CITY OF PLEASANTON PFAS TREATMENT AND WELLS REHABILITATION PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for
City of Pleasanton

June 2022

ESA

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CHAPTER 1
Introduction

1.1 Organization of the Document

This document is organized to assist the reader in understanding the potential impacts that the City of Pleasanton's (City) PFAS (per- and polyfluoroalkyl substances) Treatment and Wells Rehabilitation Project (Project) may have on the environment and to fulfill the requirements of the California Environmental Quality Act (CEQA).

Chapter 1, Introduction, describes this document's purpose under CEQA, describes the public participation process, and summarizes the applicable regulatory requirements.

Chapter 2, Project Description, provides an introduction to the Project, including Project background, needs and objectives, and discusses the proposed facilities.

Chapter 3, Environmental Checklist, presents the CEQA Initial Study Environmental Checklist, analyzes environmental impacts resulting from the Project and describes mitigation measures that would avoid or reduce potential significant impacts to less-than-significant levels.

Chapter 4, Report Preparers, presents the individuals who have contributed to this Initial Study/Mitigated Negative Declaration.

Appendix A, SRF Alternatives Analysis, includes an impact comparison analysis of a No Action alternative and the proposed Project. This is an application requirement for the State Water Resources Control Board's Drinking Water State Revolving Fund (SRF) program.

Appendix B, Air Quality and Greenhouse Gas Emissions Estimates, includes the data inputs and results of the CalEEMod modeling conducted for the Project.

Appendix C, Special-Status Species List, includes lists provided by resource agencies identifying threatened and endangered species that may occur in the Project area.

Appendix D, Noise Modeling Data, includes the noise monitoring output, roadway construction noise model output, and the operational pump noise calculations for the Project.

Appendix E, Mitigation Monitoring and Reporting Plan, presents the Project's *draft* Mitigation Monitoring and Reporting Plan organized in a tabular format, keyed to each mitigation measure incorporated into the Project.

1.2 Purpose of the Mitigated Negative Declaration

The City of Pleasanton (City), acting as the Lead Agency under CEQA, is proposing to design and construct the Project.

The purpose of the following Initial Study (IS) was to provide a basis for deciding whether to prepare an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration. Based on its findings, the City determined that a MND would satisfy the requirements of CEQA (Public Resources Code, §21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, §15000 et seq.), as noted below.

CEQA encourages Lead Agencies and applicants to modify their projects to avoid significant adverse impacts to the environment.

Section 15063(d) of the CEQA Guidelines states the content requirements of an IS as follows:

> 15063(d) Contents. An Initial Study shall contain in brief form:
>
> (1) A description of the project including the location of the project;
>
> (2) An identification of the environmental setting;
>
> (3) An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
>
> (4) A discussion of the ways to mitigate the significant effects identified, if any;
>
> (5) An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls;
>
> (6) The name of the person or persons who prepared or participated in the Initial Study.

1.3 Decision to Prepare a Mitigated Negative Declaration for this Project

As noted above, this Project is subject to the requirements of CEQA and the City is the CEQA Lead Agency for this Project. Prior to making a decision to approve this Project, the Lead Agency must identify and document the potential significant environmental effects of the Project in accordance with CEQA. This IS/MND has been prepared under the direction of the City to fulfill these requirements.

The IS analysis indicates that some impacts would be potentially significant, but that Project changes and proposed mitigation measures would result in those impacts being reduced to less-than-significant levels. In accordance with CEQA Guidelines Section 15070, a MND is the appropriate document for this Project because the IS identifies potentially significant effects; however:

a. Revisions to the project plan were made that would avoid, or reduce, the effects to a point where clearly no significant effects would occur, and;

b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

1.4 Public Review Process

This Draft IS/MND is being circulated to local and State agencies, interested organizations, and individuals who might have had interest in, and wish to review and provide comments on, the project description, the proposed mitigation measures, or other aspects of the report. The 30-day public review period per CEQA Guidelines Section 15105(b) extends from June 28, 2022, through July 27, 2022.

The Draft IS/MND and supporting documentation has been posted on the City's website during this public review period:

https://cityofpleasantonca.gov/pfasproject

Printed copies of the Draft IS/MND will be available for public review at the following locations:

Pleasanton Public Library
Reference Desk
400 Old Bernal Avenue
Pleasanton, CA 94566
(925) 931-3400

City of Pleasanton
Operations Services Center
3333 Busch Road
Pleasanton, CA 94566
(925) 931-5500

City of Pleasanton
Permit Center
200 Old Bernal Road
Pleasanton, CA 94566
(925) 931-5630

A limited number of printed copies of the Draft IS/MND are available upon request. Please reach out to Todd Yamello at (925) 931-5519 or by e-mail at tyamello@cityofpleasantonca.gov with your name and mailing address for a printed copy of the Draft IS/MND.

Written comments or questions regarding the Draft IS/MND should be directed to the attention of Todd Yamello at the address provided below.

City of Pleasanton, Operations Services Center
ATTN: Todd Yamello
P.O. Box 520
Pleasanton, CA 94566
Phone: (925) 931-5519
e-mail: tyamello@cityofpleasantonca.gov

Technical inquiries about the Project may also be directed to Todd Yamello using the contact information provided above.

1.5 Agencies' Use of this Document

CEQA Responsible Agencies are State and local agencies that have some responsibility or authority for carrying out or approving a project. In many instances, these public agencies must make a discretionary decision to issue an approval or permit, provide right-of-way or encroachment, or provide funding or other resources that are critical to the execution of a project. Trustee agencies are State agencies that have the authority by law for the protection of natural resources held in trust for the public. The California Department of Fish and Wildlife and the State Lands Commission are examples of trustee agencies.

This IS/MND is intended to assist State and local agencies with some form of discretionary jurisdiction to carry out their responsibilities for permit review or approval authority over various aspects of a project. This Project would likely require specific permitting and/or review by the agencies listed in **Table 1-1**.

TABLE 1-1
REQUIRED PERMITS AND APPROVALS

Potential Permit or Approval	Agency
• State Revolving Fund • Construction stormwater general permit	State Water Resources Control Board
• Domestic water supply permit amendment • Drinking Water Source Assessment and Protection	Division of Drinking Water
• Existing well destruction and new well construction permit.	Zone 7 Water Agency
• Engine permits/registrations for Well 8 / centralized treatment facility standby generator and Well 9 and 10 portable generators	Bay Area Air Quality Management District
• Electrical power service applications for Well 9, Well 10, and Well 8 / Centralized Treatment Facility	Pacific Gas and Electric
• GAC treatment media washing disposal	Dublin San Ramon Services District

CHAPTER 2
Project Description

2.1 Introduction

The City of Pleasanton (City) proposes to design and construct the PFAS (per- and polyfluoroalkyl substances) Treatment and Wells Rehabilitation Project (Project). The Project includes:

- Construction of a centralized treatment facility (CTF) located at the City's Operations Service Center (OSC) for disinfection, fluoridation, and PFAS treatment of the City's groundwater.

- Construction of the new Well 9 Facility (to replace the existing Well 5 Facility); rehabilitation of the existing Well 6 Facility (to be renamed Well 10 Facility upon its completion); and rehabilitation of the existing Well 8 Facility.

- Installation of approximately 5,200 feet of piping to convey raw groundwater from the well facilities to the CTF; and upsizing 1,600 feet of treated water distribution main to allow City treated groundwater to be distributed from a centralized location.

- Destruction of Well 3 and 4 casing structures, which were abandoned numerous years ago.

The City's existing Well 5, 6, and 8 facilities supply approximately 20 percent of the City's potable water demands through an annual groundwater pumping allotment of 1,140 million gallons per year. The other 80 percent is supplied by the Zone 7 Water Agency (Zone 7). The City owns and operates a treated water distribution system including pipelines, storage tanks, and booster pump stations that deliver approximately 4,500 million gallons of potable water to 22,000 customers per year. The City typically operates up to two of its three wells at a given time, combined with Zone 7 supply, to meet drinking water demands.

PFAS include thousands of manufactured fluorinated chemicals that have been widely used since the 1940s in common, everyday products from food packaging, to personal care products, to water-resistant clothing, to firefighting foam. Due to the widespread use of PFAS over the last 80 years, and their resistance to biodegradation, trace amounts of many PFAS chemicals are commonly found in the air, soil, water, and the blood of animals and humans. Two widely used PFAS compounds suspected of posing a risk to human health, PFOA and PFOS[1], were mostly phased out of production in the early 2000's, however, many PFAS remain in use. Because PFAS are ubiquitous and persistent in the environment, there are many pathways for these chemicals to

[1] PFOA is perfluorooctanoic acid and PFOS is perfluorooctanesulfonic acid.

enter the water supply, potentially posing a health risk. Major sources of PFAS contamination in drinking water may include fire training / fire response sites, military bases, industrial sites, and landfills.

In March 2019, the California State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW), initiated a statewide PFAS phased investigation that issued quarterly testing orders to hundreds of drinking water sources across the State to monitor levels of PFOA, PFOS, and other select PFAS. In September 2020, DDW issued a statewide order extending the duration of required monitoring. DDW has established notification levels (NL) and response levels (RL) for PFOA and PFOS; and are in the process of establishing NLs and RLs for other select PFAS. Drinking water sources that exceed an established NL are required to provide notification to their governing body. Sources that exceed an established RL are required to be treated to remove the contaminant, be removed from service, or require public notification of the exceedance. DDW plans to formally regulate PFAS in drinking water and is currently in the process of establishing maximum contaminant levels (MCLs).

In accordance with DDW orders, City Wells 5, 6 and 8 have been sampled quarterly for PFAS since 2019. Sampling results show detection of PFAS in all three wells, with Well 8 testing for PFOS above the RL. In response, the City has provided various forms of notification and removed Well 8 from service in 2019.

Well 5 was constructed in the early 1960s with the casing and pumping equipment located in a belowground vault. The entire Well 5 facility has reached the end of its useful life and requires replacement. Well 6 was also constructed in the early 1960s. The Well 6 building houses the casing, pumping equipment, and common electrical and chemical treatment equipment for both Wells 5 and 6. The Well 6 casing and all supporting equipment have reached the end of their useful life and require replacement. The Well 6 building is in satisfactory condition.

Well 8 was constructed in 1992. The Well 8 building houses the casing, pumping equipment, electrical equipment, and chemical treatment equipment. Well 8 has a history of operational issues including odor and water discoloration that were addressed through a well cleaning/rehabilitation program in 1999, and high turbidity experienced during higher flowrate pumping. Well 8 was designed for an approximate pumping capacity of 3,500 gallons per minute (gpm) but the City has operated the well at a reduced pumping capacity of approximately 2,500 gpm or less since 2002 to mitigate the turbidity issues. The Well 8 casing is believed to be in sound structural condition with some modifications anticipated to address the turbidity issues at higher pumping rates. The Well 8 building is also believed to be in sound structural condition with rehabilitation required to the shell and accessories. Most of the supporting equipment for Well 8 are reaching the end of their useful life and require replacement.

The Project is subject to the California Environmental Quality Act (CEQA). The City of Pleasanton, as the CEQA Lead Agency, has decided to prepare this Initial Study/Mitigated Negative Declaration (IS/MND) to further analyze potential environmental impacts of the proposed Project. The IS/MND will evaluate the direct and indirect impacts of construction and

operations associated with improvement and maintenance of existing facilities, as well as construction of new facilities.

2.2 Project Goals and Objectives

The goal of the Project is to extend the useful life of the City's groundwater well facilities as safe, reliable, and locally controlled sources of water. The objectives of the Project are to:

- Implement a centralized treatment system for the City's groundwater wells to reduce PFAS concentrations below anticipated regulations and provide disinfection and fluoridation.
- Rehabilitate and/or replace well facilities to extend their useful life to approximately 30 years.
- Plan for the centralized treatment facility to be expandable in the event additional treatment improvements are needed to meet future water regulations.
- Implement improvements in a timely fashion to increase probability of meeting PFAS regulatory timelines and reduce the window of purchasing supplemental water from Zone 7.

2.3 Project Location and Setting

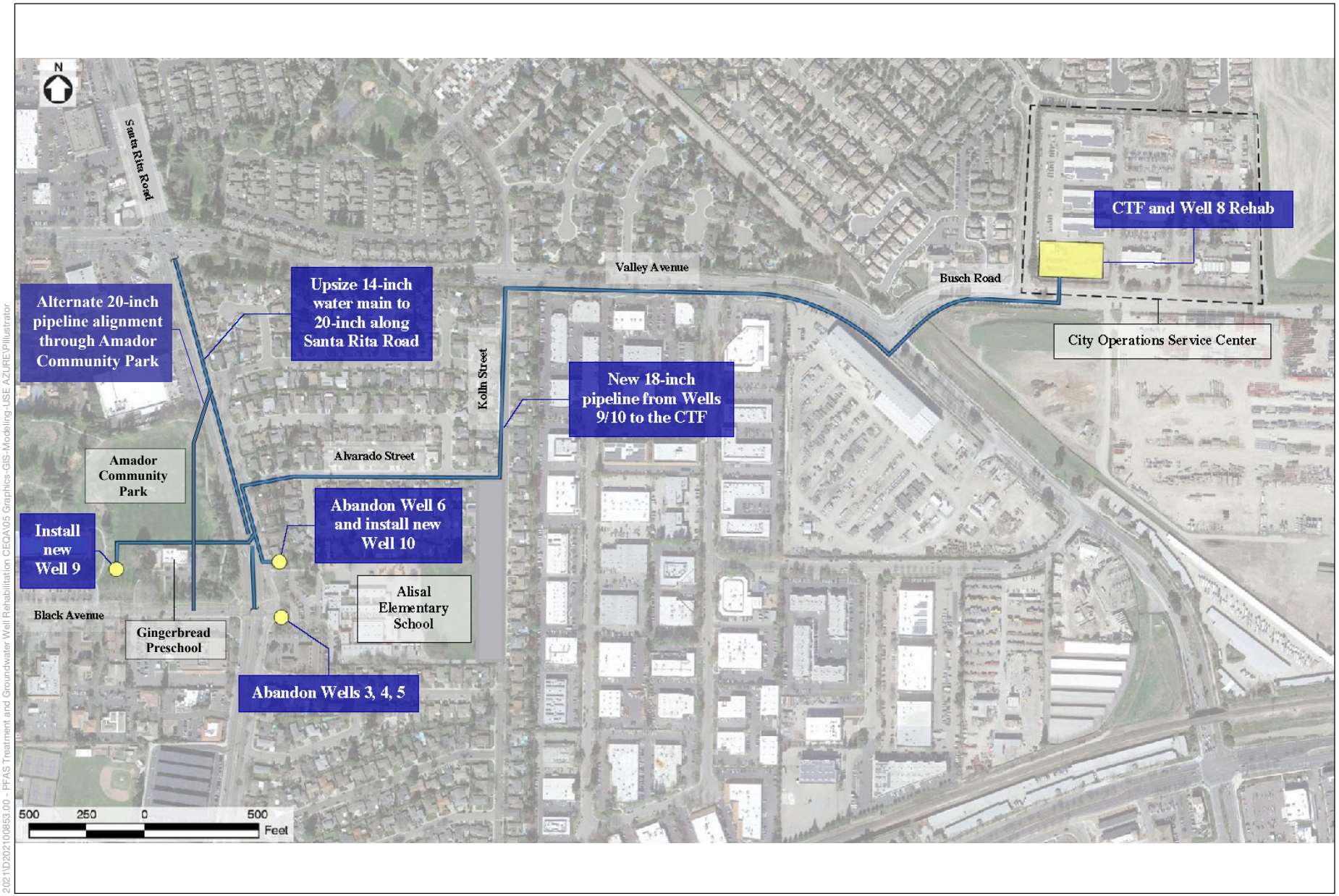
The Project is located in Alameda County in the City of Pleasanton (see **Figure 2-1**, *Regional Location*) in the vicinity of the intersection of Santa Rita Road and Black Avenue on the west, and at the City's Operation Service Center (OSC) to the east (see **Figure 2-2**, *Project Overview*). The proposed centralized treatment facility (CTF) and existing Well 8 facility is located at the City's OSC at 3333 Busch Road. The existing Wells 3, 4 and 5 (to be abandoned) are located on a City-owned parcel just east of the intersection of Santa Rita Road and Black Avenue. The rehabilitation of existing Well 6 (to be renamed Well 10 after completion) is located on a City-owned parcel northeast of the intersection of Santa Rita Road and Black Avenue. The construction of the new Well 9 Facility would be located in the south portion of Amador Community Park west of the Gingerbread Preschool on a parcel owned by the City. New water piping to convey raw groundwater from Wells 9 and 10 to the CTF would be installed along Santa Rita Road, Alvarado Street, Kolln Street, Valley Avenue, and Busch Road. Treated water distribution piping upsizing would be performed along Santa Rita Road to allow the distribution of treated groundwater from the CTF to the City's customers.

SOURCE: ESRI, 2019; ESA, 2021

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-1
Regional Location
Pleasanton, CA

ESA



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SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-2
Project Overview

ESA

2.4 Proposed Project

The Project includes centralized PFAS and chemical treatment for the City's wells; replacing, rehabilitating, and abandoning wells; and installing pipelines to support the new facilities (see Figure 2-2, *Project Overview*). The following describes each of the Project's three components: (1) CTF construction, (2) well replacement, rehabilitation, and abandonment and (3) pipeline installation and replacement.

2.4.1 Project Components

Centralized Treatment Facility Construction

- **CTF Site:** The CTF site is approximately 1.1 acres in area and located at the southwest corner of the City's OSC (see **Figure 2-2a**, *Centralized Treatment Facility and Well 8 Site*) and includes PFAS and chemical treatment facilities, as well as existing Well 8 (described below). The CTF includes additional land to the east for future treatment expansion. Existing landscaping along the south perimeter of the site would be enhanced to improve appearance and screening. The site will also be fenced for security and separated from other OSC facilities. The site stormwater facilities would be designed in accordance with the Alameda County's Clean Water Program, C.3 Stormwater Technical Guidance Manual. The PFAS and chemical treatment facilities are each described in more detail below.

- **PFAS Treatment Facility:** The PFAS Treatment facility would include 9 treatment trains (2 vessels per train) with the potential for the initial project installation to be limited to 7 trains. The treatment vessels will be located outdoors at the south end of the site and are approximately 27 feet in height. The treatment vessels would be installed on an approximate 175- by 40-foot concrete slab and would be designed for a treatment capacity of 8,100 gpm for 9 trains (5,800 gpm for 7 trains). Ancillary facilities include de-sanding equipment, bag-filters, and a backwash equalization tank.

- **Chemical Treatment Facility:** A chloramination and fluoridation chemical treatment facility would be provided, including bulk sodium hypochlorite (BSH), liquid ammonium sulfate, and fluoride chemical storage tanks, metering pumps, and ancillary equipment. The tanks and equipment would be installed below an approximate 23 foot tall sunshade canopy to protect the equipment from weather.

Well Replacement, Rehabilitation and Abandonment

- **Well 8:** Existing Well 8, located at the City's OSC (site of proposed CTF), would be rehabilitated to mitigate historical water quality issues (see Figure 2-2a, *Centralized Treatment Facility and Well 8 Site*) and extend the useful life of the facility. All associated mechanical, electrical, and control equipment would be replaced. The Well 8 building frame would be reused, but the shell and other accessories would be replaced. The replacement 500 horsepower pump would be located inside the refurbished Well 8 building. The Project also includes a new electrical building (of similar height to Well 8 building) and standby generator (in an outdoor enclosure) to support the Well 8 facility and the CTF.

- **Well 9:** The proposed new Well 9 Facility includes a new building to house the well casing, 350 hp pump and associated mechanical, electrical, and control equipment. (see **Figure 2-2b**,

Well 9 Site). The diameter of the new Well 9 casing will be either 18 or 20-inches and the well would be installed approximately 800 feet below ground surface. The proposed Well 9 building would measure approximately 45 feet by 35 feet and would be 20 feet in height and have one single door access points on the west side, one double door access point on the west side, and two double door access points on the east side. The pump-to-waste would discharge to the City's storm water collection system. This site would also require a new PG&E electrical service for the primary power supply and transformer and a connection for a portable generator. The site would be fenced for security and landscaping improvements would be added around the perimeter to improve screening and site aesthetics.

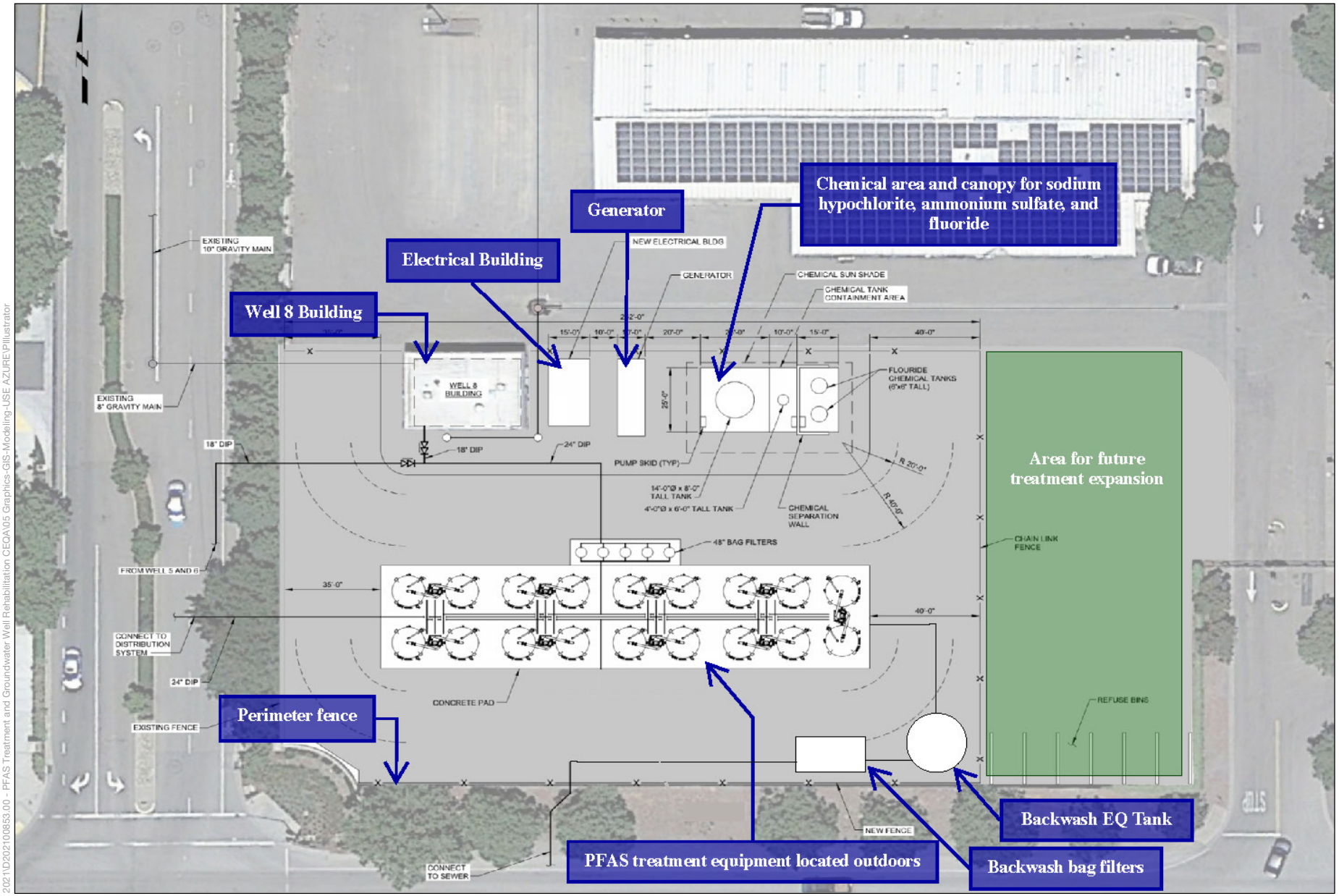
- **Well 10:** The proposed Well 10 Facility would be installed at the existing Well 6 site and includes refurbishing the existing building and site facilities (see **Figure 2-2c**, *Well 10 Site)*. The existing Well 6 casing is located inside the building and would be destroyed. The new Well 10 casing would be installed outside the building. The diameter of the new Well 10 casing would be either 18 or 20-inches and the well would be installed approximately 800 feet below ground surface. Well 10 would be equipped with a submersible 350 hp pump and motor to minimize noise impacts to the adjacent residents. New discharge piping would be installed to connect to the existing pump-to-waste system and to the new transmission piping to the CTF. The Well 10 building has three existing single door access points on the west side, two existing double door access points on the east side, and one new double door access point will be added on the south side. All mechanical, electrical, and control equipment supporting the well would be replaced. All existing chemical equipment would be permanently removed as it would now be part of the CTF at OSC. An existing carport overhang would be removed to improve site access. The site would have additional fencing for improved security and low-maintenance landscaping improvements around the perimeter of the site to improve screening and site aesthetics

- **Wells 3, 4, and 5:** Existing Wells 3, 4, and 5 (see Figure 2-2, *Project Overview*) would be destroyed and filled with cement to prevent surface water from entering the well. A vault structure associated with Well 5 would be removed and the area would be regraded.

