aerially deposited lead, pesticides and/or arsenic may be encountered in areas of exposed soil along SR 166, Black Road, and Bonita School Road. Ground-disturbing activities generating fugitive dust would have the potential to result in the release of hazardous materials into the environment if not handled properly, which could create a significant hazard to the public and/or the environment. Therefore, impacts would be potentially significant, and implementation of Mitigation Measures HAZ-1 through HAZ-3 would be required to reduce impacts to a less-than-significant level.

Operation of the project would not include the use of hazardous materials. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant.

Mitigation Measure

HAZ-1 Limited Soils Assessment

Prior to the start of construction, SMBSD shall retain a qualified consultant (i.e., Professional Geologist [PG] or Professional Engineer [PE]) to conduct a limited soils assessment that includes soil sampling and analysis for aerially-deposited lead, pesticides, and arsenic within the unpaved portions of the project site along SR 166, Black Road, and Bonita School Road proposed for ground disturbance. The PG or PE shall prepare a subsurface investigation report, which will be submitted to SMBSD for review and approval. As part of the subsurface investigation, analytical results shall be screened against the most recent San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESL) for direct exposure of construction workers and hazardous waste screening thresholds for contaminants in soil (California Code of Regulations Title 22, Section 66261.24). The subsurface investigation report shall include recommendations to address identified hazards and indicate when to apply those recommended actions in relation to project construction activities. If contaminants are detected at the project site, SMBSD shall implement the recommendations specified in the subsurface investigation report, and appropriate steps shall be undertaken by SMBSD to protect site workers during project construction, pursuant to Mitigation Measures HAZ-2 and HAZ-3.

HAZ-2 Site Management Plan

If the subsurface investigation conducted under Mitigation Measure HAZ-1 identifies contaminants are present within the construction limits at chemical concentrations exceeding ESLs for direct exposure of construction workers and/or hazardous waste screening thresholds for contaminants in soil, SMBSD shall retain a qualified consultant (i.e., PG or PE) to prepare a Site Management Plan (SMP) prior to commencement of ground-disturbing activities along SR 166, Black Road, and Bonita School Road. The SMP shall address:

- On-site handling and management of impacted soils if such soils or impacted wastes are encountered, and
- Specific actions to reduce hazards to construction workers and off-site receptors during construction.

The SMP shall establish remedial measures and/or soil management practices to ensure construction worker safety and prevent the off-site migration of contaminants from the project site. These measures and practices may include, but are not limited to:

- Stockpile management, including stormwater pollution prevention and the installation of Best Management Practices
- Proper transportation and disposal procedures of impacted materials in accordance with applicable regulations, including California Code of Regulations Title 22
- Monitoring and reporting
- A health and safety plan for contractors working at the project site that addresses the safety and health hazards of each phase of project site construction activities with the requirements and procedures for employee protection and outlines proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.

SMBSD shall review and approve the SMP prior to the commencement of ground-disturbing activities along SR 166, Black Road, and Bonita School Road. SMBSD shall require its construction contractor(s) to implement the SMP during all ground-disturbing activities along SR 166, Black Road, and Bonita School Road.

HAZ-3 Impacted Soil Disposal

If the subsurface investigation conducted under Mitigation Measure HAZ-1 identifies contaminants are present within the construction limits at chemical concentrations exceeding ESLs for direct exposure of construction workers and/or hazardous waste screening thresholds for contaminants in soil, SMBSD shall retain a qualified consultant (i.e., PG or PE) to properly delineate and dispose of the contaminated soil. The qualified consultant (i.e., PG or PE) shall utilize the project site analytical results for waste characterization purposes prior to off-site transportation or disposal of potentially impacted soils or other impacted wastes. The qualified consultant (i.e., PG or PE) shall provide disposal recommendations and arrange for proper disposal of the waste soils (as necessary). Proper excavation and off-site disposal or recycling of impacted soils may require additional delineation of impacts and additional analytical testing pursuant to landfill or recycling facility requirements. SMBSD shall review and approve the disposal recommendations for regulated waste prior to transport of waste soils off site.

Significance after Mitigation

Mitigation Measures HAZ-1 through HAZ-3 would require a limited soils assessment for aerially-deposited lead, pesticides, and arsenic along with subsequent development and implementation of a site management plan and appropriate disposal of impacted soils should ESLs or hazardous waste screening thresholds for contaminants in soil be exceeded. These measures would minimize the potential for the routine transport and disposal of hazardous materials to impact the public and/or the environment during construction activities. Therefore, implementation of Mitigation Measures HAZ-1 through HAZ-3 would reduce impacts from the routine transport and disposal of hazardous materials to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project 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?

The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities such as trenching, could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. Hazardous materials used during project construction would be disposed of off-site in accordance with all applicable laws and regulations, including the regulations of the federal and state Occupational Safety and Health Administrations. Nonetheless, upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels during project construction, potentially introducing a hazard to the public and/or the environment, which could result in a potentially significant impact. Implementation of Mitigation Measure HAZ-4 would be required to provide an additional level of safety during project construction, thereby reducing the potential impact to the public and environment due to release of hazardous materials during upset or accident conditions to a less-than-significant level.

As discussed under threshold (a), operation and maintenance of the project would involve the conveyance of potable water and would not require the routine use, storage, or disposal of hazardous materials. No impacts related to the release of hazardous materials due to reasonably foreseeable upset or accident conditions during project operation would occur.

Mitigation Measure

HAZ-4 Hazardous Materials Management and Spill Control Plan

The construction contractor(s) shall submit a Hazardous Materials Management and Spill Control Plan (HMMSCP), including a project-specific contingency plan for hazardous materials and waste operations to SMBSD for review and approval. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including, but not limited to, the California Building and Fire Codes, as well as regulations promulgated by the United States Department of Labor, United States Occupational Safety and Health Administration, and California Occupational Safety and Health Administration. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials during project construction.

Significance after Mitigation

Mitigation Measure HAZ-4 would require preparation and implementation of a HMMSCP with appropriate procedures to implement in the event of an accidental spill or release of hazardous materials during project construction, which would reduce impacts from reasonably foreseeable upset and accident conditions involving the release of hazardous materials to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

A portion of the project site is located within Bonita Elementary School. Construction of the proposed project would comply with existing federal and state requirements for the transport, use, or disposal of hazardous materials. The facilities and infrastructure proposed for demolition are not expected to contain lead-based paint or asbestos-containing materials. In addition, the project would be required to comply with existing federal and state regulations governing the use of hazardous materials during construction activities. Furthermore, project construction on the Bonita Elementary School campus would take place June through September when school is not in session, which would further reduce potential impacts. However, construction activities along SR 166, Black Road, and Bonita School Road generating fugitive dust would have the potential to result in the release of hazardous materials into the environment if soils are contaminated with aerially deposited lead, pesticides, and/or arsenic. Therefore, implementation of Mitigation Measures HAZ-1 through HAZ-3 would be required to minimize the potential for the handling of hazardous materials, substances, and wastes within 0.25 mile of Bonita Elementary School to result In significant adverse impacts.[2] Implementation of Mitigation Measure HAZ-4 would also be required to provide an additional level of safety during project construction, thereby reducing the potential impacts to schools from hazardous emissions, hazardous or acutely hazardous materials, substances, or waste. Therefore, project construction would not result in significant adverse impacts due to the emissions of hazardous emissions or handling of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Impacts would be less than significant with mitigation incorporated.

The proposed project would not emit hazardous emissions or require the routine use, storage, or disposal of hazardous materials during operation. Therefore, project operation would not adversely affect schools within 0.25 mile of the project site due to the handling of hazardous materials, substances, or waste. No impact would occur.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

[2] The use of the ESLs for direct exposure of construction workers to inform the recommendations of the limited soils assessment, preparation of the site management plan, and disposal of impacted soils under Mitigation Measures HAZ-1 through HAZ-3 would also be sufficiently protective of students at Bonita Elementary School given that their potential for exposure would be less than that of construction workers.

d. Would the project be located on a site that is included on a list of hazardous material 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?

The following databases compiled pursuant to Government Code Section 65962.5 were checked for known hazardous materials contamination within and adjacent to the project site:

- EnviroStor Database, California Department of Toxic Substances Control (DTSC)
- GeoTracker Database, California State Water Resources Control Board (SWRCB)
- "Active" Cease and Desist Orders and Cleanup and Abatement Orders from SWRCB (California Environmental Protection Agency [CalEPA] 2023a)
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit (CalEPA 2023b)

According to the database search, there is one school investigation site within the portion of the project on the Bonita Elementary School campus and one known active hazardous material site within 5,000 feet of the project site (DTSC 2023a; SWRCB 2023a). The "Bonita Land North Site" school investigation site record is associated with execution of a 2001 oversight agreement with DTSC and preparation of a workplan to conduct a Preliminary Endangerment Assessment for a formerly proposed expansion of the school campus to determine if any hazardous materials concerns related to potential lead-based paint soil contamination in the drip line of the main school building and potential pesticide and related metal contamination in the athletic field were present. Based on site records, the Preliminary Endangerment Assessment was not completed. The proposed project would not result in modifications to the drip line of the main school building and would not require disturbance of the school's athletic field (SWRCB 2023b). Therefore, the proposed project would not create a significant hazard to the public or the environment due to the presence of this school investigation site.

The Surrat Transport Spill is a Cleanup Program site located approximately 2,500 feet to the west of the project site and is listed as open as of March 10, 2003. This site involved a diesel spill onto an area of surface soils that was not expected to have affected groundwater (SWRCB 2023c). The project would not disturb the Surrat Transport Spill Site and thus would not risk disturbing contaminated sediments. The proposed project would not create a significant hazard to the public or the environment due to this cleanup site. Therefore, no impact would occur.

NO IMPACT

e. For a project located within an airport land use 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?

The project site is approximately 3.3 miles north of the Santa Maria Airport. The project site is not located within the noise level contours for the airport (Santa Barbara County Association of Governments 2023). Therefore, the project would not result in a safety hazard or excessive noise for people working at the project site due to proximity to an airport. No impact would occur.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project site is within the planning area of the County's Multi-Jurisdictional Hazard Mitigation Plan (County of Santa Barbara 2017). The proposed project involves installation of an underground pipeline and, once operational, would not modify or block current emergency access routes or site ingress and egress. The hydropneumatic tank and other improvements included in the project would be located on Bonita Elementary School's property, outside of the roadway, and would not modify or block current emergency access routes or site ingress and egress. While construction of the proposed project would temporarily increase traffic to and from the project site, the project site is surrounded by major roadways, such as U.S. 101, which have sufficient capacity to provide access to and from the project site (see Section 17, *Transportation*). Project construction may require a temporary single-lane closure along SR 166 and Black Road, which could slow traffic through the local area and thereby affect implementation of emergency response and evacuation plans, especially in the event that lane closures occur at the same time as other nearby projects affecting the transportation network, such as the Bonita School Road Bridge Replacement Project. Therefore, impacts would be potentially significant, and implementation of Mitigation Measure HAZ-5 would be required to reduce impacts to a less-than-significant level.

HAZ-5 Traffic Control Plan

SMBSD shall require the project contractor(s) to prepare and implement a traffic control plan that specifies how traffic will be safely and efficiently redirected during lane closures. All work shall comply with the Work Area Traffic Control Handbook, which conforms to the standards and guidance of the California Manual on Uniform Traffic Control Devices. Traffic control measures for lane closures shall be included, and priority access shall be given to emergency vehicles. The traffic control plan shall also include requirements to notify local emergency response providers at least one week prior to the start of work when lane closures are required. The traffic control plan shall also include regional coordination with other construction activities that impact the surrounding SR 166, Black Road, and surrounding streets. All construction activities shall be closely coordinated with other construction projects that are occurring, including the Bonita School Road Bridge Replacement Project, to ensure that traffic along SR 166, Black Road, and surrounding streets remain at an acceptable level of operation during construction.

Significance after Mitigation

Mitigation Measure HAZ-5 would require the project contractor(s) to safely redirect traffic, utilize traffic control measures, and give emergency response providers advance notification and priority access such that the potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan would be minimized. Therefore, implementation of Mitigation Measure HAZ-5 would reduce impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

As discussed in detail in Section 20, *Wildfire*, the project site is not within or near a State Responsibility Areas (SRA) or lands classified as Very High Fire Hazard Severity Zones (VHFHSZ) (California Department of Forestry and Fire Protection [CAL FIRE] 2023a; CAL FIRE 2023b). The project site is surrounded by existing irrigated agricultural fields and agro-industrial development

and is not located near any undeveloped wildland areas. In addition, the project would not include habitable structures. Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

NO IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	■	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	■
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☐	■
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☐	■
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	■
(iv) Impede or redirect flood flows?	☐	☐	☐	■
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	■
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	■	☐	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

As stormwater flows over a construction site, it can pick up sediment, debris, and chemicals, and transport them to receiving water bodies. Temporary site preparation and trenching activities associated with the project may result in soil erosion. Construction activities could also affect water quality in the event of an accidental fuel or hazardous materials leak or spill. Receiving water bodies in the vicinity of the project site include unnamed agricultural ditches, which run parallel to the project alignment in an east-west direction along the south side of the SR 166 and in a north-south direction along the east side of Black Road. As previously discussed in Section 7, *Geology and Soils*, construction activities are not anticipated to contribute to erosion and topsoil loss from stormwater runoff during construction activities. Therefore, substantial surface water quality impacts associated with sediment erosion during project construction would not occur.

Water produced by flushing of the proposed pipeline and potential hydropneumatic tank would be placed in the on-site storage tank and re-used for non-potable irrigation and fire suppression purposes. The District would comply with the applicable requirements of Order R3-2019-0089 (General Waiver for Specific Types of Discharges), issued by the Central Coast Regional Water Quality Control Board. Order R3-2019-0089 provides a general waiver of waste discharge requirements for specific types of discharges, including "water supply discharges from pipelines, storage tanks, pump tests, and well development." Specific standards to which the District would be required to adhere are outlined in Section A4 in Attachment A to Order R3-2019-0089. These standards include implementing appropriate management practices to dissipate energy, prevent erosion, and preclude discharge to surface waters or conveyances that are subject to federal Clean Water Act requirements as well as assuring chlorine and bromine concentrations in the water would not impact groundwater quality. With adherence to these regulatory requirements, the discharge of water produced by pipeline and tank flushing during construction would not result in substantial degradation of surface water or groundwater quality.

There is potential for accidental leaks and spills of hazardous materials at the surface, which could result in potentially significant impacts to water quality if hazardous materials enter the unnamed agricultural ditches. Mitigation Measure HAZ-4, as described in Section 9, *Hazards and Hazardous Materials*, would reduce the potential for accidental leaks and spills of hazardous materials by requiring preparation and implementation of an HMMSCP. With implementation of Mitigation Measure HAZ-4, project construction would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and the impact would be reduced to a less-than-significant level.

Operation

The proposed project consists of an underground water pipeline, aboveground water storage, and other potable water system appurtenances and improvements that would not have the potential to release contaminants that would adversely affect water quality during operation. As such, project operation would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. No impact would occur.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site overlies the Santa Maria River Valley Groundwater Basin, which is designated as a very low priority groundwater basin under the Sustainable Groundwater Management Act (SGMA) (California Department of Water Resources 2023).

The proposed project consists of installation of an underground pipeline, aboveground water storage tank, and other minor water system improvements on the Bonita Elementary School campus and within public roadway ROWs. The project site would be restored to pre-project conditions after the completion of construction activities. The project does not include the addition of new impervious surfaces, and project components would not substantially alter the ability for groundwater to percolate through the subsurface. In addition, as discussed in Section 17, *Utilities and Service Systems*, the project would not facilitate increased groundwater pumping because water conveyed through the proposed pipeline would be supplied from existing water sources. Accordingly, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. No impact would occur.

NO IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The proposed project consists of installation of an underground pipeline, aboveground water storage tank, and other minor water system improvements on the Bonita Elementary School campus and within public roadway ROWs. The project does not propose alterations to the course of a stream or river. As described above under threshold (b), the project would not result in an increase in impervious surfaces. As a result, the project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. No impacts would occur.

NO IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

According to the Federal Emergency Management Agency Flood Insurance Rate Maps, the project site is not located in a flood hazard zone (Federal Emergency Management Act 2021). The project site is also not located near any large bodies of water subject to seiche. The Pacific Ocean is located approximately six miles to the east of the project site; therefore, the project site is not located in a tsunami zone. As a result, the project would not risk release of pollutants due to project inundation by seiche, tsunami, or mudflow. No impact would occur.

NO IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

SGMA requires local Groundwater Sustainability Agencies in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs). As described above under threshold (b), the project site is located in the Santa Maria River Valley Groundwater Basin which is designated as a very low priority groundwater basin. As a result, a GSP has not been prepared for this basin, and the proposed project would not conflict with or obstruct implementation of a GSP.

The project is subject to the requirements of Central Coast Regional Water Quality Control Board's Water Quality Control Plan (Basin Plan) (Central Coast Regional Water Quality Control Board 2019). As described in Section 7, *Geology and Soils*, the project would involve minimal ground disturbance and would not contribute significantly to erosion and topsoil loss from stormwater runoff during construction activities. Accordingly, the project would not contribute to increased sedimentation or pollution of waterways. Compliance with applicable regulatory requirements would minimize potential surface water quality impacts associated with sediment erosion during project construction. In addition, Mitigation Measure HAZ-4, as described in Section 9, *Hazards and Hazardous Materials*, would reduce the potential for accidental leaks and spills of hazardous materials by requiring preparation and implementation of an HMMSCP. With implementation of Mitigation Measure HAZ-4, the project would not conflict with or obstruct implementation of the Basin Plan. Impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	■

a. Would the project physically divide an established community?

The proposed project consists of a water system consolidation between Bonita Elementary School with the City. The project involves the connection of the City's water system to Bonita Elementary School via the installation of approximately 8,100 linear feet of underground pipeline and the completion of various water system improvements within the Bonita Elementary School campus. As a result, the proposed project does not include components that would physically divide a community. No impact would occur.

NO IMPACT

b. Would the project 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?

The proposed project would be located in unincorporated Santa Barbara County. The project site is located in a predominately agricultural area and involves the connection of the City's water system to Bonita Elementary School. The proposed pipeline alignment is located in the public ROW of an existing roadway and does not have a General Plan land use designation or zoning. The proposed water system improvements on the Bonita Elementary School campus are located on a property zoned AG-II-40 with a General Plan designation of Educational Facility. Pursuant to California Government Code 53091, the building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water by a local agency. Therefore, the project is only evaluated for consistency with the County of Santa Barbara Comprehensive Plan. The project, as proposed, does not conflict with any applicable local land use and zoning policies.

In addition, as indicated in Section 4, *Biological Resources*, no biological resources protected by local policies and ordinances are located on the project site. Furthermore, the project would result in minimal changes to existing conditions upon completion of construction activities given that the proposed pipeline would be installed underground and installation of the hydropneumatic tank and water system improvements would occur within the existing Bonita Elementary School campus, and overall operation and maintenance activities of the school's water system would be less frequent

than the existing treatment system. As a result, the proposed project would not 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 would occur.

NO IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource 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?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project 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?

The project site and surrounding area do not contain mineral resources that are of value locally, to the region, or to residents, and the project site is not identified as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan (County of Santa Barbara 2010). In addition, the proposed project does not involve mining or oil extraction activities. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or 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 would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	■	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA,

increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptor used for this study is the equivalent noise level (L_{eq}). L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage. Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 4.

Table 4 Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec PPV)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 5.

Table 5 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	Transient Sources	Continuous/Frequent Intermittent Sources[1]
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

Project Noise Setting

The primary existing noise sources in the vicinity of the project site include vehicular traffic on Black Road and SR 166, in addition to agro-industrial development immediately north and south of SR 166 and west and east of Black Road. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the County's Environmental Thresholds and Guidelines Manual, noise-sensitive land uses are considered to include (County of Santa Barbara 2021):

1. Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses.
2. Transient lodging, including hotels, motels, and similar uses.
3. Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.
4. Public or primate educational facilities, libraries, churches, and places of public assembly.

The nearest noise-sensitive receptors include Bonita Elementary School, which is partially within the project site, a single-family residence at 410 Black Road located approximately 60 feet west of the proposed pipeline, and a single-family residence at 2475 West Main Street, located approximately 260 feet north of the proposed pipeline.

To characterize ambient noise levels in the project vicinity, three short term (15-minute) noise level measurements were conducted on June 5, 2023. The noise measurement locations are shown in Figure 3. Short-term noise measurement (ST)-1 was conducted along the southern boundary of Bonita Elementary School, adjacent to SR 166, to capture ambient noise levels attributable to the school and SR 166. ST-2 and ST-3 were conducted northeast of the intersection of SR 166 and Ray Road to capture ambient noise levels at one of the residential uses in the area. Table 6 summarizes the results of the short-term and long-term noise measurements.

Table 6 Short-Term Noise Level Measurement Results

Measurement Location	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L_{eq} (dBA)	L_{min} (dBA)	L_{max} (dBA)
ST 1	Southern boundary of Bonita Elementary School, adjacent to SR 166[1]	9:32 – 9:47 a.m.	Approximately 45 feet to SR 166 centerline	65	42	78
ST 2	Northeast of the intersection at SR 166 and Ray Road, adjacent to residential uses along SR 166	10:37 – 10:52a.m.	Approximately 125 feet to SR 166 centerline	62	42	71
ST 3	Northeast of the intersection at SR 166 and Ray Road, adjacent to residential uses along SR 166	10:58 – 11:13a.m.	Approximately 90 feet to SR 166 Centerline	67	44	99

dBA = A-weighted decibels; L_{eq} = equivalent noise level; L_{min} = minimum noise level, L_{max} = maximum noise level

[1] School was in session when the noise level measurement was conducted at Bonita Elementary School.

Detailed sound level measurement data are included in Appendix E.

Figure 3 Noise Measurement Locations

ATTACHMENT E

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Project construction activities would generate temporary noise in the vicinity of the project site, exposing sensitive receptors to increased noise levels. Construction noise would be generated by heavy-duty diesel construction equipment used for demolition/pavement cutting, site preparation, grading, tank and pipeline installation, paving, and site restoration activities. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would be short-term and temporary at any given location and construction activities would move along the project alignment over the course of the ten-month construction schedule.

For purposes of this analysis, the County's threshold of 65 dBA L_{eq} at sensitive receptors within 1,600 feet of grading and construction activity, including residential development and schools, is used to assess potential project construction noise impacts (County of Santa Barbara 2021). Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise-sensitive receptors near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Over the course of a typical construction day, construction equipment would be located as close as 50 feet from Bonita Elementary School, 60 feet from the residence at 410 Black Road, and 260 feet from the residence at 2475 West Main Street but would typically be located at an average distance farther away due to the nature of construction equipment movement and the linear nature of the project. For example, during an average construction day near sensitive receptors, equipment may operate between 50 feet to 400 feet from the receptors. Therefore, it was assumed equipment would operate at an average distance of 100 feet from Bonita Elementary School, 110 feet from the residence at 410 Black Road, and 310 feet from the residence at 2475 West Main Street.

Project construction activities on the Bonita Elementary School campus would generate noise during construction of the tank and replacement of lead service lines in Building K. However, construction on school property would primarily occur between June and September when school is not in session. Therefore, noise levels from on-site construction activities were not quantified because students would not be present.

Table 7 identifies the expected noise levels at the closest sensitive receptors from an average distance from the pipeline alignment based on the conservatively assumed combined use of all construction equipment during each phase of construction.

Table 7 Construction Noise Levels at Sensitive Receptors

Construction Stage	Estimated Noise Levels (dBA L_{eq})		
	Bonita Elementary School[1]	Residence at 410 Black Road[2]	Residence at 2475 West Main Street[3]
Demolition/Pavement Cutting	75	74	65
Site Preparation	76	76	67
Grading/Trenching	73	73	64
Tank Installation	n/a[4]	n/a[5]	n/a[5]
Infrastructure Installation	74	74	65
Paving	77	77	68
Site Restoration	70	69	60
Significance Threshold	65	65	65
Threshold Exceeded?	**Yes**	**Yes**	**Yes**

dBA = A-weighted sound-pressure level; L_{eq} = equivalent noise level; n/a = not applicable

[1] Noise levels estimated at an average distance of 100 feet.

[2] Noise levels estimated at an average distance of 110 feet.

[3] Noise levels estimated at an average distance of 310 feet.

[4] Noise levels were not estimated because tank installation would primarily occur between June and September when school is not in session.

[5] Noise levels were not estimated because these activities would occur more than 1,600 feet from this sensitive receptor.

Source: Roadway Construction Noise Model. See Appendix E for modeling outputs.

As shown in Table 7, construction noise levels could be as high as 77 dBA L_{eq} at Bonita Elementary School, 77 dBA L_{eq} at the residence at 410 Black Road, and 68 dBA L_{eq} at the residence at 2475 West Main Street. Therefore, project-generated construction noise would exceed the significance threshold of 65 dBA L_{eq} at the closest sensitive receptors. Impacts would be potentially significant. Implementation of Mitigation Measure NOI-1 would be required to reduce construction noise impacts to a less-than-significant level.