Pipeline Installation and Replacement

- **Wells 9 and 10 to CTF:** Approximately 1 mile (5,200 feet) of 14- to 18-inch diameter raw water pipeline would be installed from Wells 9 and 10 to the CTF, starting north of Black Avenue along Santa Rita Road, and continuing along Alvarado Street, Kolln Street, Valley Avenue, and Busch Road (see Figure 2-2, *Project Overview*). The pipe material would be either ductile iron pipe (DIP) or welded steel.

- **Santa Rita Road/Amador Community Park:** To improve existing treated water distribution hydraulics to handle groundwater being pumped from a centralized location, approximately 0.3 mile (1,600 feet) of existing 14-inch treated water distribution pipeline along Santa Rita Road between Black Avenue and Valley Avenue would be abandoned and replaced with a 20-inch diameter pipeline (see Figure 2-2, *Project Overview*). The southern 875 feet of pipeline would be routed through Amador Community Park or along Santa Rita Road as shown in Figure 2-2. The pipe material would be either DIP or steel and would be installed with open cut construction methods.



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SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-2a
Centralized Treatment Facility and Well 8 Site

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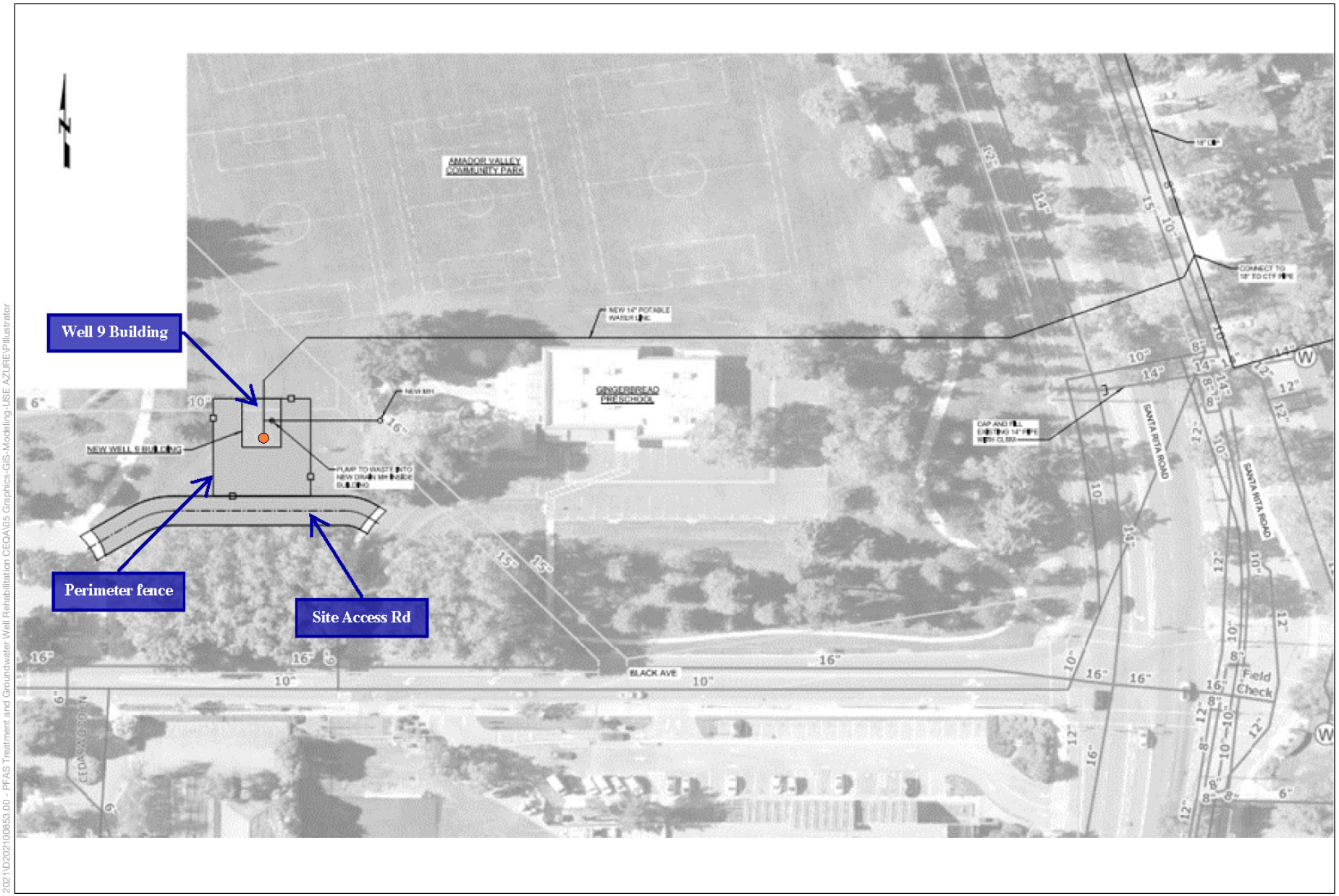

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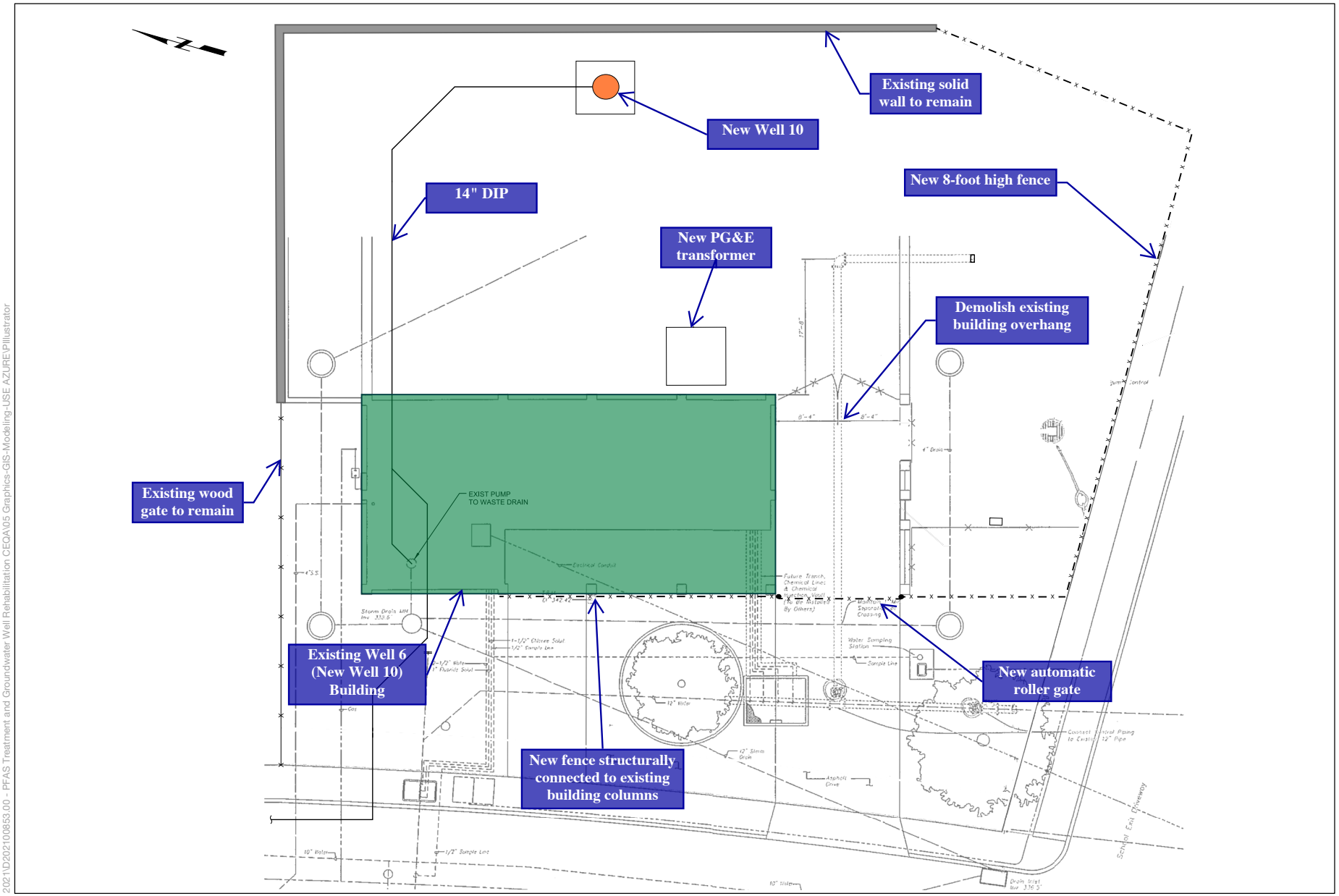
SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-2b
Well 9 Site

ESA



SOURCE: City of Pleasanton, 2022

NOTE: Well 6 is located inside the well building.

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-2c
Well 10 Site

ESA

2.5 Project Construction

2.5.1 Project Construction Schedule/Phasing

Project construction is anticipated to occur under two separate contracts and sequenced as follows:

- Well 9 and 10 Casing Installation Contract: January 2023 to May 2023
- Main Construction Contract: September 2023 to May 2025
  - Phase 1: Well 8 / CTF, Well 9, and Pipeline Improvements
  - Phase 2: Well 10 Improvements and Well 3, 4, and 5 Abandonment

Well 9 and 10 casing installation would occur during the end of the final design phase for the Project so that the wells can be developed; and pumping equipment performance requirements defined and incorporated into the main construction contract documents. Wells 9 and 10 would not be equipped (i.e., installation of pump, motor, and piping) until the main construction contract.

The main construction contract would be broken into two phases. Phase 1 includes construction of the new CTF, new Well 9, existing Well 8 (currently out of service), and piping improvements while the City remains operational with existing Wells 5 and Well 6. Once Phase 1 improvements are complete and operational, as part of Phase 2, the City would take Well 5 out of service for its abandonment, and Well 6 out of service for rehabilitation and conversion to Well 10.

The proposed Project involves construction at six Project sites that include:

1. CTF and Well 8 at the City's OSC
2. Well 9 Site
3. Well 10 (currently Well 6) Site
4. Wells 3, 4, and 5 Site
5. Pipeline from Wells 9/10 to the CTF
6. Pipeline replacement in Santa Rita Road

The general construction sequencing and schedule for each Project site is summarized in **Table 2-1**, assuming no Project delays. Construction activities would occur simultaneously at multiple sites.

In general, construction activities are anticipated to occur Monday through Friday (except for Holidays) between the hours of 8:00 a.m. to 5:00 p.m. The City may allow construction activities to occur on Saturdays between the hours of 8:00 a.m. to 5:00 p.m. if needed to maintain or accelerate the Project schedule. This schedule of construction activities would fall within the window for construction noise standards set forth in the City's Municipal Code 9.04.100 (Monday – Saturday: 8:00 a.m. to 8:00 p.m.; Sunday and holidays: 10:00 a.m. to 6:00 p.m.).

TABLE 2-1
CONSTRUCTION SEQUENCE, ACTIVITIES AND SCHEDULE

General Sequence	Project Site	Construction Activities	Estimated Construction Schedule and Duration[a]
Well 9 & 10 Installation Contract	Well 9 Site	*Drilling Contractor to:* • Drill, install casing, and develop well	April 2023 - May 2023 2 months (40 working days)
Well 9 & 10 Installation Contract	Well 10 Site	*Drilling Contractor to:* • Drill, install casing, and develop well	February 2023 – March 2023 2 months (40 working days)
Main Project Construction - Phase 1	Centralized Treatment Facility and Well 8 Site	*Main Contractor to:* • Prepare the site • Grade and excavate soil off haul • Pour concrete for new facilities foundations • Construct new electrical building and other structures • Rehabilitate existing Well 8 building • Install piping, mechanical, and chemical systems • Install 500 hp pump at Well 8 • Install 18 PFAS treatment vessels • Install electrical facilities • Restore site, including paving and landscape along south perimeter • Startup facility	October 2023 – September 2024 11 months total (240 working days)
	Well 9 Site	*Main Contractor to:* • Prepare the site • Build new Well 9 building • Install mechanical systems, 350 hp pump and associated electrical • Restore the site and landscape • Startup facility	October 2023 - September 2024 11 months total (240 working days)
	Pipeline from Wells 9/10 to Centralized Treatment Facility	• Excavate approximately 5 foot wide trench at an approximate average depth of 7 feet. The construction will occupy approx. 1 lane of traffic at 12 feet wide. • Potentially utilize jack boring (trenchless technology) at the Valley Avenue and Busch Road intersection including excavating two pits • Install approximately 1 mile of 14 to 18-inch diameter raw water pipeline • Fill/pave pipeline installation area as work progresses (approximately 100 – 150 feet per day)	March 2024 – June 2024 Approximately 4 months total (90 working days)

TABLE 2-1 (CONTINUED)
CONSTRUCTION SEQUENCE, ACTIVITIES AND SCHEDULE

General Sequence	Project Site	Construction Activities	Estimated Construction Schedule and Duration[a]
Main Project Construction - Phase 1 (cont.)	Pipeline along Santa Rita Road	• Excavate approximately 5 foot wide trench at an approximate average depth of 7 feet. The construction will occupy approx. 1 lane of traffic at 12 feet wide. • Fill/pave pipeline installation area as work progresses (approximately 100 -150 feet per day)	June 2024 – September 2024 Approximately 4 months total (90 working days)
Main Project Construction – Phase 2	Well 10 Site	Main contractor to: • Prepare site and demolition • Abandon Well 6 Casing • Renovate existing Well building • Install mechanical systems, 350 hp submersible pump and associated electrical • Restore/improve the site • Startup facility	September 2024 – March 2025 7 months total (150 working days)
	Wells 3, 4 and 5 Site	• Abandon and demolish the Well 3, 4, 5 casings • Demo the existing Well 5 vault • Restore the site	November 2024 – January 2025 3 months total (60 working days)

NOTES:

[a] Estimated construction schedule and dates includes a best-case scenario assumption of work only occurring during a five-day work week and normal working hours (i.e., Monday through Friday, 8 a.m. – 5 p.m.) and with no unforeseen conditions encountered and no delays. The exception would be the well drilling activity, which is discussed in Section 2.5.1.

In some instances, specific construction activities may deviate from the general schedule listed above and fall outside the window for construction noise standards, in which an exception to the noise standards would be required per City Municipal Code 9.04.110. Activities that may deviate from the general schedule include:

- **Well 9 and Well 10 casing installation** – Certain well casing installation activities must occur on a continuous basis (i.e., 24 hours a day) such as pilot hole drilling, geophysical logging, reaming of pilot hole, and casing construction. To cease work during these activities could cause the drill hole to collapse and lengthen the time required to complete the drilling phase of the project and increase costs substantially. It is anticipated that 10 days of continuous construction activity per well location would be required. It is anticipated that nighttime construction noise levels would remain comparable to daytime construction noise levels, which would be at or below the limits defined in Municipal Code 9.04.100.

- **Pipeline installation on Santa Rita Road** – The installation of the pipeline along Santa Rita Road would require shutting down one lane of traffic and nighttime work. Based on conversations with the City, it is acceptable to shut down one lane of traffic along Santa Rita Road and perform the work during the following times:

  – Alisal Elementary School in session – 9:00 a.m. to 2:00 p.m.

  – Summer (Alisal Elementary not in session) – 8:00 a.m. to 3:30 p.m.

  – Night hours – 6:30 p.m. to 6:30 a.m.

  The work would occur during the time windows listed above.

2.5.2 Staging/Materials Delivery and Laydown

Trucks would be used to haul off excavated material, haul in new fill material, and to deliver pipe and other construction materials. Trucks would utilize designated haul routes along Santa Rita Road, Valley Avenue and Busch Road to transport materials to the respective Project site's work area (see **Figure 2-3**, *Haul Routes*).

Equipment and materials would be delivered to the CTF and Well 8 site via access to the north of Busch Road and stored in the designated staging area (see **Figure 2-4**, *Access, Staging and Parking for Centralized Treatment Facility and Well 8 Site*). Trees and existing fencing modifications would be required to install a temporary access lane. Equipment and materials would be delivered to the Well 9 site via access to the north of Black Avenue and stored in the designated staging area (see **Figure 2-5**, *Access, Staging and Parking for Well 9 Site).* Equipment and materials to be delivered to the Well 10 site would primarily be stored at the OSC and delivered to the site, as needed (see **Figure 2-6**, *Access, Staging and Parking for Well 10 Site*). The City would also request storage space from the Pleasanton Unified School District on the Alisal school site near the Well 10 site. Trees would be removed to allow for drilling rig access, equipment and construction of facilities improvements at the Well 10 site.

Equipment and materials for the pipeline components would be staged along the pipeline routes and at the OSC. Staging would be required for the abandonment work at Wells 3, 4 and 5.

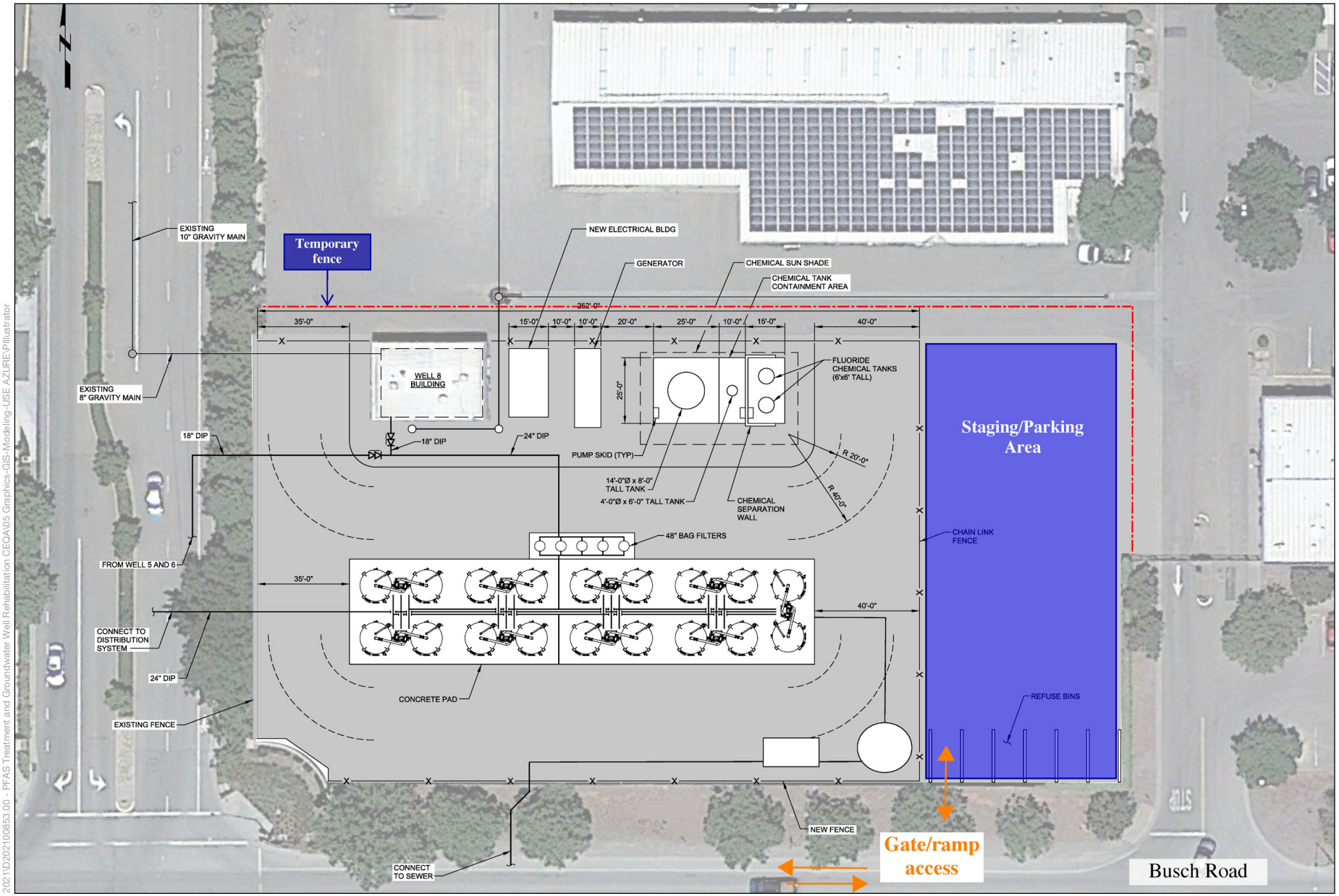
2021\D2021008S3.00 - PFAS Treatment and Groundwater Well Rehabilitation CEQA\05 Graphics-GIS-Modeling-USE AZURE\PIllustrator

SOURCE: ESA, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-3
Haul Routes

ESA



2021\D2021008S3.00 - PFAS Treatment and Groundwater Well Rehabilitation CEQA\05 Graphics-GIS-Modeling-USE AZURE\PIllustrator

SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-4
Access, Staging and Parking for Centralized Treatment Facility and Well 8 Site

ESA

SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-5
Access, Staging and Parking for Well 9 Site

ESA

2021\D2021008853.00 - PFAS Treatment and Groundwater Well Rehabilitation CEQA\05 Graphics-GIS-Modeling-USE AZURE\PIllustrator

SOURCE: SOURCE: City of Pleasanton, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 2-6
Access, Staging and Parking for Well 10 Site

ESA

2.5.3 Site Work, Grading, and Trenching

Table 2-1 describes construction activities at each Project component site, including the general work, grading and/or trenching activities anticipated. Approximately 600,000 gallons of water, to be supplied from the City's potable water distribution system (or recycled water distribution system where appropriate and feasible), would be required for all construction activities, including water required for dust suppression (i.e., approximately 98,000 gallons). Solid waste generated during Project construction would be disposed of at the Pleasanton Transfer Station located at 3110 Busch Road. Additional details for activities at each site are summarized below.

Centralized Treatment Facility and Well 8 Site

The CTF/Well 8 Site is generally level and clear of vegetation; however, over excavation and backfill and some grading would be required to address porous soils and construct the new facilities. In total, approximately 1,500 cubic yards (CY) of soil would be disturbed during construction (i.e., excavated and hauled away). Approximately 1,700 cubic yards of import material would be required for site backfill, grading, and base under asphalt cement paving. Approximately 400 CY of concrete would be poured for slab foundations for the new facilities. Approximately 0.85 acre would be installed as impervious surface within the CTF and Well 8 site. Landscaping improvements along the south perimeter of the site would be performed for screening.

Well 9 Site

The Well 9 Site is generally level and clear of vegetation; however, some grading would be required to prepare the site for the new facilities. The Well 9 casing would measure either 18-inches or 20-inches in diameter and be drilled to a depth of approximately 800 feet below grade, resulting in an estimated excavated volume of 215 cubic yards of soil to be hauled away. The well drilling process is discussed in detail in Section 2.5.6, Well Drilling. In total, construction of the new well casing, new well building and associated AC pavement, and site grading would result in approximately 935 CY of soil disturbance (i.e., excavated and hauled away), 500 cubic yards of import fill for site grading and base under new pavement, and 160 cubic yards of concrete and CMU block.. Approximately 0.21 acre would be converted to impervious surface within the Well 9 site.

Well 10 Site

The Well 10 Site is the existing Well 6 Site and would require no significant grading changes to prepare for the new facilities. The Well 10 casing would measure either 18-inches or 20 inches in diameter and be drilled to a depth of approximately 800 feet below grade using standard techniques, resulting in an estimated excavated volume of 215 cubic yards of soil to be hauled away. The well drilling process is discussed in detail in Section 2.5.6, Well Drilling. In total, construction of the new well casing and AC pavement replacement (it is anticipated existing pavement will need to be replaced due to damage during construction) would result in approximately 600 CY of soil disturbance (i.e., excavated and hauled away) and 280 cubic yards of aggregate base under AC pavement. The site includes minor concrete work for the transformer

relocation and Well 5 demolition. Trees would likely need to be removed to allow for drilling rig access and then replaced for screening. Low maintenance landscaping would be installed as part of the Project for aesthetics.

Wells 3, 4 and 5 Site

Work at this site involves abandoning the casings for existing Wells 3, 4 and 5, as well as Well 6 located at the Well 10 site. Wells would be abandoned in-place according to Zone 7 Drilling Permit Application (Rev 07/22/20), Alameda County (Ordinance No. 0-2015-20), and State of California Well Standards (74-90 and 74-81) requirements. Specifically, this would involve destroying the existing casing and filling with cement. The vault at Well 5 would also be demolished as part of the well abandonment. Each well would require approximately 40 CY of controlled low strength material (i.e., low strength concrete) for filling.

Pipeline from Wells 9 and 10 to CTF

The project includes installation of a 14-inch diameter pipeline from Well 9 to 10, and installation of an 18-inch diameter pipeline from Well 10 to the CTF. Figure 2-2 shows this pipeline alignment. This pipeline will be installed with open cut construction methods and the pipeline installation rate (excavation, backfill, and pavement replacement) is assumed to be approximately 100 to 150 feet per day. The pipeline construction corridor for both the pipeline from Wells 9 and 10 to the CTF would be located in the public right-of-way on public streets or in public parks. The construction corridor widths would be approximately 12 feet wide, with an excavated trench width of 5 feet and assumed depth of 7 feet. Any excavation deeper than 5 feet would be shored per OSHA requirements.

In total, approximately 6,500 cubic yards (CY) of soil would be disturbed during construction (i.e., excavated and hauled away) and approximately 6,100 cubic yards of import material would be installed as pipe zone and trench zone backfill.

As described in Table 2-1, jack and bore (trenchless technology) may be used along Valley Avenue and Busch Road intersection due to a high-pressure gas line and high voltage power conduit, resulting in approximately two pits. Each pit would be approximately 20 feet by 25 feet by 15 feet in depth (or approximately 280 cubic yards). Pile drivers would be required for the trenchless crossings at both locations for two weeks to install the two pits at Valley Avenue and Busch Road. If jack and bore is determined to not be feasible, the pipelines would be installed via open cut in this area.

Santa Rita Road Pipeline Replacement

The project includes replacement of an existing 14-inch asbestos cement pipeline in Santa Rita Road with a 20 inch pipeline. There are two options for this pipeline alignment. The first option is to route the replacement pipeline parallel to the existing pipeline in Santa Rita Road for its entire length. The second option is to route the first 725 of the proposed 1,600 feet of the replacement pipeline parallel to the existing pipeline, with the southern 875 feet of new pipeline to traverse the

eastern portion of Amador Community Park. Figure 2-2 shows the potential alignments for this pipeline.

This pipeline would be installed with open cut construction methods and the pipeline installation rate (excavation, backfill, and pavement replacement) is assumed to be approximately 100 to 150 feet per day. The construction corridor for this pipeline is shown in Santa Rita Road and Amador Park, which is in the public right-of-way on public streets or in public parks. The construction corridor widths would be approximately 12 feet wide, with an excavated trench width of 5 feet and assumed depth of 7 feet. Any excavation deeper than 5 feet would be shored per OSHA requirements.

After construction of the pipeline in Santa Rita Road, the trench would be backfilled and that section of the roadway would be repaved. If the pipeline is construction along the alignment in the park, the trench would be backfilled. The turf and vegetation excavated or otherwise disturbed would be restored and any trees removed would be replanted per City ordinance (explained in more detail in Chapter 3, Section IV, Biological Resources). Likewise, any portions of Santa Rita Road, sidewalks/park walking paths, and the Gingerbread Preschool parking lot would be repaved or restored to at least their pre-construction condition.

In total, approximately 2,200 cubic yards (CY) of soil would be disturbed during construction (i.e., excavated and hauled away)and approximately 2,050 cubic yards of import material would be installed as pipe zone and trench zone backfill.

The existing pipeline is a 14 inch-diameter asbestos cement water pipe. The existing pipeline would be abandoned in-place and the pipeline would be filled with controlled low strength material.

Summary of Sitework, Grading, and Trenching

Table 2-2 summarized the quantities for the sitework, grading, and trenching for each element of the Project. The total material excavated and off-hauled is 11,795 CY and the total import material (site grading, pipe trench backfill, import concrete, import aggregate base) is 11,375 CY.

2.5.4 Construction Equipment and Workforce

Construction equipment would be mobilized prior to construction with several types of equipment used at each Project site. **Table 2-3** summarizes construction equipment and workforce anticipated for activities at each Project site. Given the construction sequencing, equipment and workforce may be shared across Project sites. Each piece of equipment would operate 2 to 8 hours per day, with active work and the number of equipment pieces operating likely varying day to day across each Project site. Depending on the site, the workforce is estimated to comprise of a range of 2 to 10 workers per day making a range of 4 to 20 total one way trips per day. It is assumed that all workers would drive to and park their personal vehicles in the designated parking areas at each Project site each workday (see Figures 2.4 through 2.6 for designated parking areas).

TABLE 2-2
SUMMARY OF SITEWORK, GRADING AND TRENCHING QUANTITIES

Project Site	Material Excavated and Off Hauled (CY)	Import Fill Material (CY)	Import Concrete Material (CY)
CTF and Well 8 Site	1,500	1,700	400
Well 9 Site	935	500	160
Well 10 Site	600	280	0
Wells 3, 4 and 5 Site	60	60	40
Pipeline from Wells 9/10 to the CTF	6,500	6,100	0
Pipeline along Santa Rita Road	2,200	2,050	65
Total	**11,795**	**10,690**	**665**

TABLE 2-3
CONSTRUCTION EQUIPMENT AND WORKFORCE

Project Site	Construction Equipment		Workforce
CTF and Well 8 Site	• Concrete Delivery Truck (2) • Excavator (1) • Skip Loader (1) • Fork Lifts (1) • Crane, truck-mounted (1) • Scissor Lift (1)	• Wiring Pulling Machine (1) • Pumps (1) • Air Compressors (2) • Water Truck (1) • Generator Sets (1) • Asphalt/Paver Truck (1)	10 workers/day
Well 9 Site	• Concrete Delivery Truck (2) • Excavator (1) • Skip Loader (1) • Fork Lifts (1) • Crane, truck-mounted (1) • Scissor Lift (1)	• Wiring Pulling Machine (1) • Pumps (1) • Air Compressors (2) • Water Truck (1) • Generator Sets (1) • Asphalt/Paver Truck (1)	8 workers/day
Well 10 Site	• Fork Lifts (1) • Crane, truck-mounted (1) • Scissor Lift (1) • Wiring Pulling Machine (1)	• Pumps (1) • Air Compressors (2) • Water Truck (1) • Asphalt/Paver Truck (1)	8 workers/day
Wells 3, 4 and 5 Site	• Excavator (1) • Fork Lifts (1) • Crane (1)	• Cement Trucks (20) • Water Truck (1)	2 workers/day
Pipeline from Wells 9/10 to the CTF	• Excavator (1) • Skip Loader (1) • Fork Lifts (1) • Crane, truck-mounted (1)	• Pumps (1) • Air Compressors (2) • Water Truck (1) • Asphalt/Paver Truck (1)	5 workers/day
Pipeline along Santa Rita Road/ Amador Park	• Excavator (1) • Skip Loader (1) • Fork Lifts (1) • Crane, truck-mounted (1)	• Pumps (1) • Air Compressors (2) • Water Truck (1) • Asphalt/Paver Truck (1)	5 workers/day

2.5.5 Vehicle Trips and Haul Routes

The sitework, grading, and trenching calculations prepared for the Project design indicate that a total of 11,795 CY of soil would be excavated and off-hauled and that approximately 11,355 CY of fill material would be imported and placed for all Project components (refer to Table 2-2). The environmental analysis assumes that excavated materials would be off-hauled and re-imported from a location approximately 20 miles away. The analysis also assumes that all excavated material (site and pipeline trench excavation) is hauled off and not used for site or trench backfill which is a conservative assumption. Excavation and fill trips assume a haul truck with capacity of 12 CY. Additional trips are associated with materials and pipe delivery, and workers. **Table 2-4** presents the estimated vehicle trips associated with excavation, fill, materials delivery and workers for each Project site. In total, the Project would require an estimated 19,816 one-way trips using designated haul and access routes. See Figure 2-3 for more details regarding haul routes and Figures 2-4 through 2-6 for access routes for select Project sites.

TABLE 2-4
ESTIMATED VEHICLE TRIPS ASSOCIATED WITH PROJECT SITES

Project Site	Truck Trips per Day[a,b]			Worker Trips per Day[b]	Total One-Way Trips	Total Number of Construction Days
	Excavation & Off-Haul	Import Fill	Material/ Pipe Delivery			
Centralized Treatment Facility and Well 8	3[d]	2[d]	2[g]	10[g]	6,200	240
Well 9	2[d]	1[c]	1[g]	8[g]	4,540	240
Well 10	2[d]	0	1[g]	8[g]	3,776	200
Wells 3, 4, 5, & 6	0	20[f]	1[g]	2[g]	400	60
Pipeline from Wells 9/10 to Centralized Treatment Facility	8[e]	7[e]	2[g]	5[g]	2.900	100
Pipeline along Santa Rita Road	3[e]	3[e]	2[g]	5[g]	2,000	100

NOTE:
[a] Assumes a 12 cubic-yard truck.
[b] Assumes two-way trips.
[c] Assumes activity occurs over the first 22 working days for this task.
[d] Assumes activity occurs over the first 44 working days for this task.
[e] Assumes activity occurs over 50 percent of the working days for this task.
[f] Assumes concrete truck deliveries occur over 1 day at each well site to backfill the well.
[g] Assumes activity occurs over the total number of construction days for this task.

2.5.6 Well Construction

The well installation or drilling process would utilize a bucket auger (for surface casing installation) and reverse mud circulation technique (for all other drilling). Initially a bucket auger would be used for the installation of the surface casing due to the large borehole diameter (typically 36- to 42 inches in diameter) and relatively shallow depth (typically less than 75 feet). The surface casing would be sealed in place with cement grout to stabilize the borehole and casing and to comply with Alameda County and State regulations. Subsequent to installation of the surface casing, reverse mud circulation drilling technology would be used to drill a pilot hole

(typically 17.5-inch in diameter) to the total depth (assumed to be approximately 800 feet). Lithologic sampling and geophysical logging would be conducted in the borehole at the drill site. Subsequent to geophysical logging activities, the pilot hole (17.5-inch in diameter) would be reamed (i.e., hole diameter enlarged) to an approximate diameter of 32 inches prior to the installation of the permanent well screen and casing. After reaming, the well screen and well casing would be installed, then the well would be constructed and developed.

As noted in section 2.5.1, borehole drilling and well construction activities must continue 24-hours a day, seven days a week, until that part of the Project is complete. It is anticipated that continuous drilling operations would last 10 days at each well location.

Well development is the process of removing drilling fluids and other materials deposited in the well borehole and structure as part of the typical well drilling and construction process. Well development will consist of: 1) removing drilling fluids/materials; 2) installation of an engine driven turbine test pump; 3) pumping and surging of the well until the well is fully developed and meets the requirements of minimum sand production, turbidity, and specific capacity; and, 4) removal of the well of materials introduced into the casing during development.

2.5.7 Well and Pipeline Testing

After final well development, tests at each new well would be performed including an 8-hour step pumping test at capacities of 50, 75, 100, 125, and 150 percent of the final design capacity of the well, a 12-hour aquifer test at the final design capacity, and sand testing. The sand test will take place prior to well testing and during a short constant rate discharge test at the design capacity of the well. The sand content will be measured and recorded every minute over the first 30 minutes of pumping after start-up. The average sand content for any 5-minute period shall not exceed five parts per million during the 30-minute test.

For pipeline testing, there would be a pressure test and a disinfection/flushing procedure, which would be detailed in the construction specifications. Typically, the contractor would pressure test the pipeline at 1.25 times the operating pressure and hold that pressure for a period of time (usually 24 hours or so). The pipeline would then be flushed with disinfectant and water in segments and tested for leaks. The test water would be discharged to nearby storm drain.

2.5.8 Dewatering

No dewatering activities are anticipated as part of the Project considering the groundwater table is below the typical depth of excavation.

2.6 Project Operations and Maintenance

Operations and maintenance of the Project would begin as components are completed. The CTF would become operational once two of the City's three wells are operating. As described in Section 2.5.1, *Project Construction Schedule/Phasing*, Wells 8 and 9 would be completed and operational first, followed by Well 10.

Among the new and rehabilitated wells, the City would initially install 5,800 gpm treatment capacity. The CTF treatment capacity would be increased up to 8,100 gpm to meet future planned demand. Noise produced by the pump stations would be contained within the well building and/or structure at each well site.

Operation and maintenance of the new facilities would require approximately up to two new fulltime employees, mostly related to operation and maintenance of the new CTF. All electricity needed to operate the facilities would be sourced from Pacific Gas and Electric (PG&E) / EBCE. The total electrical required to operate the Project related facilities is estimated at 2,800,000 kilowatt hours per year (kWhr/year), which is approximately a 70% increase from existing facility use. Spent granular activated carbon (GAC) material generated by the CTF would be hauled off by a media supplier for entire system once every 20 months on average. The media supplier would be responsible for disposal per local regulations. No new chemical treatments or additional flow are anticipated as part of the Project and the annual amount of groundwater pumping would not exceed the City's current allotment. The Well 9, Well 10, and CTF sites would be designed with site lighting to facilitate safe operations and maintenance of the facilities. The lighting would be designed to minimize public impact (e.g., motion activation switches, shields or hoods directing light downward, etc.).

2.7 State Revolving Fund Alternatives Analysis

The City is pursuing funding from the State Water Resources Control Board's Drinking Water State Revolving Fund (SRF) program. The application for SRF funding requires the applicant, in this case the City of Pleasanton, to prepare an alternatives analysis to be included in the project's CEQA documentation. The alternatives analysis for this Project includes a No Action alternative and the proposed Project described above. The SRF Alternatives Analysis is included at Appendix A.

2.8 References

Carollo Engineers, 2021. *Basis of Design Report, PFAS Treatment and wells Rehabilitation Project, City of Pleasanton.* Prepared for the City of Pleasanton. June 2021.

City of Pleasanton, 2019. *Pleasanton Water Quality: Understanding PFOA and PFOS.* Accessed January 14, 2022. Available at https://www.cityofpleasantonca.gov/documents/osc/PFAS_Brochure.pdf

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CHAPTER 3
Environmental Checklist / Initial Study

1. Project Title:	PFAS Treatment & Wells Rehabilitation Project
2. Lead Agency Name and Address:	City of Pleasanton Operations Services Department
3. Contact Person and Phone Number:	Todd Yamello, Utilities Planning Manager (925) 931-5519 tyamello@cityofpleasantonca.gov
4. Project Location:	City of Pleasanton, various sites
5. Project Sponsor's Name and Address:	Same
6. General Plan Designation(s):	Public/Institutional, Medium Density Residential, Elementary School, Parks/ Recreation, General/Limited Industrial
7. Zoning:	R-1-65 (Single Family Residential, 6,500 sq. ft. minimum lot), PUD-I (Planned Unit Development, Industrial-Offices), A (Agriculture [Amador Community Park]), I-G-40 (General Industrial, 40,000 sq. ft. minimum), P (Public/Institutional), PUD-MDR (Planned Unit Development, Medium Density Residential)

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

See Chapter 2. The Project consists of the design and construction of a centralized treatment facility (CTF) for PFAS treatment, disinfection, and fluoridation of the City's groundwater and rehabilitation of the Well 8 Facility, both of which are located at the City's Operations Service Center (OSC); rehabilitation of the existing Well 6 facility (to be renamed Well 10) adjacent to Alisal Elementary School; a new Well 9 Facility in the south portion of Amador Community Park (to replace existing Well 5 Facility which would be abandoned); and pipelines connecting the project component sites and into the distribution system.

9. Surrounding Land Uses and Setting. (Briefly describe the project's surroundings.)

Consistent with Items 6 and 7, the land uses in the vicinity of the Project include Alisal Elementary School, Amador Community Park, single-family and multi-family residential, light industrial, and the City's OSC.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

- California Department of Drinking Water – Water Supply Permit Amendment; Drinking Water Source Assessment and Source Protection
- Zone 7 Water Agency – Well Construction and Destruction Permits
- State Water Resources Control Board – NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities
- Bay Area Air Quality Management District – Authority to Construct/Permit to Operate; Engine Registration

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On February 9, 2022, the City of Pleasanton sent letters to the Native American tribes with a description of the Project, a map showing the Project location, and an invitation to consult on the Project. The City received one response from Wilton Rancheria on March 3, 2022 indicating that they had no concerns with the Project. No additional responses were received.

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" 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: (To be completed by the Lead Agency)

On the basis of this initial study:

☐ 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 in 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 "potentially significant unless mitigated" 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 potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

6/23/22

Todd Yamello, PE, Project Manager — Date

3.2 Environmental Checklist

3.2.1 Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
I.	**AESTHETICS —** 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 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 which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

a) **No Impact.** The Project is not located within a viewshed of a scenic vista designated by the City of Pleasanton's or Alameda County's General Plan. Therefore, there would be no impact to scenic vistas attributable to the Project.

b) **No Impact.** Interstate 680 (I-680) through Pleasanton is a designated Scenic Highway; however, it is located approximately 2.0 miles to the west of the Project area and no component of the Project would be visible from I-680. Therefore, there would be no impact attributable to the Project to scenic resources within view of a state scenic highways.

c) **Less than Significant Impact.** The Project is located within the urbanized area of Pleasanton, as defined by the U.S. Census Bureau (U.S. Census Bureau, 2012a, 2012b). The *Pleasanton General Plan 2005-2025* – Community Character Element has policies which addresses a project's potential effects to aesthetics and visual character and quality in the city.

The *Pleasanton General Plan 2005-2025* – Community Character Element recognizes residential neighborhoods and parks as Special Interest Areas. None of the project components are proximate to other identified Special Interest Areas, downtown or city entryways, arroyos and canals, or bridge crossings. The Community Character Element has goals and policies to preserve and enhance Pleasanton's community character, including: preservation and enhancement of the downtown area; enhancing the appearance and use of arroyos and canals within the City; enhancing the appearance of the City's entryways, street landscaping near freeways, commercial and residential areas;

protecting visual character through guiding franchise and prototype architecture and signage; maintaining distinctiveness of residential neighborhoods; and, preserve open space character that the City's edge. There are no goals or policies in the Community Character Element that addresses water infrastructure in the context of aesthetics.

The well sites and pipeline alignment are primarily located in residential or park areas, although the Centralized Treatment Facility (CTF) and Well 8 site is located within the City's Operations Service Center [OSC]). The visual character of this project component site is that of an industrial site consistent with the City's use of property as a municipal corporation yard. The construction and operation of the CTF and Well 8 would be consistent with the visual character of the site. Therefore, there would be no impact to the visual quality of the CTF and Well 8 site.

The Well 5 site (including Wells 3 and 4) and the Well 10 site (including Well 6) are adjacent to the Alisal Elementary School on Santa Rita Road. Although in a residential/school neighborhood, each well site has been a part of the visual landscape at this location since the 1960s and is part of the immediate area's visual landscape and character. The decommissioning of wells at the Well 5 site would provide a temporary visual disturbance, or visual contrast, to the area's visual character while that activity would be underway. However, this would occur within a span of three months. This would not constitute a substantial change in the visual character or quality of the area at this site. Similarly, the Project activities at the Well 10 site would be temporary, although it would occur over a period of 9 months in two phases. Most of the active construction would not be visible from publicly accessible view points (i.e., Santa Rita Road, sidewalks) as it would occur to the east, or behind, the existing well building. The well building would block the view. Once construction is completed, the Well 10 site would return to its present appearance and the visual character and quality of the area would not be permanently changed. Any trees removed to accommodate project construction would be replaced with landscape screening. Therefore, Project construction would have a less-than-significant impact to the visual character and quality of the immediate area and no permanent impact attributable to operation of Well 10.

The Well 9 site is located in the southern portion of Amador Community Park with the Gingerbread Preschool to the east and the Delores Bengtson Aquatic Center to the west. Views of the Well 9 site are screened in late spring, summer, and early fall by deciduous trees that line Black Avenue, the driveways to the preschool and aquatic center, and the west side of the preschool playground. Views to the Well 9 site from the park proper are visually open, with no screening. The existing visual character and quality of the site is of moderate to high quality, given its proximity to the park. As noted in Section 2.5.3 of the Project Description, the Project would result in the construction of a well building measuring approximately 45 feet by 35 feet by 20 feet in height, as well as add 0.21 acre of impervious surface. Following construction, landscaping improvements would be added around the perimeter of the site to improve screening and site aesthetics.

Project construction activities and the Well 9 building would be visible to those using that section of park, the pools at the aquatic center, and playground at the preschool. It would be seen as contrasting with the existing visual surroundings. However, views of the Well 9 site would be temporary, depending on the season (i.e., trees leafed out) and activities in that section of Amador Community Park. Potential viewers at the aquatic center would be focused on activities at the pool. The same would be true for viewers in the Gingerbread Preschool playground. Although in a park setting, the relatively limited public viewing opportunities and length of view would not create substantial visual contrast with the surrounding area. Additionally, the installation and ongoing maintenance of landscaping would provide visual screening and provide some visual consistency to the park setting. The visual character or quality of the Well 9 site or its surroundings would not be substantially degraded with the presence of the Project. This impact would be less than significant.

d) **Less than Significant Impact.** Existing sources of light in the Project area are associated with the surrounding residential neighborhoods, street lighting, OSC lighting, and schools. Existing glare is limited to light reflecting off vehicle surfaces (e.g., windshields) and reflective building surfaces. Existing visual receptors sensitive to light and glare in the Project area would primarily be surrounding residences in direct view of any of the project component sites.

The Project would not include nighttime construction, with the exception of well casing drilling at the Well 9 and Well 10 sites which must occur 24 hours per day for approximately 10 days per well, as well as the potential for pipeline construction in Santa Rita Road. The Well 9 site is located in the southern portion Amador Community Park between the Gingerbread Preschool to the east and the Delores Bengtson Aquatic Center to the west. Neither of these facilities would be occupied overnight and there would be no sensitive visual receptors (e.g., persons, pets) present during the well drilling event at this site. The Well 10 site is situated adjacent to three residences to the north and east. These residences would potentially be affected by light trespass during the 10-day drilling event at this site. Any light used during the drilling process would be focused on the drilling site, downcast with shades and hoods. Given these features, plus the ambient nighttime lighting that exists in the area (e.g., street lighting), the overnight drilling event would not substantially add to the ambient lighting. Additionally, Mitigation Measures NOI-1 and NOI-2 would require the City to install temporary solid barriers and offer off-site overnight lodging to residences in close proximity to the overnight drilling event. Although not directly applicable to the impacts of nighttime light trespass, implementation of these measures to address noise impacts would provide the opportunity to block light trespass or remove the sensitive light receptors from the work area during the overnight drilling event. Otherwise, no night lighting would be required during Project construction.

The Project would include permanent exterior lighting at the project components sites with aboveground features. Lighting would be used only for security and as-needed maintenance activities. The existing structures (i.e., Well 10 site, OSC) are currently

equipped with exterior lighting for the same purposes. Additionally, any new lighting fixtures would be equipped with shades or hoods and directed downward to reduce light trespass. The incremental addition of lighting specifically serving the project component sites would not create a substantial new source of light when considered with the existing condition.

Sources of glare would be limited to glass on construction equipment or delivery vehicles (e.g., windshields). With the movement of vehicles and dependence on sky conditions, glare associated with Project construction would not be substantial during the daytime and would not occur at night. No components of the Project would have reflective surfaces that would create permanent sources of glare once in operation.

Based on the precautions taken during overnight well drilling activities, the lack of sensitive receptors in some cases, minimum use of permanent lighting, and lack of glare sources, the Project would have a less than significant impact attributable to light or glare.

References

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U.S. Bureau of the Census, 2012a. 2010 Census – Urbanized Area Reference Map – Concord, CA. March 11.

U.S. Bureau of the Census, 2012b. 2010 Census – Urbanized Area Reference Map – Livermore, CA. March 11.

3.2.2 Agriculture and Forestry Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
II. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the 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?	☐	☐	☐	☒

Discussion

a) **No Impact.** The Project would be constructed in the City of Pleasanton and in the vicinity of the intersection of Santa Rita Road and Black Avenue, in Amador Community Park, and at the City's Operation Service Center (OSC). The locations of the project components are classified by the Farmland Mapping and Monitoring Program as Urban and Built-Up Land (DOC, 2018). All project components and staging areas would not occur on Prime, Unique, or Statewide Importance Farmland, therefore, no conversion of designated farmland would occur and there would be no impact.

b) **No Impact.** The Project would not be located in or near any land used or zoned for agricultural use. The Project location and areas adjacent are designated as Community Facilities, Residential, Industrial, Commercial and Offices, and Open Space by The City of Pleasanton (City of Pleasanton Land Use Map, 2009). See the Land Use and Planning section for more details. The Project is not located on or near designated agricultural land, therefore the Project would not conflict with a Williamson Act contract or use of agriculturally zoned parcels. There would be no impact.

c, d) **No Impact**. The Project site is surrounded by Community Facilities, Residential, Industrial, Commercial and Offices, and Open Space zones. The Project does not support and is not zoned as forest land or timberland, as defined by Public Resources Code §12220(g)2[1], §45263[2], or Government Code §51104(g)4[3]. There would be no loss of forest land or conversion of forest land to non-forest use. There would be no impact.

e) **No Impact**. As discussed above, the Project site is not designated or zoned for any type of farmland or forestland. Therefore, the Project would not involve any other changes in the existing environment due to their location or nature, which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. There would be no impact.

References

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California Department of Conservation, 2018. California Important Farmland Finder. Available at https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed March 16, 2022.

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1 (g) "Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

2 "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

3 (g) "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, "timberland preserve zone" means "timberland production zone."

3.2.3 Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. 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?	☐	☐	☒	☐

Environmental Setting

The project component sites are located in Alameda County, which is in the San Francisco Bay Area Air Basin (Bay Area Air Basin), within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Alameda County has a Mediterranean climate; temperatures rarely reach below freezing, adequate rainfall year-round, and warm days in the summertime with cool evenings.

Sensitive Receptors

For the purposes of this air quality analysis, sensitive receptors are defined as facilities and land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these types of uses include schools, hospitals, and daycare centers. Residential areas are also considered sensitive to poor air quality because these sensitive individuals could be present there, and people usually stay home for extended periods of time, which results in greater exposure to ambient air quality.

The land directly surrounding the sites include suburban residential neighborhoods, an elementary school, retail spaces, and a vacant lot. There is one preschool, and three grade schools within the 1,000-foot radius of the proposed component sites (see **Table 3-1**). The nearest hospital, Stanford Valleycare, is 1.5 miles away from the CTF site.