Operation

The project would not include any new sources of operational noise. As such, project operation would not generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of locally-adopted standards, and no impact would occur.

Mitigation Measure

NOI-1 Construction Noise Reduction Measures

SMBSD shall require its construction contractor ensure construction noise levels do not exceed 65 dBA L_{eq} at nearby sensitive receptors during construction activities. At a minimum, construction noise reduction measures shall include the following:

- Installation of at least 8-foot-high temporary sound barriers/blankets to break the line of sight between construction equipment and nearby residences when construction is performed within 80 feet of the residential property. The barriers shall be at least 1.5 pounds per square foot with

no gaps from the ground to the top of the barrier. Alternately, if sound blankets are preferred, barriers shall be constructed with solid material with a density of at least 1 pound per square foot with no gaps from the ground to the top of the barrier and be lined on the construction side with acoustical blanket, curtain or equivalent absorptive material rated sound transmission class (STC) 32 or higher.

- To the extent consistent with applicable safety regulations, trucks operating with reverse motions alarms shall be outfitted with SAE J994 Class D or equivalent alarms (ambient-adjusting, or "smart alarms" that automatically adjust the alarm to 5 dBA above the ambient near the operating equipment). Alternatively, back-up alarms shall be switched off and replaced with human spotters in compliance with all safety requirements and laws.
- A construction notification sign shall be posted at the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the contractor's authorized representatives that are assigned to respond in the event of a noise complaint. If the authorized contractor's representative receives a complaint, that person shall investigate, take appropriate corrective action, and report the action to the school district.

SMBSD shall include these measures on the construction plans prior to beginning of construction activities. Sound barriers and construction notification signs shall be installed on the project site prior to initiation of ground-disturbance activities within 80 feet of sensitive receptors and shall be maintained throughout the duration of construction activities near sensitive receptors.

Significance After Mitigation

Mitigation Measure NOI-1 would require installation of a temporary noise barrier and other noise reduction measures during construction activities. The estimated noise reduction from a temporary noise barrier that would block the line-of-sight between the equipment exhaust stacks and nearby sensitive receivers would be at least 15 dBA. With this reduction, noise levels at the closest sensitive receptors would not exceed 65 dBA L_{eq}. Therefore, implementation of Mitigation Measure NOI-1 would reduce construction noise impacts to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Project construction may require operation of vibratory equipment such as loaded trucks and rollers within 50 feet of structures on the Bonita Elementary School campus, 60 feet of the residence at 410 Black Road to the west of the pipeline alignment, and 260 feet of the residence at 2475 West Main Street to the north of pipeline alignment. As shown in Table 8, construction vibration levels would not exceed 0.20 in/sec PPV at Bonita Elementary School or the nearest residences, the threshold at which damage can occur to residential buildings.[3] In addition, construction vibration levels at these sensitive receptors would not exceed 0.25 in/sec PPV, which is the threshold for human annoyance based on the level at which transient vibration sources are distinctly perceptible. Because the use of construction equipment would not exceed the threshold for structural damage

3 The threshold for residential buildings was conservatively applied to structures at Bonita Elementary School because certain structures are not of modern construction (e.g., Building K).

or human annoyance, project construction would not generate excessive groundborne vibration or groundborne noise levels. Impacts would be less than significant.

Table 8 Vibration Levels at Nearest Receptors

Equipment	Estimated Vibration Level at Bonita Elementary School (in/sec PPV)[1]	Estimated Vibration Level at Residence at 410 Black Road (in/sec PPV)[2]	Estimated Vibration Level at Residence at 2475 West Main Street (in/sec PPV)[3]
Roller	0.074	0.056	0.006
Loaded Truck	0.027	0.020	0.002
Threshold For Structural Damage[4]	**0.20**	**0.20**	**0.20**
Threshold Exceeded?	No	No	No
Threshold For Human Annoyance[5]	**0.25**	**0.25**	**0.25**
Threshold Exceeded?	No	No	No

in/sec = inches per second; PPV = peak particle velocity

[1] Vibration levels estimated at an average distance of 50 feet.

[2] Vibration levels estimated at an average distance of 60 feet.

[3] Vibration levels estimated at an average distance of 260 feet.

[4] See Table 4 for maximum vibration levels for preventing damage. The threshold for residential buildings was conservatively applied to structures at Bonita Elementary School because certain structures are not of modern construction (e.g., Building K).

[5] See Table 5 for vibration annoyance potential criteria.

See Appendix E for vibration modeling spreadsheet.

Operation

The project consists of water system improvements and does not include components or activities with the potential to generate substantial vibration during operation, such as manufacturing or heavy equipment. Therefore, project operation would not result in generation of excessive groundborne vibration or groundborne noise levels. No impact would occur.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport to the project site is the Santa Maria Airport, located approximately 3.3 miles to the north. The project site is not located within Santa Maria Airport's noise level contours (Santa Barbara County Airport Land Use Commission 2023). Given the distance of the project site from the airport, the project would not expose people residing or working in the project area to excessive noise levels associated with airport operations. No impact would occur.

NO IMPACT

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14 Population and Housing

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

a. Would the project 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. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project would involve installation of water system improvements to connect Bonita Elementary School to the City's water system. The project does not include any housing development that would directly induce population growth. Because construction of the project would be temporary in nature, it is anticipated that construction workers would live locally and would not relocate to the area. In addition, no new City or school employees would be required to operate the project, and the project would not facilitate expansion of school enrollment capacity that could result in additional employment opportunities. Furthermore, the proposed project would not displace any existing housing or people. Therefore, no impacts to population and housing would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly result in population growth or result in an expansion of school enrollment capacity. As such, the proposed project would not increase demand for fire protection, police protection, schools, parks, or other public facilities. Therefore, no impacts to public services would occur.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	■

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?

As described in Section 14, *Population and Housing*, the project does not include development of structures or infrastructure that would directly or indirectly increase the local or regional population. As such, the proposed project would not increase the usage of or demand for neighborhood and regional parks or other recreational facilities. The project also does not include recreational facilities. Therefore, the proposed project would not result in the physical deterioration of parks or facilities and would not require the construction or expansion of recreational facilities. No impacts related to recreation would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	■	☐	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	■	☐	☐
d. Result in inadequate emergency access?	☐	■	☐	☐

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Regional and local plans and policies addressing the circulation system include the County's Comprehensive Plan Circulation Element, the SBCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy; and the SBCAG Congestion Management Program (County of Santa Barbara 2014; SBCAG 2013, 2016).

Access to the project site during construction would be provided by SR 166 and Black Road, which are both two-lane roads. There are bike lanes along the segment of SR 166 within the project site but no transit stops or sidewalks. Also, no transit stops, sidewalks, or bicycle lanes are located along the segment of Black Road within the project site. Construction traffic would be temporary and limited to the duration of the construction schedule. Construction activities may require temporary single-lane closures along portions of SR 166 and Black Road during pipeline installation. As required by Mitigation Measure HAZ-5, traffic control measures would be implemented during this closure, including flaggers at both ends, to minimize conflicts with the circulation system. After construction is complete, no changes to existing transportation patterns would occur because the pipeline would be located underground, the components on the Bonita Elementary School campus would not affect traffic patterns, and no new operation and maintenance activities would be required for the project. The minimal level of traffic generated during project construction would not have the potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant with implementation of Mitigation Measure HAZ-5.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. According to CEQA Guidelines Section 15064.3(b)(3), a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate the VMT for the particular project being considered. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, and other factors. SMBSD has not adopted VMT thresholds. The County has adopted VMT thresholds for land use development projects in the County's Environmental Thresholds and Guidelines Manual (2021), but these do not include thresholds for construction-phase VMT impacts.

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As discussed under threshold (a) above, traffic on local roadways would temporarily increase during project construction due to worker trips and the necessary transport of construction vehicles, equipment, and soil material to and from the project site. Increases in VMT from construction would be short-term, minimal, and temporary. In addition, overall operation and maintenance activities under the proposed project would be less frequent than those conducted for the existing treatment system and would therefore result in a net reduction in VMT. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

The proposed project does not involve any changes to roadways and would not substantially increase hazards due to a geometric design feature. During project construction, construction staging, and worker parking would occur at the Bonita Elementary School campus and adjacent to SR 166 and Black Road. Construction activities may require temporary one-lane closures along these roadways, and traffic control measures would be implemented during this closure, including flaggers at both ends, to minimize the creation of traffic hazards. Nevertheless, due to the high volume of traffic on SR 166, particularly related to the surrounding agricultural land uses, project construction could substantially increase hazards due to an incompatible use. Therefore, impacts related to traffic hazards during construction would be potentially significant. Implementation of Mitigation Measure HAZ-5 would be required to reduce impacts related to traffic hazards to a less-than-significant level.

Upon the completion of construction, the proposed pipeline would be located underground, and other water system improvements would be located within the Bonita Elementary School campus. Thus, project operation would not substantially increase traffic hazards. Impacts would be less than significant with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project result in inadequate emergency access?

Construction of the project may require temporary single-lane closures along portions of SR 166 and Black Road, which would have the potential to impede emergency response in the project area. Therefore, the project would potentially result in inadequate emergency access during construction activities, and impacts would be potentially significant. Implementation of Mitigation Measure HAZ-5 (outlined in Section 9, *Hazards and Hazardous Materials*) would minimize interference with emergency access during project construction activities through implementation of traffic control measures and advance notification of emergency response providers prior to construction activities. With implementation of Mitigation Measure HAZ-5, impacts related to emergency access during project construction would be reduced to a less-than-significant level.

Operation of the project would not introduce new vehicle trips. Aboveground features of the project would be located on the Bonita Elementary School campus in similar locations as the campus' existing water system and would not impede emergency access. Therefore, project operation would not result in inadequate emergency access, and no impact would occur.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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. 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)?	☐	☐	☐	■
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.	☐	☐	☐	■

AB 52 of 2015 expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 states, "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Sections 21074(a)(1)(A-B) define tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and are:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying

these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

On August 23, 2023, SMBSD distributed AB 52 consultation letters for the proposed project, including project information, map, and contact information, to Native American Tribes. The Native American contacts provided with an AB 52 consultation letters consisted of:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and formal consultation. SMBSD received one response from the Santa Ynez Band of Chumash Indians who stated no further consultation is needed.

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?

SMBSD circulated sent AB 52 consultation letters to Native American tribes on August 23, 2023, and the 30-day response period concluded on September 25, 2023. No tribal cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources were identified within the project site. In addition, no tribal cultural resources were identified within or near the project site that have been determined by SMBSD (the lead agency) to be significant. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k) or that is a resource determined by SMBSD (the lead agency), in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). No impact would occur.

NO IMPACT

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project 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?

The project itself consists of the installation of water system improvements connecting the City's water system to Bonita Elementary School, including installation of a pipeline, hydropneumatic tank, and minor piping modifications as well as replacement of lead service lines in the school's Building K. Water conveyed through the pipeline would be supplied from the City's existing water sources. The environmental impacts of this infrastructure have been evaluated throughout this document, and no additional environmental impacts would occur. The project would not result in an increase in

wastewater generation or stormwater runoff because school enrollment would not be increased and no new impervious surfaces would be introduced. In addition, the project would not involve expansion or relocation of electric power, natural gas, or telecommunications. Therefore, no impacts would occur.

NO IMPACT

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

The project consists of the connection of the City's water system to Bonita Elementary School. The purpose of the project is to provide Bonita Elementary School with a source of potable water from the City's water supply.

The City provides water services to residents within Santa Maria. According to the City's 2020 Urban Water Management Plan (UWMP), the City's water portfolio consists primarily of local groundwater and imported water from the State Water Project. As shown below in Table 9, the City's water supply is expected to reliably meet the projected demands through 2045 with a surplus in normal years, single dry years, and multiple dry years ranging from 7,686 acre-feet per year (AFY) to 21,532 AFY (City of Santa Maria 2021). Bonita Elementary School is anticipated to require approximately 4.1 AFY per year,[4] which would fall within the forecast surplus of the City's water supplies in normal, single dry, and multiple dry years. In addition, the project would reduce local groundwater pumping because the school would no longer utilize its on-site groundwater well to supply its potable water demands. Therefore, the City would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, and impacts would be less than significant.

[4] Calculated based on the 2022-2023 student population of 540 students and a water demand factor of 2,424 gallons/day/student provided in the CalEEMod User Guide for elementary school land uses (California Department of Education 2023; California Air Pollution Control Officers Association 2022).

Table 9 City of Santa Maria Normal Year/Single Dry Year/Multiple Dry Year Average Water Supply and Demand

Totals	2025	2030	2035	2040	2045
Normal Year (acre-feet)					
Supply Totals	36,558	36,403	36,250	36,095	35,941
Demand Totals	15,026	17,247	17,869	18,490	18,716
Difference	**21,532**	**19,156**	**18,381**	**17,605**	**17,225**
Single Dry Year (acre-feet)					
Supply Totals	26,419	26,571	26,724	26,876	27,029
Demand Totals	15,026	17,247	17,869	18,490	18,716
Difference	**11,393**	**9,324**	**8,855**	**8,386**	**8,313**
Multiple Dry Years – 5 Year Average (acre-feet)[1]					
Supply Totals	28,254	28,074	27,894	27,714	27,535
Demand Totals	17,167	18,877	19,307	19,736	19,849
Difference	**11,087**	**9,197**	**8,587**	**7,978**	**7,686**

sf = square feet; AFY = acre-feet/year

Source: City of Santa Maria 2021 (Tables 7-3, 7-4, and 7-5)

[1] The numbers presented in the Multiple Dry Years line incorporate the five-year average for the projected supply and demand during multiple-dry years, calculated using the set of numbers provided in Table 7-5 of the 2020 UWMP.

LESS THAN SIGNIFICANT IMPACT

c. Would the project 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?

The project includes the connection of the City's water system to Bonita Elementary School. The project would not result in the generation of additional wastewater because no expansion of school enrollment would occur. Therefore, no impact would occur.

NO IMPACT

d. Would the project 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?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction of the project would result in a temporary increase in solid waste because approximately 4,500 cubic yards of soil would be exported from the site. The soil would be disposed of in accordance with all applicable federal, state, and local statutes and regulations. All on-site existing infrastructure would be repurposed, so demolition activities and resultant waste material would be minor. The soil and waste would be disposed of at a nearby landfill, such as the Santa Maria Regional Landfill. This landfill has a remaining capacity of 1,477,580 cubic yards as of 2023 (California Department of Resources Recycling and Recovery 2023). Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the

remaining total daily regional permitted capacity available at the Santa Maria Regional Landfill. In addition, the existing lead service lines removed from Building K would be disposed of at a licensed hazardous waste disposal facility. Following construction activities, project operation would not generate long-term waste. Therefore, the project would not 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 and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	■

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

According to CAL FIRE, the project site is not located in an SRA or in or near a Very High Fire Hazard Severity Zone (CAL FIRE 2023a and 2023b). The nearest VHFHSZ is approximately 5.5 miles west of the project site. Therefore, the proposed project would not be located in or near an SRA or land classified as a Very High Fire Hazard Severity Zone. No impacts related to wildfire would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. 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. 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. 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?

As discussed in Section 4, *Biological Resources*, the project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Section 5, *Cultural Resources*, the project would not eliminate important examples of the major periods of California history or prehistory. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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)?

As described in the discussion of environmental checklist Sections 1 through 20, with respect to all environmental issues, the proposed project would not result in significant and unmitigable impacts to the environment. All anticipated impacts associated with project construction and operation would be either less than significant or less than significant with mitigation incorporated. This is largely due to the fact project construction activities would be temporary and project operation would result in minimal changes to the environmental baseline condition.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. One planned project - the Bonita School Road Bridge Replacement Project - would occur during the same time as the proposed project, approximately 1.4 miles north of the project site along Bonita School Road.[5] There are no other planned or pending projects within the immediate vicinity of the project site that could combine with the project to result in cumulative construction-related impacts (County of Santa Barbara 2023c).

Project impacts are primarily temporary, localized effects that would occur during project construction. Therefore, the potential for the project to contribute to cumulative impacts would be limited to the temporary periods of project activities and the following issue areas:

- **Air Quality**. The Basin is designated nonattainment for the ozone NAAQS and CAAQS and nonattainment for the CAAQS for PM_{10} (County of Santa Barbara 2021). Therefore, cumulative air quality impacts currently exist for these pollutants. As discussed in the Section 3, *Air Quality*, project construction activities would not generate emissions of these air pollutants in excess of SBCAPCD thresholds, which are intended to assess whether a project's contribution to existing cumulative air quality impacts is considerable. Therefore, the project's contribution to cumulative air quality impacts during construction would not be cumulatively considerable.
- **Noise.** Overlapping construction activities associated with the Bonita School Road Bridge Replacement Project in conjunction with proposed project activities could result in cumulative noise impacts related to a temporary increase in ambient noise levels at Bonita Elementary School. (Residences near the project site are located sufficiently far from the Bonita School Road Bridge Replacement Project such that cumulative noise impacts would not occur at these locations.) However, as discussed in Section 13, *Noise*, the proposed project would not result in temporary noise levels in excess of the construction noise threshold with implementation of Mitigation Measure NOI-1. In addition, project construction activities near Bonita Elementary School during the school year would be temporary and short-term due to the linear nature of

[5] Based on recent construction bid documents, the SR 166 and Black Road Traffic Signal Project is expected to start construction in October of 2023 and is anticipated to last for the duration of 100 working days (Construction Journal 2023). Because construction of the proposed project is expected to begin in January of 2025, construction of the two projects is unlikely to overlap. Therefore, the SR 166 and Black Road Traffic Signal Project is not included in this cumulative impacts analysis.

pipeline construction activities. Therefore, the project's contribution to cumulative construction noise impacts would not be cumulatively considerable.

- **Transportation/Traffic Hazards/Emergency Access**. Overlapping construction activities on Bonita School Road could result in cumulative impacts to transportation, traffic hazards, and emergency access. However, Mitigation Measure HAZ-5 requires the project contractor to prepare a Traffic Control Plan that includes coordination with this project and any other ongoing construction projects nearby to maintain adequate traffic flows and emergency access. Therefore, the project's contribution to cumulative impacts to transportation, traffic hazards, and emergency access during construction would not be cumulatively considerable.

The project would result in an overall reduction in the frequency of operation and maintenance activities associated with the Bonita Elementary School's water system and would not increase water supply availability. Therefore, the project would not contribute to cumulative impacts related to direct or indirect population growth, such as impacts to public services, recreation, and population and housing. Impacts related to geology and soils, hazardous materials, and land use and planning are inherently restricted to the project site and would not contribute to cumulative impacts associated with existing and future development in Santa Barbara County. In addition, GHG impacts are cumulative by nature, and as discussed in Section 8, *Greenhouse Gas Emissions*, the project would not generate GHG emissions that would conflict with the County's Climate Action Plan. Therefore, the project would not contribute to the existing significant cumulative air quality impacts related to the Basin's nonattainment status for ozone and PM_{10} or the existing significant cumulative climate change impact. Furthermore, project impacts to resources such as aesthetics, agriculture and forestry resources, biological resources, cultural resources, hydrology and water quality, mineral resources, noise, transportation, tribal cultural resources, and utilities and service systems would be minimal and would not have the potential to constitute a cumulatively considerable contribution to cumulative impacts that may occur due to existing and future development in the region. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant impact, and impacts would be less than significant.

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

In general, impacts to human beings are associated with such issues as air quality, hazards and hazardous materials, and noise impacts. As detailed under Section 3, *Air Quality*, Section 9, *Hazards and Hazardous Materials*, and Section 13, *Noise*, the proposed project would not result, either directly or indirectly, in substantial adverse effects related to air quality, hazardous materials, and noise with implementation of Mitigation Measures HAZ-1 through HAZ-4 and NOI-1. Therefore, impacts to human beings would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to SMBSD. Persons involved in data gathering analysis, project management, and quality control are listed below.

RINCON CONSULTANTS, INC.

Jennifer Haddow, PhD, Principal Environmental Scientist
Annaliese Torres, Senior Environmental Planner
Virginia Dussell, Environmental Planner
Katherine Fikan, Environmental Planner
Megan Knight, Environmental Planner

Bill Vosti, Program Manager – Air Quality, GHG Emissions, and Noise
Aaron Rojas Jr, Air Quality and GHG Specialist
Shannon Carmack, Principal Architectural Historian
Jennifer DiCenzo, Paleontological Program Manager
Andrew McGrath, Ph.D., Paleontologist
Annette Tran, MESM, Senior GIS Analyst
Abigail Robles, GIS Analyst
Bryan Valladares, GIS Analyst
Luis Apolinar, Publishing Specialist

Appendix A

Air Quality and Greenhouse Gas Modeling

Bonita School Water System Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bonita School Water System
Construction Start Date	3/3/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	2715 W Main St, Santa Maria, CA 93458, USA
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3338
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	1.53	Mile	0.74	0.00	—	—	—	—

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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.06	28.8	31.0	0.09	1.05	1.00	2.04	0.92	0.27	1.20	—	8,955	8,955	0.43	0.62	7.45	9,159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.06	28.9	31.0	0.09	1.05	1.00	2.04	0.92	0.27	1.20	—	8,954	8,954	0.43	0.62	0.19	9,151
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.18	4.30	5.27	0.01	0.20	0.09	0.29	0.18	0.02	0.21	—	1,046	1,046	0.05	0.04	0.25	1,060
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.78	0.96	< 0.005	0.04	0.02	0.05	0.03	< 0.005	0.04	—	173	173	0.01	0.01	0.04	176

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	1.28	1.06	28.8	31.0	0.09	1.05	1.00	2.04	0.92	0.27	1.20	—	8,955	8,955	0.43	0.62	7.45	9,159
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.28	1.06	28.9	31.0	0.09	1.05	1.00	2.04	0.92	0.27	1.20	—	8,954	8,954	0.43	0.62	0.19	9,151
2026	0.01	0.01	0.01	0.09	< 0.005	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	96.7	96.7	< 0.005	< 0.005	< 0.005	97.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.20	0.18	4.30	5.27	0.01	0.20	0.09	0.29	0.18	0.02	0.21	—	1,046	1,046	0.05	0.04	0.25	1,060
2026	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.46
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.04	0.03	0.78	0.96	< 0.005	0.04	0.02	0.05	0.03	< 0.005	0.04	—	173	173	0.01	0.01	0.04	176
2026	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.12	0.99	< 0.005	0.07	—	0.07	0.06	—	0.06	—	142	142	0.01	< 0.005	—	142

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.93	8.93	< 0.005	< 0.005	—	8.96
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48	1.48	< 0.005	< 0.005	—	1.48
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	< 0.005	15.6
Vendor	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	0.00
Hauling	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	0.99
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.16
Vendor	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	0.00
Hauling	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	0.00

3.3. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	81.6	81.6	< 0.005	< 0.005	—	81.9
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	5.94	5.94	< 0.005	< 0.005	—	5.96

Dust From Material Movemen:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	0.98	0.98	< 0.005	< 0.005	—	0.99
Dust From Material Movemen:	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	< 0.005	15.6
Vendor	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	0.00
Hauling	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	0.00
Average Dail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.14
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	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	0.00

Hauling	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	0.00

3.5. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	81.6	81.6	< 0.005	< 0.005	—	81.9
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	0.38	0.38	< 0.005	< 0.005	—	0.38
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	0.06	0.06	< 0.005	< 0.005	—	0.06

ATTACHMENT E

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	< 0.005	15.3
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	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	0.00
Hauling	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	0.00

ATTACHMENT 1

3.7. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.46	11.6	13.8	0.02	0.49	—	0.49	0.44	—	0.44	—	2,537	2,537	0.10	0.02	—	2,546
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.46	11.6	13.8	0.02	0.49	—	0.49	0.44	—	0.44	—	2,537	2,537	0.10	0.02	—	2,546
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.73	0.87	< 0.005	0.03	—	0.03	0.03	—	0.03	—	160	160	0.01	< 0.005	—	160
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.13	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.5	26.5	< 0.005	< 0.005	—	26.6

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.21	48.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.05	18.6
Hauling	0.29	0.07	5.02	1.74	0.04	0.06	0.89	0.95	0.04	0.25	0.29	—	3,602	3,602	0.21	0.57	6.94	3,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.2	46.2	< 0.005	< 0.005	0.01	46.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	< 0.005	18.5
Hauling	0.28	0.07	5.16	1.76	0.04	0.06	0.89	0.95	0.04	0.25	0.29	—	3,603	3,603	0.21	0.57	0.18	3,779
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.92	2.92	< 0.005	< 0.005	0.01	2.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.17
Hauling	0.02	< 0.005	0.33	0.11	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	227	227	0.01	0.04	0.19	238
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.6	37.6	< 0.005	0.01	0.03	39.5