TABLE 3-1
SENSITIVE RECEPTORS WITHIN 1,000 FEET OF PROJECT COMPONENT SITES

Project Component	Receptor	Distance from Construction Areas
Wells 8 and CTF	Montessori School of Pleasanton	450 ft from Well 8 and CTF sites.
Wells 5, 6, 9, & 10	Gingerbread Preschool (front of building)	200 ft from Well 9 site, 500 ft from Wells 6 & 10 site, and 550 ft from Well 5 site.
Wells 5, 6, 9, & 10	Alisal Elementary School (front of building)	200 ft from Well 5 site, 250 ft from Wells 6 & 10 site, and 900 ft from Well 9 site.
Well 9	The Quarry Lane School- West Campus	725 ft from Well 9 site

Air Quality Attainment Status

The existing air quality of the Bay Area Air Basin is described relative to its attainment of federal and State ambient air quality standards. The air quality attainment status is determined based on air pollutant monitoring data and judged for each air pollutant. Areas with monitored pollutant levels higher than the standards described as non-attainment of the standard. The Bay Area Air Basin is currently designated as a non-attainment area for the national 8-hour ozone standard and $PM_{2.5}$ (24-hour) standard. The Bay Area Air Basin has met the CO standards for over a decade and is classified as an attainment area by the U.S. EPA. The U.S. EPA has deemed the area as attainment/unclassified for all other air pollutants, which include PM_{10}. For State standards, which are for many pollutants lower than the federal standards, the Bay Area Air Basin is currently designated as a non-attainment area for the state 8-hour ozone standard, 1-hour ozone standard, PM_{10} standard, and $PM_{2.5}$ standard.

Discussion

a) **Less than Significant Impact.** BAAQMD is the regional air quality authority in the Project area. In April 2017, the BAAQMD adopted the 2017 Clean Air Plan (BAAQMD, 2017a). The plan's primary goals are to protect public health by achieving attainment of air quality standards. The plan includes a wide range of proposed control measures, which consist of actions to reduce the non-attainment pollutants discussed above. BAAQMD guidance states that "if approval of a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project would be considered consistent with the Clean Air Plan (BAAQMD 2017b)." As indicated in the discussion of questions b and c below, the Project would not result in significant air quality impacts. Therefore, this impact would less than significant.

b) **Less than Significant with Mitigation.**

Construction

Construction activities would result in emissions of the non-attainment pollutants described above: reactive organic gases (ROG) and nitrogen oxides (NOx), which are ozone precursors, and particulate matter (PM_{10} and $PM_{2.5}$). These pollutant emissions would be generated in the form of fugitive dust (PM_{10} and $PM_{2.5}$) and in the form of exhaust by construction equipment, on-road vehicle trips of haul trucks for delivering

construction material, water trucks for site dust control, and construction worker commutes to and from the project site.

Construction Dust

Activities that generate dust include excavation and equipment movement across unpaved construction sites. Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Excavation, grading, and other construction activities can cause wind-blown dust that adds PM_{10} and $PM_{2.5}$ to the local atmosphere. The BAAQMD has taken a qualitative approach to addressing fugitive dust emissions during construction, such that any project that implements the BAAQMD Basic Construction Mitigation Measures Recommended for All Projects (Best Management Practices) would not result in a significant impact with respect to fugitive dust (BAAQMD 2017b). **Mitigation Measure AQ-1: Best Management Practices**, provided below, specifies BAAQMD recommended measures and would apply to all individual project components to address construction dust.

Mitigation Measure AQ-1: Best Management Practices.

All subsequent projects, regardless of size, shall implement the following best management practices to reduce construction impacts, particularly fugitive dust, to a less-than-significant level:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be

visible to ensure compliance with applicable regulations. This signage requirement may be incorporated with other project signage requirements.

Construction Equipment and Vehicle Exhaust

Construction-related criteria air pollutant emissions from equipment and on-road vehicle exhaust were estimated using CalEEMod (version 2020.4.0); modeling output files are included in **Appendix B**. Construction is assumed to take place over an approximate 28-month period. Project specific data for construction phasing schedule and equipment fleet provided by the project applicant was used in the model to estimate emissions over the construction period. The total emissions (without mitigation) generated over the duration of construction were divided by the number of construction days for each construction year to determine average daily emissions from construction. Emissions from equipment and vehicle exhaust are presented in **Table 3-2**. As shown in the table, emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ would all be below their respective significance thresholds, which for construction have been established by BAAQMD in terms of average daily emissions. Therefore, the proposed project would not have a significant impact related to construction criteria air pollutant emissions.

TABLE 3-2
AVERAGE DAILY CONSTRUCTION-RELATED CRITERIA POLLUTANT EMISSIONS (POUNDS PER DAY) WITHOUT MITIGATION

Project Average Daily Construction Emissions by Year	ROG	NO_x	Exhaust PM_{10}	Exhaust $PM_{2.5}$
2023	0.8	8.3	0.3	0.2
2024	1.9	21.3	0.5	0.5
2025	3.0	33.0	0.7	0.7
BAAQMD Threshold for Significant Construction Impacts	54	54	82	54
Potential Significant Impact?	No	No	No	No

SOURCE: ESA (Appendix B)

Table 3-3 presents emissions from construction equipment and vehicle exhaust, mitigated with use of Tier 4-compliant[4], clean construction equipment. Use of Tier 4 equipment would further reduce emissions, as shown in Table 3-3.

[4] Effective January 2011, both the U.S. EPA and CARB adopted so-called Interim Tier 4 standards for new equipment with diesel engines of 175 hp or greater. Tier 4 compliant engines significantly reduce emissions of particulate matter (PM) and oxides of nitrogen (NOx) to near zero levels.

TABLE 3-3
AVERAGE DAILY CONSTRUCTION-RELATED CRITERIA POLLUTANT EMISSIONS
(POUNDS PER DAY) WITH MITIGATION

Project Construction Emissions by Year	ROG	NO_x	Exhaust PM_{10}	Exhaust $PM_{2.5}$
2023	0.3	3.8	negligible	negligible
2024	0.8	11.8	0.1	0.1
2025	1.3	19.4	0.1	0.1
BAAQMD Threshold for Significant Construction Impacts	54	54	82	54
Potential Significant Impact?	No	No	No	No

SOURCE: ESA (Appendix B)

c) **Less than Significant with Mitigation.**

Construction

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known toxic air contaminant (TAC). Construction exhaust emissions may pose health risks for sensitive receptors. The health risk assessment (HRA) prepared for the Project evaluated the potential health effects to nearby sensitive receptors from construction emissions of Diesel Particulate Matter (DPM) and $PM_{2.5}$ (see Appendix B). This assessment included dispersion modeling to predict the off-site concentrations resulting from Project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

Operations

The proposed Project would also introduce a new source of DPM and $PM_{2.5}$ emissions due to the installation of an emergency diesel generator at the centralized treatment facility. These activities would result in minimal TAC emissions for emergency operations only (typically less than 50 hours per year), and therefore have negligible associated health risks to existing sensitive receptors in the area. Emergency generators would be subject to BAAQMD permit requirements, which would ensure that operation of these generators would not significantly impact nearby receptors. The operational health risk impact associated with the Project would be less than significant and were not quantitatively evaluated.

Health Risk Assessment Methodology

The HRA was conducted using the U.S. EPA AERMOD dispersion model (version 21112) and uses measured meteorology to predict conservative concentrations at specific locations defined by a Cartesian coordinate system. Diesel construction equipment would be used during the trenching and well installation.

As discussed in Chapter 2, for the replacement of the existing pipeline along Santa Rita Road, there are two options for the pipeline alignment. The first option is to route the

replacement pipeline parallel to the existing pipeline in Santa Rita Road. The second option is to route the first 725 feet of the proposed 1,600 feet of the replacement pipeline parallel to the existing pipeline in Santa Rita Road, with the southern 875 feet of pipeline through the eastern portion of Amador Community Park. Because health risk is a localized impact and dependent on the location of the emissions sources, two health risk assessments were completed to analyze both alignments (see Appendix B), with only the "worst case" scenario presented in the results below.

A conservative representation of the on-site construction equipment within each of the project components was modeled as an area source, based on the site planning diagrams (included in Appendix B). The modeling parameters are as follows:

- On-site Construction: polygon area source dimensions covering the project components of pipe from Wells 9 and 10 to the CTF, pipe along Santa Rita Road or Santa Rita Road/Amador Community Park, CTF plus Well 8, Wells 3-6 abandonment, with;
  - Release height of 5 meters (16.4 feet) for construction equipment exhaust;
  - Initial vertical dimension of 1.4 meters (4.6 feet);
  - Emissions occurring only between the hours of 8 AM and 8 PM;
- On-site Construction: polygon area source dimensions covering the project components of Well 9 and of Well 10, with;
  - Release height of 5 meters (16.4 feet) for construction equipment exhaust;
  - Initial vertical dimension of 1.4 meters (4.6 feet);
  - No variable emissions;
- Receptor flagpole height of 1.5 meters (4.9 feet) (ground-level receptor at breathing height); and
- Meteorological station of Livermore Municipal Airport for the years 2009 through 2014.

The sources were modeled with an emission rate of 1.0 gram per second to obtain a dispersion factor (unit concentration) at each receptor location. The DPM and $PM_{2.5}$ concentrations were calculated using the dispersion factors and the DPM and $PM_{2.5}$ emissions from Table 3-2 and Table 3-3.

The HRA was based on recommended methodology of the Office of Environmental of Health Hazard Assessment (OEHHA) and adopted by the BAAQMD (OEHHA 2015). To calculate the resident child cancer risks, the 95^{th} percentile daily child breathing rate is recommended by the BAAQMD for children under the age of two and 80^{th} percentile rate for age groups that are two years old or older (BAAQMD 2016). These breathing rates were used along with the modeled annual TAC concentrations and assuming the exposure would occur for 350 days per year at the residence, as recommended by BAAQMD.

The maximum excess residential cancer risks at this location would exceed the BAAQMD significance threshold of 10 in 1.0 million, and the maximum annual $PM_{2.5}$ concentration would exceed the BAAQMD threshold of 0.3 $\mu g/m^3$ for unmitigated construction activity. The chronic health hazard index is not exceeded at any location. **Table 3-4** below summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and chronic health hazard index for Project-related unmitigated and mitigated constructionaffecting the residential maximum exposed individual sensitive receptor (MEISR). The results represent the higher health risk impacts of the two pipeline alignment scenarios, and all results are presented in Appendix B.

TABLE 3-4
HEALTH RISK IMPACTS AT THE MAXIMUM EXPOSED INDIVIDUAL SENSITIVE RECEPTORS

	Maximum Cancer Risk (per million)	Hazard Index	$PM_{2.5}$ concentration ($\mu g/m^3$)
Unmitigated Construction MEISR			
Construction Risk[a]	51.8	0.07	0.33
BAAQMD Threshold of Significance	*10.0*	*1.0*	*0.3*
Exceeds Significance Threshold?	Yes	No	Yes
Mitigated Construction MEISR			
Construction Risk[a]	5.5	0.01	0.04
BAAQMD Threshold of Significance	*10.0*	*1.0*	*0.3*
Exceeds Significance Threshold?	No	No	No

NOTES:
[a] Construction Risk at the MEISR is the higher impact from the two scenarios: the Santa Rita Road pipeline alignment or Santa Rita Road / Amador Community Park alignment. The higher impact occurred under the Santa Rita Road pipeline alignment; however, the impacts are only minimally higher (less than 2 percent).

SOURCE: ESA (Appendix B)

The use of Tier 4 construction equipment is included as Mitigation Measure AQ-2. Emissions reductions with the use of Tier 4 equipment were shown in Table 3-3. After the implementation of Mitigation Measure AQ-2, DPM from construction equipment would be reduced, and the maximum increased lifetime residential cancer risk, would be 5.5 in one million, the maximum annual $PM_{2.5}$ concentrations would be 0.04 $\mu g/m^3$, and the Hazard Index would be 0.01. As a result, health risk impacts after mitigation would be reduced to less than significant.

Cumulative Impact at MEISRs

Cumulative community risk impacts were addressed through an evaluation of TAC sources located within 1,000 feet of the MEISR. These sources include busy surface streets, and stationary sources identified by BAAQMD. For local roadways, BAAQMD has provided the *Roadway Screening Analysis Calculator* to assess whether roadways with traffic volumes of over 10,000 vehicles per day may have a potentially significant effect on a proposed Project (BAAQMD, 2015). A review of the project area traffic volume counts

from the City of Pleasanton indicates that traffic on Santa Rita Road is the only roadway with over 10,000 vehicles per day within 1,000 feet of the MEISR. Other nearby streets are assumed to have less than 10,000 vehicles per day. A review of BAAQMD's stationary source GIS map tool identified one stationary source with the potential to affect the MEIRs, located west of Santa Rita Road, which is a generator.

Table 3-5 reports both the Project and cumulative community risk impacts. Without mitigation, the Project would have a significant impact with respect to community risk caused by project construction activities, since the maximum cancer risk exceeds the single-source threshold of 10.0 per million for cancer risk. However, the cumulative cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations would not exceed their cumulative source thresholds of greater than 100 per million, greater than 10.0, and greater than 0.8 $\mu g/m^3$, respectively. Thus, a **less-than-significant cumulative** impact would occur during construction and operation of the Project.

TABLE 3-5
CUMULATIVE HEALTH RISK IMPACTS AT THE MAXIMUM EXPOSED INDIVIDUAL SENSITIVE RECEPTORS

	Maximum Cancer Risk (per million)	Hazard Index	$PM_{2.5}$ concentration ($\mu g/m^3$)
Unmitigated Construction MEISR			
Project Risk	51.8	0.07	0.33
Existing Risk from Santa Rita Road	8.8	<0.01	0.15
Existing Generator	0.03	<0.01	<0.01
Project + Existing	60.6	0.07	0.48
BAAQMD Cumulative Threshold of Significance	*100.0*	*10.0*	*0.8*
Exceeds Significance Threshold?	No	No	No
Mitigated Construction MEISR			
Project Risk	5.5	0.01	0.04
Existing Risk from Santa Rita Road	8.8	<0.01	0.15
Existing Generator	0.03	<0.01	<0.01
Project + Existing	14.3	0.01	0.18
BAAQMD Cumulative Threshold of Significance	*100.0*	*10.0*	*0.8*
Exceeds Significance Threshold?	No	No	No

SOURCE: ESA (Appendix B)

Mitigation Measure AQ-2: Tier 4 Engines.

Prior to the occurrence of construction activities, a City shall prepare a construction operations plan shall be prepared that demonstrates that the off-road equipment used on-site to construct the Project would at a minimum achieve a fleet-wide average 95-percent reduction in mass of exhaust emissions of diesel particulate matter (DPM). Specifically, this plan shall include, but is not limited to, the measures identified below:

- All diesel-powered off-road equipment larger than 25 horsepower operating on the site for more than two days continuously shall, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 4 engines with CARB-certified Level 3 Diesel Particulate Filters, or equivalent. Exceptions could be made for equipment that includes CARB-certified Level 3 Diesel Particulate Filters or equivalent. Equipment that is electrically powered or uses non-diesel fuels would also meet this requirement

- Provide electric power if feasible to avoid use of diesel-powered generator sets and other portable equipment.

Off-road equipment descriptions and information shall be provided, including, but not limited to, equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number. Prior to beginning construction activities, the City's contractor shall submit the construction operations plan and records of compliance to the City construction manager or designee.

d) **Less than Significant Impact.** Typical odor sources of concern include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing facilities, fiberglass manufacturing facilities, auto body shops, and rendering plants. As a water supply project, the Project would not use chemicals, etc., that would introduce significant sources of new odors in the vicinity. Therefore, odor impacts from the Project would be less than significant.

References

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3.2.4 Biological Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV.	**BIOLOGICAL RESOURCES —** 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 Game 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, regulations, or by the California Department of Fish and Game 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?	☐	☐	☐	☒

Discussion

a) **Less than Significant with Mitigation.** The Project proposes to install centralized PFAS and chemical treatment for the City's groundwater supply, to install new supply Wells 9 and 10, rehabilitate existing Well 8, abandon outdated Wells 3, 4, 5 and 6, and install approximately 6,800 feet of pipelines to connect and support the new facilities. The Project is located in the vicinity of the intersection of Santa Rita Road and Black Avenue on the west, and on the Centralized Treatment Facility (CTF) at the City's Operation Service Center (OSC) to the east. (see Figure 2-2, *Project Overview*). The PFAS treatment facility is proposed within a disturbed area presently used for materials storage at the OSC. The pipelines will be installed within existing roadways, in a city park (Amador Community Park), and within existing well housing.

Biological resources at the CTF, well sites, pipeline alignment, and surrounding area (collectively referred to as the survey area) were identified through field reconnaissance conducted on January 29, 2021. No protocol-level species evaluations were conducted. A review of pertinent literature and database queries was also conducted for the survey area, including the following sources (see Appendix C):

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW, 2022)
- California Native Plant Society (CNPS) rare plant online inventory (CNPS, 2022)
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) environmental conservation online system (USFWS, 2022)

The survey area for the pipeline alignment includes disturbed and developed habitat within roadways in a residential neighborhood and in Amador Community Park. Roads, sidewalks, City facilities, and residential development are adjacent to the alignment, while open grassland associated with active quarry operations is located to the east of the terminus at the OSC.

The Project components are located within the geographic range of several listed and special-status species (CDFW, 2022), which occur in the regional project vicinity. Species recorded in the Dublin and Livermore USGS 7.5-minute quadrangles are identified in Appendix C. A discussion of potential impacts to special-status wildlife and plant species is provided below.

Reptiles and Amphibians

The California red-legged frog (*Rana draytonii*) (federally-listed threatened [FT] and California Species of Special Concern [SSC]), California tiger salamander (*Ambystoma californiense*) (FT and state-listed threatened [ST]), and western pond turtle (*Actinemys marmorata*) (SSC) are known to occur in the regional vicinity of the survey area. California red-legged frog is documented to the north and south, in Arroyo Mocho and Arroyo del Valle, with the nearest occurrence approximately two miles north (CDFW, 2022). California tiger salamander and western pond turtle have been documented to both north and south, with the nearest occurrence 1.5 miles east in Shadow Cliffs Recreation Area. The nearest western pond turtle occurrence is approximately 2.0 miles to the northeast in Arroyo Mocho. However, the Project alignment has no suitable habitat for any of these species and no habitat occurs adjacent to the Project site or pipeline alignments. Thus, these species are not expected to be present and would not be impacted by the Project.

Birds

Smaller nesting birds may use the shrubs and trees of the survey area for nesting habitat within the park, along residential streets, and in the OSC. Two special-status birds, tricolored blackbird (*Agelaius tricolor*) (state threatened [ST], SSC) and burrowing owl (*Athene cunicularia*) (SSC) are documented from areas east of the OSC (CDFW, 2022), but habitat for this species is not present along the Project alignment. Tricolored blackbirds nest in colonies often in association with cattails, blackberry brambles, mustard patches, or agricultural lands, which do not occur in the Project area. Burrowing owls occur at Livermore Municipal Airport in association with ground squirrel burrows in open grasslands. Such habitat does not occur on or adjacent to the Project site. Bald eagles (*Haliaeetus leucocephalus*) nest east of Cope Lake, greater than 1.0 mile from the Project site. Eagles nest

and forage within the Chain of Lakes area and do not rely upon urban portions of the City of Pleasanton. This species would not be affected by the Project. Other special-status birds such as white-tailed kite (*Elanus leucurus*) (fully protected [FP]), as well as common migratory birds, including mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), western scrub jay (*Aphelocoma californica*), and house finch (*Haemorhous mexicanus*) may nest in trees and shrubs within the survey area.

All actively nesting migratory birds are protected under the Migratory Bird Treaty Act and California Fish and Game Code (FGC); hence, any impacts to active nests (i.e., "take") would constitute a significant impact. Implementation of **Mitigation Measure BIO-1** would involve pre-construction nesting surveys and the establishment of no-work buffers, varying by the location and species of bird, for the duration of nesting. Implementation of this measure would reduce impacts on nesting birds to a less-than-significant level.

Mammals

Terrestrial special-status mammal species, such as San Joaquin kit fox (*Vulpes macrotis mutica*), are not expected on any of the Project components, which are located primarily in suburban residential developments, parks, and the OSC. While three species of bat have been recorded in the vicinity, hoary bat (*Lasiurus cinereus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and pallid bat (*Antrozous pallidus*), and many species of bat can roost in cavities or bark of mature trees. Approximately eight mature trees near Well 10 would be removed for the Project. While these trees are not large enough for maternity roosts, they may accommodate night-roosting bats. If roosting bats were present in these trees, they could be killed or injured. Harm to special-status roosting bats would be a significant impact. Implementation of **Mitigation Measure BIO-2** would implement a bat-safe tree removal process and would reduce the impact to a less-than-significant level.

Plants

Neither the developed/disturbed areas in the roads, at the well sites and OCS – nor the ornamental vegetation at the residences, school, and county park – provide suitable habitat for special-status plant species. Due to the high level of disturbance and the predominance of non-native plant species, special-status plants are unlikely to be present and no impacts are anticipated.

Mitigation Measure BIO-1: Protection of Nesting Birds

To avoid or minimize Project impacts to nesting birds, the City shall implement the following:

- Tree and vegetation removal or pruning associated with project construction and commencement of outdoor project construction activities shall be avoided from February 1 through August 31, the primary local bird nesting season, to the extent feasible. If tree and vegetation removal or pruning associated with project construction is proposed during the nesting period, within seven days prior to the proposed start of construction activities a qualified biologist shall conduct a nesting

bird survey of all potential habitat at the construction site and within 250 feet of the perimeter of the construction site.

- If any active nests are detected during the pre-construction survey, the qualified biologist shall recommend a work-exclusion buffer zone that shall be designated around the active nest to allow for the successful fledging of the birds. At the discretion of the qualified biologist, limited work may be performed within a designated buffer if biological monitoring confirms that the work does not impact the nest. Once young birds have fledged and are independent of the nest, the qualified biologist can confirm that the buffer is no longer needed.

Mitigation Measure BIO-2: Protection of Roosting Bats

To avoid or minimize Project impacts to roosting bats, the City shall implement the following:

- Prior to project construction, a qualified bat biologist shall conduct a pre-construction survey for roosting bats in trees to be removed or pruned and structures to be demolished within the work area. If no roosting bats are found, no further action is required. If active bat roosts are found, these roosts shall be flagged and avoided with a suitable buffer, determined in coordination with CDFW.

- If a non-maternal roost of bats is found in a tree or structure to be removed or demolished as part of project construction, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity. Removal or demolition should occur no sooner than at least two nights after the initial minor site modification (to alter airflow). This action allows bats to leave during darkness, increasing their chance of finding new roosts with a minimum of disturbance. Departure of the bats from the construction area shall be confirmed with a follow-up survey by a qualified bat biologist prior to start of construction.

Implementation of Mitigation Measures BIO-1 and BIO-2 would ensure that potential Project-related impacts to nesting birds and roosting bats would be reduced through pre-construction surveys and, if necessary, implementation of work exclusion buffers and bat-safe tree removal processes. With implementation of these mitigation measures, these impacts would be reduced to a less-than-significant level.

b) **No Impact.** Vegetation communities on the Project components are limited to non-native annual grasslands, and much of the site is developed or disturbed. The Project would have no impact on riparian habitat or other sensitive natural community.

c) **No Impact.** The federal government defines and regulates waters, including wetlands, in Section 404 of the Clean Water Act (CWA). Wetlands are “areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b] and 40 CFR 230.3). No wetlands or waters are located along or on the Project components; thus, there would be no impact.

d) **Less than Significant Impact.** Being located in a residential area, the CTF, well sites, and pipeline alignment do not provide valuable nursery habitat for fish, amphibian, bird, or mammal species. Because of the existing barriers to terrestrial wildlife movement (e.g., local roadway network), the Project's impact on wildlife corridors would be less than significant, with no mitigation required.

e) **Less than Significant Impact.** The new pipeline would be placed under existing roadways or landscaped areas within disturbed land and non-native annual grassland. No trees would be removed or trimmed for pipeline installation in Santa Rita Road. Likewise, no tree removal or trimming would be required at the Well 9 site. At the Well 10 site, it is anticipated that eight mature trees would be removed and additional trees trimmed to accommodate the replacement facility. Trees would also need to be removed along the southern boundary of the CTF to provide construction access and some trees in Amador Community Park would be removed for pipeline installation within the park. These trees would be replanted at the conclusion of construction. As trees need to be removed, the Project would adhere to Pleasanton Tree Preservation Ordinance (City of Pleasanton, 2015), which requires a permit for removal of heritage trees (trees larger than 55 inches in circumference or taller than 35 feet). No other local policies or ordinances protect biological resources that could be affected by construction or operation of the PFAS facility, wells, and pipeline. Thus, with adherence to the City's Tree Preservation Ordinance, impacts under this criterion would be less than significant with no mitigation required.

f) **No Impact.** The Project alignment is not within an area subject to any Habitat Conservation Plan adopted pursuant to the federal Endangered Species Act, or any Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan; thus, there would be no impact.

References

California Department of Fish and Wildlife, (CDFW). 2022. California Natural Diversity Database (CNDDB) Rarefind 5. CDFW's Electronic database, Sacramento, California. https://www.wildlife.ca.gov/Data/CNDDB.

California Native Plant Society, 2022. *Inventory of Rare and Endangered Plants*. http:// www.rareplants.cnps.org.

Mayer, K. E. and W. F. Laudenslayer, Jr., 1988. *A Guide to Wildlife Habitats of California*, 166 pp. Available online at https://www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats.

Pleasanton, City of, 2015. Pleasanton Municipal Code, Chapter 17.16, Tree Preservation. Accessed at: http://qcode.us/codes/pleasanton/.

U.S. Fish and Wildlife Service (USFWS), 2022. Species List. Information for Planning and Conservation (IPaC) Environmental Conservation Online System. https://ecos.fws.gov/ipac/.

3.2.5 Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource 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 dedicated cemeteries?	☐	☒	☐	☐

ESA staff completed a records search of the area within a 0.5-mile radius of the Project components and the pipeline alternative alignments at the Northwest Information Center (NWIC) of the California Historical Resources Information System on January 13, 2022 (File No. 21-1098). The purpose of the records search was to: (1) determine whether known cultural resources have been recorded within or adjacent to the Project site; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources.

The result of the background research indicates that one pre-contact Native American site and one historic-era resource have been previously recorded within the records search radius. Pre-contact site P-01-000064 consists of three mortars and one pestle reportedly identified 15 feet below the surface in 1950 (Harner, 1950). The area was subsequently entirely destroyed by gravel mining. Historic-era resource P-01-001783 is the former alignment of the Southern Pacific Railroad. The tracks and rails have been removed and the alignment is currently the Iron Horse Trail, a pedestrian and bicycle path. These resources would not be impacted by the Project.

ESA completed a survey of the Project components and pipeline alignments on January 25, 2022. The survey included the proposed PFAS CTF and the two new well sites (Well 9 and 10). The survey was completed in narrow transects where feasible or observed from vantage points to provide an overall assessment of site conditions. Pipeline alignments would be installed within established, paved road rights-of-way and/or Amador Community Park. All roadway segments were subjected to a windshield survey. Dense vegetation in Amador Community Park obscured visibility along that pipeline alignment. Rodent holes, the base of trees, or other location of exposed soil was observed as feasible.

The proposed location of the PFAS CTF is used as a staging area and equipment yard in the City Operations Service Center. The approximately 1.1-acre area is graveled and highly disturbed. Small areas of undisturbed land were observed on the perimeter, where soil was a dark brown silty clay with gravel inclusions. Well 8 building was observed from the outside; no exposed ground surface is in the vicinity of the building. Proposed Well 9 site would be constructed near the Gingerbread Preschool in Amador Community Park. The area was landscaped with limited visibility. A few rodent holes and areas adjacent to the preschool building exhibited medium

brown silty clay. Proposed Well 10 site is entirely paved except a few small, landscaped areas to the rear of the existing maintenance building.

No pre-contact cultural materials (such as midden soil, shell, bone, or lithics) or historic-era cultural materials (such as glass or ceramic deposits, or foundations) were identified during the survey effort.

Discussion

a) **No Impact.** CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on historical resources. A historical resource is defined as any building, structure, site, or object listed in or determined to be eligible for listing in the California Register of Historical Resources (California Register), or determined by a lead agency to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The following discussion focuses on architectural and structural resources. Archaeological resources, including those that are potentially historical resources according to CEQA Guidelines Section 15064.5, are addressed below under question b).

As a result of the records search, background research, and a site survey, it was determined that there are no architectural or structural resources on the Project site that qualify as historical resources, as defined in CEQA Guidelines Section 15064.5. As such, there are no historical resources present within the Project site and there would be no impact on historical resources.

b) **Less than Significant Impact with Mitigation.** CEQA Guidelines Section 15064.5 requires the lead agency to consider the effects of a project on archaeological resources. A significant impact would occur if a project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

No evidence of pre-contact or historic-era archaeological resources was identified in the Project component sites. Given that most of the Project is within road rights-of-way, there is a low sensitivity for historic-era archaeological resources (such as foundations, artifact-filled privies, or other historic deposits). Based on the results of the records search and survey effort, the urban/disturbed context of the Project sites, and the distance to natural water sources, the sensitivity for impact pre-contact cultural resources is also low.

In the unlikely event that a previously unrecorded archaeological resource is identified during Project ground-disturbing activities and found to qualify as a historical resource or a unique archaeological resource, any impacts on the resource resulting from the Project could be potentially significant.

Implementation of **Mitigation Measure CUL-1a: Cultural Resources Awareness Training** and **Mitigation Measure CUL-1b: Inadvertent Discovery of Cultural Materials or Tribal Cultural Resources** would reduce potentially significant impacts to

less than significant. In the event of an inadvertent discovery of any cultural materials or tribal cultural resource, this mitigation would ensure that work halts in the vicinity until a qualified archaeologist can make an assessment and provide additional recommendations if necessary, including contacting Native American tribes.

Mitigation Measure CUL-1a: Cultural Resources Awareness Training.

Prior to authorization to proceed, the City shall engage a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior's Professional Qualification Standards for Archeology, shall conduct a training program for all construction and field workers involved on site disturbance. On-site personnel shall attend a mandatory pre-Project training that outlines the general archaeological sensitivity of the area and the procedures to follow in the event an archaeological resource and/or human remains are inadvertently discovered.

Mitigation Measure CUL-1b: Inadvertent Discovery of Cultural Materials or Tribal Cultural Resources.

If pre-contact or historic-era cultural materials are encountered during Project implementation, the City shall halt all construction activities within 100 feet of the material, and the contractor's qualified archaeologist shall inspect the find within 24 hours of discovery and notify the City of the initial assessment. Pre-contact cultural materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era cultural materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse.

If the City determines, based on recommendations from the qualified archaeologist and a Native American representative (if the resource is pre-contact), that the resource may qualify as a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5) or a tribal cultural resource (as defined in PRC Section 21080.3), the resource shall be avoided if feasible. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource, incorporating the resource within open space, capping and covering the resource, or deeding the site into a permanent conservation easement.

If avoidance is not feasible, the City shall consult with appropriate Native American representatives (if the resource is pre-contact) to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2 and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).

c) **Less than Significant Impact with Mitigation.** The records search and background research conducted for the Project determined that no human remains are known to exist

within the Project sites. Therefore, the Project is not anticipated to impact human remains, including those interred outside of formal cemeteries.

While unlikely, if any previously unknown human remains were encountered during ground-disturbing activities, impacts on the human remains resulting from the Project could be potentially significant.

Implementation of **Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains** would reduce potentially significant impacts to less than significant. This measure shall comply with applicable state laws, including Section 7050.5 of the Health and Safety Code. This would require work halt in the vicinity of a find and the immediate notification of the County coroner. If the coroner determines that the human remains are Native American, they will notify the California Native American Heritage Commission, who shall appoint a Most Likely Descendant (PRC Section 5097.98).

> **Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.**
>
> If human remains are encountered during Project implementation, The City shall halt all construction activities within 100 feet of the find until the Alameda County Coroner has been contacted to determine that no investigation of the cause of death is required. The Native American Heritage Commission shall be contacted within 24 hours if it is determined that the remains are Native American. The Commission shall then identify the person or persons it believes to be the Most Likely Descendant from the deceased Native American, who in turn would make recommendations for the appropriate means of treating the human remains and any grave goods.

References

Harner, 1950. Archaeological Site Survey Record for P-01-000065. Confidential file at NWIC.

Northwest Information Center (NWIC). 2022. California Historical Resources Information System Database Search. File No. 21-1098, January 13, 2022. Confidential files at ESA.

3.2.6 Energy

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

Discussion

a) **Less than Significant Impact.** Both construction and operation of the Project would involve expenditure of energy.

Construction Energy

During construction, energy use would be both direct and indirect. Direct energy use would include the consumption of fuel (typically gasoline and diesel fuel) for the operation of construction equipment and vehicles. Energy in the form of electricity may also be consumed by some pieces of construction equipment, such as welding machines, power tools, lighting, etc.; however, the amount of consumed electricity would be relatively minimal. Indirect energy use would include the energy required to make the materials and components used in construction. This includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing. Direct energy use represents about one-quarter of total construction-related consumption while indirect energy use typically represents the remaining three-quarters (Hannon, 1978).

CEQA focusses on the efficient use of energy rather than a quantification of the actual amount of energy consumed. Construction activities at each of the well sites is expected to range from approximately three to 11 months. Construction of the two pipeline alignments is expected to take 4 months each. Construction activities would include use of heavy-duty construction equipment and offsite vehicles to transport equipment, materials, and workers to the project component sites.

Energy use requirements in the form of diesel fuel consumed by on-site off-road construction equipment have been estimated based on the GHG emissions estimates from the CalEEMod modeling conducted for the Air Quality and GHG analysis. GHG emissions from CalEEMod were used in conjunction with The Climate Registry's 2021 default factors for calculating CO_2 emissions from diesel fuel (TCR, 2021). The analysis assumes that all off-road construction equipment would be fueled by diesel.

For on-road construction vehicles, the analysis assumes that light-duty automobiles and trucks used by commuting workers would be fueled by gasoline, and that on-road construction vehicles, such as vendor vehicles and trucks hauling demolition debris, soil,

and other materials, would use diesel fuel. This analysis assumes that no electric on-road vehicles would be used during Project construction. The quantities of fuels required by on-road vehicles during construction have been calculated based on the GHG emissions associated with commuting workers and vendor and haul trips and The Climate Registry's 2021 default factors for calculating CO_2 emissions from gasoline and diesel fuels (TCR, 2021). GHG emissions associated with commuting workers and vendor and haul trips were estimated using information provided by the City for estimated trip counts and CalEEMod default trip lengths (detailed in Appendix B).

In addition to fuels used by equipment and vehicles, construction activities would use water for dust suppression and management, which in turn would require electricity to supply, treat, and transport the water to the project area. Based on the estimated water use for dust suppression provided by the City, GHG emissions were estimated using GHG intensity factors for East Bay Community Energy (EBCE) electricity.

It is estimated that over the entire construction period of the Project, off-road equipment and on-road vehicles would consume approximately 61,074 gallons of diesel fuel and on-road worker vehicles would consume approximately 4,861 gallons of gasoline.

Due to the relatively small scope of the Project, as well as the limited duration of construction activities, the consumption of fuel energy during construction would be temporary, localized, and would amount to a very small fraction of the 104 million gallons of diesel and 442 million gasoline sold in Alameda County (California Energy Commission [CEC], 2020). Vehicles used for Project construction and operation would be required to comply with all federal and state efficiency standards. Additionally, there are no Project characteristics or features that would be inefficient or that would result in the use of equipment and vehicles in a manner that would be less energy efficient than similar construction projects.

Therefore, Project construction would not result in wasteful, inefficient, or unnecessary use of energy, and would result in a less-than-significant impact associated with energy consumption.

Operation

Once operational, increase in the Project's energy requirements would be primarily in the form of electricity to power new pumps at the well sites. The Project would operate primarily using equipment such as pumps, motors, and standby generators, and would not include any new high-powered pieces of equipment. The total energy required to operate the Project related facilities is estimated at 2,800,000 kilowatt hours per year (kWhr/year), which is approximately a 70 percent increase from existing facility use. All electricity needed to operate the facilities would be sourced from PG&E / EBCE.[5] A small amount of diesel would be used for routine testing and maintenance of the backup generator. Operation and maintenance of the new facilities would require up to two new

[5] Electricity used at the City of Pleasanton facilities is generated by EBCE. This electricity is transmitted to these facilities via PG&E's transmission grid.

employees; energy use from employee trips would therefore be minimal. No additional chemicals or additional groundwater flow are anticipated as part of the Project; hence no new truck trips would be generated by Project operations. Though the Project would increase long-term energy demand, this increase is essential to provide the required treatment to ensure that drinking water provided to the community is safe and in compliance with SWRCB standards. Increase in energy use associated with the Project would not be considered inefficient and wasteful and hence, this impact would be considered less than significant.

b) **Less than Significant Impact.** As discussed above, Project construction would require the use of off-road construction equipment and on-road trucks. Construction activities would comply with state and local requirements designed to minimize idling and associated emissions, which would also minimize the use of fuel. Specifically, pursuant to 13 CCR Sections 2485 and 2449, idling of commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower would be limited to a maximum of five minutes. Fuel use for Project construction would be consistent with typical construction and manufacturing practices, and energy standards such as the Energy Policy Acts of 1975 and 2005, which promote strategic planning and building standards that reduce consumption of fossil fuels, increase use of renewable resources, and enhance energy efficiency.

Once operational, the Project's energy use would be primarily in the form of electricity used for the operation of pumps at the well sites. Energy used for operational vehicle trips would be negligible. Electricity would be provided by EBCE which would be subject to SB 100 under California's Renewable Portfolio Standard (RPS) Program. Signed into law by Governor Brown, SB 100 increased California's RPS target to 60 percent of total electric retail sales by 2030, and requires 100 percent of electric retail sales to come from eligible renewable or carbon-free resources by 2045. EBCE, as the electricity provider, is subject to these requirements[6]. EBCE provides renewable energy ranging from 40- to 100 percent renewable. Therefore, there are no aspects of the proposed Project that would conflict with or obstruct a state or local plan for renewable energy or energy efficiency and impacts would be less that significant.

References

California Energy Commission (CEC), 2020. 2020 California Annual Retail Fuel Outlet Report Results (CEC-A15), August 31, 2020. Available: https://www.energy.ca.gov/media/3874. Accessed March 30, 2022.

Hannon et al., 1978, Energy and Labor in the Construction Sector. Article in Science Magazine. November 24, 1978.

[6] Electricity used at the City of Pleasanton facilities is generated by EBCE. This electricity is transmitted to these facilities via PG&E's transmission grid.

Pacific Gas & Electricity (PG&E), 2021. PG&E Currents, April 19, 2021. Available: https://www.pgecurrents.com/2021/04/19/a-renewable-revolution-how-pge-and-its-customers-helped-write-californias-clean-energy-success-story/. Accessed March 31, 2022.

The Climate Registry (TCR), 2021. 2021 Default Emission Factors, Table 2.1—U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels. May 2021. Available: https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf?mc_cid=4b45d12237&mc_eid=5f138d1baa. Accessed March 29, 2022.

3.2.7 Geology and Soils

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GEOLOGY AND SOILS — Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) 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 waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Discussion

a.i) **Less than Significant Impact.** The State Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) prohibits the development of structures for human occupancy across active fault traces. Under this Act, the California Geological Survey (CGS) has established "Zones of Required Investigation" on either side of Holocene-active faults[7] that delineates areas susceptible to surface fault rupture. The zones are referred to as Earthquake Fault Zones (EFZs) and are shown on an official Earthquake Zones of Required Investigation Map (EZRIM) published by the CGS; the California Earthquake Hazards Zone Application (EQ Zapp) is the online database containing the EZRIMs. Surface rupture occurs when the ground surface is broken due to a fault movement during an earthquake; typically, these types of hazards occur within 50 feet of a Holocene-active fault (CGS, 2018).

[7] Holocene-active faults refer to faults that have displayed surface displacement within Holocene time (the last 11,700 years) (CGS, 2018).

The project components do not lie within any mapped EFZs according to the available data (CGS, 2022). Although the area can be affected by earthquakes or seismic ground shaking, there are no current data available that indicates that Holocene-active faults are present within the area of the project components. The nearest faults that are designated EFZs are the Verona fault zone (CGS, 2022) approximately 2 miles south of the Well 9 site, the Calaveras fault zone (CGS, 2022) approximately 2.5 miles east of the Well 9 site, and the Pleasanton fault zone approximately 2.6 miles northwest of the CTF/Well 8 site (CGS, 2022).

A portion of an approximately 4.5-mile-long segment of the Pleasanton fault zone is mapped within a portion of one of the Well 9 site. This segment of the Pleasanton fault zone is not considered a Holocene-active fault because it does not show evidence for surface rupture in the last 11,700 years and, as such, it is not considered an EFZ under the Alquist-Priolo Act.

As the Project does not include building habitable structures or facilities within a designated EFZ, it would not expose people or structures to potential substantial adverse effects relating to rupture of a known earthquake fault. There would be a **less-than-significant impact** related to with surface fault rupture.

a.ii) **Less than Significant Impact.** The project components are located in a historically seismically active portion of California. The 2014 Working Group on California Earthquake Probabilities[8] concluded that there is a 72 percent probability that a magnitude (M_W) 6.7 earthquake or higher could strike the San Francisco Bay Area in the next 30 years (Field et al., 2015). As discussed above, there are a number of fault systems in the region. The nearby Calaveras, Verona, and Pleasanton fault zones are all in proximity to the project components and are possible sources of strong seismic groundshaking. According to the WGCEP, there is an approximately 25 percent probability that there could be an earthquake of magnitude 6.7 or greater in the next 30 years within the Calaveras fault zone (Field et al., 2015).

The Project would include (but would not be limited to) the construction of the CTF, the replacement of the Well 8 building shell, the installation of Wells 9 and 10, and the installation 1.3 miles of pipeline. In the event of an earthquake in the region, strong seismic groundshaking could be experienced at any of the project component sites; if any of these project components were damaged or destroyed by strong seismic groundshaking, this could result in a significant impact. However, the construction and replacement of structures associated with the Project would be subject to the standards and regulations included in the most current version of the California Building Code (CBC), consistent with state law. The CBC requires the preparation of a site-specific geotechnical report by a licensed geotechnical engineer, certified by the State of California. The report will be used to inform the specific design elements of the project

8 Also referred to as WGCEP 2014, this is a working group comprised of seismologists from the U.S. Geological Survey (USGS), California Geological Survey (CGS), Southern California Earthquake Center (SCEC), and California Earthquake Authority (CEA).

components, including seismic design elements, to ensure the structures associated with the Project are suitable to withstand any potential damage due to seismic groundshaking. Compliance with the CBC would ensure impacts related to strong seismic groundshaking would be less than significant.

a.iii) **Less than Significant Impact.** Liquefaction is a phenomenon in which unconsolidated, water saturated sediments become unstable due to the effects of strong seismic groundshaking. During an earthquake, these sediments can behave like a liquid, potentially causing severe damage to overlying structures. Lateral spreading is a variety of minor landslide that occurs when unconsolidated liquefiable material breaks and spreads due to the effects of gravity, usually down gentle slopes. Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 50 feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

According to EQ Zapp, the project component sites are within a mapped Liquefaction Zone, except for the CTF/Well 8 site (CGS, 2022). In the event that an earthquake in the region produced groundshaking strong enough to trigger liquefaction at one or all of the Project component sites, the Project components could be damaged or destroyed—this would be a potentially significant impact.

However, as discussed above, the Project would be subject to the regulations and standards included in the CBC, which would require the preparation of a site-specific geotechnical report by a licensed geotechnical engineer, certified by the State of California. The report will be used to inform the specific design elements of the Project components to ensure the structures associated with the Project are suitable to withstand any potential damage due to liquefaction. Compliance with the CBC would ensure impacts related to liquefaction would be less than significant.

a.iv) **No Impact.** Landslides are one of the various types of downslope movements in which rock, soil, and other debris are displaced due to the effects of gravity. The potential for material to detach and move down slope depends on multiple factors including the type of material, water content, and steepness of terrain.

The project components would be within developed, urbanized areas with relatively flat topography. Landslides and other slope failures are not anticipated at the Project component sites because are all within developed, urbanized areas with relatively flat topography. Based on Google Earth imagery, there are no signs of previous landslides within or around the project component sites. Additionally, based on a review of the EQ Zapp and geologic maps of the area, there are no designated Landslide Zones or areas

of mapped historical landslides in the vicinity of the Project site (CGS, 2022; Dibblee & Minch, 2006). Nevertheless, slope stability studies will be included in the geotechnical investigation; if any investigation indicates there is a landslide risk, the geotechnical report would provide recommendations to address such conditions. The Project would not include any activity that would directly or indirectly cause potential substantial adverse effects (including loss. injury, or death) as a result of landslides. There would be no impact.

b) **Less than Significant Impact.** The construction activities associated with the Project would involve ground-disturbing earthwork, including earthmoving, excavation, and grading. These activities could increase the susceptibility of soils on the project component sites to erosion by wind or water and subsequently result in the loss of topsoil. If not controlled and managed, the impact of soil erosion would be significant. As the Project would create over 1.0 acre of ground disturbance, a Stormwater Pollution Prevention Plan (SWPPP) would be developed and implemented as part of the Project in accordance with a NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (*NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The SWPPP would include Best Management Practices (BMPs) designed to control run-on and run-off and prevent soil erosion. The BMPs may include dewatering procedures, storm water runoff quality control measures, watering for dust control, and the construction of silt fences, as needed. During construction-related activities, soil compaction associated with bank formation would further reduce the potential for soil erosion. The implementation of these soil and erosion control measures and compliance with these independently enforceable existing requirements would ensure that the Project's potential impacts associated with soil erosion and loss of topsoil during construction are less than significant.

c) **Less than Significant Impact.** As discussed above, there would be no impact associated with landslides at the Project component sites due to the flat topography at the project component sites. As discussed above, the project component sites are within a designated Liquefaction Zone, except for the CTF/Well 8 site.

Land subsidence is the gradual settling or sudden sinking of the earth's surface due to subsurface movement of earth materials (USGS, 1999). Subsidence in alluvial valley areas is typically associated with groundwater or petroleum withdrawal, and regional ground subsidence or settlement is typically caused by compaction of alluvial deposits, or other saturated deposits in the subsurface (USGS, 1999). The Project would not include dewatering or other activities that could exacerbate subsidence in the area during construction. During operations, the Project would not change the volume of groundwater from the existing 3,500 acre-feet per year (the amount reported in Chapter 2, *Project Description*) and, thus, would not exacerbate subsidence in the area.

As previously discussed above, the Project would be subject to the regulations and standards included in the CBC, which would require the preparation of a site-specific geotechnical report by a licensed geotechnical engineer, certified by the State of California. The report will be used to inform the specific design elements of the project components to ensure the structures associated with the Project are suitable to withstand any potential damage due to liquefaction. Additionally, while the Project is not expected to result in significant impacts related to landslides and subsidence, the site-specific geotechnical investigation would include the analysis of the potential for landslides and subsidence. Compliance with the CBC would ensure impacts related to liquefaction and other unstable soils would be less than significant.

d) **Less than Significant Impact.** Expansive soils are soils that possess a "shrink-swell" characteristic, also referred to as linear extensibility. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying; the volume change is reported as a percent change for the whole soil. This property is measured using the coefficient of linear extensibility (COLE) (NRCS, 2017). The Natural Resources Conservation Service (NRCS) relies on linear extensibility measurements to determine the shrink-swell potential of soils. If the linear extensibility percent is more than 3 percent (COLE=0.03), shrinking and swelling may cause damage to buildings, roads, and other structures (NRCS, 2017). Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater[9]. Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Structural damage may occur incrementally over a long period of time, usually as a result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

NRCS Web Soil Survey data indicates the soils underlying the Project site have between a 1.5 to 2.8 percent linear extensibility rating, which is considered a low linear extensibility rating (NRCS, 2021). Nonetheless, geotechnical investigations are required to address expansion potential. If site conditions differ from the Web Soil Survey data, measures will be included in the geotechnical report that would provide recommendations to address risk associated with soil expansion. The impacts of the Project would be less than significant.

e) **No Impact.** The Project does not include any components that would require soils adequate for the use of septic tanks or other alternative wastewater disposal system. None of the project components include the use of septic tanks or an alternative wastewater disposal system, therefore there would be no impact under this criterion.

f) **Less than Significant with Mitigation.** Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones; mammals, birds, fish, etc.), invertebrates (animals without backbones; starfish, clams, coral, etc.), and microscopic plants and animals (microfossils), and can include mineralized body

[9] Perched groundwater is a local saturated zone above the water table that typically exists above an impervious layer (such as clay) of limited extent.

parts, body impressions, or footprints and burrows. They are valuable, non-renewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. A significant impact would occur if a project would destroy a unique paleontological resource or site, or a unique geologic feature.

In its "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources," the Society of Vertebrate Paleontology (SVP) defines four categories of paleontological potential for rock units: high, low, undetermined, and no potential: **High Potential**, rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources; **Low Potential**, rock units that are poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule; **Undetermined Potential**, rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment; and **No Potential**, rock units like high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites) that will not preserve fossil resources (SVP, 2010). It is important to note that while paleontological potential as defined above can provide a rough idea of whether subsurface fossils may exist, the uniqueness or significance of a fossil locality is unknown until it is identified to a reasonably precise level (Scott and Springer, 2003). Therefore, any fossil discovery should be treated as potentially unique or significant until determined otherwise by a professional paleontologist.

Geologic mapping by Dibblee and Minch (2006) indicates Holocene-age alluvial deposits are present at the surface within a majority of the Project area. These deposits have low-to-high paleontological sensitivity, increasing with depth, with older, high sensitivity alluvium present at depth. While not mapped at the surface within the project component sites, there are older Pleistocene-age alluvium deposits mapped approximately 0.5 mile south and southeast of the Project component sites. These Pleistocene-age deposits are considered to have a high paleontological sensitivity due to the Pleistocene-age vertebrate fossil discoveries throughout California, including Alameda County (Sub Terra, 2017; UCMP, 2020a). Also not mapped at the surface within the project area, but occur in the area, are deposits known as Livermore Gravel, which are mapped approximately 1 mile south and southeast of the project component sites (Dibble & Minch, 2006). The Livermore Gravels are considered to have high paleontological sensitivity due to the presence of vertebrate fossil localities within this formation in Alameda County (UCMP, 2020a); two such localities are within 1 mile the CTF/Well 8 site.