3.9. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.46	12.0	14.9	0.02	0.49	—	0.49	0.44	—	0.44	—	2,686	2,686	0.11	0.02	—	2,695
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.46	12.0	14.9	0.02	0.49	—	0.49	0.44	—	0.44	—	2,686	2,686	0.11	0.02	—	2,695
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.76	0.94	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	170
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.14	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.0	28.0	< 0.005	< 0.005	—	28.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.21	48.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.05	18.6
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.2	46.2	< 0.005	< 0.005	0.01	46.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	< 0.005	18.5
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.92	2.92	< 0.005	< 0.005	0.01	2.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.17
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Hauling	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	0.00

3.11. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	5.20	6.96	0.01	0.29	—	0.29	0.27	—	0.27	—	991	991	0.04	0.01	—	995
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.87	2.50	< 0.005	0.11	—	0.11	0.10	—	0.10	—	356	356	0.01	< 0.005	—	357
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.34	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	58.9	58.9	< 0.005	< 0.005	—	59.1

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.21	48.1
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	0.01	2.80
Vendor	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	0.00
Hauling	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	0.00

ATTACHMENT

3.13. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	4.07	4.30	0.01	0.22	—	0.22	0.20	—	0.20	—	604	604	0.02	< 0.005	—	606
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	4.07	4.30	0.01	0.22	—	0.22	0.20	—	0.20	—	604	604	0.02	< 0.005	—	606
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.32	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.95	7.95	< 0.005	< 0.005	—	7.97

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	47.2	47.2	< 0.005	< 0.005	0.21	48.1
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.2	46.2	< 0.005	< 0.005	0.01	46.9
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.68	3.68	< 0.005	< 0.005	0.01	3.74
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	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	0.00
Hauling	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	0.00

3.15. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	3.19	4.31	0.01	0.13	—	0.13	0.12	—	0.12	—	614	614	0.02	< 0.005	—	616
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.20	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	38.7	38.7	< 0.005	< 0.005	—	38.8
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.41	6.41	< 0.005	< 0.005	—	6.43
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.8	30.8	< 0.005	< 0.005	< 0.005	31.3
Vendor	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	0.00

Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.94	1.94	< 0.005	< 0.005	< 0.005	1.98
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

ATTACHMENT E

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

ATTACHMENT 5

5. Activity Data

5.1 Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demo / Pavement Cutting	Linear, Grubbing & Land Clearing	3/3/2025	3/28/2025	6.00	23.0	Demo/Pavement Cutting

Site Restoration	Linear, Grubbing & Land Clearing	12/1/2025	1/2/2026	6.00	29.0	Site Restoration
Site Prep	Linear, Grading & Excavation	3/31/2025	4/25/2025	6.00	23.0	Site Prep
Grading	Linear, Grading & Excavation	3/31/2025	4/25/2025	6.00	23.0	Grading
Pipeline Installation	Linear, Drainage, Utilities, & Sub-Grade	4/28/2025	9/26/2025	6.00	131	Pipeline Installation
Tank Installation	Linear, Drainage, Utilities, & Sub-Grade	9/29/2025	10/31/2025	6.00	29.0	Tank Installation
Paving	Linear, Paving	11/3/2025	11/28/2025	6.00	23.0	Paving

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demo / Pavement Cutting	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Site Restoration	Pumps	Diesel	Tier 3	1.00	8.00	11.0	0.74
Site Prep	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Site Prep	Rubber Tired Loaders	Diesel	Tier 3	1.00	8.00	150	0.36
Site Prep	Sweepers/Scrubbers	Diesel	Tier 3	1.00	8.00	423	0.48
Grading	Rubber Tired Loaders	Diesel	Tier 3	1.00	8.00	150	0.36
Grading	Skid Steer Loaders	Diesel	Tier 3	1.00	8.00	423	0.48
Grading	Sweepers/Scrubbers	Diesel	Tier 3	1.00	8.00	84.0	0.37
Pipeline Installation	Aerial Lifts	Diesel	Tier 3	1.00	8.00	37.0	0.48
Pipeline Installation	Sweepers/Scrubbers	Diesel	Tier 3	1.00	8.00	148	0.41
Pipeline Installation	Skid Steer Loaders	Diesel	Tier 3	1.00	8.00	71.0	0.37
Tank Installation	Excavators	Diesel	Tier 3	1.00	8.00	36.0	0.38
Tank Installation	Rubber Tired Loaders	Diesel	Tier 3	1.00	8.00	84.0	0.37

Tank Installation	Sweepers/Scrubbers	Diesel	Tier 3	1.00	8.00	37.0	0.48
Paving	Pavers	Diesel	Tier 3	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 3	1.00	8.00	89.0	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demo / Pavement Cutting	—	—	—	—
Demo / Pavement Cutting	Worker	2.50	8.80	LDA,LDT1,LDT2
Demo / Pavement Cutting	Vendor	0.00	5.30	HHDT,MHDT
Demo / Pavement Cutting	Hauling	0.00	20.0	HHDT
Demo / Pavement Cutting	Onsite truck	—	—	HHDT
Site Prep	—	—	—	—
Site Prep	Worker	7.50	8.80	LDA,LDT1,LDT2
Site Prep	Vendor	1.00	5.30	HHDT,MHDT
Site Prep	Hauling	48.9	20.0	HHDT
Site Prep	Onsite truck	—	—	HHDT
Pipeline Installation	—	—	—	—
Pipeline Installation	Worker	7.50	8.80	LDA,LDT1,LDT2
Pipeline Installation	Vendor	0.00	5.30	HHDT,MHDT
Pipeline Installation	Hauling	0.00	20.0	HHDT
Pipeline Installation	Onsite truck	—	—	HHDT
Tank Installation	—	—	—	—
Tank Installation	Worker	7.50	8.80	LDA,LDT1,LDT2
Tank Installation	Vendor	0.00	5.30	HHDT,MHDT
Tank Installation	Hauling	0.00	20.0	HHDT

Tank Installation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	8.80	LDA,LDT1,LDT2
Grading	Vendor	1.00	5.30	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Site Restoration	—	—	—	—
Site Restoration	Worker	2.50	8.80	LDA,LDT1,LDT2
Site Restoration	Vendor	0.00	5.30	HHDT,MHDT
Site Restoration	Hauling	0.00	20.0	HHDT
Site Restoration	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	8.80	LDA,LDT1,LDT2
Paving	Vendor	0.00	5.30	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Not applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demo / Pavement Cutting	0.00	0.00	0.00	0.00	—
Site Restoration	0.00	0.00	0.00	0.00	—
Site Prep	4,500	4,500	0.74	0.00	—
Grading	0.00	0.00	0.00	0.00	—
Pipeline Installation	0.00	0.00	0.00	0.00	—
Tank Installation	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	0.74	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.70	annual days of extreme heat
Extreme Precipitation	4.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Modified to match applicant provided construction schedule
Construction: Off-Road Equipment	Modified per applicant provided construction equipment. All equipment would be equipped with Tier 3 or Tier 4 engines. Conservatively assumed all equipment would have Tier 3 engines.
Construction: Dust From Material Movement	Based on applicant provided import/export information
Construction: Trips and VMT	Adding in 0 vendor trips

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Appendix B

Biological Resources Assessment

Bonita Elementary School Drinking Water Improvements Project

Biological Resources Assessment

prepared for

Rural Communities Assistance Corporation
3120 Freeboard Drive, Suite 201
West Sacramento, California 95691

prepared by

Rincon Consultants, Inc.
1530 Monterey Street, Suite D
San Luis Obispo, California 93401

January 2024

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Environmental Scientists | Planners | Engineers
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1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Biological Resources Assessment for the Bonita Elementary School Water System Project (herein referred to as "project"), which includes the connection of the City of Santa Maria's (City) water system to the Bonita Elementary School's water system via approximately 8,100 linear feet of a two-inch diameter service line extending from the planned terminus of the City's water system near the northeast corner of the Wastewater Treatment Plant (WWTP) to Bonita Elementary School. This report presents information on existing conditions, regulated biological resources, potential jurisdictional waters, and other locally protected resources. The assessment of biological resources herein includes the results of a background literature review and reconnaissance-level field survey conducted by Rincon and provides an assessment of potential impacts to regulated biological resources that could result from project activities in accordance with the California Environmental Quality Act (CEQA).

1.1 Project Location

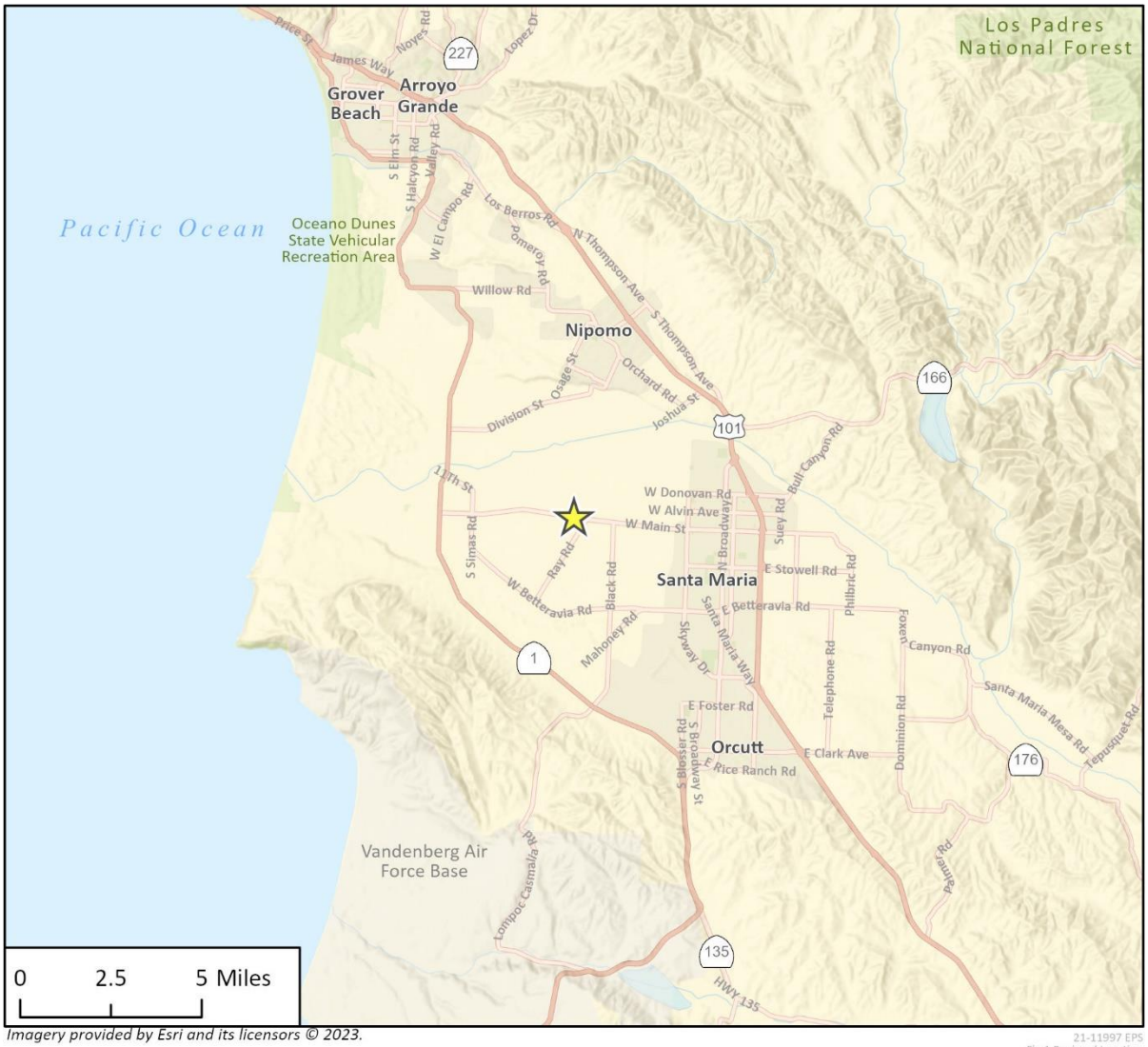
The project site is located in an unincorporated area of Santa Barbara County approximately 2.9 miles west of Santa Maria, California (Figure 1). The project site includes an approximately 8,100-linear-foot pipeline alignment that would commence at the terminus of a planned water main in Black Road located at the northeast corner of the City's WWTP, proceed north along Black Road, proceed west along State Route (SR) 166 (also known as West Main Street), proceed north on Bonita School Road, and terminate at its connection to Bonita Elementary School at 2715 West Main Street, Santa Maria (Assessor Parcel Number 113-050-007). The project site also includes portions of Bonita Elementary School that would be modified as part of the proposed project. The project site is located within the *Guadalupe* and *Santa Maria, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangles. The Public Land Survey System depicts the project site within Township 10N, Range 35W, Section 12 and Township 10N, Range 34W, Sections 7, 8, and 17, San Bernardino Meridian.

1.2 Project Description

Background

Bonita Elementary School's water system currently consists of a 430-foot-deep well, two treatment vessels, a chlorination system, a pump, three expansion tanks, a 10,000-gallon steel tank, electrical/controls panel, two 500-gallon propane tanks, and a backup propane generator. The treatment process generates brine waste, which is stored on-site. The Bonita Elementary School water system is currently operated from a single groundwater well and has no redundant source of supply. Bonita Elementary School has encountered elevated sulfate and hexavalent chromium levels, which are common in groundwater in this area. Notices of violation have been issued by the Santa Barbara County Environmental Health for exceedances of state maximum contaminant levels in the water supply for Bonita Elementary School. The water supply for Bonita Elementary School currently exceeds the maximum containment level (MCL) for nitrate and the recommended and upper secondary MCLs for total dissolved solids. In addition, the Kindergarten Building (Building K) is known to contain lead pipes, and lead concentrations in the Building K currently exceed the lead MCL. As a result, Bonita Elementary School is seeking to obtain Drinking Water State Revolving Fund

Figure 1 Regional Location Map



(DWSRF) grant funding through the State Water Resources Control Board (SWRCB) Division of Financial Assistance to fund the construction of a long-term, affordable solution to mitigate further water quality violations.

Project Description

The proposed project consists of connecting the City's water system to the Bonita Elementary School Water System via approximately 8,100 linear feet of a two-inch diameter service line from the planned terminus of the City's water system near the northeast corner of the City's WWTP to Bonita Elementary School. The City is currently in the design phase of extending City water service to the WWTP separately from the proposed project. To meet peak demand, fire flow requirements, and irrigation demand, the project would also include repurposing the existing on-site 10,000-gallon storage tank and wells and potentially adding a hydropneumatic tank (up to approximately 1,000 gallons in capacity) with appurtenances such as an air compressor and additional above-grade piping and isolation valves.[1] Minor piping modifications to the existing system would be required to disconnect the proposed potable, domestic supply from the existing system. In addition, the project would involve replacing lead service lines in the school's Building K. Other improvements would include installation of blowoffs along the proposed pipeline and other appurtenances on Bonita Elementary School's property.

Construction

Construction of the project, including mobilization, would begin January 2025 and would occur over the course of approximately one year. The pipeline would be installed primarily via horizontal directional drilling (HDD), pursuant to California Department of Transportation's (Caltrans) requirements. The HDD pits would be placed approximately 500 feet apart from each other and/or be placed at a horizontal end or deflection in the pipe. All pits would be located within the pavement limits or adjacent to the shoulder of SR 166 and Black Road. Open trench construction techniques may also be utilized for minor portions of the pipeline on Bonita School Road and Black Road. The maximum depth of excavation for pipeline installation would be approximately six feet. Construction of the pipeline would occur within the existing disturbed roadways and road shoulders, and no construction activities would occur within or below the stormwater and agricultural ditches along Bonita School Road, SR 166, and Black Road. All existing on-site infrastructure would be repurposed, so demolition activities would be minor. Construction equipment staging would occur in the southwest corner of Bonita Elementary School's property. Construction workers would park along Bonita School Road on the eastern boundary of the school property. No tree trimming or vegetation removal would be required.

Operation and Maintenance

Inspection and maintenance of the proposed pipeline would occur periodically. The existing fire storage tank as well as the proposed hydropneumatic system would also be recoated as needed to prevent corrosion. In addition, water quality would be monitored, and flushing of the pipeline would occur as necessary. Overall, operation and maintenance activities would be less frequent than the existing treatment system. The project would not require transportation or storage of hazardous

[1] At this time, it is uncertain whether the hydropneumatic tank will be included in the proposed project and if so, what the exact capacity may be. Therefore, this report conservatively evaluates inclusion of this project element with its maximum estimated capacity of 1,000 gallons.

materials on-site. No modifications to existing light sources at the Bonita Elementary School property would occur.

1.3 Regulatory Summary

Regulated biological resources studied and analyzed herein include special status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, regionally protected resources (e.g., from county-wide Habitat Conservation Plans [HCPs] and Natural Community Conservation Plans [NCCPs]), and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, state, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the County of Santa Barbara).

1.3.1 Definition of Special Status Species

For the purposes of this report, special status species include:

- Species listed as threatened or endangered under the federal Endangered Species Act (FESA); including proposed and candidate species
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern (SSC) or Watch List by the California Department of Fish and Wildlife (CDFW)
- Native Plant Protection Act (NPPA) – State Rare (SR)
- California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B. CRPR List 1B and 2 species are typically regarded as rare, threatened, or endangered under CEQA by CEQA lead agencies and were considered as such in this document. CRPR List 3 and List 4 plant species are typically not considered as special status species for the purpose of analysis under CEQA except where they are designated as rare or otherwise protected by local governments because CRPR List 3 species lack the necessary information to assign them to one of the other ranks (or exclude them) and CRPR List 4 species have limited distribution globally but are fairly common within their range
- Species designated as locally important by the local agency and/or otherwise protected through ordinance, local policy, or HCPs/NCCPs

1.3.2 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes (see Appendix A for additional detail):

- CEQA
- FESA
- CESA
- CFGC
- Federal Clean Water Act (CWA)
- Migratory Bird Treaty Act (MBTA)

- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act

1.3.3 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS).

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW or USFWS.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

2 Methodology

2.1 Biological Study Area

The biological study area (BSA) is used in this analysis to inform existing baseline conditions and ecological context and to assist in informing the potential for the project site to support special status species. Considering the narrow scope of the proposed project, the BSA for the project encompasses the project features as well as a 50-foot buffer (Figure 2).

2.2 Literature Review

Rincon conducted a literature review to characterize the nature and extent of biological resources on and adjacent to the BSA. The literature review included an evaluation of current and historical aerial photographs of the site (Google Earth), regional and site-specific topographic maps, and climatic data.

Queries of the USFWS Information for Planning and Consultation system (IPaC; UFWS 2023a), CDFW California Natural Diversity Database (CNDDB) (CDFW 2023a), and California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (2023) were conducted to obtain comprehensive information regarding state and federally listed species, and other special status species, considered to have potential to occur within the *Guadalupe* and *Santa Maria, California* USGS 7.5-minute topographic quadrangles and the surrounding seven quadrangles (*Nipomo, Huasna Peak, Point Sal, Twitchell Dam, Casmelia, Orcutt,* and *Sisquoc*). The results of database-queries and lists of special status species were reviewed by Rincon's regional biological experts for accuracy and completeness. The final list of special status biological resources (species and sensitive natural communities) was evaluated based on documented occurrences within the nine-quadrangle search area and biologists' expert opinions on species known to occur in the region. The evaluation results and justification were compiled into a table (Appendix B).

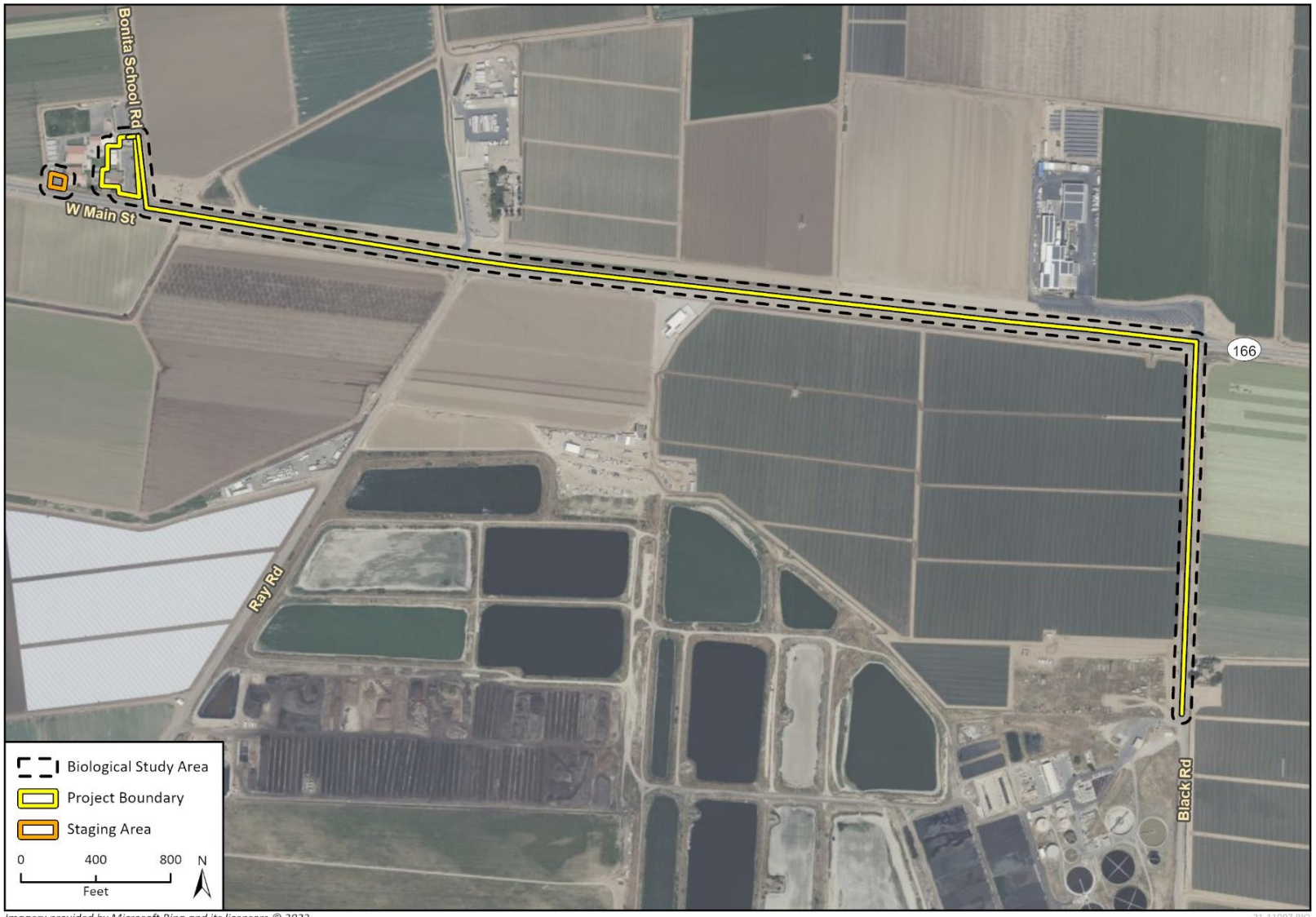
The following resources were reviewed for additional information on existing conditions relating to biological resources within the BSA:

- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (2023)
- USFWS Critical Habitat Portal (2023b)
- CDFW Biogeographic Information and Observation System (CDFW 2023b)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (2023c)
- CDFW Special Animals List (CDFW 2023d)

The vegetation community characterizations for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (MCV2) (Sawyer et al. 2009).

The potential for wildlife movement corridors was evaluated based on the California Essential Habitat Connectivity Project commissioned by the California Department of Transportation (Caltrans) and CDFW (Spencer et al. 2010).

Figure 2 Biological Study Area



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2.3 Field Reconnaissance Survey

A field reconnaissance survey was conducted to document the existing site conditions and to evaluate the potential for presence of regulated biological resources, including special status plant and animal species, sensitive plant communities, and potentially jurisdictional waters and wetlands within the BSA. The field reconnaissance survey was conducted by Rincon Senior Biologist Michael Tom on June 28, 2023. Mr. Tom surveyed the BSA on foot where publicly accessible and where entry was permissible. Portions of the BSA occurring on private property were surveyed using binoculars.

During the survey, an inventory of plant and animal species observed was compiled (Appendix C) and special status species, if observed during the survey, were mapped. Plant species nomenclature and taxonomy followed The Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012). All plant species encountered were noted and identified to the lowest possible taxonomic level. The vegetation classification system used for this analysis is based on MCV2 (Sawyer et al. 2009) with modifications as needed to accurately describe the existing habitats observed on site.

Wildlife identification and nomenclature followed standard reference texts including Field Guide to Birds of Western North America (Sibley 2016), Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and Mammals of North America (Bowers et al. 2004). The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of the habitats observed within the BSA during the field survey. Several special status species were eliminated from consideration for potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or known regional distribution.