Ground disturbance during construction of the wells is anticipated to reach up to 75 feet below ground surface (bgs). Additionally, the reverse mud drilling is expected to reach up to 700 feet bgs. The pipeline construction corridor for both the pipeline from Wells 9 and 10 to the CTF and along Santa Rita Road would be approximately 12 to 15 feet wide excavated at a depth of 5 feet. As described in Table 2-1, jack boring (trenchless

technology) would be used along Valley Avenue and Busch Road intersection due to a high-pressure gas line and high voltage power conduit, resulting in approximately two pits, and along Santa Rita Road, with up to six excavation pits. Each pit would be approximately 20 by 25 by 15 feet (or 278 cubic yards) resulting in a total of approximately 2260 cubic yards excavated and filled at both pipeline sites.

The risks of encountering and/or destroying paleontological resources increase with the amount of ground disturbance associated with a project; ground disturbing activities that would not require mass excavation of soil (i.e., post driven into the ground) would have a minimal impact on paleontological resources, as there would be little to no material to observe. Ground disturbance that includes mass open evacuation or situations where excavation spoils may be examined, has a greater impact and an increased likelihood of encountering significant paleontological resources. While the exact depth at which the transition to older sediments is not known in the project site, fossils have been discovered in California as shallowly as 5-10 feet below ground surface (Jefferson, 1991a and b). If ground disturbance and/or excavation associated with the Project encounters and inadvertently damages or destroys significant paleontological resources, this would be a potentially significant impact.

The deep excavations have the potential to disturb geologic units with high paleontological sensitivity. The destruction of fossils would be a potentially significant impact to paleontological resources. In order to reduce impacts to paleontological resources to less than significant, **Mitigation Measures GEO-1** is recommended, which requires preconstruction training and monitoring in areas of high paleontological sensitivity, and that work halt in the vicinity of a find until a qualified paleontologist can make an assessment and provided further recommendations. The specifications of Mitigation Measure GEO-1 are as follows:

Mitigation Measure GEO-1: Inadvertent Discovery of Paleontological Resources.

Prior to the start of any ground-disturbing activity, the City shall retain a qualified paleontologist (meeting the standards set by the Society of Vertebrate Paleontology [SVP]) to prepare paleontological resources sensitivity training materials for use during a Project-wide Worker Environmental Awareness Training (WEAP), or equivalent. The WEAP shall be conducted by a qualified environmental trainer working under the supervision of the qualified paleontologist. The training session shall focus on the recognition of the types of paleontological resources that could be encountered during construction and the procedures to be followed if they are found. Protocols for an unanticipated discovery shall also be included, in the event that fossils are encountered in areas of low paleontological potential. The City and/or its contractor shall retain documentation demonstrating that all construction personnel attended the training prior to the start of work on the site and shall provide the documentation. In the event construction crews are phased, additional trainings shall be conducted for new construction personnel.

Paleontological monitoring is necessary for all ground-disturbing activities that exceed 5 feet below ground surface (bgs), in previously undisturbed formations

mapped as Holocene-age alluvium. Monitoring is also necessary for excavations in formations mapped as Pleistocene-age alluvium and/or Pliocene and Pleistocene-age Livermore Gravel. Paleontological monitoring shall be conducted by a qualified paleontological monitor(s) meeting the standards of the SVP. Monitoring specifications and details shall be documented in a Paleontological Resources Monitoring and Mitigation Plan (PRMMP), to be prepared by the Qualified Paleontologist. Depending on the conditions encountered, full-time monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist. The Qualified Paleontologist may spot check the excavation on an intermittent basis and recommend whether the depth of required monitoring should be revised based on his/her observations. Upon completion of monitoring, the results shall be documented in a paleontological resource monitoring report, to be prepared by the Qualified Paleontologist at the completion of construction.

If a paleontological resource (such as fossilized bone, teeth, shell, tracks, trails, cast, molds, or impressions) is discovered during construction, the paleontological monitor shall have the authority to halt grading and excavation activities in the area of the exposed resource to evaluate the significance of the discovery. An appropriate buffer area (usually between 50 and 100 feet) shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the University of California Museum of Paleontology at Berkeley, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, photographs, and a technical report shall also be filed at the repository and/or school.

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3.2.8 Greenhouse Gas Emissions

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

Certain gases in the earth's atmosphere known as greenhouse gases (GHGs), are important in regulating the earth's surface temperature. As solar radiation enters the atmosphere from space, some of the radiation is absorbed by the earth's surface while the rest is emitted back toward space. However, GHGs in the atmosphere absorb this radiation, resulting in a warming of the atmosphere. Carbon dioxide (CO_2), methane, ozone, water vapor, nitrous oxide, and chlorofluorocarbons are the most prominent greenhouse gases. The emission of these gases in excess of natural ambient concentrations has led to an enhanced greenhouse effect and accelerated warming of the atmosphere. In California, the transportation and industrial sectors result in the largest emission of GHGs (California Air Resources Board [CARB], 2021).

GHG emissions worldwide cumulatively contribute to the significant adverse environmental impacts of global climate change. No single project could generate sufficient GHG emissions on its own to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects in Pleasanton, the entire state of California, across the nation, and around the world contribute cumulatively to the phenomenon of global climate change and its associated environmental impacts.

Discussion

a) **Less than Significant Impact.** GHG emissions would be generated during both construction and operational phases of the Project.

Construction

The combustion of diesel fuel to provide power for the operation of various construction equipment results in the generation of GHGs. Construction emissions associated with the Project were estimated using Project-specific information provided by the City, such as construction schedule and phasing; types, number, and horsepower rating of construction equipment used, their daily usage in terms of hours per day, and the number of days each piece of equipment is used over the construction period; and information on construction vehicle trips for worker commute, equipment and material transport and hauling trips. Appendix B contains the data and assumptions used to estimate the construction-phase GHG emissions that would be associated with the Project.

CO_2, CH_4 and N_2O emissions from off-road construction equipment and construction vehicle trips were derived from the CalEEMod run to estimate criteria air pollutant emissions. N_2O and CH_4 emissions were multiplied by their respective Global Warming Potentials[10] GWPs (25 and 298) and added to the CO_2 emissions to obtain CO_2e emissions.

It is estimated that Project construction would generate a total of approximately 677 $MTCO_2e$ over the 28-month construction period. The Bay Area Air Quality Management District (BAAQMD) does not have adopted significance thresholds for construction-related GHG emissions in its 2017 CEQA Guidelines (BAAQMD, 2017), nor in its updated GHG thresholds (BAAQMD 2022). However, it recommends that the Lead Agency (i.e., the City of Pleasanton) quantify and disclose construction GHG emissions and incorporate best management practices to reduce GHG emissions during construction, as applicable.

In addition, the GHG thresholds proposed by the BAAQMD in response to SB 32's GHG reduction goals also do not contain significance thresholds for construction (BAAQMD, 2022). GHG emissions from the construction phase of a project represent a very small portion of emissions over the project's lifetime, which for the projects such as the proposed Project would be at least 30 years. The BAAQMD's proposed thresholds are instead designed to address operational GHG emissions from land use development projects which represent the majority of a project GHG emissions. The primary source of GHG emissions from construction is diesel-powered construction equipment. Large reductions in construction emissions are difficult to realize because there are currently no economical alternatives to diesel fuel for powering most construction equipment. Improvements in statewide regulations governing construction equipment and fuel standards driven by SB 32 and other initiatives will also contribute to reduced emissions from construction activities. Therefore, GHG emissions associated with Project construction would be considered less than significant. Though not required as mitigation to reduce a significant impact, implementation of **Mitigation Measure AQ-1 and AQ-2** will also help reduce GHG emissions in addition to providing air quality benefits. Therefore, GHG emissions associated with Project construction would be considered less than significant.

Appendix B contains details on the calculations and assumptions used to estimate construction GHG emissions as well as model outputs.

Operations

Operation and maintenance activities associated with the Project would be performed by City staff, and would require two additional staff. No new truck trips would be generated as no new chemicals or additional flow is anticipated as part of the Project. Spent granular activated carbon (GAC) material generated by the CTF would be hauled off by a

[10] Global warming potential is the heat absorbed by any GHG in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of the reference GHG, CO_2. GWP for CO_2 is 1.

media supplier for entire system once every 20 months on average. These trips would generate very minimal GHG emissions and have not been quantified.

A 600-kilowatt emergency standby generator is proposed at Well 8 site to provide backup power in the event of power outage. Routine testing and maintenance of this generator would be required which would also generate GHG emissions. Testing would be limited to one hour per day and 50 hours per year by the BAAQMD's permit requirements for the generator. Emissions from generator testing was estimated using U.S. EPA's AP-42 emissions factors for CO_2.

In addition, GHG emissions would be generated indirectly from the use of electricity to pump water from the wells. The total estimated annual power requirement for the operation of the wells is estimated to be approximately 2,800 megawatt hours (MWh) per year. Indirect GHG emissions generated by the Project's use of electricity from East Bay Community Energy (EBCE) were estimated using a GHG intensity factor of 100.75 pounds CO2e per MWh from the California Community Choice Association (CalCCA 2020). GHG emissions in the form of CO_2e were calculated by multiplying the N_2O and CH_4 emissions by their respective global warming potential, and then adding the CO_2, N_2O, and CH_4 emissions.

Project operational emissions are shown in **Table 3-6**.

TABLE 3-6
GHG EMISSIONS FROM PROJECT OPERATIONS

Source	Annual Operational GHG Emissions ($MTCO_2e$ per year)
Backup Generator Testing	23
Indirect Electrical Grid Emissions	129
Total[a]	*152*

NOTE:
[a] Total may appear incorrect because of rounding

SOURCE: Appendix B

The 2017 BAAQMD CEQA Guidelines include significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated by the California Legislature in AB 32. The first threshold, 1,100 $MTCO_2e$ per year, is a numeric emissions level below which a project's contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 $MTCO_2e$ per service population or better. Because these thresholds are based on a 2020 GHG target they are no longer relevant for current and future projects.

In February, 2022, in response to SB 32 and 2017 Scoping Plan Update targets for 2030 and Executive Order (EO) B-55-18 target for carbon neutrality no later than 2045, the

BAAQMD updated its CEQA significance thresholds for GHGs in its Justification Report (BAAQMD, 2022). The BAAQMD's thresholds do not include any quantitative operational thresholds and instead focus on implementation of Best Management Practices (BMPs) for land use development projects that the BAAQMD estimates will provide maximum reductions needed while being implementable at a project-level. The BMPs target energy use and transportation - the two major sources of GHG emissions, and require elimination of natural gas use, efficient use of electricity, reduction in VMT generated by projects beyond regional averages and provision of Electric Vehicle charging infrastructure. These BMPs do not apply to infrastructure development projects such as the Project that do not include occupied, conditioned buildings or generate traffic.

In the absence of an adopted operational significance threshold, the Project's operational emissions have been compared to the 1,100 $MTCO_2e$ per year operational threshold adjusted for the SB 32 reduction target. The adjusted threshold would be 660 $MTCO_2e$ per year, 40 percent less than the operational threshold identified by the BAAQMD for AB 32 compliance. As shown in Table 3-6, the Project's operational emissions would be well below this threshold. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. This would be a less than significant impact.

b) **Less than Significant Impact.** In response to AB 32 GHG reduction goals, CARB adopted the Climate Change Scoping Plan, which outlined a framework for achieving the emission reduction goals set in the California Global Warming Solutions Act. The Scoping Plan was most recently updated in 2017 (2017 Scoping Plan Update; CARB, 2017) to address California's 2030 GHG target and identifies how the State can reach the 2030 climate target established by SB 32 while making substantial advancements toward the 2045 climate goal established by Executive Order (EO) B-55-18 (2018).

In response to the updated GHG reduction targets per SB 32, Pleasanton adopted its Climate Action Plan (CAP 2.0; City of Pleasanton, 2022). The previous version of the CAP (CAP 1.0) adopted in 2012 was successfully implemented reducing Pleasanton's emissions 28 percent between 2005 and 2017, and exceeding the City's CAP 1.0 target ahead of schedule. The CAP 2.0 includes a target aligned with the State's 2045 target of per capita carbon neutrality and calls for deeper emissions reductions (1.4 $MTCO_2e$ per capita) in 2030 than required by SB 32.

The Project would generate GHG emissions primarily from construction activities and electricity use during operation. None of the actions in the 2017 Scoping Plan Update or the City's CAP 2.0 contain any actions or measures that address GHG emissions from construction. Electricity supplied to Project would be provided by PG&E; PG&E is required to comply with SB 100 and the RPS. SB 100 requires that the proportion of electricity from renewable sources be 60 percent by 2030 and 100 percent renewable power by 2045. Therefore, the Project would be consistent with all applicable plans, policies and regulations adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

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3.2.9 Hazards and Hazardous Materials

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

Discussion

a, b) **Less than Significant Impact.** The construction of the Project would involve the routine use of small quantities of hazardous materials commonly used during construction activities such as fuels and oils, lubricants and grease, paints and thinners, and solvents and cleaning solutions. Storage and use of hazardous materials at the project component sites during routine use could result in the accidental release of small quantities of hazardous materials, which could degrade soil and/or surface water within the one or all of the project component sites. This would be potentially significant impact.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) that would require that hazardous materials used for construction and operation would be used properly and stored in appropriate containers with secondary containment to contain a

potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.

Additionally, as discussed in Section VII, Geology and Soils, the Project would be required to comply with the National Pollutant Discharge Elimination System (NDPES) Construction General Permit. The NPDES permit includes a requirement to prepare a Stormwater Pollution Prevention Plan (SWPPP) and implement best management practices (BMPs) during construction to reduce the discharge of sediments and pollutants as a result of construction activities. BMPs would be implemented to minimize the risk of a hazardous materials release during construction activities.

The National Pipeline Mapping System (NPMS) Public Map Viewer is a web-based mapping application designed to assist the general public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) jurisdiction.

According to the NPMS Public Viewer, there are three pipelines that could be encountered during Project excavations and/or pipeline installment: two natural gas transmission pipelines that are owned by PG&E and one hazardous liquids pipeline owned by Kinder Morgan (NMPS, 2022). If activities associated with the Project were to encounter and rupture one or more of these pipelines during excavation, this would be a significant impact. To avoid damaging or destroying one or more of these pipelines, the City would be required to notify the responsible parties of its plans to excavate in the vicinity of these pipelines. By following established notification procedures, there would be would no impact these pipelines.

The use, storage, transport, and disposal of hazardous materials during construction and operation of the Project would be carried out in accordance with existing federal, state, and county regulations. These requirements would ensure that hazardous materials used for construction would be stored in appropriate containers, with secondary containment to prevent a potential release. Additionally, project-related spills of hazardous materials would be required to be reported to appropriate regulatory entities, including but not limited to Alameda County Department of Environmental Health (ACDEH); U.S. Fish and Wildlife Service (USFWS); California Department of Fish and Game (CDFG); and the San Francisco Bay Regional Water Quality Control Board (RWQCB). Hazardous materials spills would be cleaned up immediately, and contaminated soils would be excavated and transported to approved disposal areas, consistent with state and local requirements. Therefore, impacts associated with the use, storage, disposal, or transportation of hazardous materials would be less than significant.

Project operation would include the use and storage of water treatment chemicals (i.e., bulk sodium hypochlorite [BSH], liquid ammonium sulfate, hydrofluosilicic acid [fluoride]); no new chemicals would be introduced into the treatment system. The chemicals would be stored properly, in accordance with federal, state, and local laws,

which would reduce any risk of exposure to the public or environment. Compliance with applicable federal, state, and local laws would ensure the impact would be less than significant.

c) **Less than Significant Impact.** There are four schools within one-quarter mile of the Project component sites; the names, addresses, and distances from Project component sites are listed below:

- ***Montessori School of Pleasanton*** – 3410 Cornerstone Court, Pleasanton, CA (approximately 350 feet west of the CTF/Well 8 site and roadwork on Busch Road)
- ***Gingerbread Preschool*** – 4333 Black Avenue, Pleasanton, CA (approximately 200 feet east of the Well 9 site and road work on Santa Rita Road)
- ***Alisal Elementary School*** – 1454 Santa Rita Road, Pleasanton, CA (approximately 200 feet east of the Well 6/Well 10 site)
- ***Amador Valley High School*** – 1155 Santa Rita Road, Pleasanton, CA (approximately 700 south of the Well 9 site and roadwork on Sant Rita Road)
- ***The Quarry Lane School, West Campus*** – (approximately 300 feet southwest of Well 9 site and roadwork on Sant Rita Road)

As discussed above, the Project would include the use, storage, disposal, and transportation of hazardous materials. Additionally, construction activities associated with the Project could result in the production hazardous emissions while construction equipment is operating. If the Project activities resulted in the exposure of hazardous materials or emissions to sensitive receptors at the nearby schools, this would be a potentially significant impact.

However, also discussed above, the Project would be subject to numerous existing federal, state, and local laws in place to regulate the use, storage, disposal, and transportation of hazardous materials. These laws further regulate the use of hazardous materials in proximity to a school. Compliance with the applicable federal, state, and local laws would ensure that Project impacts associated with the release of hazardous emissions or the handling of hazardous materials within one-quarter mile of a school would be less than significant.

d) **Less than Significant Impact.** The Project is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List).

According to the State Water Resources Control Board's (SWRCB) GeoTracker database and the Department of Toxic Substances Control's (DTSC) EnviroStor database, there is one open Cleanup Program Site and two closed Leaking Underground Storage Tank (LUST) sites in proximity to one or more of the project component sites (DTSC, 2022; SWRCB, 2022a). A description of the status of these recorded sites is included below.

- ***USL Pleasanton Lakes – Long-Term Monitoring***. Cleanup Program Site, Open – Long-Term Management. 3000 Busch Road, Pleasanton, CA (approximately 750 feet east of the CTF/Well 8 site).

  This location is the site of the Hanson Radum Aggregates Facility, which is regulated by the Alameda County Department of Environmental Health (ACDEH) under two existing voluntary remedial action program (VRAP) cases. This is the site of soil contamination from an undisclosed contaminant. The area of concern that is nearest to the CTF/Well 8 site has been evaluated and the ACDEH concluded that this site does not to pose a potential risk to human health or the environment (Haley & Aldrich, 2017).

- ***B & J Trucking***. LUST Cleanup Site, Completed – Case Closed as of January 6, 1997. 3742 Valley Avenue, Pleasanton, CA (adjacent to a portion of pipeline from Wells 9/10 to the CTF).

  This location was the site of soil contamination as a result of a diesel fuel spill. The contamination was excavated, and the site was remediated to the satisfaction of the San Francisco Bay Regional Water Quality Control Board (RWQCB) (SWRCB, 2022b).

- ***Shell #13-5783***. LUST Cleanup Site, Completed – Case Closed as of 3/18/2014. 1801 Santa Rita Road, Pleasanton, CA (adjacent to a portion of the pipeline from Wells 9/10 to the CTF).

  This location was the site of soil and groundwater contamination as a result of a petroleum release. The site was remediated and closed under the SWRCB Low-Threat Underground Storage Tank Closure Policy. Although this site has been remediated, there is a potential for residual contamination to be present in the surrounding soil or groundwater (ACDEH, 2014). However, this site would be about 200 feet northwest of the northernmost extent of the pipeline (see Figure 2-2) and the pipeline excavation would only extend to 5 feet deep. It is highly unlikely that soil contamination from the Shell station could have laterally extended 200 feet but at only 5 feet in depth. Therefore, this site would not have affected the proposed pipeline excavation location.

Based on the review of hazardous materials site records, the impact of being located on or adjacent to a hazardous materials site would be less than significant.

e) **Less than Significant Impact.** The Livermore Municipal Airport is approximately 2 miles northeast of CTF site; the remaining project component sites are all beyond 2 miles of an airport. According to the Airport Layout Plan and Narrative Report for Livermore Municipal Airport, neither the CTF site, nor the remaining project component sites, are within the delineated Airport Influence Area (AIA). Further, none of the project component sites are within an approach or departure zone (City of Livermore, 2014).

The Project would not involve any activities that would pose a safety hazard or excessive noise for people working or residing in the area (see Section XIII, Noise, for detailed analysis of noise-related impacts). The Project would not result in a safety hazard or

excessive noise for people residing or working in the project area. The impact would be less than significant.

f) **Less than Significant Impact with Mitigation.** The City of Pleasanton has an adopted Emergency Operations Plans (EOPs) (City of Pleasanton, 2018), but it does not specify any designated evacuation routes. However, Annex B of the City of Pleasanton's Comprehensive Emergency Management Plan does include specific evacuation routes (City of Pleasanton, no date). The document explains that the City of Pleasanton has divided the city into four quadrants to better manage evacuation procedures—the Project sites are within Quadrant 4 – Southeast City. Santa Rita Road is within Quadrant 4 and is considered a major arterial roadway and would be utilized as an emergency evacuation route in the event of an emergency (City of Pleasanton, undated). While Santa Rita Road is considered an emergency evacuation route, this analysis assumes that evacuation routes would be determined as needed on a case-by-case basis by emergency response agencies. The Project would include the installation of pipelines in Valley Avenue, Santa Rita Road, potentially Amador Community Park, Busch Road, Kolln Street, and Alvarado Street. Valley Avenue and Santa Rita Road are major arterial roadways, and road closures within these roadways could temporarily disrupt traffic and cause congestion, which could impact the accessibility of an evacuation route in the event of an emergency. If Project-related road closures or necessary detours creates traffic disruptions or congestions, this could be a potentially significant impact.

To address the potential impacts associated with traffic obstruction and congestion due to the Project's pipeline installation, **Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan** would be required (see Section XVII, *Transportation*, for a detailed traffic analysis). Mitigation Measure TRA-1 requires the preparation and implementation of a traffic control or traffic management plan, which would be reviewed and approved by the City's Engineering Department prior to construction.

The traffic control plan would be required to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities and roads shall always remain passable by emergency service vehicles.

Implementation of Mitigation Measure TRA-1 would ensure that construction activities associated with pipeline installation would not interfere or impede an emergency response or evacuation plan, and any potential impacts would be less than significant.

> **Mitigation Measure TRA-1: Traffic Control/Traffic Management Plan**. (See Section XVII, *Transportation*, for full description of Mitigation Measure TRA-1.)

g) **No Impact.** According to the California Department of Forestry and Fire Protection (CAL FIRE), Fire Resource Assessment Program (FRAP) maps, the project component sites are mapped within a Non-VHFHSZ (CAL FIRE, 2008).

As discussed in Section XX, *Wildfire*, questions b and d, due to the location of the Project in an urbanized setting without vegetation or fuels, the risk of sparks from construction exacerbating fire risk is minimal. Therefore, construction and operation of the Project would not exacerbate existing fire risk and not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Under this criterion, there would be no impact.

References

Alameda County Department of Environmental Health (ACDEH), 2014. Remedial Action Completion Certificate. Case Closure for Fuel Leak Case No. RO0002882 and GeoTracker Global ID T0600144714, Shell #13-5783, 1801 Santa Rita Road, Pleasanton, CA 94566.

California Department of Forestry and Fire Protection (CAL FIRE), 2008. *Very High Fire Hazard Severity Zones in LRA* for Alameda County. Map. Scale 1:100,000

City of Livermore, 2014. *Airport Layout Plan Update and Narrative Report* for Livermore Municipal Airport. September 2014

City of Pleasanton, undated. *Pleasanton Comprehensive Emergency Management Plan*, Annex B.

City of Pleasanton, 2018. *City of Pleasanton Emergency Operations Plan*. January 2018.

Department of Toxic Substances Control (DTSC), 2022. EnviroStor online database. Search results for Pleasanton, CA.

Haley and Aldrich, Inc. (Haley & Aldrich), 2017. Soil Management Plan – APNS 946-1250-64 & 946-1350-3-12 Former Hanson Aggregates Radum Site Pleasanton, California.

State Water Resources Control Board (SWRCB), 2022a. GeoTracker online database. Search results for Pleasanton, CA.

SWRCB, 2022b. Printable Case Summary for USL Pleasanton Lakes – Long-Term Monitoring (T10000009398). GeoTracker online database record entry.

3.2.10 Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
X. HYDROLOGY AND WATER QUALITY — 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 offsite;	☐	☐	☒	☐
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?	☐	☐	☒	☐

Discussion

a) **Less than Significant Impact.** One purpose of the Project is to improve water quality by treating the per- and polyfluoroalkyl substances (PFAS) in the groundwater. As such it would not violate water quality standards.

The Project would include the construction of the Centralized Treatment Facility (CTF) and new wells; replacement, rehabilitation, and abandonment of well; the installation and replacement of pipelines; and other grading and vegetation removal. These activities would increase the potential for erosion and sedimentation at the different project component sites and disturb approximately 5,175 cubic yards (CY) of soil. Increased sedimentation could potentially discharge sediments and other construction-related pollutants.

As discussed in Section VII, *Geology and Soils*, the Construction General Permit would include development and implementation of a SWPPP. The objectives of a SWPPP are to identify pollutant sources that may be delivered off-site (in the form of runoff) and affect the quality of storm water discharge; to implement site controls and practices to reduce

stormwater pollution; and to protect water quality of receiving waters. The SWPPP would include site-specific BMPs such as strategically placed silt fences and straw wattles to minimize erosion on site and reduce or otherwise prevent conditions of erosion and storm water runoff during construction.