2.4 Impact Evaluation

Impact evaluations are based on Appendix G of the State CEQA Guidelines as listed in Section 1.3.3, *Guidelines for Determining CEQA Significance*. Impacts are defined as project-related activities that destroy, damage, alter, or otherwise affect biological resources. This may include injury or mortality to plant or wildlife species, effects on an animal's behavior (such as through harassment or frightening off an animal by construction noise), as well as the loss, modification, or disturbance of natural resources or habitats. Impacts are defined as either direct or indirect and either permanent or temporary:

- **Direct Impacts.** Direct impacts are generally those that occur during project implementation and at the same time and location as the cause of the impact. Direct impacts can include injury, death, and/or harassment of special status wildlife species, if present in the work areas or vicinity. Direct impacts can also include the destruction of vegetation communities necessary for special status species breeding, feeding, or sheltering. Direct impacts to plants can include crushing of plants, bulbs, or seeds where present in the impact areas.
- **Indirect Impacts.** Indirect impacts are those that are reasonably foreseeable and caused by a project but occur later in time and/or potentially at locations of some distance from the source of the impact. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect impact. Specific examples include soil compaction that, following completion of the project, prevents wildlife from digging burrows or allows weedy plant species to thrive. Other examples include dust that drifts outside of project

disturbance areas and covers special status plants, thereby decreasing their photosynthetic capacity, and unintentional introduction of invasive species (particularly weedy plant species that outcompete special status plant species) that over time negatively affect the local ecology.

- **Permanent Impacts.** Permanent impacts are those that result in the long-term or irreversible loss of biological resources. For example, construction of a new project that would result in a large, developed, and fenced property where sensitive vegetation communities previously existed would be a permanent impact.
- **Temporary Impacts.** Temporary impacts to biological resources are those that are reversible over time, with or without implementation of avoidance and minimization measures. Examples include the generation of fugitive dust and noise during project implementation, trimming or crushing vegetation that will regrow following project completion, and removed vegetation that will be actively restored. Temporary impacts typically last during project implementation and shortly thereafter; however, the affected biological resources are anticipated to return to baseline after project completion.

3 Existing Conditions

This section summarizes the results of the literature review and reconnaissance-level field survey. Discussions regarding the general environmental setting, vegetation communities present, plants and animals observed, potential special status species issues, and other potential constraints regarding the biological resources on site are presented below. Representative photographs of the BSA are provided in Appendix D. A complete list of all plant and animal species observed on site during the field survey is presented as Appendix C.

3.1 Physical Characteristics

3.1.1 Topography and Geography

The BSA is located within the Santa Maria Valley in northern Santa Barbara County. The topography of the BSA is generally flat with on-site elevations at approximately 150 to 180 feet above mean sea level. The predominant land use surrounding the BSA is agriculture. Anthropogenic manipulated and maintained habitat types in the vicinity of the project site include row crop agriculture; ruderal areas associated with agricultural fields and support facilities such as materials storage yards, outbuildings, and machinery lots; developed areas; barren ground; irrigation ponds; industrial; irrigated pasture; and fallow agricultural fields that are vegetated by ruderal plant species and/or non-native grassland.

3.1.2 Watershed and Drainages

The BSA is located within the Carralitos Canyon watershed (Hydrologic Unit Code 180600080503). Four drainage ditches, which are man-made hydrologic features, occur within and immediately adjacent to the BSA and are located as follows (Figure 3):

- Along the east side of Bonita School Road
- Along the north side of SR 166
- Along the south side of SR 166
- Along the east side of Black Road

Drainage ditches in the region typically provide drainage for agricultural fields and flood control purposes. The ditches are a major collector of runoff from roadways as well as agricultural and agro-industrial areas in the region. Water flows west along SR 166 and drains into a series of ditches that flow southwesterly until they reach Guadalupe Dunes Natural Reserve where the water ultimately flows to the Santa Maria River. Very little vegetation occurs in the ditches and the vegetation present is comprised of annual non-native species.

3.1.3 Soils

According to the USDA NRCS Web Soil Survey of Santa Barbara County, California, Northern Santa Barbara Area, three soil map units are mapped within the BSA: Sorrento Sandy Loam, 0 to 2 percent slopes, Sorrento Loam, 0 to 2 percent slopes, and Sorrento Loam, 2 to 9 percent slopes (USDA NRCS 2023).

Figure 3 Land Cover and Ditches within the Biological Study Area

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- Sorrento Sandy Loam, 0 to 2 percent slopes are well drained soils with high water capacity (about 8.2 inches). The parent materials of this soil map unit are alluviums. The Sorrento and similar soils comprise approximately 85 percent of this soil unit. The remaining composition is comprised of a combination of minor components such as Sorrento loam, Mocho, and Metz soils. This soil unit does not meet the national hydric criteria.
- Sorrento Loam, 0 to 2 percent slope soils are well drained soils with high water capacity (about 9.2 inches). The parent materials of this soil map unit are alluviums. The Sorrento and similar soils comprise approximately 85 percent of this soil unit. The remaining composition is comprised of a combination of minor components such as Sorrento clay loam, Mocho, and Salinas soils. This soil unit does not meet the national hydric criteria.
- Sorrento loam, 2 to 9 percent slopes are well drained soils with high water capacity (about 9.6 inches). The parent materials of this soil map unit are alluviums derived from sedimentary rock. The Sorrento and similar soils comprise approximately 85 percent of the soil unit. The remaining composition is comprised of a combination of minor components such as Sorrento clay loam, Mocho, and Sorrento, moderately/severely eroded soils. This soil unit does not meet the national hydric criteria.

3.2 Vegetation and Other Land Cover

No natural vegetation communities occur within the BSA. The BSA is comprised of two land cover types, agriculture and ruderal/developed. Figure 3 illustrates the extent of the land cover types observed, and each are discussed in greater detail below. Representative photographs of the project site are included as Appendix D, and a complete list of plant species observed during the field surveys is presented in Appendix C.

3.2.1 Agriculture

Given that this land cover is not naturally-occurring, it is not described in the Sawyer et al. (2009) classification system. Agriculture is an anthropogenic, frequently-disturbed land cover and includes irrigated row crops that are usually monotypic. This land cover type occurs within and adjacent to the BSA specifically outside of the County and Caltrans right-of-way boundaries along SR 166, Black Road, and Bonita School Road. During the June 28, 2023 site visit, agricultural fields were in various stages of production from freshly tilled to planted fields of annual crops. Most of the ground cover consisted of bare soil.

3.2.2 Ruderal/Developed

Given that this land cover is not naturally occurring, it is also not described in the Sawyer et al. (2009) classification system. Developed areas within the BSA include paved roads, agro-industrial facilities on the north side of SR 166, and Bonita Elementary School. Developed areas also contain landscaped areas with ornamental planted trees and shrubs. Ruderal land cover occurs in areas that are regularly disturbed by human activities and is commonly associated with road shoulders, fallow fields, abandoned lots, and developed areas. Vegetation can vary depending on the degree of disturbance or development. In less developed areas, ruderal species, including non-native herbaceous species, are dominant. Cover by plant species is generally low due to disturbance, and there is a high percentage of bare soil. Within the BSA, ruderal areas consist of compacted road shoulders along Bonita School Road, SR 166, and Black Road. Common plant species that occur within this land cover in the BSA include common purslane (*Portulaca oleracea*), shortpod mustard

(*Hirschfeldia incana*), mallow (*Malva* spp.), and horseweed (*Conyza* sp.) as well as non-native grasses such as slender wild oat (*Avena barbata*), Italian ryegrass (*Lolium multiflorum*), and common wild oat (*Avena fatua*), which are the dominant species.

3.3 General Wildlife

The quality of habitat for wildlife within the BSA is limited because the majority of the BSA occurs in the right-of-way of paved roadways and a school and is surrounded by development and agriculture. A list of wildlife observed during surveys is presented in Appendix C. Generally, the native wildlife species expected to occur are those that are adapted to or can tolerate anthropogenic disturbances and/or anthropogenic environments.

4 Regulated Biological Resources

This section discusses special status species and regulated biological resources observed on the project site and evaluates the potential for the project site to support additional regulated biological resources. Assessments for the potential occurrence of special status species are based on known ranges, habitat preferences for the species, species occurrence records from the CNDDB and other sources, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project site, and the results of a survey of the project site. The potential for each special status species to occur in the BSA was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential**. Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last five years).

4.1 Special Status Species

4.1.1 Special Status Plant Species

Based on the database and literature review, 41 special status plant species are known to or have the potential to occur within the regional vicinity of the BSA (Appendix B). Of these, one special status plant species has a low potential to occur within the BSA - La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*; Federally Endangered and State Candidate Threatened) based on the presence of marginally suitable habitat. Specifically, the ditch systems provide potentially suitable areas for La Graciosa thistle to establish as they provide suitable mesic soils. The CNDDB notes occurrences of this species within the SR 166 man-made ditch systems west of the intersection of SR 166 and SR 1 approximately 3.8 miles west of the BSA. The high amount of disturbance from maintenance and other anthropogenic activities within these ditch systems is likely a limiting factor for establishment of this species. No thistle plants were observed in the ditches within the BSA during the reconnaissance survey, which was conducted during the species' blooming period.

Therefore, based on the marginal suitability of the habitat within the BSA as well as no observations during the reconnaissance survey, it is unlikely the species occurs in the BSA.

4.1.2 Special Status Wildlife Species

Based on the database and literature review, 32 special status wildlife species are known to or have the potential to occur in the regional vicinity of the BSA (Appendix B). Of those, one special status animal species - California red-legged frog (*Rana draytonii;* Federally threatened and CDFW SSC) - was determined to have moderate potential to occur within the BSA. During the site reconnaissance surveys, no areas of standing water were of sufficient depth to support CRLF breeding. In addition, based on the design of the ditches within the BSA, it is unlikely CRLF can utilize them for breeding due to flows, shallow water depth, and lack of cover. Therefore, the BSA does not contain suitable breeding habitat for CRLF. However, the on-site ditches can provide dispersal areas if water is present. The ditches within the BSA are a part of the drainage ditch system that parallels SR 166 from Santa Maria west to the Santa Maria River. Multiple CRLF occurrences are documented within these ditch systems. Three CRLF occurrences have been recorded within one mile of the BSA, all of which are located within or immediately adjacent to the ditch systems along SR 166 (CDFW 2023a). One occurrence was documented in an agricultural pond on private property on the north side of SR 166, just east of Bonita School Road and adjacent to and north of the BSA. The other two occurrences were documented in the ditches on the south side of SR 166, approximately 0.5 mile and 0.8 mile east of the intersection of Black Road and SR 166, respectively. All three occurrences were of adult CRLF, and breeding was not documented. Because of the known use of these ditches by CRLF, the species could occur incidentally in upland portions of the BSA if conditions are conducive to CRLF leaving the ditches (e.g., sufficient moisture from a rain event). However, due to the high amounts of existing human activity and the active highway, movement into upland areas is unlikely.

Nesting birds are protected by the MBTA and CFGC Sections 3503, 3503.5, and 3513. No bird nests were detected during the survey. Trees within the BSA providing suitable nesting habitat for bird species occur at Bonita Elementary School adjacent to the proposed staging area and landscape trees at a residence on the east side of Black Road at the southern extent of the BSA. In addition, wood utility poles located on both sides of SR 166 and along the eastern shoulder of Black Road may provide suitable nesting locations for bird species such as crows, ravens, and red-tailed hawks.

4.2 Sensitive Natural Communities and Critical Habitat

The BSA consists of agricultural and ruderal/developed land cover types. No sensitive natural communities occur within the BSA. The BSA also does not occur within federally designated critical habitat (USFWS 2023b).

4.3 Jurisdictional Waters and Wetlands

As noted in Section 3.1.2, *Watersheds and Drainages*, four ditches occur within the BSA, all of which are likely hydrologically connected to the Santa Maria River and ultimately the Pacific Ocean, a Traditional Navigable Water. These areas are potentially under the jurisdiction of the U.S. Army Corps of Engineers, Central Coast Regional Water Quality Control Board, and CDFW, considering the Initial Study-Mitigated Negative Declaration prepared for the State Route 166/Black Road Intersection Improvement Project (Caltrans 2018), which overlaps with the BSA, determined the

ditches along SR 166 and Black Road are jurisdictional features based on a formal delineation. A formal delineation would need to be conducted to ascertain the extent of jurisdictional waters within the BSA but was not conducted as part of the current effort because they are not within the proposed footprint of project impacts.

4.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The habitats within the link do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, although dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending on the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large- and small-scale. Regionally, the BSA is not located within an Essential Connectivity Area (ECA) as mapped in the report *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (Spencer et al. 2010). ECAs represent principal connections between Natural Landscape Blocks and constitute regions in which land conservation and management actions should be prioritized to maintain and enhance ecological connectivity. ECAs are mapped based on coarse ecological condition indicators rather than the needs of species and thus serve the majority of species in each region.

The BSA is also located in a largely developed area with regular human activities, specifically a school, vehicular traffic on SR 166, and surrounding agriculture. Therefore, the BSA does not likely contribute significantly as an important corridor for regional movement compared to regionally undeveloped habitats.

4.5 Resources Protected by Local Policies and Ordinances

No local policies or ordinances protecting biological resources pertain to the biological resources present within the BSA. All trees present on the site are landscape trees within 50 feet of an existing structure, which do not meet the definition of protected trees under the County of Santa Barbara's Deciduous Oak Tree Protection and Regeneration ordinance (Santa Barbara County Code Chapter 35, Article IX). Therefore, no resources protected by local policies or ordinances are present.

4.6 Habitat Conservation Plans

The BSA is not located in an area subject to an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plans.

5 Impact Analysis and Mitigation Measures

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.*

As described in Section 4.1.1, *Special Status Plant Species*, one special status plant species - La Graciosa thistle - has a low potential to occur within the BSA, specifically within the ditches along Bonita School Road, SR 166, and Black Road. However, the project would avoid these ditches, thereby avoiding potentially suitable habitat for La Graciosa thistle. As such, the project would not directly or indirectly impact any special-status plant species. No impact would occur, and no mitigation is recommended.

As described in Section 4.1.2, *Special Status Wildlife Species*, CRLF has a moderate potential to occur within the BSA. No impacts to suitable breeding habitat for CRLF would occur during implementation of the project because the project would avoid the ditches along Bonita School Road, SR 166, and Black Road, and project activities would occur in previously-developed areas and disturbed road shoulders. In addition, impacts to individuals in upland areas at the school are unlikely because construction on the school property would occur during the dry season (between June and September) during daylight hours. However, construction of the proposed pipeline along Bonita School Road, SR 166, and Black Road may occur outside of the dry season; therefore, individual CRLF may be encountered dispersing during conditions conducive to CRLF movement, such as during rain and shortly after rain events. The potential for direct impacts to dispersing CRLF is low considering project construction would be conducted during daylight hours when CRLF are less likely to move and would be more visible to construction workers and equipment operators. No indirect impacts to CRLF would occur because the amount of noise and activity from the project would not substantially increase the overall amount of activity around the ditches compared to existing agricultural operations and highway traffic. In addition, no nighttime construction would occur that would increase the amount of artificial light at night. Although no indirect impacts to CRLF are expected, direct impacts would be potentially significant, and implementation of avoidance and minimization measures BIO-1 through BIO-3 is recommended.

Project implementation is not expected to result in direct impacts to nesting birds because no tree removal or trimming would occur, and ground nesting species are not expected to be present. Indirect impacts to common bird species may occur if these species are nesting within the trees, structures, or power poles in the BSA as a result of construction noise that may cause behavioral changes that can result in failure of an established nest. This may be particularly notable at the elementary school if a nest is established when school is out of session and the amount of ambient activity is lower than during the school year. Therefore, impacts to nesting birds would be potentially significant, and implementation of avoidance and minimization measure BIO-4 is recommended.

Recommended Avoidance and Minimization Measures

The following measures are recommended to reduce impacts to special status species to less-than-significant levels.

BIO-1 Worker Environmental Awareness Program Training

Prior to commencement of project construction activities, a qualified biologist should provide a Worker Environmental Awareness Program training for all construction personnel. At a minimum, the training should include a description of the biology of the CRLF and its habitats; the specific measures that are being implemented to avoid this species; the guidelines that must be followed by all construction personnel to avoid take of this species; and the boundaries within which the project may be accomplished. The qualified biologist should appoint a designated person (e.g., the crew foreman) who will be responsible for ensuring all crew members comply with the guidelines. The training should be conducted for all new personnel before they can participate in construction activities.

BIO-2 Pre-construction Surveys

A qualified biologist familiar with CRLF should conduct a pre-construction survey of the project site within 48 hours prior to the start of construction. If CRLF are encountered during the survey or at any time during project construction, activities should cease and the USFWS should be notified to determine how to proceed. No work should continue until authorized by the USFWS.

BIO-3 Construction Site Best Management Practices

The following construction site best management practices should be implemented during construction activities:

- Work should be conducted during dry weather conditions (days with less than 0.1 inch of predicted rainfall) and should not occur within 48 hours after a rain event of 0.1 inch or more.
- All vehicles and equipment should be in good working condition and free of leaks. A spill prevention plan should be established in the event of a leak or spill.
- The number of access routes, numbers and sizes of staging areas, and the total area of the activity should be limited to the minimum necessary to achieve the goal of project. Routes and boundaries should be clearly demarcated.
- All areas outside of the project perimeter fence should be designated as Environmentally Sensitive Areas where no construction activities should occur.
- Water should not be impounded in a manner that may attract CRLF.
- No pets or firearms should be permitted on-site.
- All food-related trash should be disposed of in closed containers and removed from the project at least twice per week during the construction period to avoid attracting predators.
- Open excavations should be covered at the end of each day and inspected for CRLF prior to backfilling.

BIO-4 Avoidance and Minimization Measures for Nesting Birds

Project-related activities should occur outside of the bird breeding season (February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than two weeks prior to initiation of ground disturbance and/or vegetation removal, a nesting bird

pre-construction survey should be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300 feet for raptors), where accessible. If project construction is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird survey should be conducted prior to each phase of construction, if occurring during the bird breeding season.

The pre-construction nesting bird survey should be conducted during the time of day when birds are active and should factor in sufficient time to perform the survey adequately and completely. A report of the nesting bird survey results, if applicable, should be submitted to the Santa Maria Bonita School District for review and approval within two weeks of survey completion.

If nests are found, their locations should be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 300 feet for raptors, depending upon the species and the proposed work activity, should be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests should be monitored at a minimum of once per week until it has been determined the nest is no longer being used by either the young or adults. No project activities (including parking and staging) should occur within this buffer until the qualified biologist confirms the breeding/nesting is complete and all the young have fledged. If project activities must occur within the buffer, they should be conducted at the discretion of the qualified biologist. If no nesting birds are observed during the pre-construction survey, no further action is necessary.

5.2 Sensitive Natural Communities and Critical Habitat

The proposed project would have a significant effect on biological resources if it would:

b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.

As described in Section 4.2, *Sensitive Natural Communities and Critical Habitat*, no sensitive natural communities or riparian habitats occur in the BSA, and the BSA is not located within federally designated critical habitat. Therefore, no impacts to sensitive natural communities, riparian habitats, or federally designated critical habitat would occur, and no mitigation is recommended.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

All activities associated with the project would occur outside of the ditches along Bonita School Road, SR 166, and Black Road, thereby avoiding potentially jurisdictional features. Given the limited amount of ground disturbance, the project is not anticipated to contribute to significant sediment erosion or surface water quality impacts during construction activities. Therefore, impacts to potentially jurisdictional waters and wetlands would be less than significant, and no mitigation is recommended.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.

The project is not located within an ECA (Spencer et al. 2010), and no wildlife nursery sites are located within the BSA. The project site also occurs in a heavily-developed area with SR 166 within the project site and surrounding agricultural uses. Implementation of the project would not disturb or remove native vegetation communities. In addition, no aboveground components of the project would create new barriers to movement. Therefore, the project would not interfere substantially with the local or regional movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors or impede the use of wildlife nursery sites. No impacts to wildlife movement or nursery sites would occur, and no mitigation is recommended.

5.5 Resources Protected by Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

The project would not conflict with local policies or ordinances protecting biological resources because no biological resources subject to such local policies or ordinances are present within the BSA, as described in Section 4.5, *Resources Protected by Local Policies and Ordinances*. Therefore, no impact would occur, and no mitigation is recommended.

5.6 Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

f) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

The project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan because the project site is not subject to any such plans, as described in Section 4.6, *Habitat Conservation Plans*. Therefore, no impact would occur, and no mitigation is recommended.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future.

No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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8 List of Preparers

Rincon Consultants, Inc.

Primary Author and Field Reconnaissance Survey

- Michael Tom, Senior Biologist

Technical Review

- Alex Hunt, Director

Graphics

- Erik Holtz, GIS Analyst

Appendix A

Regulatory Setting

ATTACHMENT E

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include the following:

- U.S. Army Corps of Engineers (USACE; wetlands and other waters of the United States)
- U.S. Fish and Wildlife Service (USFWS; federally listed species and migratory birds)
- National Marine Fisheries Service (NMFS; marine wildlife and anadromous fishes)
- Central Coast Regional Water Quality Control Board (waters of the State)
- California Department Fish and Wildlife (CDFW; riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources)

United States Army Corps of Engineers

The USACE is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule, 2020 Navigable Waters Protection Rule, and the most recent effort promulgated by the USACE and USEPA on January 18, 2023 (88 FR 3004-3144)), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," which dates from 1986, remains in effect although it is currently being interpreted consistent with the recent *Sackett v. Environmental Protection Agency* Supreme Court decision as described below. The USACE and USEPA have announced their intent to issue revised regulations defining "waters of the United States" by September 1, 2023. Waters of the U.S.

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3(c)(1)). The USACE’s delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty

percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Applicable Case Law and Agency Guidance

The USACE's regulations defining "waters of the United States" have been subject to legal interpretation, and two influential Supreme Court decisions have narrowed the definition to exclude certain classes of waters that bear an insufficient connection to navigable waters. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001), the United States Supreme Court stated that the USACE's CWA jurisdiction does not extend to ponds that "are not adjacent to open water." In reaching its decision, the Court concluded that the "Migratory Bird Rule," which served as the basis for the USACE's asserted jurisdiction, was not supported by the CWA. The Migratory Bird Rule extended CWA jurisdiction to intrastate waters "which are or would be used as habitat by birds protected by Migratory Bird Treaties or which are or would be used as habitat by other migratory birds which cross state lines…" The Court was concerned that application of the

Migratory Bird Rule resulted in "reading the term 'navigable waters' out of the statute. Highlighting the language of the CWA to determine the statute's jurisdictional reach, the Court stated, “the term ‘navigable’ has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made.” This decision stands for the proposition that non-navigable isolated, intrastate waters are not waters of the United States and thus are not jurisdictional under the CWA.

In 2006, the United States Supreme Court decided *Rapanos v. United States* and *Carabell v. United States* (collectively “Rapanos”), which were consolidated cases determining the extent of CWA jurisdiction over waters that carry only an infrequent surface flow. The court issued no majority opinion in Rapanos. Instead, the justices authored five separate opinions including the “plurality” opinion, authored by Justice Scalia (joined by three other justices), and a concurring opinion by Justice Kennedy. To guide implementation of the decision, the USACE and USEPA issued a joint guidance memorandum (“Rapanos Guidance Memorandum”) in 2008 stating that “regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied.”

According to the plurality opinion in Rapanos, “the waters of the United States include only relatively permanent, standing or flowing bodies of water” and do not include “ordinarily dry channels through which water occasionally or intermittently flows.” In addition, while all wetlands that meet the USACE definition are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

Under Justice Kennedy’s opinion, “the USACE’s jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. Wetlands possess the requisite nexus, and thus come within the statutory phrase ‘navigable waters,’ if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’ When, in contrast, wetlands’ effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term ‘navigable waters.’” Justice Kennedy identified "pollutant trapping, flood control, and runoff storage" as some of the critical functions wetlands can perform relative to other waters. He concluded that, given wetlands’ ecological role, ”mere adjacency” to a non-navigable tributary was insufficient to establish CWA jurisdiction, and that “a more specific inquiry, based on the significant nexus standard, is therefore necessary.”

Interpreting these decisions, and according to the Rapanos Guidance Memorandum, the USACE and USEPA will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Where a significant nexus analysis is required, the USACE and USEPA will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and,
- Significant nexus includes consideration of hydrologic and ecologic factors.

The USACE and USEPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and,
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

On May 25, 2023, the Supreme Court issued its decision on the petition from the Sacketts, a family in Idaho that was subject to a compliance order from the USEPA for backfilling their lot near Priest Lake, which the USEPA claimed contained federally-regulated wetlands. The wetlands in question were adjacent to a ditch that fed a creek that ultimately drained into Priest Lake, a navigable water body. The USEPA asserted the Sacketts had violated the law by filling the wetlands on their property without a permit. The Court's decision addressed controversy over whether, and under what conditions, the CWA governs navigable waters' tributaries or adjacent wetlands. The Supreme Court's decision in Sackett provides definitive guidance to the agencies in determining the limits of their Clean Water Act authority. Prioritizing a need for clarity and regulatory certainty, the Court set forth an interpretation of Clean Water Act jurisdiction that can be applied without the need for lengthy case-by-case evaluations. This interpretation will have the effect of reducing the Clean Water Act's geographic reach.

The Court decided:

- "Adjacent wetlands" are WOTUS only if there is a continuous surface connection between the wetland and a navigable or relatively permanent water body, such that it is difficult to determine the boundary between the wetland and the water body. The opinion notes that "temporary interruptions to surface connection may sometimes occur because of phenomena like low tides or dry spells."
- The Significant Nexus Standard, introduced by the Court in prior decisions, is not mentioned in the Clean Water Act and should not be used. Additionally, the standard includes ecological factors whose use in determining jurisdiction is not supported by the statute.
- Although jurisdiction over tributaries was not addressed by the Court, current agency guidance relies upon the Significant Nexus Standard to establish jurisdiction over tributaries that flow infrequently. In disallowing the use of that standard, the decision suggests that non-relatively

permanent tributaries will be non-jurisdictional going forward, stating, "…the [Clean Water Act's] use of 'waters' encompasses only those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as streams, oceans, rivers, and lakes."

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

(i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

(ii) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

(iii) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The USFWS implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

Endangered Species Act

The USFWS and NMFS share responsibility for implementing the ESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered wildlife species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in

1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes.
3. New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTRA requires the USFWS to publish a list of all nonnative, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The CDFW derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA's protections extend to candidate species during the period (typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed,

channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term “stream” for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References “river,” “stream,” and “lake”
  - References “natural flow”
  - References “bed,” “bank,” and “channel”
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602’s use of “stream” to be as defined in common law. The Court indicated that a “stream” is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM
- **CDFW regulations** defining “stream” for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation

- **Guidance documents**, *including A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic wildlife including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Appendix B

Special Status Species Evaluation Tables

Special Status Plant Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Agrostis hooveri Hoover's bent grass	None/None G2/S2 1B.2	Perennial herb. Chaparral, cismontane woodland, closed-cone coniferous forest, valley and foothill grassland. Sandy (usually). Elevations: 20-2000ft. (6-610m.) Blooms Apr-Jul.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Aphanisma blitoides aphanisma	None/None G3G4/S2 1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 5-1000ft. (1-305m.) Blooms Feb-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Arctostaphylos pilosula Santa Margarita manzanita	None/None G2?/S2? 1B.2	Perennial evergreen shrub. Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest. Sandstone (sometimes). Elevations: 245-3610ft. (75-1100m.) Blooms Dec-May.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Arctostaphylos purissima La Purisima manzanita	None/None G2/S2 1B.1	Perennial evergreen shrub. Chaparral, coastal scrub. Sandstone outcrops, sandy soil. Elevations: 195-1280ft. (60-390m.) Blooms Nov-May.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Arctostaphylos refugioensis Refugio manzanita	None/None G3/S3 1B.2	Perennial evergreen shrub. Chaparral. On sandstone. Elevations: 900-2690ft. (274-820m.) Blooms (May)Dec-Mar.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Arctostaphylos rudis sand mesa manzanita	None/None G2/S2 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Sandy. Elevations: 80-1055ft. (25-322m.) Blooms Nov-Feb.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Arenaria paludicola marsh sandwort	FE/SE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps. Openings, sandy. Elevations: 10-560ft. (3-170m.) Blooms May-Aug.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Astragalus didymocarpus var. *milesianus* Miles' milk-vetch	None/None G5T2/S2 1B.2	Annual herb. Coastal scrub. Clay soils. Elevations: 65-295ft. (20-90m.) Blooms Mar-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.

ATTACHMENT E

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Castilleja densiflora var. *obispoensis* San Luis Obispo owl's-clover	None/None G5T2/S2 1B.2	Annual herb (hemiparasitic). Meadows and seeps, valley and foothill grassland. Serpentinite (sometimes). Elevations: 35-1410ft. (10-430m.) Blooms Mar-May.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Ceanothus impressus var. *impressus* Santa Barbara ceanothus	None/None G3T3/S3 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 130-1540ft. (40-470m.) Blooms Feb-Apr.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Ceanothus impressus var. *nipomensis* Nipomo Mesa ceanothus	None/None G3T2/S2 1B.2	Perennial shrub. Chaparral. Sandy. Elevations: 100-805ft. (30-245m.) Blooms Feb-Apr.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Chenopodium littoreum coastal goosefoot	None/None G1/S1 1B.2	Annual herb. Coastal dunes. Generally on sandy soils, and on dunes. Elevations: 35-100ft. (10-30m.) Blooms Apr-Aug.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Cicuta maculata var. *bolanderi* Bolander's water-hemlock	None/None G5T4T5/S2? 2B.1	Perennial herb. Marshes and swamps. In fresh or brackish water. Elevations: 0-655ft. (0-200m.) Blooms Jul-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Cirsium occidentale var. *compactum* compact cobwebby thistle	None/None G3G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes, coastal prairie, coastal scrub. On dunes and on clay in chaparral; also in grassland. Elevations: 15-490ft. (5-150m.) Blooms Apr-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Cirsium rhothophilum surf thistle	None/ST G1/S1 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes. Open areas in central dune scrub; usually in coastal dunes. Elevations: 10-195ft. (3-60m.) Blooms Apr-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Cirsium scariosum var. *loncholepis* La Graciosa thistle	FE/ST G5T1/S1 1B.1	Perennial herb. Cismontane woodland, coastal dunes, coastal scrub, marshes and swamps, valley and foothill grassland. Mesic, sandy. Elevations: 15-720ft. (4-220m.) Blooms May-Aug.	Low	Marginally suitable habitat present within the BSA, specifically the ditches. Species was not observed during the June 28, 2023 reconnaissance survey. A CNDDB occurrence is located within the same ditch system approximately 3.8 miles west on SR 166.

ATTACHMENT E

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Cladium californicum California saw-grass	None/None G4/S2 2B.2	Perennial rhizomatous herb. Marshes and swamps, meadows and seeps. Freshwater or alkaline moist habitats. Elevations: 195-5250ft. (60-1600m.) Blooms Jun-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Clarkia speciosa ssp. *immaculata* Pismo clarkia	FE/SR G4T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Sandy. Elevations: 80-605ft. (25-185m.) Blooms May-Jul.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Cordylanthus rigidus ssp. *littoralis* seaside bird's-beak	None/SE G5T2/S2 1B.1	Annual herb (hemiparasitic). Chaparral, cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Disturbed areas (often), sandy. Elevations: 0-1690ft. (0-515m.) Blooms Apr-Oct.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Deinandra increscens ssp. *villosa* Gaviota tarplant	FE/SE G3T2/S2 1B.1	Annual herb. Coastal bluff scrub, coastal scrub, valley and foothill grassland. Known from coastal terrace near Gaviota; sandy blowouts amid sandy loam soil; grassland/coast scrub ecotone. Elevations: 65-1410ft. (20-430m.) Blooms May-Oct.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Delphinium parryi ssp. *blochmaniae* dune larkspur	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes. On rocky areas and dunes. Elevations: 0-655ft. (0-200m.) Blooms Apr-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Dithyrea maritima beach spectaclepod	None/ST G1/S1 1B.1	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sea shores, on sand dunes, and sandy places near the shore. Elevations: 10-165ft. (3-50m.) Blooms Mar-May.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	None/None G3T2/S2 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475ft. (5-450m.) Blooms Apr-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Erigeron blochmaniae Blochman's leafy daisy	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Sand dunes and hills. Elevations: 10-150ft. (3-45m.) Blooms Jun-Aug.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Eriodictyon capitatum Lompoc yerba santa	FE/SR G2/S2 1B.2	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal bluff scrub. Sandy soils on terraces. Elevations: 130-2955ft. (40-900m.) Blooms May-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Horkelia cuneata var. *puberula* mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660ft. (70-810m.) Blooms Feb-Jul(Sep).	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Horkelia cuneata var. *sericea* Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655ft. (10-200m.) Blooms Apr-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Layia carnosa beach layia	FT/SE G2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. Elevations: 0-195ft. (0-60m.) Blooms Mar-Jul.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Layia erubescens blushing layia	None/None G2/S2 1B.2	Coastal dunes, coastal scrub. Prefers loose, fine sand of stabilized dunes and sandhills. 10-245m. Blooms (Feb)Mar-May(Jun).	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Layia heterotricha pale-yellow layia	None/None G2/S2 1B.1	Annual herb. Cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Alkaline or clay soils; open areas. Elevations: 985-5595ft. (300-1705m.) Blooms Mar-Jun.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Lupinus ludovicianus San Luis Obispo County lupine	None/None G1/S1 1B.2	Perennial herb. Chaparral, cismontane woodland. Open areas in sandy soil, Santa Margarita formation. Elevations: 165-1725ft. (50-525m.) Blooms Apr-Jul.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.

ATTACHMENT E

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Lupinus nipomensis Nipomo Mesa lupine	FE/SE G1/S1 1B.1	Annual herb. Coastal dunes. Dry sandy flats, restricted to back dunes, associated with central dune scrub habitat - a rare community type. Elevations: 35-165ft. (10-50m.) Blooms Dec-May.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Malacothamnus gracilis slender bush-mallow	None/None G1Q/S1 1B.1	Perennial deciduous shrub. Chaparral. Dry, rocky slopes. Elevations: 625-1885ft. (190-575m.) Blooms May-Oct.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Monardella sinuata ssp. *sinuata* southern curly-leaved monardella	None/None G3T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy soils. Elevations: 0-985ft. (0-300m.) Blooms Apr-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Monardella undulata ssp. *crispa* crisp monardella	None/None G3T2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Often on the borders of open, sand areas, usually adjacent to typical backdune scrub vegetation. Elevations: 35-395ft. (10-120m.) Blooms Apr-Aug(Dec).	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Monardella undulata ssp. *undulata* San Luis Obispo monardella	None/None G2/S2 1B.2	Perennial rhizomatous herb. Coastal dunes, coastal scrub. Stabilized sand of the immediate coast. Elevations: 35-655ft. (10-200m.) Blooms May-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Muhlenbergia utilis aparejo grass	None/None G4/S2S3 2B.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, marshes and swamps, meadows and seeps. Alkaline (sometimes), Serpentinite (sometimes).Elevations: 80-7630ft. (25-2325m.) Blooms Mar-Oct.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Nasturtium gambelii Gambel's water cress	FE/ST G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevations: 15-1085ft. (5-330m.) Blooms Apr-Oct.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Nemacaulis denudata var. *denudata* coast woolly-heads	None/None G3G4T2/S2 1B.2	Annual herb. Coastal dunes. Elevations: 0-330ft. (0-100m.) Blooms Apr-Sep.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.

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Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations
Scrophularia atrata black-flowered figwort	None/None G2?/S2? 1B.2	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub, riparian scrub. Sand, diatomaceous shales, and soils derived from other parent material; around swales and in sand dunes. Elevations: 35-1640ft. (10-500m.) Blooms Mar-Jul.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Symphyotrichum defoliatum San Bernardino aster	None/None G2/S2 1B.2	Perennial rhizomatous herb. Cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, meadows and seeps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. Elevations: 5-6695ft. (2-2040m.) Blooms Jul-Nov.	None	No suitable habitat types occur within the BSA. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.

Regional Vicinity refers to within a nine-quad search radius of site.

FESA = Federal Endangered Species Act
CESA = California Endangered Species Act
CRPR = California Rare Plant Rank
CNPS = California Native Plant Society

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)

1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

ATTACHMENT E

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CRPR	Habitat Requirements	Potential to Occur in BSA	Habitat Suitability/ Observations

Other Statuses

G1 or S1	Critically Imperiled Globally or Subnationally (state)
G2 or S2	Imperiled Globally or Subnationally (state)
G3 or S3	Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5	Apparently secure, common and abundant
GH or SH	Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Additional notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)

Q – Questionable taxonomy that may reduce conservation priority

? – Inexact numeric rank

ATTACHMENT E

Special Status Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Invertebrates				
Branchinecta lynchi vernal pool fairy shrimp	FT/None G3/S3 None	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	None	No vernal pools present. The BSA consists of agriculture and ruderal/developed land cover types. The species is not expected to occur.
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	FC/None G4T1T2Q/S2 None	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None	No suitable habitat present. The BSA consists of agriculture and ruderal/developed land cover types. Trees within the BSA do not provide adequate shelter for roosting. The species is not expected to occur.
Fish				
Eucyclogobius newberryi tidewater goby	FE/None G3/S3 None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	None	No suitable aquatic habitat present. Species is not expected to occur.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE/SE G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	None	No suitable aquatic habitat present. Species is not expected to occur.
Gila orcuttii arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	None	No suitable aquatic habitat present. Species is not expected to occur.

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Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	FE/SCE G5T1Q/S1 None	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 tolerances to warmer water and more variable conditions.	None	No suitable aquatic habitat present. Species is not expected to occur.
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast distinct population segment	FT/None G5T2Q/S2 None	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	None	No suitable aquatic habitat present. Species is not expected to occur.
Amphibians				
Ambystoma californiense pop. 2 California tiger salamander - Santa Barbara County distinct population segment	FE/ST G2G3T2/S2 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	None	The BSA is located outside of the geographic range of the species in Santa Barbara County and is not located in a metapopulation area (USFWS 2016).
Anaxyrus californicus arroyo toad	FE/None G2G3/S2 SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	None	No suitable habitat present. Species is not expected to occur.
Rana boylii pop. 6 foothill yellow-legged frog - south coast distinct population segment	FPE/SE G3T1/S1 None	Southern Coast Ranges from Monterey Bay south through San Gabriel Mountains; west of the Salinas River in Monterey Co, south through Transverse Ranges, and east through San Gabriel Mountains. Historically may have ranged to Baja California. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	None	No suitable habitat present. Species is not expected to occur.

Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Moderate	Marginally suitable habitat present within the BSA, namely the ditches (expected to be used as dispersal habitat only), but no observations were made during reconnaissance field survey. CRLF are known to use the ditch systems in the BSA based on CNDDB occurrences outside of the BSA within the same ditches. Due to the highly-disturbed condition of upland areas and almost constant human activity, the species would only be encountered incidentally in upland areas, if at all.
Spea hammondii western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Low	Marginally suitable habitat present within the BSA, namely the ditches. Species is not expected to occur in upland areas due to highly compacted soils.
Reptiles				
Anniella pulchra Northern California legless lizard	None/None G3/S2S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Low	Marginally suitable habitat present in upland portions of the BSA; however, soil compaction would be a limiting factor for occurrence of the species. Species has a low likelihood of occurring.
Emys marmorata western pond turtle	None/None G3G4/S3 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.	None	No suitable habitat present. Species is not expected to occur.
Phrynosoma blainvillii coast horned lizard	None/None G4/S4 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.	None	No suitable habitat present. Species is not expected to occur.

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Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	None	No suitable habitat present. Species is not expected to occur.
Birds				
Accipiter striatus sharp-shinned hawk	None/None G5/S4 WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 ft of water.	None	No suitable nesting habitat present. Species is not expected to occur.
Agelaius tricolor tricolored blackbird	None/ST G1G2/S2 SSC	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.	None	No suitable nesting habitat present. Species is not expected to occur.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S4 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	None	No suitable nesting habitat present. Species is not expected to occur.
Athene cunicularia burrowing owl	None/None G4/S2 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Low	No suitable nesting habitat present within the BSA, and no California ground squirrel burrows observed during the reconnaissance survey. The species may occur transiently and has a low potential to occur.
Buteo swainsoni Swainson's hawk	None/ST G5/S4 None	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	None	No suitable nesting habitat present. Species is not expected to occur.
Charadrius nivosus nivosus western snowy plover	FT/None G3T3/S3 SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	None	No suitable nesting habitat present. Species is not expected to occur.

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Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Low	No suitable nesting habitat present. Species may occur transiently or forage on site. Species is not likely to occur.
Falco peregrinus anatum American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	None	No suitable nesting habitat present. Species is not expected to occur.
Laterallus jamaicensis coturniculus California black rail	None/ST G3T1/S2 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None	No suitable nesting habitat present. Species is not expected to occur.
Setophaga petechia yellow warbler	None/None G5/S3 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	None	No suitable nesting habitat present. Species is not expected to occur.
Sternula antillarum browni California least tern	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	None	No suitable nesting habitat present. Species is not expected to occur.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S3 None	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None	No suitable nesting habitat present. Species is not expected to occur.

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Scientific Name Common Name	Status FESA/CESA Global Rank/State Rank CDFW	Habitat Requirements	Potential to Occur in the BSA	Habitat Suitability/ Observations
Mammals				
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	None	No suitable habitat present. Species is not expected to occur.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	None	No suitable nesting habitat present. Species is not expected to occur.
Lasiurus frantzii western red bat	None/None G4/S3 SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	None	No suitable nesting habitat present. Species is not expected to occur.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low	Marginally suitable habitat present; however, due to the amount of existing human activity, the species would be expected to only occur transiently as it moves through the region.

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FP = CDFW Fully Protected

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Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)

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G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)

G4/5 or S4/5 Apparently secure, common and abundant

GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

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ATTACHMENT E

Appendix C

Floral and Faunal Compendium

Plant Species Observed Within the Biological Study Area on June 28, 2023

Scientific Name	Common Name	Status	Native or Introduced
Amaranthus blitoides	lambs quarter	None	Introduced
Conyza sp.	horseweed	None	Introduced
Hirschfeldia incana	shortpod mustard	None	Introduced
Malva sp.	Mallow	None	Introduced
Avena barbarta	slender wild oat	None	Introduced
Avena fatua	common wild oat	None	Introduced
Lolium multiflorum	Italian ryegrass	None	Introduced
Portulaca oleracea	common purslane	None	Introduced

Wildlife Species Observed Within the Biological Study Area on June 28, 2023

Scientific Name	Common Name	Status	Native or Introduced
Buteo jamaicensis	red-tailed hawk	None	Native
Cathartes aura	turkey vulture	None	Native
Corvus brachyrhynchos	American crow	None	Native

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Appendix D

Site Photographs

Photograph 1. Photograph of the ditches on the east side of Bonita School Road, facing south. June 28, 2023.

Photograph 2. Photograph of the existing ditch along the south side of State Route 166, facing southeast. June 28, 2023.

Photograph 3. Photograph of road and road shoulder of Bonita School Road and the Bonita Elementary School, facing south. June 28, 2023.

Photograph 4. Photograph of landscape trees that are part of Bonita Elemantary School in the vicinty of the project site. Facing north. June 28, 2023.

Appendix C

Cultural Resources Assessment

Rincon Consultants, Inc.
319 East Carrillo Street, Suite 105
Santa Barbara, California 93101
805-319-4092

January 10, 2024
Rincon Project No. 21-11997

Rural Communities Assistance Corporation
3120 Freeboard Drive, Suite 201
West Sacramento, California 95691

Subject: Cultural Resources Assessment for the Bonita Elementary School Drinking Water Improvements Project, Santa Maria, California 93458

MKN & Associates, Inc. retained Rincon Consultants, Inc. (Rincon) to conduct a cultural resources assessment in support of the Bonita Elementary School Drinking Water Improvements Project (project) located in unincorporated Santa Barbara County, California. This letter report documents the results of the tasks performed by Rincon, including the following: a search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search through the Native American Heritage Commission (NAHC), background and archival research, a pedestrian field survey, and historical resources evaluation of the Bonita Elementary School campus. The proposed project is subject to the California Environmental Quality Act (CEQA). With the Santa Maria-Bonita School District as the lead agency. All work was performed in accordance with CEQA regulations.

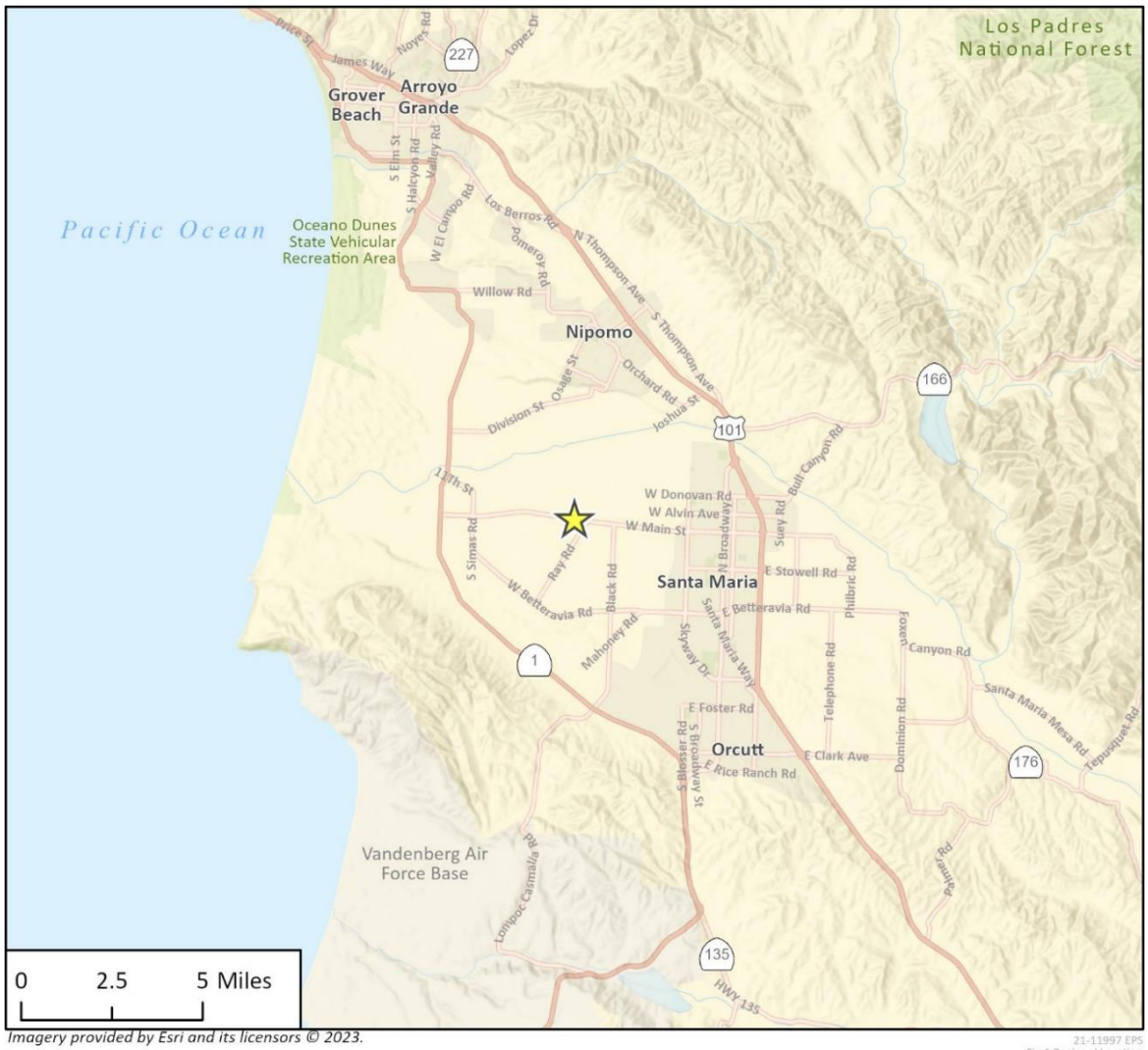
Project Site and Description

The project site includes an approximately 8,100-linear-foot pipeline alignment that would extend from the terminus of a planned water main in Black Road located at the northeast corner of the City of Santa Maria's (City) Wastewater Treatment Plant (WWTP), proceed north along Black Road, proceed west along State Route (SR) 166 (also known as West Main Street), proceed north on Bonita School Road, and connect to the property encompassing Bonita Elementary School (Assessor Parcel Number 113-050-007) at 2715 West Main Street (Figure 1 and Figure 2).

The proposed project consists of connecting the City's water system to the Bonita Elementary School Water System via approximately 8,100 linear feet of a two-inch diameter service line from the planned terminus of the City's water system near the northeast corner of the City's WWTP to Bonita Elementary School. The City is currently in the design phase of extending City water service to the WWTP separately from the proposed project. To meet peak demand, fire flow requirements, and irrigation demand, the project would also include repurposing the existing on-site 10,000-gallon storage tank and wells and potentially adding a hydropneumatic tank (up to approximately 1,000 gallons in capacity) with appurtenances such as an air compressor and additional above-grade piping and isolation valves.[1] Minor piping modifications to the existing system would be required to disconnect the proposed potable domestic supply from the existing system. In addition, the project would involve replacing lead service lines in the school's Kindergarten Building (Building K). Other improvements would include installation of blowoffs along the proposed pipeline and other appurtenances on Bonita Elementary School campus.

[1] At this time, it is uncertain whether the hydropneumatic tank will be included in the proposed project and if so, what the exact capacity may be. Therefore, this report conservatively evaluates inclusion of this project element with its maximum estimated capacity of 1,000 gallons.