With implementation of a SWPPP and accompanying BMPs, Project construction would not violate water quality standards or release sediment and/or pollutants into surface or groundwater. Therefore, Project impacts to water quality would be less than significant.

b) **Less than Significant Impact.** The Project would include the conversion of approximately 1.03 acres of land into impervious surface (at the CTF/Well 8 site and the Well 9 site). Given that this amount of impervious surface would be divided between two sites (0.85 acres at the CTF/Well 8 site and 0.18 acres at the Well 9 site), the volume of additional impervious surface would be negligible as it relates to interfering with groundwater recharge in those locations. In addition, rainwater falling on the Well 9 site would flow off to the surrounding unpaved area and infiltrate down to the underlying aquifer, as it does now. As such, the Project would not interfere with groundwater recharge or impede a sustainable groundwater management plan. During operations, the Project would not change the volume of groundwater from the existing 3,500 acre-feet per year (the amount reported in Chapter 2) and thus would not affect groundwater supplies. There would be a less-than-significant impact.

c.i) **Less than Significant Impact.** As discussed above, the Project would include the construction of the CTF, new and replacement wells, installation and replacement of pipelines, and vegetation removal. These activities would increase the erosion and sedimentation at the different project component sites and disturb approximately 5,175 CY of soil. These activities could increase the susceptibility of soils at the project component sites to erosion by wind or water and subsequently result in the loss of topsoil. If not controlled and managed, the impact of soil erosion would be a potentially significant impact.

As discussed in Section VIII, *Geology and Soils*, a SWPPP would be developed and implemented as part of the Project in accordance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The SWPPP would include best management practices (BMPs) designed to control and reduce soil erosion. The BMPs may include dewatering procedures, storm water runoff quality control measures, watering for dust control, and the construction of silt fences, as needed. During construction-related activities, soil compaction associated with bank formation would further reduce the potential for soil erosion.

In addition to the Construction General Permit and associated NPDES requirements, the Project would be subject to the stormwater regulations of the Municipal Regional Stormwater Permit (MRP) as the City of Livermore, City of Pleasanton, and Alameda

County are permitees of the MRP. As part of the review process for municipal development which creates or replaces 10,000 square feet of impervious surface area, a stormwater control plan would be required to be prepared. Compliance with provision C.3 of the MRP must be demonstrated at the time of application for a development project including rezoning, tentative map, parcel map, conditional use permit, variance, site development review, design review, development agreement, or building permit. Source control of pollution, site design, and stormwater treatment measures are required for new and redevelopment. In addition to providing treatment and source control, projects recreating or replacing an acre or more of impervious area (unless exempted) must also provide flow controls (or hydromodification management measures) so that post project runoff does not exceed estimated pre-project rates and durations. Regulated projects for which building or grading permits are issued (after January 1, 2016) must include Low Impact Development (LID) design measures (such as pervious paving or bioretention areas) for stormwater capture and pretreatment. Compliance with provision C.3 of the MRP would help to reduce the amount of erosion at the Project sites.

Additionally, as discussed in Chapter 2, stormwater would be routed to existing storm drains that discharge into the municipal system.

The implementation of these soil and erosion control measures and compliance with these independently enforceable existing requirements would ensure that the Project's potential impacts associated with soil erosion and loss of topsoil during construction are less than significant.

c.ii) **Less than Significant Impact.** As discussed above, the Project would convert approximately 1.03 acres (divided into two sites) into impervious surface. The additional impervious surface would be negligible when considered in the context of increased surface runoff resulting in on- or offsite flooding. The CTF/Well 8 site would be in an existing developed area and the additional 0.85 acres of impervious surface would not change the conditions of the area such that it results on or off-site flooding. Further, the Well 9 site is in proximity to Amador Community Park and is surrounded by pervious surfaces, and the additional 0.18 acres of impervious surface at the Well 9 site would not change the conditions of the area such that it results on or off-site flooding.

The Project would be required to adhere to post-construction drainage control requirements in accordance with the SWPPP that would also include measures to control runoff volumes directly related to the Project's construction. Additionally, as discussed above, the Project would be subject to the provision C.3 of the MRP, which is required for projects that add or replace impervious surface. Compliance with provision C.3 would ensure that the Project would not result in increased runoff that could lead to on- or off-site flooding. As the Project would convert a negligible amount of land into an impervious surface, and the Project would be required to prepare and implement a SWPPP, there would be a less-than-significant impact.

c.iii) **Less than Significant Impact.** As discussed above, the Project would convert approximately 1.03 acres (divided into two sites) into impervious surface. The additional impervious surface would be negligible when considered in the context of exceeding the capacity of a stormwater drainage system or providing additional sources of polluted runoff.

Additionally, because the Project would involve over 1.0 acre of ground disturbance, compliance with the NPDES Construction General Permit would be required. The NPDES Construction General Permit requires the preparation and implementation of a SWPPP. The SWPPP would include BMPs designed to control and reduce soil erosion and reduce polluted runoff. The BMPs may include dewatering procedures, storm water runoff quality control measures, watering for dust control, and the construction of silt fences, as needed. During construction-related activities, soil compaction associated with bank formation would further reduce the potential for soil erosion. Further, as discussed above, the Project would be subject to provision C.3 of the MRP, which would ensure the capacity of the existing stormwater drainage system would not be exceeded and that the Project would not result in additional sources of polluted runoff.

Because of the relatively small amount of additional impervious surface that is proposed as part of the Project and the fact that the Project would be required to comply with the NPDES Construction General Permit (including the associated SWPPP and BMPs), and provision C.3 of the MRP, the Project would have a less-than-significant impact as it relates to exceeding the capacity of a stormwater drainage system and provided additional sources of polluted runoff.

c.iv) **No Impact.** According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) that encompasses the project component sites, none of the project component sites are within the delineated 100-year flood zone. While the Project would include the addition of 1.03 acres of impervious surface (divided between two sites), the amount would be negligible as it relates to impeding or redirecting flood flows. As the project component sites would not be within an established 100-year flood zone, the Project would have no impact as it relates to impeding or redirecting flood flows as a result of the addition of impervious surfaces. There would be no impact under this criterion.

d) **No Impact.** As discussed above, the project component sites are not within an established FEMA 100-year flood zone (FEMA, 2009). Seiches are large waves on an enclosed or semi-enclosed body of water that can be caused by seismic activity. The project component sites are landlocked and are not in proximity of any closed or semi-enclosed water body; there is no risk of the Project altering conditions related to seiches. Tsunamis occur on the ocean and the project component sites are not located near the ocean. As the project component sites would not be within an established flood, tsunami, or seiche zone, there would be no impact related to risk of release of pollutants due to Project inundation caused by a flood, seiche, or tsunami.

e) **Less than Significant Impact.** As discussed above, one objective of the Project is to improve water quality by treating PFAS in the groundwater, which is used as drinking water. As the Project would be implemented to improve water quality, it would not violate a water quality control plan or sustainable groundwater management plan. Therefore, the impacts would be less than significant.

References

Federal Emergency Management Agency (FEMA), 2009. FEMA's Flood Insurance Rate Map for Alameda County, California and Incorporated Areas. Panel 336 of 725. Map Number: 06001C0336G. Effective date: August 3, 2009. National Flood Insurance Program.

3.2.11 Land Use and Planning

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

Discussion

a) **No Impact.** The Project would not include any land use changes that would physically divide an established community. During construction, immediate access to neighborhoods, commercial areas, schools, and parks (i.e., Amador Community Park) could be temporarily disrupted (e.g., lane closures or detours), but these impacts would be temporary and would not divide an established community (see Section XVII, Transportation, for additional discussion). Proposed above-ground project components, including wells and the Centralized Treatment Facility, would be constructed within the limits of existing parcels owned by the City or at the City's Operation Services Center and would, therefore, not divide an established community. There would be no impact under this criterion.

b) **No Impact.** The project component sites are designated as Community Facilities, Residential, Industrial, Commercial and Offices, and Open Space as described in Section II, Agriculture and Forestry. The Pleasanton General Land Use Plan Open Space designation includes parks, recreation, agriculture, and public health and safety areas. Industrial, Commercial, and Office designated spaces include retail, general, and limited industrial areas as well as business parks. Schools and other public and institutional areas are classified as Community Facilities (City of Pleasanton Land Use Map, 2009). All proposed structures on parcels with the described designations above are subject to City Design Review (City of Pleasanton Design Review, 2021). The Project would remain consistent with the Pleasanton General Plan Land Use Element (City of Pleasanton Land Use Element, 2009) and General Plan Land Use designations. No other land use plans, policies, or regulations are known to be applicable to the Project. Therefore, there would be no impact.

References

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City of Pleasanton Land Use Element, 2009. The City of Pleasanton. Pleasanton Plan Land Use Element. Available at: https://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23896. Accessed March 18, 2022.

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3.2.12 Mineral Resources

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

Discussion

a, b) **Less than Significant Impact.** The project component sites are not within an area classified as a mineral resource by the State Geologist, except for the CTF/Well 8 site and roadwork on Busch Road (CGS, 1996; City of Pleasanton, 2009; City of Livermore, 2014). According to the Pleasanton General Plan 2025, the CTF/Well 8 site is within a delineated Aggregate Resource Area, as well as an area of Depleted Mineral Resources (City of Pleasanton, 2009). However, the CTF/Well 8 site is in an area that has already been developed and there are no current mining operations taking place at or near the site, therefore the Project would not result in the loss of availability of a known mineral resource. Similarly, the road work proposed along Busch Road would be within a previously developed area where there are no current mining operations are occurring.

Nevertheless, the Project would be required to comply with the Surface Mining and Reclamation Act of 1975 (SMARA), which regulates activities in areas where significant mineral resources occur, to protect and conserve significant mineral resources.

As the Project would be in compliance with SMARA and would not include activities that would result in the loss of a significant mineral resource, the Project's impact on mineral resources would be less than significant.

References

California Geological Survey (CGS), 1996. Designated Areas Update, Regionally Significant Construction Aggregate Resource Areas in the South San Francisco Bay Production-Consumption Region, Livermore Quadrangle.

City of Livermore, 2014. City of Livermore General Plan. Chapter 8 – Open Space and Conservation Element.

City of Pleasanton, 2009. Pleasanton General Plan 2025. Chapter 7 – Open Space and Conservation Element.

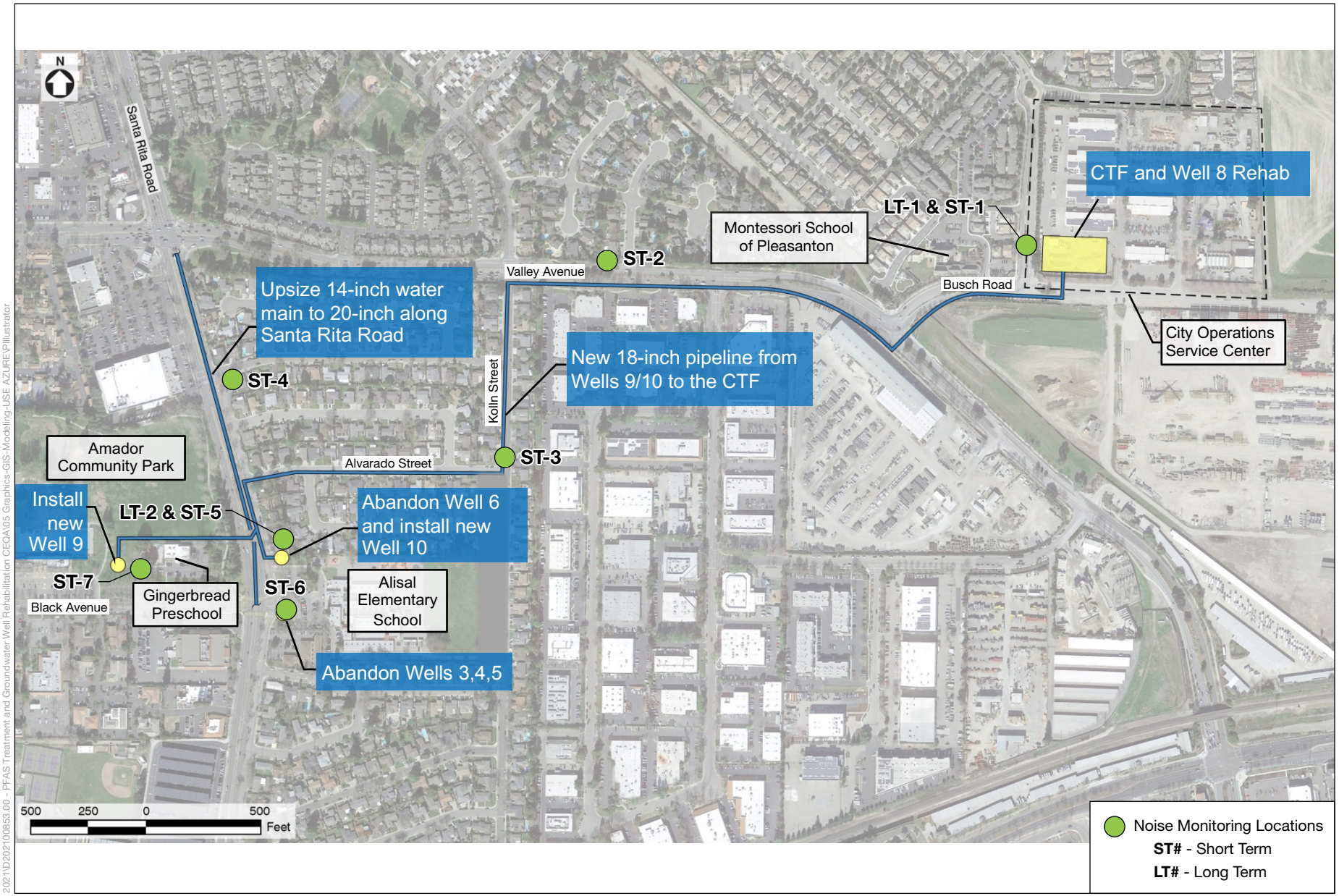
3.2.13 Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIII. NOISE — Would the project result in:				
a) Generation of 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?	☐	☐	☐	☒

Existing Conditions

The Project is located entirely within the City of Pleasanton, adjacent to industrial, light industrial, residential, recreational, and educational uses. Residential and educational land uses are noise-sensitive uses that could be affected by short-term construction and long-term operational activities. Residential uses are as close as 125 feet to the proposed Centralized Treatment Facility (CTF) and Well 8 Rehab site at the City's Operation Service Center (OSC); 25 feet to 100 feet from proposed pipeline segments along Busch Road, Valley Avenue, Koln Street, Alvarado Street, and Santa Rita Road (and greater than that for the Amador Community Park alignment); 25 feet from the new Well 10 site; and 600 feet from the new Well 9 site. Educational uses in the Project vicinity include Montessori School of Pleasanton, approximately 100 feet from the pipeline segment along Busch Road; Alisal Elementary School, approximately 175 feet from existing wells to be abandoned on Santa Rita Road; and Gingerbread Preschool, approximately 25 feet from the proposed pipeline alignment and approximately 80 feet from the proposed new Well 9 site (from edge of property) in Amador Community Park. Refer to **Figure 3-1** for an illustration of the sensitive receptor locations relative to the Project component sites and pipeline alignments.

The primary noise sources in the vicinity of the Project components include vehicles on adjacent roadways, activities at the City's OSC, and residential sounds, including HVAC equipment and voices of nearby residents. To characterize the existing ambient noise environment in the Project vicinity, short-term (15-minute) and long-term (24-hour) ambient noise level measurements were collected at locations adjacent to the Project component sites and pipeline alignments (see Figure 3-1 for an illustration of the noise measurement locations). These locations were chosen to best represent the ambient noise environments at the closest noise-sensitive uses to the Project component sites and pipeline alignments. The short-term measurements are characterized in terms of the equivalent sound level (L_{eq}) to describe noise over a specified period, in terms of a single numerical value that is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period, in this case 15 minutes); as well as the L_{max} and L_{min}, which represent the



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SOURCE: City of Pleasanton, 2022; ESA, 2022

City of Pleasanton PFAS Treatment and Wells Rehabilitation Project

Figure 3-1
Noise Monitoring Locations

ESA

instantaneous maximum and minimum noise levels, respectively, measured during the 15-minute measurement periods. **Table 3-7** shows the results of the short-term noise monitoring survey. As shown in Table 3-7, L_{eq} noise levels ranged from approximately 48 dBA to 69 dBA, L_{max} noise levels ranged from approximately 60 dBA to 83 dBA, and L_{min} noise levels ranged from approximately 41 to 60 dBA.

TABLE 3-7
MEASURED SHORT-TERM AMBIENT NOISE MEASUREMENT RESULTS

No.	Location Description	Time Period	Noise Level (dBA)			Sources
			L_{eq}	L_{max}	L_{min}	
ST-1	Adjacent to proposed CTF/Well 8 Rehab and residences on Busch Road at Ironwood Drive	10:51 a.m.–11:08 a.m.	57.9	71.3	41.0	Traffic on Busch Road and Ironwood Drive
ST-2	Near pipeline alignment and residences along Valley Avenue at Blacow Street	11:14 a.m.–11:30 a.m.	68.5	77.2	41.7	Traffic on Valley Avenue and Blacow Road
ST-3	Near pipeline alignment and residences along Alvarado Street at Kolln Street	11:35 a.m.–11:51 a.m.	47.8	60.3	41.6	Bird vocalizations
ST-4	Near pipeline alignment and residences along Francisco Street near Santa Rita Road	11:54 a.m. – 12:10 p.m.	57.7	73.3	44.4	Traffic on Santa Rita Road
ST-5	New Well 10 site at 1530 Santa Rita Road	12:14 p.m. – 12:29 p.m.	61.8	74.0	47.4	Traffic on Santa Rita Road.
ST-6	Abandoned Wells 3, 4, and 5 adjacent to Alisal Elementary School	12:31 p.m. – 12:47 p.m.	62.5	82.9	49.6	Traffic on Santa Rita Road.
ST-7	Adjacent to new Well 9 site, near Gingerbread Preschool	12:51 p.m. – 1:06 p.m.	65.3	76.1	60.0	Traffic on Black Avenue, monitoring well drilling at adjacent park about 120 feet from meter

NOTES:

CTF = Centralized Treatment Facility); dBA = A-weighted decibels; L_{eq} = equivalent sound level; L_{max} = maximum sound level; L_{min} = minimum sound level.

Measurements were short-term, collected over 15-minute periods on Tuesday, March 8, 2022.

SOURCE: ESA, 2022.

In addition to short-term measurements, two long-term (24-hour) measurements were collected to characterize the day-night noise level (L_{dn}), which is the energy average of the sound levels occurring during a 24-hour period and which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night ("penalizing" nighttime noises) between 10:00 p.m. and 7:00 a.m. by adding 10 dBA to consider the greater annoyance of nighttime noises. The long-term measurements are also used to characterize the daytime and nighttime L_{eq} levels. **Table 3-8** shows the results of the long-term noise monitoring survey. As shown in Table 3-8, L_{dn} noise levels at LT-1 and LT-2 were approximately 62 dBA and 57 dBA, respectively; daytime L_{eq} noise levels were approximately 58 dBA and 54 dBA, respectively; and L_{min} noise levels were approximately 56 dBA to 51 dBA, respectively.

TABLE 3-8
MEASURED LONG-TERM AMBIENT NOISE MEASUREMENT RESULTS

No.	Location Description	Noise Level (dBA)		
		L_{dn}	Daytime (7 a.m. to 10 p.m.) L_{eq}	Nighttime (10 p.m. to 7 a.m.) L_{eq}
LT-1	Adjacent to proposed CTF/Well 8 Rehab and residences on Busch Road at Ironwood Drive	62.0	57.9	56.2
LT-2	New Well 10 site at 1530 Santa Rita Road	56.6	54.0	51.3

NOTES:
CTF = Centralized Treatment Facility; dBA = A-weighted decibels; L_{dn} = day-night noise level; L_{eq} = equivalent sound level.
Measurements at LT-1 were collected on March 16, 2022, and measurements at LT-2 were collected on March 9, 2022.

SOURCE: ESA, 2022.

Discussion

a) **Less than Significant Impact with Mitigation.**

Construction

Construction of the Project would occur over a period of approximately 28 months. Construction activities at each of the CTF/Well 8 Rehab and new Well 9 sites would last approximately 1 year, construction activities at the new Well 10 site would last approximately 10 months, and activities associated with abandonment of existing Wells 3, 4, 5, and 6 would last approximately 3 months. Pipeline construction activities would proceed at a rate of approximately 100 to 150 feet per day and would be in the general vicinity of any one location for a period of approximately 1 to 2 weeks.

Project construction would result in temporary increases in ambient noise levels. Onsite construction activities would require the use of heavy construction equipment (e.g., excavator, loader, crane) that would generate varying noise levels. Offsite construction noise sources would consist of passing trucks and other construction-related vehicles. City of Pleasanton Noise Ordinance, Section 9.04.100, regulates construction noise by allowing construction work that generates noise to occur between the hours 8:00 a.m. and 8:00 p.m. daily, except Sunday and holidays, when the exemption applies between 10:00 a.m. and 6:00 p.m., as long as the associated noise levels meet at least one of the following noise limitations (City of Pleasanton, 2016):

- No individual piece of equipment can produce a noise level exceeding 83 dBA at 25 feet; or
- The noise level at any point outside of the property plane of the project should not exceed 86 dBA.

For the purposes of this analysis, the first bullet above is used to assess construction noise compliance at the various sites with Section 9.04.100 of the City of Pleasanton Noise Ordinance. The value of 86 dBA from the second bullet above is used as the basis to evaluate if combined construction noise causes any significant impact at sensitive receptors.

As indicated in Section 2.5 of the Project Description, the City's construction work hours would fall within that allowed in Noise Ordinance Section 9.04.100 with the exception of well drilling and associated construction activities, which must occur 24 hours per day for approximately 10 days per well, and potential open trench pipeline installation activities along Santa Rita Road, which would occur between 6:30 p.m. to 6:30 a.m. Since this work is outside the hours of Noise Ordinance Section 9.04.100, an exemption would be required by the City which may occur in accordance with Noise Ordinance Section 9.04.110. Since Section 9.04.110 does not establish quantitative noise level standards, this analysis applies a conservative[11] noise level of 60 dBA. The results of the noise modeling conducted for this Project is found in Appendix D.

Nighttime construction of the proposed Project could result in nighttime noise levels exceeding 60 dBA at the sensitive receptor locations. Consequently, the nighttime work would require a special exemption from the City Manager (or designee) for noise that would exceed the ambient noise level by 60 dBA at the nearest property planes. The City and its contractor would need to comply with all requirements of the special exemption to engage in nighttime work; therefore, nighttime noise would be subject to the limits of the exemption that is granted. With implementation of **Mitigation Measures NOI-1** and **NOI-2** and the exemption for nighttime work under Section 9.04.110 of the Municipal Code, nighttime construction noise resulting from the Project would be less than significant with respect to generation of a substantial temporary increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance.

In addition to on-site construction equipment, the Project would also result in short-term increases in local daytime traffic volumes. The Project components would each add up to approximately 41 one-way daily construction-related vehicle trips to area roadways, including 21 heavy truck trips to import material and export debris from the Project component sites, and 20 one-way daily worker trips. The associated increase in short-term construction vehicular noise levels would not be expected to increase noise levels in the vicinity of existing sensitive receptors.

Mitigation Measure NOI-1: Daytime Construction.

The City shall implement noise controls for daytime construction activities that include a minimum of the following measures:

- Use only construction equipment that has intake and exhaust mufflers recommended by the manufacturers thereof, to meet relevant noise limitations.
- Maintain maximum physical separation, as far as practicable, between noise sources (construction equipment) and noise-sensitive receptors. Separation may

[11] This exterior noise level standard is applied to residential land uses in General Plans throughout California including the Pleasanton General Plan Noise Element. This exterior standard was developed to ensure an interior noise level of 45 dBA is maintained in residential uses to avoid sleep disturbance. It assumes an exterior to interior noise reduction of 15 dBA from standard building materials and windows open. It is conservative because since the development of this estimate published by the U.S. EPA in 1974 improvements to windows and building materials can result in much larger noise reductions.

be achieved by locating stationary equipment to minimize noise impacts on the community.

- Use construction noise shields such as paneled noise shields, blankets, and/or enclosures adjacent to pumps, generators, and other small stationary equipment. Noise control shields, blankets, and/or enclosures shall be made featuring a solid panel and a weather-protected, sound-absorptive material on the noise source side of the noise shield.

Mitigation Measure NOI-2: Nighttime Construction (10:00 p.m. to 7:00 a.m.) along Santa Rita Road and at Well 10.

In addition to the measures described in Mitigation Measure NOI-1, the following measures shall be implemented relative to nighttime construction activities along Santa Rita Road and at the Well 10 site, as indicated:

- Distribute a "hotline" telephone number, which shall be attended during active construction working hours, for use by the public to register complaints. The hotline number shall be distributed to potentially affected residences within 150 feet of the work.

- The distribution shall identify a noise disturbance coordinator who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaints and institute actions warranted to correct the problem. All complaints shall be logged noting the date, time, complainant's name, nature of complaint, and any corrective action taken. The distribution shall also include the construction schedule.