Figure 1 Regional Location Map



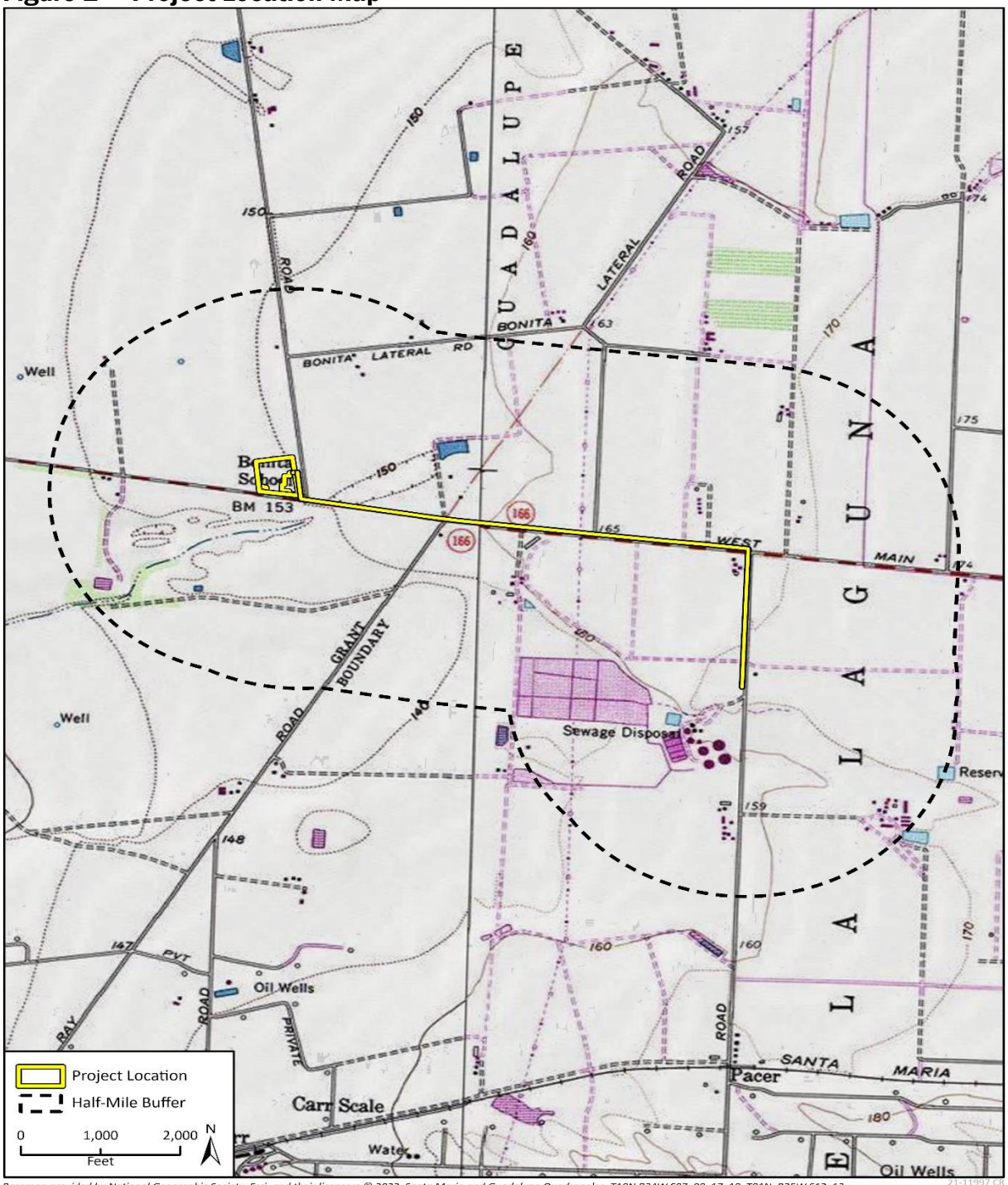
Imagery provided by Esri and its licensors © 2023.

21-11997 EPS
Fig 1 Regional Location

Project Location

N

Figure 2 Project Location Map



Basemap provided by National Geographic Society, Esri, and their licensors © 2023. Santa Maria and Guadalupe Quadrangles. T10N R34W S07, 08, 17, 18. T01N, R35W S12, 13. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

21-11997 CR
CRFig 2 Project Site Topo

California Historical Resources Information System Records Search

On May 19, 2023, Rincon received CHRIS records search results (Records Search File No.: 23-112) from the Central Coast Information Center (CCIC) for the project site vicinity (Attachment 1). The CCIC is the official state repository for cultural resources records and reports for Santa Barbara County. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding the project site. Rincon also reviewed the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor, the California State Historic Property Data File. Additionally, Rincon reviewed the Archaeological Determination of Eligibility list.

Previously Conducted Studies

The CCIC records search identified five previously-conducted cultural resources studies within the project site and an additional seven previously-conducted cultural resource studies outside the project site but within a 0.5-mile radius (Attachment 1). Table 1 summarizes these 12 studies, with additional detail on the five previously-conducted cultural resource studies within the project site provided following the table.

Table 1 Previous Cultural Resource Studies within a 0.5-mile Radius of Project Site

Report Number	Author	Year	Title	Relationship to Project Site
SL-02035a, b, c	ERCE	1991	San Luis Obispo Water Lines and Facilities Project, Cultural Resources Report	Within
SR-00378	Spanne, Larry	1977	Archaeological Component for City of Santa Maria Wastewater Treatment and Disposal Facilities Environmental Impact Report	Within
SR-00845	Snethkamp, P., Michals, L., and J. Costello	1989	Draft: Phase 1 Cultural Resources Survey for the proposed California Coastal Aqueduct between Devils Den, Kern County and Mission Hills, Santa Barbara County (Volume I)	Within
SR-01286	Sheets, R. and J.L. Rudolph	1991	Cultural Resources Survey for the Proposed Santa Maria Valley Water Treatment Plant	Within
SR-04842	Billat, Lorna	2012	New Tower ("NT") Submission Packet, Santa Maria Water Treatment Facility, 601 S Black Road, Santa Maria, Santa Barbara County	Outside
SR-05180	Ramirez, R. and H. Haas	2015	Historic Property Survey Report/Archaeological Survey Report for the State Route 166 and Black Road Intersection Improvements Project, Santa Maria	Within
SR-01876	Farris, G., Hines, P., Rhoades, M., Rivers, B. and R. Gibson	1995	Coastal Branch, Phase II State Water Project Cultural Resources Survey, Reaches 5B and 6, San Luis Obispo and Santa Barbara Counties, California	Outside

Report Number	Author	Year	Title	Relationship to Project Site
SR-02740	Lebow, C., et al,	2001	Final Report of Archaeological Investigations for Reaches 5B and 6, Coastal Branch Aqueduct, Phase II	Outside
SR-02900	Holson, J.	2002	Clayton Cell Tower, 70-02613.00, Santa Maria, Santa Barbara County	Outside
SR-04572	Wlodarski, Robert J.	2010	A Phase 1 Archaeological Study: For the Area 9 Specific Plan, an 890 acre Project Site located in the city of Santa Maria, Santa Barbara County, California	Outside
SR-05057	Haas, H., Hunt, K., and R. Ramirez	2013	Phase 1 Cultural Resources Survey for the Atlas Copco Mafi-Trench Project	Outside
SR-05141	Leter, Rachael J.	2014	Phase I Cultural Resources Study for Unit II Channel Drainage Capacity Improvements Project, Santa Barbara County, California	Outside

Source: Central Coastal Information Center 2023

SL-02035

In 1991, Environmental and Energy Services Company, Inc. (ERCE) conducted a study entitled "Cultural Resources Report: San Luis Obispo Water Lines and Facility Project" for the proposed pipeline segments and facility sites of the State Water Project, Coastal Branch, Phase II, Local Distribution Lines and Facilities Project in San Luis Obispo County, California. The project encompassed approximately 43 miles of pipeline segments, a water treatment plant, and two hydroelectric plants located at seven different community locations in San Luis Obispo County. Although the report primarily focused on San Luis Obispo County, a portion of the State Water Project pipeline that was evaluated is located in Santa Barbara County within the current project site. The report consisted of a record search and archival review, an intensive field survey, and recommendations. Within that project's right-of-way, the report identified 32 cultural resources, none of which were found within the current project site or within a 0.5-mile radius. The report recommended that if realignment is not feasible, a mitigation plan should be developed, potentially including data recovery, to alleviate the impacts of pipeline construction on the identified resources (ERCE 1991).

SR-00378

In 1977, L. Spanne conducted a study entitled "Archaeological Component: City of Santa Maria Wastewater Treatment and Disposal Facilities Environment Impact Report" for the Santa Maria Wastewater Treatment Facilities located south of the intersection of Main Street and Black Road. Although the exact purpose of the study was not identified, it included a search of available archaeological site records at the CCIC as well as an intensive field survey. The results of these efforts indicated there are no archaeological resources within the current project area along Black Road. Consequently, the study recommended the execution of archaeological investigations prior to initiating any new construction activities in the vicinity of that project area (Spanne 1977).

SR-00845

In 1989, P. Snethkamp, L. Michals, and J. Costella of Painted Cave Archaeological Associates conducted a study entitled "Final Report: Phase I Cultural Resources Survey for the Proposed California Coastal Aqueduct between Devils Den, Kern County and Mission Hills, Santa Barbara County." The

proposed project involved the realignment of approximately 46 miles of the aqueduct along the San Luis Obispo/Santa Maria/Lompoc Coastal Plain, terminating three miles north of Lompoc. A cultural resources assessment for the entire aqueduct had already been conducted by Larson and Coombs in 1988. The original survey within the current project site vicinity did not identify any cultural resources, and no cultural resources were encountered during the realignment survey. The study recommended that if cultural resources were encountered during the project implementation, a Section 106 assessment pursuant to the National Historic Preservation Act and/or a CEQA Appendix K assessment would be necessary (Snethkamp et al. 1989).

SR-01286

In 1991, R. Sheets and J.L. Rudolph of Science Applications International Corporation conducted a study entitled "Cultural Resources Survey for the Proposed Santa Maria Valley Water Treatment Plant." That project proposed construction of a municipal water treatment plant in the Santa Maria Valley on approximately 25 acres of undeveloped non-agricultural lands near the route of the Mission Hills Extension pipeline of the Coastal Branch Phase II of the California Aqueduct of the State Water Project. The proposed facilities included a new Santa Maria Valley Water Treatment Plant and pipelines. The study included a record search of the CCIC aerial photographs housed at the Map and Imagery Library at the University of California, Santa Barbara (UCSB), previous studies conducted for other projects in the area, Native American consultations, and a Phase I cultural resources survey. The results of these efforts did not locate any prehistoric, historic, or historic architectural remains and determined the proposed construction of the water treatment plant would not affect cultural resources. The study recommended that if ground disturbing construction activities uncovered any cultural remains, all activities in the area of the discovery should halt and a qualified archaeologist should be contacted to assess the significance of the discovery (Sheets and Rudolph 1991).

SR-05180

In 2015, R. Ramirez and H. Haas of Rincon Consultants, Inc. conducted a study titled "Archaeological Survey Report for the State Route 166 and Black Road Intersection Improvement Project, Santa Maria, Santa Barbara County, California." The purpose of that project was to enhance traffic operations and improve safety at the intersection. That study consisted of several activities, including a search of cultural resource records housed at the CCIC as well as a search of the NAHC SLF. Additionally, Native American consultations were conducted, and an archaeological survey of the APE was performed. The results of the CCIC records search, Native American consultations, and archaeological survey revealed no previously recorded or newly identified archaeological resources were located within the APE. Consequently, the study concluded the APE is not sensitive for the presence of archaeological deposits. However, the study acknowledged the potential for subsurface deposits remained in areas with limited visibility (Ramirez and Haas 2015).

Previously Recorded Resources

The CCIC records search results identified four historic-era built environment resources and one historic trash refuse within a 0.5-mile radius of the project site. There are no cultural (prehistoric or historic) resources recorded within the project site. Table 2 summarizes the resources located within a 0.5-mile radius of the project site. None of these historic-era resources would be impacted or altered by the proposed project (Attachment 2).

Table 2 Previously Recorded Resources within a 0.5-mile Radius of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	Eligibility Status	Relationship to Project Site
P-42-002712H	CA-SBA-002712H	Historic Oil Field	Santa Maria Refining Oil Field	L. Steidl and B. Steidl (1994)	7N1: (Formerly NR SC4). Needs to be reevaluated, may become eligible for National Register of Historic Places with restoration or when meets other specific conditions.	Outside
P-42-002716H	CA-SBA-002716H	Historic Trash Refuse	Adams Barn Dump	P. Hines (1995)	Not Evaluated	Outside
P-42-002717H	CA-SBA-002717	Historic Structure	Adams Barn	P. Hines and G. Farris (1994)	Not Evaluated	Outside
P-42-002726H	CA-SBA-002726	Historic Railroad Crossing	Santa Maria Valley Railroad Crossing	E. Barter and L. Ramirez (1994)	Not Evaluated	Outside
P-42-003617	CA-SBA-003617H	Historic Earthen Berms, Tree Stumps, and Trash Scatter	2 Earthen Berms, 30 Eucalyptus Tree Stumps, and Trash Scatter	L. Leach-Palm and S. Mikesell (1999)	Not Evaluated	Outside

Source: Central Coastal Information Center 2023

Sacred Lands File Search

Rincon contacted the NAHC on May 18, 2023, to request an SLF search of the project site. As part of this request, Rincon asked the NAHC to provide a contact list of Native American groups and/or individuals culturally affiliated with the area who may have knowledge of tribal heritage resources at the project site and/or in the vicinity. The NAHC emailed a response on June 19, 2023, stating the SLF search results were positive and indicating a tribe has reported a sacred site within a one to three mile vicinity of the current project site (Attachment 3).

Assembly Bill 52 Administrative Assistance

On August 11, 2023, the Santa Maria-Bonita School District received the AB 52 Tribal Notification List from the NAHC, The Santa Maria-Bonita School District, with administrative assistance from Rincon, prepared notification letters and commenced tribal notifications pursuant to AB 52. As of this date, no requests for consultation under AB 52 have been received.

Pedestrian Survey

Methods

Rincon Cultural Resources Specialist, Catherine Johnson, PhD, conducted a pedestrian archaeological survey of the project site on June 9, 2023. The pedestrian survey used transect intervals spaced 15 meters north and south of the centerline along SR 166 and transect intervals spaced 15 meters east and west of the centerline along Black Road to include staging/laydown areas and portions of Bonita Elementary School. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools), ecofacts (marine shell and bone), soil discoloration that might

indicate the presence of a cultural midden, historic debris (e.g., metal, glass, ceramics), and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite (GPS) unit.

Additionally, Ms. Johnson conducted a built environment field survey of the project site under the direction of Architectural Historian Rachel Perzel, MA. Ms. Johnson visually inspected all built environment features within the project site, including buildings, structures, and landscape elements. Pursuant to the California Office of Historic Preservation's *Instructions for Recording Historical Resources* (1995), properties over 45 years of age were recorded and evaluated for inclusion in the NRHP, CRHR, and local designation on California Department of Parks 523 series forms. During the field survey, the overall condition and integrity of built features on the project site as well as site characteristics and conditions were assessed and documented using notes and digital photographs. Notes and photographs, which were later reviewed by Ms. Perzel, are maintained at Rincon's Santa Barbara office.

Results

The field survey of the proposed project alignment along SR 166 and Black Road identified heavily-traveled paved roads lined with active agricultural fields that are highly disturbed by underground and aboveground utilities, including electrical poles, manholes, pipelines, and irrigation ditches. Ground visibility along the shoulders and areas adjacent to SR 166 and Black Road was very good, ranging from 80 to 90 percent. The soil consisted of hard-packed sandy loam sediment covered by imported gravel. Vegetation consisted of ruderal plants, various weeds, and seasonal grasses. Modern debris and trash, including clear and amber glass bottle fragments, plastic bottle caps, paper and plastic food wrappers, cardboard fragments, and metal fragments, were observed throughout this portion of the project site (Attachment 4: Photograph 1 through Photograph 5).

Spare quantities of modern trash, including paper and plastic wrappers, plastic bottles, and caps, were also observed throughout the portion of the project site within the Bonita Elementary School campus. The school's vegetation consisted of modern landscaping, including manicured grass lawns, shrubs, and trees (Attachment 4: Photograph 6 through Photograph 10).

No archaeological resources were identified within the project site during the pedestrian field survey.

Built Environment Resources

The following section summarizes the results of all background research and fieldwork as they pertain to built environment resources that may qualify as historical resources. This study resulted in the identification of one historic-period building within the project site, the Kindergarten Building, located on the southeast corner of the Bonita Elementary School campus. Due to the presence of a historic period building on the campus, the campus was evaluated for listing in the NRHP and CRHR. Corresponding California Department of Parks 523 series forms were prepared (Attachment 5) and summarized below.

Physical Description

The Bonita Elementary School campus (subject property) is comprised of seven permanent buildings in addition to a number of temporary structures neatly organized on a roughly rectangular property on the northwestern corner of Bonita School Road and SR 166 in unincorporated Santa Barbara County (Photograph 6). All of the campus buildings are concentrated on the southern half of the property in proximity to SR 166 and are organized around a central quad consisting of greenspace and pathways

in addition to two shade structures. The campus additionally includes a rectangular-shaped field and a blacktop-covered area, which occupy much of its northern half. Two paved parking lots and a maintenance area are located along the eastern property line. Aside from the aforementioned field and quad, landscaping is minimal throughout the campus and consists of scattered trees.

The campus includes one historic-period building, the Kindergarten Building (Photograph 7 and Photograph 8), which is situated adjacent to the SR 166 and Bonita School Road intersection. All other present buildings post-date the historic period. The Kindergarten Building is one-story in height, sits on a concrete base, has an irregular footprint, and integrates elements of the Spanish Revival Style. Indicative of its progressive development, roof forms are varied and include gabled and truncated hipped roof forms, sheathed in barrel clay tiles. The building is clad in smooth stucco and features solid metal doors; window type varies throughout. A covered walkway extends from its southern elevation, and a play area featuring blacktop and playground equipment is located just west of the building.

Along with the Kindergarten Building, the campus includes six permanent buildings and one temporary building organized around the previously-noted quad (Photograph 9). These buildings, all of which were added to the campus following 1994, house essential campus functions such as the administration building, cafeteria, and several classroom buildings. They all feature a simple, utilitarian design aesthetic and do not embody a particular architectural style. All buildings are one-story and feature rectilinear footprints. Siding throughout these buildings is wood panel or stucco, and roof forms are gabled or flat, many with red metal cladding. Between the two parking lots along the campus's eastern property line is a maintenance area that consists of an additional permanent building, which features a barn-like design aesthetic, in addition to a water tank and various equipment, such as generators, enclosed in a chain link fence (Photograph 10). There are also five temporary mobile classroom buildings sited in the southwest portion of the campus, west of the quad area.

All of the campus buildings and facilities appear in good condition.

Developmental History

The research conducted for this study indicates Bonita Elementary School (then referred to as Bonita School) was originally a one-room schoolhouse, teaching multiple grades in one structure and serving a limited student body. Archival research was unable to determine when the original schoolhouse was built. However, a review of newspaper articles indicates it was established by 1897 (*Santa Maria Times* 1897). The school retained a small student body for several decades early in its history. The original schoolhouse, a small rectangular building, was located roughly in the current location of the Kindergarten Building (UCSB 2023). Two additional buildings sited along SR 166 were added to the campus between 1957 and 1961 (UCSB 2023). The campus retained this configuration until the mid-1970s, when the original schoolhouse and one of the buildings added to the campus in the late 1950s were replaced with the current Kindergarten Building and an associated paved parking lot. Although the entirety of the current Kindergarten Building appears present in the 1975 aerial imagery, its roof form indicates it may have been constructed in two phases. Between 1975 and 1981, the building added in the late 1950s building was also demolished.

Following the historic period, buildings were routinely constructed and demolished on campus to accommodate the needs of its attending population, and all extant buildings with the exception of the Kindergarten Building were constructed after 1994. The campus was modernized in 2004, and the Kindergarten Building appears to feature contemporary stucco siding, roofing materials, windows, and doors. Most recently, following 2000, five temporary mobile classroom buildings were sited in the southwest portion of the campus.

Historical Resources Evaluation

As detailed below, the subject property is recommended ineligible for listing in the NRHP or CRHR under any significance criteria.

The Bonita School was initially developed prior to the turn of the 20th century as a one-room schoolhouse to serve the surrounding rural population. The original one-room schoolhouse was demolished and replaced with the current Kindergarten Building circa 1975. As the student body slowly expanded throughout the 20th century, the school campus was further developed with an initial expansion between 1957 and 1967 and another more recently, between 1994 and 2000. In addition to the Kindergarten Building, the current campus consists of six permanent buildings which date to the post-historic period along with a number of temporary buildings and structures. The research conducted for this assessment did not indicate the Bonita Elementary School campus or any individual building within it played an important role in the developmental history of unincorporated Santa Barbara County, the city of Santa Maria, or the surrounding region. Although the current campus occupies the site of the area's original one-room schoolhouse, none of the present buildings date to this early period of construction, and none of the current buildings appear to possess a significant association with the development of the surrounding region. As a result of the information summarized above, the subject property is not associated with events important to the history of the city, region, state, or nation. It is therefore recommended ineligible for listing in the NRHP and CRHR under Criteria A/1.

Research conducted for this assessment does not suggest the subject property possesses an association with any individual significant to the community, state, or nation. It is therefore recommended ineligible for listing in the NRHP and CRHR under Criteria B/2.

The Kindergarten Building features limited elements of the Spanish Revival Style, primarily its stucco cladding and barrel tile roofing material. However, the building is limited in its expression of the Spanish Revival Style and has also been recently modernized. The building therefore does not embody the Spanish Revival or any other particular architectural style, and it does not represent the work of a master or possess high artistic value. Additionally, the rest of the buildings on campus embody a utilitarian design aesthetic and do not embody a particular architectural style, represent the work of a master, or possess high artistic value. Therefore, the campus is recommended ineligible for listing in the NRHP and CRHR under Criteria C/3.

A review of available evidence and the CCIC records search results did not indicate the subject property may yield important information pertaining to the prehistory or history of the region, state, or nation. Therefore, it is recommended ineligible for listing in the NRHP or CRHR under Criteria D/4.

Aerial Imagery and Topographic Map Review

Aerial Imagery Review

Historical aerial photographs from 1957 to 1967 depict Bonita Elementary School on SR 166 and depict SR 166 as a major east-west highway. Black Road is shown as a two-track paved road, and the City's WWTP is situated adjacent to Black Road on the west, outside the project site. The entire project site is shown surrounded by agricultural fields on the north, south, east, and west. Historical topographical maps from 1994 to 2020 show the expansion of both Bonita Elementary School and the City's WWTP complex, along with the construction of new commercial facilities located adjacent to SR 166 to the north. Agricultural fields still surround the project site on all four sides (NETR Online 1994-2023).

Topographic Map Review

Historical topographic maps from 1947 to 1959 depict Bonita Elementary School and SR 166 as a major east-west highway (State Route 166). Black Road is depicted as a paved two-track road running in a north-south direction, and the WWTP is shown as a small facility located adjacent to and west of Black Road. Agricultural fields surround the project site on all four sides (NETR Online 1959-2023). Topographic maps from 1960-2021 depict Bonita Elementary School, SR 166, and Black Road with little to no change. However, they show a rapid western expansion of the WWTP complex (NETR Online 1960-2023).

Findings and Recommendations

This study identified one property within the project site, the Bonita Elementary School campus, that includes historic-period development - the Kindergarten Building. The campus was recorded, evaluated, and recommended ineligible for historical resources eligibility. It is therefore not considered a historical resource pursuant to CEQA and the project does not have the potential to impact historical resources. Rincon therefore recommends a finding of ***no impact to historical resources*** pursuant to CEQA.

This study determined there are no archaeological (prehistoric or historic) resources located within the project site, and there is one historic-era trash refuse (P-42-002716H) within a 0.5-mile radius of the project site. This assessment did not identify archaeological (prehistoric or historic) resources existing within the project site. Given the negative results of the background research, the negative results of previous studies within the project site, and the lack of known archaeological resources existing within the project site, there is a low potential to encounter intact surface and/or subsurface archaeological deposits during project implementation.

Rincon recommends a finding of ***no impact to archaeological resources*** with the implementation of the following best management practice to address the potential for an unanticipated discovery of archaeological resources during project construction and a finding of ***no impact to human remains*** with regulatory compliance with the California Health and Safety Code Section 7050.5 in the unlikely event that human remains are unexpectedly encountered**.**

Best Management Practice

Unanticipated Discovery of Cultural Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential

information that justifies the resource's significance. The Santa Maria-Bonita School District shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the CCIC pursuant to CEQA Guidelines Section 15126.4(b)(3)(C).

Regulatory Compliance

Unanticipated Discovery of Human Remains

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are unexpectedly found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance.

Should you have any questions concerning this assessment, please do not hesitate to contact the undersigned at (213) 267-8096 or cpurtell@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

Ken Victorino
Senior Principal Investigator

Chris Purtell, MA, RPA
Senior Archaeologist/Project Manager

Rachel Perzel, MA
Architectural Historian

Attachments

Attachment 1 CCIC Previously Conducted Cultural Resource Studies

Attachment 2 CCIC Previously Recorded Cultural Resources

Attachment 3 NAHC Sacred Lands File Search and Native American Contact List

Attachment 4 Photographs

Attachment 5 California Department of Parks 523 Series Forms

References

Billat, L.

2012 New Tower (NT) Submission Packet: FCC Form 620. Prepared for the Office of Historic Preservation Department of Parks and Recreation (Sacramento, California); prepared by Earth Touch, Inc., (Layton Utah). On file at the Central Coast Information Center at the Santa Barbara Museum of Natural History.

Environmental and Energy Services Company (ERCE)

1991 Cultural Resources Study: San Luis Obispo Water Lines and Facilities Project. Prepared for the County of San Luis Obispo.

National Park Service

1983 36 CFR Part 61-The Secretary of the Interior's Historic Preservation Professional Qualifications Standards. Accessed July 2023. https://www.doi.gov/pam/asset-management/historic-preservation/pqs.

NETR Online

Var. "Historic Aerials." Various historic aerials and topographic maps of the project area. Accessed July 2023, https://www.historicaerials.com/.

Office of Historic Preservation

1995 *Instructions for Recording Historical Resources*. Accessed July 2023, https://www.parks.ca.gov/pages/1054/files/manual95.pdf.

Ramirez, R. and Haas, H.

2015 Archaeological Survey Report for the State Route 166 and Black Road Intersection Improvements Project, Santa Marina, Santa Barbara County, California. Prepared for California Department of Transportation 5 (San Luis Obispo, California) and Psomas Engineering (Roseville, California); prepared by Rincon Consultants, Inc. (Ventura, California). On file at the Central Coast Information Center at the Santa Barbara Museum of Natural History.

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Snethkamp, P., Michals, L., and Costella, J.

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Sacramento, California; prepared by Painted Cave Archaeological Associates, Santa Barabara, California. On file at the Central Coast Information Center at the Santa Barbara Museum of Natural History.

Spanne, Laurance W.

1977 Archaeological Component for the City of Santa Maria Wastewater Treatment Facilities Environmental Impact Report. Prepared for the City of Santa Maria; prepared by Laurance W. Spanne. On file at the Central Coast Information Center at the Santa Barbara Museum of Natural History.

University of California, Santa Barbara

2023 "Frame Finder." Historic aerial database. Accessed July 2023, https://mil.library.ucsb.edu/ap_indexes/FrameFinder/.

Attachment 1

CCIC Previously Conducted Cultural Resource Studies

California Historical Resource Information System
San Luis Obispo & Santa Barbara Counties

Central Coast Information Center
Santa Barbara Museum of Natural History
2559 Puesta del Sol
Santa Barbara, CA 93105
PHONE (805) 682-4711 ext. 181
FAX (805) 682-3170
EMAIL ccic@sbnature2.org

5/19/2023 Records Search # 23-112

Chris Purtell
Rincon Consultants, Inc.
180 N. Ashwood Avenue
Ventura, CA 93003

Re: 21-11997 Bonita School Water System Project

The Central Coast Information Center received your record search request for the project area referenced above, located on the Santa Maria and Guadalupe USGS 7.5' quad(s). The following reflects the results of the records search for the project area and a one half mile radius:

As indicated on the data request form, the locations of reports and resources are provided in the following format: ☐ custom GIS maps ■ shapefiles ☐ hand-drawn maps ☐ none

Resources within project area:	None.
Resources within ½ mile radius:	Five; see enclosed list.
Reports within project area:	Eight; see enclosed list.
Reports within ½ mile radius:	Four; SR-01876, SR-04572, SR-05057, SR-05141.

Resource Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Report Database Printout (list):	■ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	■ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	■ not requested	☐ nothing listed
Resource Record Copies:	■ enclosed	☐ not requested	☐ nothing listed
Report Copies:	■ enclosed	☐ not requested	☐ nothing listed
OHP Historic Properties Directory:	☐ enclosed	■ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	■ nothing listed

The following sources of information are available at **http://ohp.parks.ca.gov/?page_id=28065**. Some of these resources used to be available through the CHRIS but because they are now online, they can be accessed directly. The Office of Historic Preservation makes no guarantees about the availability, completeness, or accuracy of the information provided through the sources listed below.

California State Lands Commission Shipwreck Database	*Caltrans Historic Bridge Inventory*
U.S. Geological Survey Historic Topographic Maps	*Rancho Plat Maps*
National Park Service National Register of Historic Places Nominations	*Natural Resource Conservation Service Soil Survey Maps*
US Bureau of Land Management General Land Office Records	*California Historical Landmarks Listing (by county)*
Five Views: An Ethnic Historic Site Survey for California (1988)	*Historical Soil Survey Maps*

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of California Historical Resources Information System (CHRIS) data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the CHRIS.

Sincerely,

Rebecca Albert

Rebecca Albert, M.A.
Assistant Coordinator

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SL-02035		1991	ERCE	San Luis Obispo Water Lines and Facilities Project, Cultural Resources Report	ERCE	40-000122, 40-000164, 40-000165, 40-000168, 40-000172, 40-000181, 40-000584, 40-000596, 40-000758, 40-000879, 40-001240, 40-001372, 40-001375, 40-001376, 40-001377, 40-001378, 40-001379, 40-001380, 40-001381, 40-001382, 40-001383, 40-001384, 40-001385, 40-001386, 40-001387
SL-02035b		1991	ERCE	Draft Environmental Impact Report State Water Project Coastal Branch (Phase II) Local Distribution Lines and Facilities	ERCE	
SL-02035C		1991	N/A	maps	ERCE	
SR-00378		1977	Spanne, Larry	Archaeological Component for City of Santa Maria Wastewater Treatment and Disposal Facilities Environmental Impact Report.	UCSB	42-000574, 42-000575, 42-001209
SR-00845		1989	Snethkamp, P., Michals, L., and Costello, J.	Draft: Phase 1 cultural resources survey for the proposed California Coastal Aqueduct between Devils Den, Kern County and Mission Hills, Santa Barbara County (Volume I)	Painted Cave Archaeological Associates	42-001019, 42-001052, 42-001088, 42-001174, 42-001923, 42-001926, 42-002360, 42-002361, 42-002362, 42-002363, 42-002364, 42-038256, 42-039169
SR-01286		1991	Sheets, R. and Rudolph, J.	Cultural Resources Survey for the Proposed Santa Maria Valley Water Treatment Plant	Science Applications International Corporation	
SR-01876		1995	Farris, G., Hines, P., Rhoades, M., Rivers, B., and Gibson, R.	Coastal Branch, Phase II State Water Project Cultural Resources Survey, Reaches 5B and 6, San Luis Obispo and Santa Barbara Counties, California		42-002688, 42-002697, 42-002711, 42-002712, 42-002713, 42-002714, 42-002715, 42-002716, 42-002717, 42-002726
SR-02740		2001	Lebow, C., et al, and Applied Earthworks	Final Report of Archaeological Investigations for Reaches 5B and 6, Coastal Branch Aqueduct, Phase II	Applied Earthworks, Inc. (AE)	40-000806, 40-001764, 40-001765, 40-001767, 40-001770, 40-002714, 40-002767
SR-02900		2002	Holson, J.	Clayton Cell Tower, 70-02613.00, Sand Maria, Santa Barbara County		
SR-04572		2010	Robert J Wlodarski	A Phase 1 Archaeological Study: For the Area 9 Specific Plan, an 890 acre Project Site located in the city of Santa Maria, Santa Barbara County, Calfironia	HEART	
SR-04842		2012	Billat, Lorna	New Tower ("NT") Submission Packet, Santa Maria Water Treatment Facility, 601 S Black Road, Santa Maria, Santa Barbara County	EarthTouch, Inc.	

ATTACHMENT E

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SR-05057		2013	Haas, Hannah, Hunt, Kevin, and Ramirez, Robert	Phase 1 Cultural Resources Survey for the Atlas Copco Mafi-Trench Project	Rincon Consultants	
SR-05141		2014	Rachael J. Leter, M.S., RPA	Phase I Cultural Resources Study for Unit II Channel Drainage Capacity Improvements Project, Santa Barbara County, California	Padre Associates, Inc.	
SR-05180		2015		Historic Property Survey Report/ Archaeological Survey Report for the State Route 166 and Black Road Intersection Improvements Project, Santa Maria		

ATTACHMENT E

Attachment 2

CCIC Previously Recorded Cultural Resources

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-42-002712	CA-SBA-002712H	Agency Nbr - Santa Maria Refining Oil Field	Site	Historic	AH16	1994 (L. Steidl, B. Steidl)	SR-01876
P-42-002716	CA-SBA-002716H	Agency Nbr - Adams Barn Dump	Site	Historic	AH04	1995 (P. Hines)	SR-01876, SR-01877
P-42-002717	CA-SBA-002717	Agency Nbr - Adams Barn	Building, Site	Historic	HP94	1994 (P. Hines, G. Farris, Department of Parks and Recreation)	SR-01876, SR-01877
P-42-002726	CA-SBA-002726	Agency Nbr - Santa Maria Valley RR at Black Rd Crossing	Site	Historic	AH07	1994 (E. Barter, L. Ramirez)	SR-01876, SR-01877
P-42-003617	CA-SBA-003617H	Other - SS-2H	Site	Historic	AH03; AH04	1999 (L. Leach-Palm (FW), S. Mikesell (JRP), Far Western Anthropological Research Group, Inc ., P.O. Box 413, Davis, CA 95617; JRP Historical Con)	

ATTACHMENT E

Attachment 3

NAHC Sacred Lands File Search and Native American Contact List

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

June 15, 2023

Christopher Purtell
Rincon Consultants, Inc.

Via Email to: cpurtell@rinconconsultants.com

Re: Bonita School Water System (21-11997) Project, Santa Barbara County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological Information Center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

ATTACHMENT E

Native American Heritage Commission
Native American Contact List
Santa Barbara County
6/15/2023

Barbareno/Ventureno Band of Mission Indians
Matthew Vestuto, Chairperson
Phone: (805) 746 - 6685
mvestuto@gmail.com
Chumash

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net
Chumash

Coastal Band of the Chumash Nation
Gabe Frausto, Chairperson
P.O. Box 40653
Santa Barbara, CA, 93140
Phone: (805) 568 - 8063
cbcntribalchair@gmail.com
Chumash

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533
Los Osos, CA, 93412
Phone: (760) 549 - 3532
violetsagewalker@gmail.com
Chumash

Salinan Tribe of Monterey, San Luis Obispo Counties
Patti Dunton, Tribal Administrator
8270 Morro Rd.
Atascadero, CA, 93422
Phone: (805) 464 - 2650
info@salinantribe.com
Salinan

San Luis Obispo County Chumash Council
Chumash

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
Chairman@chumash.gov
Chumash

yak tityu tityu yak tiłhini – Northern Chumash Tribe
Mona Tucker, Chairperson
660 Camino Del Rey
Arroyo Grande, CA, 93420
Phone: (805) 748 - 2121
olivas.mona@gmail.com
Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Bonita School Water System (21-11997) Project, Santa Barbara County.

ATTACHMENT E

Attachment 4

Photographs

Photograph 1. South side of State Route (SR) 166, view east.

Photograph 2. North side of SR 166, view east.

Photograph 3. Black Road, view north.

Photograph 4. Black Road and the City's Wastewater Treatment Plant, view south.

Photograph 5. Modern trash on east side of Black Road, view north.

Photograph 6. Overview of Bonita Elementary School campus, view north.

Photograph 7. North and east elevations of Bonita Elementary School Kindergarten Building, view southwest.

Photograph 8. South and west elevations of Bonita Elementary School Kindergarten Building, view northeast.

Photograph 9. Overview of the buildings surrounding Bonita Elementary School quad, view northwest.

Photograph 10. Barn-like building located in maintenance area in eastern portion of Bonita Elementary School campus, view northwest.

Attachment 5

California Department of Parks and Recreation Series 523 Forms

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code | Reviewer | Date

 ***Resource Name or #:** Bonita Elementary School

P1. Other Identifier: N/A
***P2. Location:** ☐ **Not for Publication** ☑ **Unrestricted** ***a. County:** Santa Barbara
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** Guadalupe **Date:** 1959 **T** 10N ; **R** 34 & 35W ; **¼ of** **¼ of Sec** 7 & 12 ; S.B. **B.M.**
c. Address: 2715 West Main Street City: N/A Unincorporated Zip:93458
d. UTM: Zone: ; mE/ mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate): APN 113-050-007 Elevation:

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
The Bonita Elementary School campus (subject property) is comprised of seven permanent buildings in addition to a number of temporary structures neatly organized on a roughly rectangular property on the northwestern corner of Bonita School Road and State Route (SR) 166 in unincorporated Santa Barbara County. All of the campus buildings are concentrated on the southern half of the property in proximity to SR 166 and are organized around a central quad consisting of greenspace and pathways in addition to two shade structures. The campus additionally includes a rectangular-shaped field and a blacktop-covered area, which occupy much of its northern half. Two paved parking lots and a maintenance area are located along the eastern property line. Aside from the aforementioned field and quad, landscaping is minimal throughout the campus and consists of scattered trees.

The campus includes one historic-period building, the Kindergarten Building, which is situated adjacent to the SR 166/Bonita School Road intersection. All other present buildings post-date the historic period. The Kindergarten Building is one-story in height, sits on a concrete base, has an irregular footprint, and integrates elements of the Spanish Revival Style. Indicative of its progressive development, roof forms are varied and include gabled and truncated hipped roof forms, sheathed in barrel clay tiles. The building is clad in smooth stucco and features solid metal doors; window type varies throughout. A covered walkway extends from its southern elevation, and a play area featuring blacktop and playground equipment is located just west of the building.

See Continuation Sheet.

***P3b. Resource Attributes:** (List attributes and codes) HP15. Educational Building
***P4. Resources Present:** ■Building ☐Structure ☐Object ☐Site ☐District ☐Element of District ☐Other (Isolates, etc.)

P5b. Description of Photo: (View, date, accession #)
North and east elevations of Bonita Elementary School Kindergarten Building, view southwest.

***P6. Date Constructed/Age and Sources:**
■Historic ☐Prehistoric ☐Both
c. 1975 (Kindergarten Building)
Post 1994 (all other buildings)

***P7. Owner and Address:**
N/A

***P8. Recorded by:** (Name, affiliation, and address)
Rachel Perzel
Rincon Consultants
180 North Ashwood Avenue
Ventura California 93003

***P9. Date Recorded:** June 9, 2023
***P10. Survey Type:** (Describe)
Intensive

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.")
Rincon Consultants, Inc. "Cultural Resources Assessment for the Bonita Elementary School Drinking Water Improvements Project, Santa Maria, California 93458." Rincon project number 21-11997. August 2023.

***Attachments:** ☐NONE ■Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other (List):

ATTACHMENT E

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

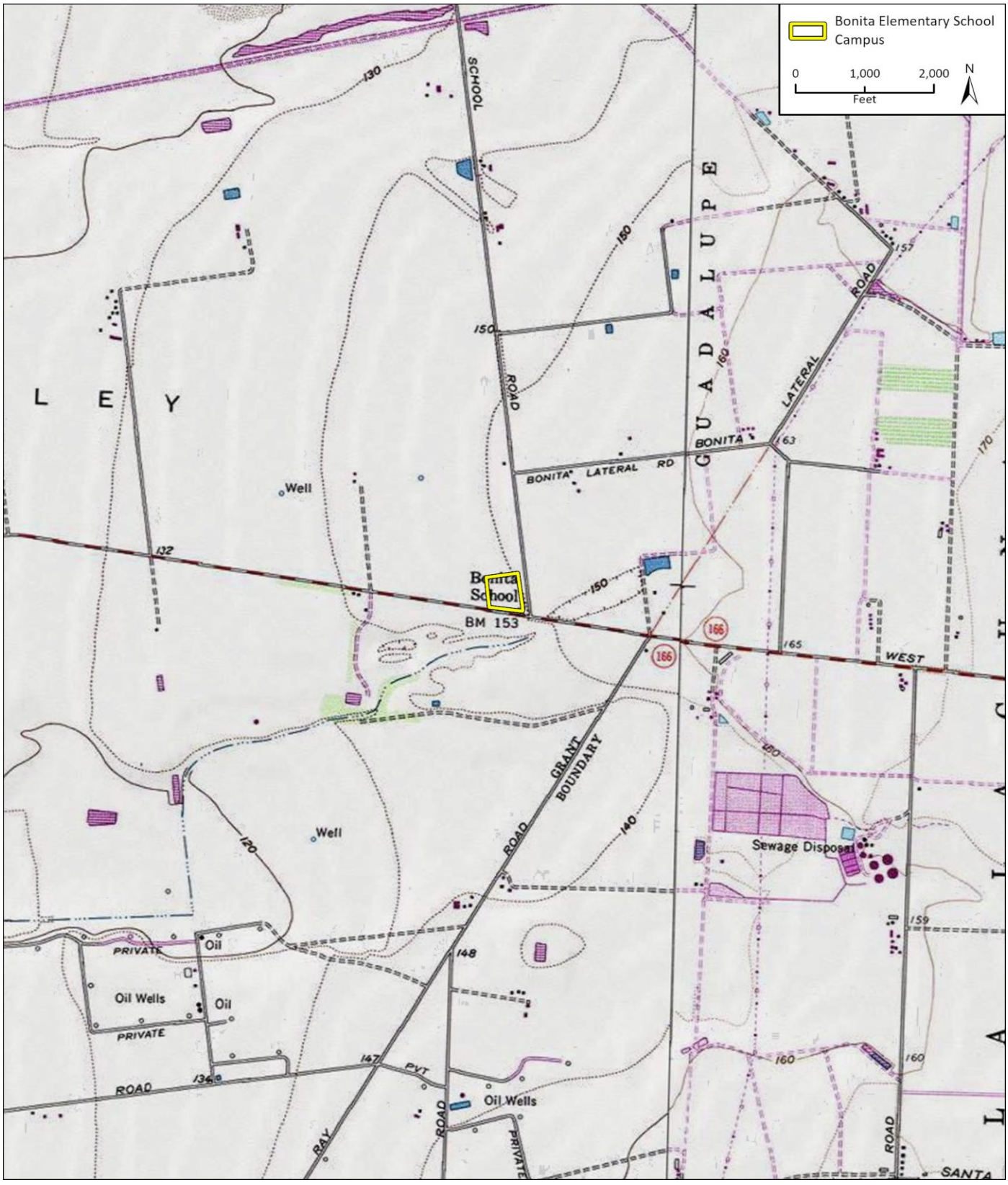
Primary #
HRI#
Trinomial

*Resource Name or #: Bonita Elementary School

*Map Name: Guadalupe

*Scale: 1:24,000

*Date of Map:1959



*Required information

ATTACHMENT E

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6Z

***Resource Name or #** (Assigned by recorder) Bonita Elementary School

B1. Historic Name: Bonita Elementary School
B2. Common Name:
B3. Original Use: School **B4. Present Use:** School
***B5. Architectural Style:** Spanish Revival Style (Kindergarten Building); N/A (all other buildings)
***B6. Construction History:** (Construction date, alterations, and date of alterations)
The Kindergarten Building was constructed ca. 1975. All other buildings post-date 1994. The campus was modernized in 2004.

***B7. Moved?** ■No ☐Yes ☐Unknown **Date:** **Original Location:**
***B8. Related Features:** N/A

B9a. Architect: N/A **b. Builder:** N/A
***B10. Significance: Theme:** N/A **Area:**
Period of Significance: N/A **Property Type:** N/A **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Developmental History

The research conducted for this study indicates Bonita Elementary School (then referred to as Bonita School) was originally a one-room schoolhouse, teaching multiple grades in one structure and serving a limited student body. Archival research was unable to determine when the original schoolhouse was built. However, a review of newspaper articles indicates it was established by 1897 (Santa Maria Times 1897). The school retained a small student body for several decades early in its history. The original schoolhouse, a small rectangular building, was located roughly in the current location of the Kindergarten Building (University of California, Santa Barbara 2023). Two additional buildings sited along SR 166 were added to the campus between 1957 and 1961 (University of California, Santa Barbara 2023). The campus retained this configuration until the mid-1970s, when the original schoolhouse and one of the buildings added to the campus in the late 1950s were replaced with the current Kindergarten Building and an associated paved parking lot. Although the entirety of the current Kindergarten Building appears present in the 1975 aerial imagery, its roof form indicates it may have been constructed in two phases. Between 1975 and 1981, the building added in the late 1950s was also demolished.

See Continuation Sheet.

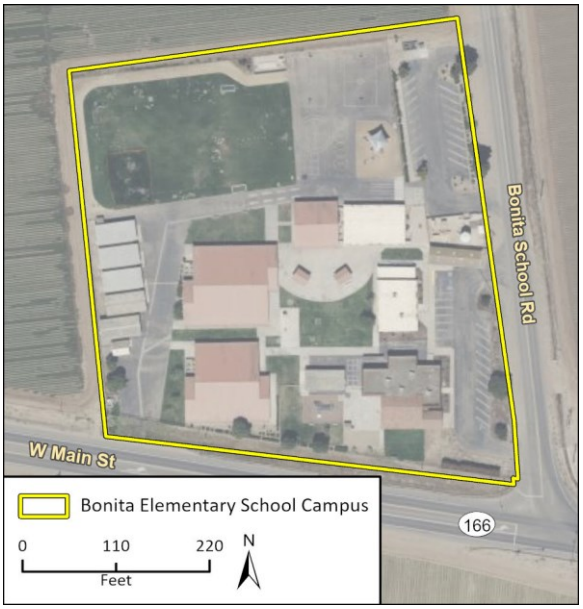
B11. Additional Resource Attributes: (List attributes and codes)

***B12. References:**

See Continuation Sheet.

B13. Remarks:
***B14. Evaluator:** Rachel Perzel, Rincon Consultants

***Date of Evaluation:** August 2023



(This space reserved for official comments.)

P3a. Description (Continued):

Along with the Kindergarten Building, the campus includes six permanent buildings and one temporary building organized around the previously-noted quad. These buildings, all of which were added to the campus following 1994, house essential campus functions such as the administration building, cafeteria, and several classroom buildings. They all feature a simple, utilitarian design aesthetic and do not embody a particular architectural style. All buildings are one-story and feature rectilinear footprints. Siding throughout these buildings is wood panel or stucco, and roof forms are gabled or flat, many with red metal cladding. Between the two parking lots along the campus's eastern property line is a maintenance area that consists of an additional permanent building, which features a barn-like design aesthetic, in addition to a water tank and various equipment, such as generators, enclosed in a chain-link fence. There are also five temporary mobile classroom buildings sited in the southwest portion of the campus, west of the quad area.

All of the campus buildings and facilities appear in good condition.

Overview of Bonita Elementary School campus, view north.

Overview of the buildings surrounding the Bonita Elementary School quad, view northwest.

B10. Significance (Continued):

Following the historic period, buildings were routinely constructed and demolished on campus to accommodate the needs of its attending population, and all extant buildings with the exception of the Kindergarten Building were constructed after 1994. The campus was modernized in 2004, and the Kindergarten Building appears to feature contemporary stucco siding, roofing materials, windows, and doors. Most recently, following 2000, five temporary mobile classroom buildings were sited in the southwest portion of the campus.

Historical Resources Evaluation

As detailed below, the subject property is recommended ineligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical resources (CRHR) under any significance criteria.

The Bonita School was initially developed prior to the turn of the 20th century as a one-room schoolhouse to serve the surrounding rural population. The original one-room schoolhouse was demolished and replaced with the current Kindergarten Building circa 1975. As the student body slowly expanded throughout the 20th century, the school campus was further developed with an initial expansion between 1957 and 1967 and another more recently, between 1994 and 2000. In addition to the Kindergarten Building, the current campus consists of six permanent buildings which date to the post-historic period along with a number of temporary buildings and structures. The research conducted for this assessment did not indicate the Bonita Elementary School campus or any individual building within it played an important role in the developmental history of unincorporated Santa Barbara County, the city of Santa Maria, or the surrounding region. Although the current campus occupies the site of the area's original one-room schoolhouse, none of the present buildings date to this early period of construction, and none of the current buildings appear to possess a significant association with the development of the surrounding region. As a result of the information summarized above, the subject property is not associated with events important to the history of the city, region, state, or nation. It is therefore recommended ineligible for listing in the NRHP and CRHR under Criteria A/1.

Research conducted for this assessment does not suggest the subject property possesses an association with any individual significant to the community, state, or nation. It is therefore recommended ineligible for listing in the NRHP and CRHR under Criteria B/2.

The Kindergarten Building features limited elements of the Spanish Revival Style, primarily its stucco cladding and barrel tile roofing material. However, the building is limited in its expression of the Spanish Revival Style and has also been recently modernized. The building therefore does not embody the Spanish Revival or any other particular architectural style, and it does not represent the work of a master or possess high artistic value. Additionally, the rest of the buildings on campus embody a utilitarian design aesthetic and do not embody a particular architectural style, represent the work of a master, or possess high artistic value. Therefore, the campus is recommended ineligible for listing in the NRHP and CRHR under Criteria C/3.

A review of available evidence and the Central Coast Information Center records search results did not indicate the subject property may yield important information pertaining to the prehistory or history of the region, state, or nation. Therefore, it is recommended ineligible for listing in the NRHP or CRHR under Criteria D/4.

B12. References (Continued)

NETR Online

2023 "Historic Aerials." Various historic aerials and topographic maps of the project area. Accessed July 2023, https://www.historicaerials.com/.

Santa Maria Times

1897 "Holiday Goods." December 11, 1897, page 3. Accessed July 2023, https://www.newspapers.com/image/628906537/?terms=%22bonita%20school%22&match=1.

University of California, Santa Barbara

2023 "Frame Finder." Historic aerial database. Accessed July 2023, https://mil.library.ucsb.edu/ap_indexes/FrameFinder/.

Appendix D

Energy Calculations

Bonita School Water System Improvements Station

Last Updated: 8/3/2023

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Excavators	1	8	36	0.38	Demolition Phase/ Paving Cutting	148
Pumps	1	8	11	0.74	Site Restoration	111
Excavators	1	8	36	0.38	Site Preparation Phase	148
Rubber Tired Loaders	1	8	150	0.36	Site Preparation Phase	525
Sweepers/Scrubbers	1	8	423	0.48	Site Preparation Phase	1,975
Rubber Tired Loaders	1	8	150	0.36	Grading Phase	525
Skid Steer Loaders	1	8	423	0.48	Grading Phase	1,975
Sweepers/Scrubbers	1	8	84	0.37	Grading Phase	336
Aerial Lifts	1	8	37	0.48	Pipeline Installation	1,094
Sweepers/Scrubbers	1	8	148	0.41	Pipeline Installation	3,361
Skid Steer Loaders	1	8	71	0.37	Pipeline Installation	1,618
Excavators	1	8	36	0.38	Tank Installation	187
Rubber Tired Loaders	1	8	84	0.37	Tank Installation	424
Sweepers/Scrubbers	1	8	37	0.48	Tank Installation	242
Pavers	1	8	81	0.42	Paving Phase	368
Paving Equipment	1	8	89	0.36	Paving Phase	346
					Total Fuel Used	**13,382 (Gallons)**

Construction Phase	Days of Operation
Demolition Phase/ Paving Cutting	23
Site Restoration	29
Site Preparation Phase	23
Grading Phase	23
Pipeline Installation	131
Tank Installation	29
Paving Phase	23
Total Days	281

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition Phase/ Paving Cutting	24.1	2.5	8.8	21.00
Site Restoration	24.1	2.5	8.8	26.47
Site Preparation Phase	24.1	7.5	8.8	62.99
Grading Phase	24.1	7.5	8.8	62.99
Pipeline Installation	24.1	7.5	8.8	358.76
Tank Installation	24.1	7.5	8.8	79.42
Paving Phase	24.1	5.0	8.8	41.99
			Fuel	**653.61**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Demolition Phase/ Paving Cutting	7.5	0	20.0	0.00
Site Restoration	7.5	0	20.0	0.00
Site Preparation Phase	7.5	48.9	20.0	2999.20
Grading Phase	7.5	0	20.0	0.00
Pipeline Installation	7.5	0	20.0	0.00
Tank Installation	7.5	0	20.0	0.00
Paving Phase	7.5	0	20.0	0.00
		Fuel		**2,999.20**
VENDOR TRIPS				
Demolition Phase/ Paving Cutting	7.5	0	5.3	0.00
Site Restoration	7.5	0	5.3	0.00
Site Preparation Phase	7.5	1.0	5.3	16.25
Grading Phase	7.5	1.0	5.3	16.25
Pipeline Installation	7.5	0	5.3	0.00
Tank Installation	7.5	0	5.3	0.00
Paving Phase	7.5	0	5.3	0.00
		Fuel		**32.51**

Total Gasoline Consumption (gallons)	**654**
Total Diesel Consumption (gallons)	**16,414**

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

Appendix E

Noise and Vibration Modeling

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 77.6 - 2023/06/05 09:41:18
- Level Range : 40-100
- SEL : 94.6
- Leq : 65.1
-

No.s	Date Time	(dB)				
1	2023/06/05 09:32:21	49.6	49.8	59.9	61.9	57.3
6	2023/06/05 09:32:36	61.4	68.8	67.4	59.4	51.1
11	2023/06/05 09:32:51	47.1	48.1	50.6	64.5	63.1
16	2023/06/05 09:33:06	66.1	60.3	56.2	59.7	61.8
21	2023/06/05 09:33:21	67.5	66.3	72.4	66.3	63.0
26	2023/06/05 09:33:36	64.0	57.5	57.3	65.3	73.9
31	2023/06/05 09:33:51	68.9	67.9	66.2	65.7	56.7
36	2023/06/05 09:34:06	49.6	46.1	47.6	62.8	66.1
41	2023/06/05 09:34:21	66.7	59.5	53.3	52.1	54.5
46	2023/06/05 09:34:36	57.2	62.5	63.4	58.4	56.0
51	2023/06/05 09:34:51	61.3	63.5	56.4	50.6	46.7
56	2023/06/05 09:35:06	44.7	45.3	48.9	49.8	53.7
61	2023/06/05 09:35:21	59.5	74.1	69.0	62.8	69.0
66	2023/06/05 09:35:36	60.8	67.9	68.5	65.5	66.6
71	2023/06/05 09:35:51	66.1	62.4	55.7	54.7	58.5
76	2023/06/05 09:36:06	63.6	64.8	61.9	63.2	57.3
81	2023/06/05 09:36:21	51.2	50.5	65.9	64.9	57.2
86	2023/06/05 09:36:36	51.2	48.6	52.2	55.8	61.2
91	2023/06/05 09:36:51	67.0	61.5	57.2	53.5	60.4
96	2023/06/05 09:37:06	68.9	69.7	70.2	67.8	65.0
101	2023/06/05 09:37:21	67.7	64.6	71.3	64.2	58.8
106	2023/06/05 09:37:36	57.2	54.9	52.9	52.4	61.6
111	2023/06/05 09:37:51	63.8	57.0	63.3	62.4	62.4
116	2023/06/05 09:38:06	65.5	63.9	56.2	51.6	50.8
121	2023/06/05 09:38:21	49.1	47.3	49.6	49.7	49.0
126	2023/06/05 09:38:36	49.3	58.0	68.5	68.6	64.4
131	2023/06/05 09:38:51	58.4	54.3	55.2	68.2	64.0
136	2023/06/05 09:39:06	65.5	59.4	55.2	52.7	51.1
141	2023/06/05 09:39:21	51.8	60.2	62.9	58.4	62.5
146	2023/06/05 09:39:36	68.7	69.0	64.7	66.7	68.1
151	2023/06/05 09:39:51	70.3	62.3	64.1	70.7	63.7
156	2023/06/05 09:40:06	65.1	66.0	64.5	58.1	66.7
161	2023/06/05 09:40:21	59.7	54.8	70.2	69.3	61.6
166	2023/06/05 09:40:36	56.8	54.2	53.0	52.6	53.6
171	2023/06/05 09:40:51	56.8	60.6	65.6	69.6	70.3
176	2023/06/05 09:41:06	65.1	60.6	60.4	77.6	69.8
181	2023/06/05 09:41:21	63.5	71.5	65.1	64.8	65.7
186	2023/06/05 09:41:36	61.9	65.9	67.7	68.5	74.2
191	2023/06/05 09:41:51	69.7	64.4	71.8	65.3	67.0
196	2023/06/05 09:42:06	61.9	60.7	56.6	57.5	60.4
201	2023/06/05 09:42:21	67.6	71.6	68.9	67.9	72.1
206	2023/06/05 09:42:36	72.8	73.3	66.3	58.7	56.7
211	2023/06/05 09:42:51	54.4	52.6	53.0	51.9	47.9
216	2023/06/05 09:43:06	46.9	44.1	43.2	45.7	47.2
221	2023/06/05 09:43:21	48.6	51.5	47.6	47.7	47.1
226	2023/06/05 09:43:36	52.4	57.0	68.5	66.7	68.9
231	2023/06/05 09:43:51	71.2	64.8	59.8	54.8	51.2
236	2023/06/05 09:44:06	50.4	52.6	56.7	55.6	63.2
241	2023/06/05 09:44:21	73.6	68.2	58.6	51.3	58.8
246	2023/06/05 09:44:36	64.2	67.6	70.3	63.9	65.7
251	2023/06/05 09:44:51	65.8	64.8	57.6	51.9	53.4
256	2023/06/05 09:45:06	55.8	56.7	53.4	53.7	57.7
261	2023/06/05 09:45:21	65.6	67.3	63.8	61.4	64.1
266	2023/06/05 09:45:36	60.0	57.2	63.6	70.5	69.6
271	2023/06/05 09:45:51	58.7	50.1	50.3	53.8	69.3
276	2023/06/05 09:46:06	72.1	71.0	71.2	68.6	69.3
281	2023/06/05 09:46:21	63.4	57.1	55.0	48.8	49.1
286	2023/06/05 09:46:36	51.6	44.7	50.5	46.6	50.3
291	2023/06/05 09:46:51	52.9	56.0	60.5	62.2	63.4
296	2023/06/05 09:47:06	57.4	60.3	65.9	66.9	73.7

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 71.1 - 2023/06/05 10:42:48
- Level Range : 40-100
- SEL : 91.4
- Leq : 61.9
-

No.s	Date Time	(dB)				
1	2023/06/05 10:37:02	48.8	61.1	55.7	54.8	58.6
6	2023/06/05 10:37:17	51.6	50.4	49.6	51.0	56.0
11	2023/06/05 10:37:32	59.7	61.9	58.0	61.5	67.7
16	2023/06/05 10:37:47	60.7	62.8	56.4	60.1	57.3
21	2023/06/05 10:38:02	49.8	51.0	52.4	54.1	54.1
26	2023/06/05 10:38:17	58.6	65.1	65.6	63.8	67.5
31	2023/06/05 10:38:32	62.4	61.9	66.4	62.8	64.1
36	2023/06/05 10:38:47	63.4	65.3	61.1	53.7	48.5
41	2023/06/05 10:39:02	51.1	56.0	61.0	57.9	49.8
46	2023/06/05 10:39:17	47.3	54.1	68.1	69.4	67.1
51	2023/06/05 10:39:32	60.3	53.9	50.1	48.7	59.0
56	2023/06/05 10:39:47	60.0	53.6	52.4	57.2	67.5
61	2023/06/05 10:40:02	64.8	63.9	63.7	63.0	63.5
66	2023/06/05 10:40:17	59.1	63.5	68.0	69.5	61.8
71	2023/06/05 10:40:32	56.8	51.4	50.7	48.3	58.6
76	2023/06/05 10:40:47	68.0	59.5	51.0	46.5	46.9
81	2023/06/05 10:41:02	60.7	57.8	51.2	46.9	47.0
86	2023/06/05 10:41:17	64.0	66.0	62.3	62.6	60.6
91	2023/06/05 10:41:32	51.2	45.5	43.4	42.5	43.1
96	2023/06/05 10:41:47	55.9	61.7	55.2	49.2	45.8
101	2023/06/05 10:42:02	45.1	47.0	53.7	64.8	67.5
106	2023/06/05 10:42:17	66.5	59.0	58.7	60.2	64.4
111	2023/06/05 10:42:32	59.7	61.0	68.8	66.0	66.6
116	2023/06/05 10:42:47	70.7	65.6	62.4	58.1	56.2
121	2023/06/05 10:43:02	65.5	60.5	57.7	62.3	59.4
126	2023/06/05 10:43:17	66.2	66.6	62.7	61.3	58.1
131	2023/06/05 10:43:32	52.5	50.8	60.1	64.2	62.8
136	2023/06/05 10:43:47	60.5	65.3	58.3	55.3	58.6
141	2023/06/05 10:44:02	62.2	63.9	59.1	57.6	59.8
146	2023/06/05 10:44:17	61.4	65.0	56.9	52.3	50.4
151	2023/06/05 10:44:32	50.4	50.1	51.3	50.3	50.3
156	2023/06/05 10:44:47	52.0	53.3	53.1	58.2	59.1
161	2023/06/05 10:45:02	56.4	62.2	65.0	63.8	63.9
166	2023/06/05 10:45:17	63.4	65.2	66.2	68.1	65.2
171	2023/06/05 10:45:32	64.4	58.9	56.4	60.0	59.7
176	2023/06/05 10:45:47	62.3	60.9	58.1	60.8	53.4
181	2023/06/05 10:46:02	49.9	50.0	50.4	52.1	53.2
186	2023/06/05 10:46:17	54.8	56.2	58.1	61.0	65.3
191	2023/06/05 10:46:32	63.2	65.2	63.1	58.8	62.0
196	2023/06/05 10:46:47	56.6	64.2	63.1	54.1	50.3
201	2023/06/05 10:47:02	51.5	63.5	64.8	66.6	58.8
206	2023/06/05 10:47:17	53.4	54.4	52.6	48.3	47.4
211	2023/06/05 10:47:32	49.8	53.0	63.8	61.8	63.2
216	2023/06/05 10:47:47	69.1	67.9	66.8	59.0	56.4
221	2023/06/05 10:48:02	69.0	62.1	62.2	64.0	56.2
226	2023/06/05 10:48:17	63.0	59.6	56.9	63.1	65.5
231	2023/06/05 10:48:32	66.7	57.7	61.2	54.7	49.3
236	2023/06/05 10:48:47	50.6	46.0	45.9	61.0	59.1
241	2023/06/05 10:49:02	52.4	48.3	52.4	56.9	62.1
246	2023/06/05 10:49:17	60.2	70.1	63.2	66.9	63.6
251	2023/06/05 10:49:32	57.3	52.9	52.8	55.2	60.9
256	2023/06/05 10:49:47	63.9	62.3	59.6	66.2	65.4
261	2023/06/05 10:50:02	69.8	64.1	60.0	61.7	58.9
266	2023/06/05 10:50:17	53.5	54.2	60.9	56.7	53.0
271	2023/06/05 10:50:32	52.7	51.6	51.8	54.6	65.5
276	2023/06/05 10:50:47	64.2	68.1	64.2	57.4	54.6
281	2023/06/05 10:51:02	58.2	63.2	66.6	65.4	62.8
286	2023/06/05 10:51:17	62.6	60.8	58.9	55.2	60.6
291	2023/06/05 10:51:32	57.8	62.9	57.9	52.7	53.9
296	2023/06/05 10:51:47	58.6	59.1	53.5	52.5	53.1

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 40-100
- Max dB : 79.3 - 2023/06/05 11:03:55
- Level Range : 40-100
- SEL : 96.9
- Leq : 67.4
-

No.s	Date Time	(dB)				
1	2023/06/05 10:58:24	44.8	44.7	44.6	47.3	47.0
6	2023/06/05 10:58:39	50.0	52.2	53.0	60.3	64.0
11	2023/06/05 10:58:54	63.4	69.7	71.1	71.4	64.3
16	2023/06/05 10:59:09	60.7	66.8	72.1	70.6	68.4
21	2023/06/05 10:59:24	70.0	68.6	67.3	65.6	59.8
26	2023/06/05 10:59:39	59.2	74.4	73.3	68.9	60.2
31	2023/06/05 10:59:54	54.2	56.3	62.8	72.9	70.9
36	2023/06/05 11:00:09	61.2	54.1	54.8	53.8	48.9
41	2023/06/05 11:00:24	45.2	45.5	46.7	49.9	53.6
46	2023/06/05 11:00:39	63.0	65.7	65.2	66.9	68.8
51	2023/06/05 11:00:54	71.2	67.1	63.3	72.5	65.0
56	2023/06/05 11:01:09	57.9	67.2	71.6	67.7	63.2
61	2023/06/05 11:01:24	54.3	47.6	48.8	52.5	61.8
66	2023/06/05 11:01:39	66.8	59.5	51.2	54.5	65.7
71	2023/06/05 11:01:54	65.7	59.3	53.1	62.9	65.9
76	2023/06/05 11:02:09	58.7	59.2	57.3	56.6	65.0
81	2023/06/05 11:02:24	65.7	58.8	61.1	66.6	64.0
86	2023/06/05 11:02:39	63.9	64.2	67.4	68.9	61.9
91	2023/06/05 11:02:54	54.2	63.1	59.2	53.7	60.3
96	2023/06/05 11:03:09	62.3	65.2	69.7	67.9	69.1
101	2023/06/05 11:03:24	68.2	63.4	73.0	72.5	69.5
106	2023/06/05 11:03:39	65.2	60.6	59.2	65.1	73.0
111	2023/06/05 11:03:54	78.3	70.9	70.5	73.4	70.2
116	2023/06/05 11:04:09	63.7	55.5	51.6	53.4	51.9
121	2023/06/05 11:04:24	53.7	64.4	70.3	63.2	65.9
126	2023/06/05 11:04:39	67.0	58.7	58.5	74.0	72.3
131	2023/06/05 11:04:54	64.8	56.0	51.0	57.0	59.9
136	2023/06/05 11:05:09	58.7	61.7	70.3	68.1	61.4
141	2023/06/05 11:05:24	55.3	56.9	68.6	70.4	76.3
146	2023/06/05 11:05:39	78.3	73.5	67.7	65.9	65.7
151	2023/06/05 11:05:54	57.5	55.3	64.0	67.8	64.7
156	2023/06/05 11:06:09	67.5	64.8	66.0	63.9	68.9
161	2023/06/05 11:06:24	69.3	64.6	62.6	64.0	62.9
166	2023/06/05 11:06:39	62.6	60.6	55.6	54.4	59.1
171	2023/06/05 11:06:54	60.4	53.1	47.5	46.8	52.9
176	2023/06/05 11:07:09	59.3	69.3	75.0	69.6	69.2
181	2023/06/05 11:07:24	63.8	70.5	70.8	66.2	71.6
186	2023/06/05 11:07:39	72.9	68.0	61.5	64.4	66.6
191	2023/06/05 11:07:54	63.9	65.3	67.3	62.3	63.0
196	2023/06/05 11:08:09	65.7	61.6	61.3	56.0	57.9
201	2023/06/05 11:08:24	60.5	62.1	60.7	62.9	67.6
206	2023/06/05 11:08:39	63.2	75.1	69.6	67.7	66.8
211	2023/06/05 11:08:54	71.4	69.7	69.5	65.6	67.1
216	2023/06/05 11:09:09	59.3	53.4	52.9	63.5	67.1
221	2023/06/05 11:09:24	61.1	65.0	72.9	70.0	69.3
226	2023/06/05 11:09:39	66.9	65.2	65.3	68.8	69.7
231	2023/06/05 11:09:54	64.9	58.9	59.2	58.5	55.6
236	2023/06/05 11:10:09	58.6	67.0	69.1	67.4	63.3
241	2023/06/05 11:10:24	60.8	62.1	66.4	72.3	70.7
246	2023/06/05 11:10:39	66.7	65.3	58.9	67.4	71.3
251	2023/06/05 11:10:54	62.5	67.6	68.7	74.7	72.2
256	2023/06/05 11:11:09	67.0	65.3	64.7	66.1	64.0
261	2023/06/05 11:11:24	70.0	66.1	68.2	70.0	63.1
266	2023/06/05 11:11:39	62.5	68.2	67.3	66.9	67.1
271	2023/06/05 11:11:54	67.5	59.7	53.8	57.7	66.0
276	2023/06/05 11:12:09	68.4	63.6	65.8	70.7	64.4
281	2023/06/05 11:12:24	61.0	75.2	67.0	63.6	67.9
286	2023/06/05 11:12:39	65.5	67.4	70.8	72.7	70.1
291	2023/06/05 11:12:54	67.2	71.4	71.5	67.9	67.5
296	2023/06/05 11:13:09	64.7	63.5	64.6	68.1	67.0

Bonita Elementary School Water System Improvements Project

Construction Noise Attenuation Calculations

	Noise Level @ 50 ft	Bonita School	Residence on W. Main	410 Black Road
Distance (feet)		100	310	110
Demo/Pavement Cutting	**81**	**75**	**65**	**74**
Site Prep	**82.5**	**76**	**67**	**76**
Grading	**79.5**	**73**	**64**	**73**
Tank Installation	**82.5**	**76**	**67**	**76**
Infrastructure Installation	**80.5**	**74**	**65**	**74**
Paving	**83.5**	**77**	**68**	**77**
Site Restoration	**76**	**70**	**60**	**69**

ATTACHMENT E

	Vibration @ 25 ft	Bonita School	Residence at 2475 West Main Street	Residence at 410 Black Road
		50	260	60
Vibratory Roller	**0.21**	**0.074**	**0.006**	**0.056**
Loaded Trucks	**0.076**	**0.027**	**0.002**	**0.020**

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Santa Barbara
Address: 1100 Anacapa Street Suite 1
Santa Barbara, CA 93101

From:
Public Agency: Santa Maria-Bonita School District
Address: 708 South Miller Street
Santa Maria, CA 93454
Contact: Javier Cavazos, Coordinator of Maintenance, Operations, Facilities, Transportation
Phone: (559) 399-7698

Lead Agency (if different from above):

Address:

Contact:
Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2024010761

Project Title: Bonita Elementary School Drinking Water Improvements Project

Project Applicant: Santa Maria-Bonita School District

Project Location (include county): SR 166, Black Road, and 2715 West Main Street in unincorporated Santa Barbara County (see attached map)

Project Description:

The proposed project consists of the connection of the City of Santa Maria's (City) water system to Bonita Elementary School via approximately 8,100 linear feet of a two-inch diameter service line from the planned terminus of the City's water system near the northeast corner of the City's Wastewater Treatment Plant to Bonita Elementary School. To meet peak demand, fire flow requirements, and irrigation needs, the project would also include repurposing the existing 10,000-gallon storage tank and wells and potentially adding a hydropneumatic tank (up to 1,000 gallons in capacity) with appurtenances such as an air compressor and additional above-grade piping and isolation valves. Minor piping modifications to the existing system would be required to disconnect the proposed potable, domestic supply from the existing system. In addition, the project would involve replacing lead service lines in the school's Building K. Other improvements would include installation of blowoffs along the pipeline and other appurtenances on Bonita Elementary School's property.

This is to advise that the Santa Maria-Bonita School District has approved the above
(☒ Lead Agency or ☐ Responsible Agency)

described project on 5/8/2024 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
https://www.smbsd.org/departments/maintenance-operations/forms-and-reports

Signature (Public Agency): [signature] Title: Deputy Superintendent for Business Services

Date: 5/9/2024 Date Received for filing at OPR:

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

ATTACHMENT F

Santa Maria-Bonita School District

708 South Miller Street, Santa Maria, California 93454
Phone: (805) 928-1783 • https://smbsd.org

Figure 1 Project Site Map

Imagery provided by Microsoft Bing and its licensors © 2023.

ATTACHMENT F

Recording Requested By:

LAFCO
Santa Barbara Local Agency Formation Commission

Return via interoffice mail to:

LAFCO
105 East Anapamu Street Rm. 407
Santa Barbara CA 93101
805-568-3391 FAX 805-568-2249

LANDOWNER CONSENT TO ANNEXATION TO THE CITY OF SANTA MARIA UNDER AN OUT-OF AGENCY SERVICE AGREEMENT

Santa Barbara Local Agency Formation Commission (LAFCO)

December 12, 2024

LAFCO FILE OUT-OF AGENCY SERVICE AGREEMENT No 24-04: THE CITY OF SANTA MARIA TO PROVIDE OUT-OF-AGENCY WATER SERVICE TO SANTA MARIA-BONITA ELEMENTARY SCHOOL

As landowner(s) of the property described below, I hereby consent to my/our property being included in the above referenced Out-of-Agency Service Agreement ("Agreement").

Approval of this Agreement is conditioned upon recordation of the landowner's consent and agreement to future annexation of the property subject to the Agreement to City of Santa Maria, which consent shall run with the land and be binding upon the heirs, executors, administrators, successors and assigns of landowner.

PROPERTY OWNER ADDRESS: 2715 West Main Street, Santa Maria, CA. 93458

ASSESSORS PARCEL NO: 113-050-007

LANDOWNER(S): Matthew Beecher, Deputy Superintendent
2715 West Main Street
SANTA MARIA CA 93458

_____

Signature Date

Please attach an Acknowledgement from a Notary for all signatures.

ATTACHMENT G