- The City shall install a minimum 20-foot tall, engineered noise walls along the northern and eastern perimeter of the Well 10 drill site capable of achieving a minimum noise reduction performance standard of 5 dBA. The walls shall consist of 20-foot by 4-foot and 20-foot by 8-foot sound panels, installed with sound curtains on the noise source side of the wall (batt insulation sewn between vinyl laminates with a weight of 1 pound per square feet).

- At least 30 days prior to the nighttime drilling activities at the Well 10 drill site, the City shall offer off-site lodging accommodations for all residences within 150 feet of the Well 10 drill site. The City shall document all communications and associated outcomes.

- Open trench pipeline construction activities along Santa Rita Road shall restrict loading of trucks to daytime hours (before 10:00 p.m. and after 7:00 a.m.).

Operation

The primary source of noise during Project operation would be the onsite pumps at Wells 8, 9, and 10, and other mechanical equipment proposed for the PFAS Facility, including an emergency power generator, chemical metering pumps, and other ancillary equipment. At the PFAS, the new pump for Well 8 and the emergency generator would be installed in new buildings adjacent to the east of the existing Well 8 building. The pump for Well 9 would also be installed within a new building and the pump for Well 10

would be submerged within the well to reduce audible noise levels. The horsepower (hp) ratings of the well pumps would be 350 hp to 500 hp. Pumps at these horsepower ratings can generate noise levels of 96 dBA at 3 feet (Hoover and Keith, 2000), which corresponds to a noise level of 78 dBA at 25 feet. The emergency generator would be expected to generate a similar noise level, but it would be routinely operated only for testing a maximum of 1 hour per day, approximately once a week, and would be located within an enclosure. Wells 8 and 9 would be installed within a building, and Well 10 will be installed below grade in the well casing, which is assumed to result in an interior to exterior attenuation of 25 dBA. Therefore, operational pump noise levels at 25 feet would be expected to be 53 dBA at 25 feet.

City of Pleasanton Noise Ordinance, Section 9.04.060, regulates operational noise levels from public property at residential areas. Per Section 9.04.060, noise levels caused by mechanic equipment on public property in residential areas should not result in noise levels in excess of 60 dBA at a distance of 25 feet or more from the noise source (City of Pleasanton, 2016). In addition, per City of Pleasanton land-use compatibility guidelines identified in the 2005 Pleasanton Plan 2025, the City's goal for maximum outdoor noise levels in residential areas is 60 L_{dn} (City of Pleasanton, 2013). In addition, impacts would be considered significant if Project operational noise exceeded a 5 dBA increase in noise exposure. This is the level of change that is readily perceptible (Caltrans, 2013). Therefore, a 5 dB noise increase threshold is also used to assess the significance of operational noise increases. The 60 dBA L_{eq} at 25 feet, 60 dBA L_{dn} at the closest sensitive receptor locations, and a 5 dBA L_{dn} increase over ambient noise at the closest sensitive receptor locations are used here to assess whether operational noise levels would cause a substantial permanent increase in ambient noise levels. As shown in **Table 3-9**, pump noise L_{eq} at 25 feet, L_{dn} at the closest sensitive receptor, and L_{dn} difference relative to baseline levels would not exceed the significance thresholds. Therefore, the operational noise impact would be less than significant and mitigation measures are not recommended.

TABLE 3-9
OPERATIONAL PUMP NOISE LEVELS

Type of Equipment	Ambient L_{dn} at Closest Sensitive Receptor (dBA)	L_{eq} at 25 feet (dBA)	L_{dn} at Closest Sensitive Receptor (dBA)[a]	Pump L_{dn} - Ambient L_{dn} (dBA)
CTF and Well 8 Rehab	62.0 (Residences)	52.5	45.0 (at 125 feet)	-17
Well 10 Site	56.6 (Residences)	52.5	58.9 (at 25 feet)	+2.3
Well 9 Site	56.6 (Gingerbread Preschool)[b]	52.5	46.9 (at 100 feet)	-9.7
Significance Threshold	---	60.0	60.0	+5.0
Significant Impact?	---	No	No	No

NOTES: L_{eq} = the equivalent sound level used to describe noise over a specified period of time, in terms of a single numerical value; L_{dn} = day-night noise level.

[a] Ldn values were calculated under the conservative assumption that the pumps would operate continuously, 24 hours per day.

[b] It is assumed that ambient noise levels in the vicinity of new Well 9 site are similar to those measured at the new Well 10 site.

SOURCE: ESA, 2022.

b) **Less than Significant Impact.** Vibration can be interpreted as energy transmitted as waves through the ground. These energy waves generally dissipate with distance from the vibration source. Since energy is lost during the transfer of energy from one particle to another, vibration attenuates rapidly with distance. Operations and maintenance of the Project would not include any sources of vibration that would be considered excessive. Groundborne vibration and noise associated with some construction activities, including the use of pile drivers, blasting, and vibratory rollers can cause excessive vibration. The Project would not include any such activities. Groundborne vibration and noise levels generated by the types of equipment required to construct the Project would be minimal and would not cause human annoyance or structure damage at a distance of 25 feet or beyond from the source (FTA, 2018). No existing historic structures that would be potentially vulnerable to vibration are located in the immediate vicinity of the Project component sites or alignments such that any damage related to groundborne vibration from construction activities would occur. This impact would be less than significant and mitigation measures are not recommended.

c) **No Impact.** The Project is located approximately 2 miles southwest of the Livermore Municipal Airport and is not located within the 60 dBA L_{dn} noise contours for the Livermore Municipal Airport (City of Pleasanton, 2013). The Project would not involve the development of noise-sensitive land uses that would be exposed to excessive aircraft noise. Workers that would construct the Project may be exposed to periodic short-term aircraft overflight noise associated with this airport; however, the average construction activity noise levels that the workers would be exposed to would be far greater than the average overflight noise levels that they would be exposed to. Therefore, there would be no impact.

References

California Department of Transportation (Caltrans), 2013. *Technical Noise Supplement (TeNS)*. September 2013.

City of Pleasanton, 2013. 2005 Pleasanton Plan 2025, Chapter 11, Noise Element. Amended February 5, 2013.

City of Pleasanton, 2016. Pleasanton Municipal Code, Title 9 Health and Safety, Chapter 9.04 Noise Regulations. June 12, 2016.

Environmental Science Associates (ESA), 2022. Noise Monitoring Data and Project Analysis Collected/Conducted by Environmental Science Associates, monitoring data collected weeks of March 7, and 14, 2022.

Federal Highway Administration (FHWA), 2008. FHWA Roadway Construction Noise Model, Version 1.1, December 2008.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September 2018. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/

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Hoover and Keith, 2000. Noise Control for Buildings and Manufacturing Plants, Thirteenth Printing, 2000. Available: https://www.co.monterey.ca.us/Home/ShowDocument?id=51070. Accessed March 31, 2022.

3.2.14 Population and Housing

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

Discussion

a, b) **No Impact**. The Project is intended to improve existing water treatment infrastructure to improve water quality, not to increase overall water treatment capacity. The Project does not involve demolition of existing housing or require the construction of homes elsewhere. The Project would not displace any existing housing or people. Therefore, no impact would occur.

References

N/A

3.2.15 Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XV. PUBLIC SERVICES —				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☐	☒

Discussion

a.i) **Less than Significant Impact.** Construction for the Project would be intermittent and temporary, requiring an approximate 28-month construction window and involving approximately two to 10 construction workers at each site on any given day. It is assumed these workers would likely be sourced from the local workforce and would not relocate to communities nearby the Project site for this short-term work. Therefore, Project construction would not significantly increase the demand for fire protection services throughout the Project vicinity due to population growth and would not change any uses on the site. For these reasons, the Project would not be expected to substantially affect the Livermore-Pleasanton Fire Department's ability to maintain service ratios, response times, or other performance objectives or require new or physically altered facilities. For this reason, the Project's impact with respect to fire services would be less than significant.

a.ii) **Less than Significant Impact.** As referenced in a.i, construction for the Project would be intermittent, with only two to 10 construction workers on each site at any given time. The Project would, therefore, not be expected to substantially affect the City of Pleasanton Police Department's ability to maintain service ratios, response times, or other performance objectives or require new or physically altered facilities. The Project's impact with respect to the provision of police protection during construction would be less than significant.

a.iii) **No Impact.** The Project would result in a small temporary increase of construction worker employees at the Project site. Construction workers would most likely be sourced from the local workforce and the Project would not require an increase of permanent construction employees such that new or expanded school facilities would be required. A portion of the alignment through Amador Community Park would travel through the

Gingerbread Preschool parking lot. However, this would be temporary and not cause the closure of that facility. For these reasons the Project would have no impact with respect to schools.

a.iv) **Less than Significant Impact.** The Project would not result in increased population such that there would be additional demand for park facilities. Portions of Amador Community Park would be closed during construction; however, this closure would be temporary. Impacts related to increased or expanded public access are addressed in Section XVI, Recreation. The Project's impacts related to new or expanded park facilities to maintain acceptable service ratios would be less than significant.

a.v) **No Impact.** The Project would not involve the employment of new permanent employees or residents; therefore, it is not expected to increase the use of other public facilities. There would be no impact under this criterion.

References

N/A

3.2.16 Recreation

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

Discussion

a) **Less than Significant Impact.** The Project proposes to update existing water treatment sites and add additional facilities on land owned by the City of Pleasanton. The Well 9 site is located within the southern part of the City-owned Amador Community Park between Gingerbread Preschool and Dolores Bengston Recreation Center. This well site would be permanently expanded to include an approximately 1,400 square foot building to house a 350-horsepower pump and associated equipment, as well as a paved access driveway – a total of 0.18 acre. Amador Community Park has an area of approximately 23.7 acres. The reduction of space at the park would be about 0.75 percent compared to the remaining acres still available for use by the public.

The southern 875 feet of the pipeline replacement along Santa Rita Road would traverse the eastern portion of Amador Community Park. This area is typically used for soccer and other field sports. This portion of the park would be closed during construction, with the turf restored after the pipeline trench is backfilled. The closure of this portion of the park would be temporary; therefore, the loss of the portion of the park at Well 9 and the closure of portions of the soccer fields would not result in the displacement of park visitors from this park to other nearby parks such that their increase in use would result in substantial physical deterioration of their facilities. This would be a less-than-significant impact.

b) **No Impact.** The Project does not include development of parks or other recreational facilities; therefore, it would not require the construction or expansion of new or existing facilities and there would be no impact.

References

N/A

3.2.17 Transportation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVII. TRANSPORTATION — Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☒	☐	☐

Discussion

Regional access to the Project work sites would occur from I-580 and I-680, with local access occurring via various roads, including Santa Rita Road, Stanley Boulevard, Valley Avenue, and Busch Road. Tri-Valley Wheels, operated by the Livermore Amador Valley Transit Authority, provides bus service to the Project work sites. Route 10R (Rapid Route) travels between the East Dublin/Pleasanton BART Station and the Livermore Transit Center, with stops on Santa Rita Road and Stanley Boulevard. Route 605 (School Route) provides limited service (i.e., one morning trip and one afternoon trip) between Amador Valley High School and Fairlands, with stops on Santa Rita Road. Route 608 (School Route) provides limited service (i.e., one morning trip and two afternoon trips) between Harvest Park Middle School and Amaral Park, with stops at the intersection of Valley Avenue and Santa Rita Road. Near the Project work sites, bicycle lanes are present on all study area roadways: Santa Rita Road (southbound only), Stanley Boulevard, Valley Avenue, and Busch Road. Pedestrian facilities consist of sidewalks on all study area roadways, as well as access to the Iron Horse Trail at the intersection of Valley Avenue and Busch Road.

a) **Less than Significant Impact with Mitigation.**

Construction Traffic

Construction of the Project would temporarily increase local traffic due to the transport and delivery of construction equipment and materials, as well as from daily worker trips. Existing average daily traffic (ADT) on local roadways that provide access to the Project work sites are provided in **Table 3-10**. The most recent available ADT data, from 2020 traffic counts, was provided by the City of Pleasanton (City of Pleasanton, 2020).

As described in Chapter 2.5, *Project Construction*, Project construction is anticipated to begin in January 2023, and be completed in May 2025 – a period of approximately 28 months. Construction would generally occur year-round between the hours of 8 a.m. to 8 p.m., Monday through Friday. There would be exceptions to allow for 1) 24-hour continuous borehead drilling and well construction activities, and 2) Nighttime construction for pipeline installation along Santa Rita Road to avoid closing travel lanes during Alisal Elementary school operating hours. In addition, the contractor may need to

perform weekend construction activities to maintain the Project schedule. Project construction activities would generate offsite traffic associated with the delivery of construction vehicles and equipment to the Project site via designated haul routes (see Figure 2-3, *Haul Routes*), the daily arrival and departure of construction workers, and the delivery of materials throughout the construction period. A detailed traffic plan would be required by the City of Pleasanton for overweight vehicles. Construction staging would occur entirely within the Project work sites and would not require any temporary lane closures on adjacent roadways (i.e., Santa Rita Road – Well 10, Black Avenue – Well 9, Busch Road – CTF and Well 8).

TABLE 3-10
EXISTING ADT ON STUDY AREA ROADWAYS

Roadway Segment	Existing ADT
Santa Rita Road north of Valley Avenue	47,500
Santa Rita Road south of Valley Avenue	26,900
Stanley Boulevard west of Valley Avenue/Bernal Avenue	21,000
Valley Avenue east of Santa Rita Road	32,900
Valley Avenue north of Stanley Boulevard	26,200
Busch Road east of Valley Avenue	4,300

SOURCE: City of Pleasanton, 2020.

Based on information developed by the City as part of the preliminary design of the Project, a maximum traffic impact scenario was developed. As shown in **Table 3-11**, during the peak of construction activity, which would occur during an approximately 4-month period in Spring/Summer 2024 when the CTF and Well 8, Well 9, and the pipeline from Wells 9/10 to the CTF are concurrently being constructed, the Project would require up to 23 total workers spread across all Project work sites, which includes equipment operators, a construction foreman, truck drivers, and laborers for traffic control and other tasks. Twenty-three workers would generate approximately 46 one-way passenger vehicle trips per day (23 inbound trips and 23 outbound trips). Excavation, fill, and material/pipe delivery trips during this same peak 4month period would require a maximum of 56 one-way truck trips per day (28 inbound trips and 28 outbound trips), assuming an average truck hauling capacity of approximately 12 cubic yards. The total daily trip generation (trucks plus workers) during the peak 4month construction period would be 102 one-way vehicle trips (46 passenger vehicle trips, 52 truck trips).

Based on the existing ADT volumes on study area roadways shown in Table 3-10 and the estimated number of construction-related project trips for the maximum traffic impact scenario (102 one-way trips) shown in Table 3-11, construction activities would increase the ADT volume on study area roadways by no more than up to 2.4 percent (i.e., too small of a change to be perceived by the average motorist). These changes in daily traffic are within the typical daily fluctuations experienced on roadways (plus or minus 5 percent) and therefore, do not represent a substantial increase in traffic. The percentage increase in

traffic on I-580 and I-680 would be even smaller, considering that volumes on freeways are much higher than those on local arterial roadways. Please note that existing traffic volumes on Black Avenue, which would be used to access the Well 9 worksite, are not currently available. However, only the construction traffic described above for the maximum traffic impact scenario related to Well Site 9 access (i.e., 16 one-way worker trips [8 inbound trips and 8 outbound trips] and 8 one-way truck trips [4 inbound trips and 4 outbound trips]) would affect traffic on Black Avenue, as Black Avenue would not be used for regional or local access to any of the other construction work sites.

TABLE 3-11
CONSTRUCTION PHASE OVERLAP AND VEHICLE TRIPS

Construction Stage	One-way Trips per Day (Average)			
	Workers	Excavation	Fill	Material/ Pipe Delivery
Pipeline: Wells 9 and 10 to CTF	10	16	14	4
Well Site 8 and CTF	20	6	4	4
Well Site 9	16	4	2	2
Total	*46*	*26*	*20*	*10*

SOURCE: Carollo, 2022.

Pipeline Installation/Replacement

The installation of 5,200 feet of new raw water pipeline from Wells 9 and 10 to the CTF, and the replacement of 1,600 feet of existing treated water distribution pipeline along Santa Rita Road between Black Avenue and Valley Avenue, would affect traffic flow by temporarily reducing the capacity of the affected roads because of lane closures. Figure 2-2, *Project Overview*, shows the local roadways that would be affected. Excavation, filling and paving would occur as pipeline installation progresses, at rate of approximately 100 to 150 feet per day, depending on the location, meaning that lane closures affecting local roadways would be temporary and of short duration. The pipeline construction corridor for both the pipeline from Wells 9 and 10 to the CTF and along Santa Rita Road would be located in the public right-of-way on public streets or in parks. Jack and bore (trenchless technology) may be used along Valley Avenue and Busch Road intersection due to a high-pressure gas line and high voltage power conduit, resulting in approximately two pits; this pipeline installation technique would avoid lane closures and interruptions to other transportation activity where feasible. If jack and bore is determined to not be feasible, the pipelines would be installed via open cut at these locations.

Installation of the pipeline within roadway rights-of-way under the Project would temporarily affect traffic flow. Open-trench pipeline construction within road rights-of-way would potentially require the closure of one travel lane and shoulder (or parking lane), with one-way traffic control around the construction area on two-lane roads. Trenchless pipeline construction in road rights-of-way would also potentially require closing one travel lane and shoulder, but for much shorter segments of roadway that

would accommodate the launching and receiving pits. The pits would remain open during trenchless operations and protected with concrete barriers. Pipeline construction within or across streets could result in delays for emergency vehicle access, and would obstruct pedestrian, bicycle, and vehicle access. Construction along the pipeline alignment could cause delays for school and transit buses and limit access to school and transit bus stops.

Consistent with Chapter 13.04, *Encroachments*, of the Pleasanton Municipal Code, Project construction activities that occur within public rights-of-way (i.e., streets, sidewalks, and public places) require an encroachment permit from the City's Engineering Department. The encroachment permit process typically requires the submittal and approval traffic and/or pedestrian control plans for any construction activities that could affect vehicular traffic on streets and/or pedestrian access on sidewalks. Nevertheless, because pipeline construction within or across streets would obstruct pedestrian, bicycle, and vehicle access, this impact related to potential conflicts with a program, plan, ordinance, or policy addressing the circulation system would be potentially significant. Implementation of **Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan** would reduce the potentially significant impacts of construction activities associated with pipeline installation/replacement to a less-than-significant level.

Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan.

The City shall require the construction contractor to prepare a construction traffic control/traffic management plan and submit the plan to the City's Engineering Department for review and approval before construction. The plan will supplement any City-required encroachment permit(s), and shall be prepared in accordance with professional engineering standards and shall include, but shall not be limited to, the following requirements:

- Identify hours of construction for each Proposed Project component.
- Schedule truck trips outside of the peak morning and evening commute hours, when feasible, to minimize adverse impacts on traffic flow if the City identifies highly congested roadway segments during their review of the encroachment permit applications. Haul routes that minimize truck traffic on local roadways and residential streets shall be used.
- Develop circulation and detour plans to minimize impacts on local street circulation. This may include the use of signing and flagging to guide vehicles, bicyclists, and pedestrians through and/or around the construction zone.
- Control and monitor construction vehicle movements by enforcing current standard construction specifications, as defined by the City, through periodic onsite inspections by the construction contractor.
- Install traffic control devices where traffic conditions warrant, as specified in the City's standards (e.g., the California Manual of Uniform Traffic Controls for Construction and Maintenance Work Zones).

- Perform construction that crosses on-street and off-street bikeways, sidewalks, and other walkways in a manner that allows safe access for bicyclists and pedestrians. Alternatively, provide safe detours to reroute affected bicycle/pedestrian traffic.

- Consult with the Livermore Amador Valley Transit Authority at least one month before construction to coordinate bus stop relocations (as necessary) and to reduce potential interruption of transit service.

- Comply with roadside safety protocols to reduce the risk of accidents, as defined in the Caltrans Division of Construction Code of Safe Practices and the California Manual of Uniform Traffic Controls for Construction and Maintenance Work Zones. Provide "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone.

- Store all equipment and materials in designated contractor staging areas.

- Encourage construction crews to park at staging areas to limit lane closures in the public rights-of-way.

- Include a plan and implementation process for notifications and a process for communicating with affected residents, businesses, and City facilities before the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities at least one week in advance. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints.

- Include a plan and implementation process to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable by emergency service vehicles at all times.

- Include a plan and implementation process to coordinate all construction activities with the Pleasanton Unified School District at least two months in advance. The school district shall be notified of the timing, location, and duration of construction activities. The City shall coordinate with the school district to identify peak circulation periods at schools along the pipeline alignment and near Wells 9 and 10 (i.e., the arrival and departure of students), so that the contractor can avoid construction and lane closures during those periods, if feasible. The construction contractor shall be required to provide that construction of the component does not inhibit vehicle, bicycle, pedestrian, and/or school bus service, by including such provisions in the construction contract. Temporary crossing guards may need to be assigned at designated intersections to enhance pedestrian safety during Project construction.

- Identify all roadway locations where special construction techniques (e.g., trenchless pipeline installation or night construction) will be used to minimize

impacts on traffic flow. Require that all open trenches and pits be covered with metal plates at the end of each workday to accommodate traffic and access.

Project Operation

Once the Project is in operation, it is anticipated that up to two new staff may be needed to operate or perform routine maintenance on the new/rehabilitated facilities. As noted in Chapter 2, *Project Description*, no new chemicals or additional flow are anticipated as part of the Project, meaning that truck trips used for maintenance activities at the Project component sites would remain unchanged from existing conditions. Relative to existing traffic volumes on study area roadways (Table 3-10, above), an additional four one-way passenger vehicle trips resulting from Project operation (two inbound trips and two outbound trips) would not noticeably affect roadway operations.

The Project would neither directly nor indirectly eliminate existing or planned alternative transportation corridors or facilities (e.g., bike paths, lanes, etc.), including changes in policies or programs that support alternative transportation, nor construct facilities in locations for which future alternative transportation facilities may be planned. The Project would not conflict with the policies set forth in the East County Area Plan supporting alternative transportation (Alameda County, 2002), nor would it interfere with the implementation of bicycle routes, pedestrian routes, trails, and related facilities identified in the City's Bicycle & Pedestrian Master Plan (City of Pleasanton, 2018). As described above, construction activities associated with the Project would not generate traffic volume increases that would significantly affect traffic flow on area roadways. The performance of public transit, bicycle and pedestrian facilities in the area likewise would not be adversely affected.

Based on the above discussion, Project operation would result in a less-than-significant impact to the circulation system, including transit, roadway, bicycle and pedestrian facilities roadways.

b) **Less than Significant Impact.** In accordance with Senate Bill (SB) 743, the new CEQA Guidelines Section 15064.3, subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts are primarily focused on projects within transit priority areas and shifts the focus from driver delay to a reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses. Vehicle miles traveled, or VMT, is a measure of the total number of miles driven to or from a development and is sometimes expressed as an average per trip or per person.

The City of Pleasanton has not yet adopted VMT screening criteria and thresholds and, therefore, the statewide guidance as documented in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Guidelines) would apply to the Project. According to the Technical Guidelines, absent substantial evidence indicating that a project would generate a potentially significant level of VMT or inconsistency with a

Sustainable Communities Strategy or general plan, projects that generate fewer than 110 operational trips per day generally may be assumed to cause a less-than-significant transportation impact.

Taking the information discussed above into account, the Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). The number of new operational vehicle trips resulting from up to two new employees and additional maintenance activities necessitated by implementation of the Project would be far less than the 110 daily vehicle trip threshold. Therefore, VMT generated by the Project would be less than significant.

c) **Less than Significant Impact.** The Project would not introduce any new intersections or adjusted roadway geometry that would have the potential to introduce a hazardous driving condition. Additionally, as noted in question a) above, the Project would not introduce a substantial number of large construction or delivery vehicles to area roadways during the construction phase. Furthermore, trucks would utilize designated haul routes along Santa Rita Road, Valley Avenue and Busch Road to transport materials to the respective Project site's work area (see Figure 2-3, *Haul Routes*) This impact would be less than significant.

d) **Less than Significant Impact with Mitigation.** The Project would not change the configuration of the Project area's road network, and would not require temporary lane closures which would create reduced traffic capacity issues. As described in question a) above, construction would not cause a substantial increase in congestion on area roadways, though slow-moving construction-related vehicles could temporarily interfere with emergency response to the work site (e.g., emergency service vehicles traveling behind the slow-moving truck). However, all vehicles are required by law to yield to responding emergency vehicles that have warning apparatus in operation, and it is not considered likely that heavy construction-related traffic would result in inadequate emergency access.

However, both open-trench and trenchless pipeline installation/replacement in the right-of-way of study area roadways would potentially require lane closures that could result in delays for emergency vehicle access. Implementation of **Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan** (see question a), above), includes the following provision for emergency service access, which would reduce the potentially significant impacts of construction activities associated with pipeline installation/replacement on emergency access to a less-than-significant level:

> *Include a plan and implementation process to coordinate all construction activities with emergency service providers in the area at least one month in advance. Emergency service providers shall be notified of the timing, location, and duration of construction activities. All roads shall remain passable by emergency service vehicles at all times.*

References

Alameda County Community Development Agency, *East County Area Plan – Volume 1: Goals, Policies and Programs*, last amended in May 2002.

City of Pleasanton, 2018. *Bicycle and Pedestrian Master Plan*. Available at: http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=32630

City of Pleasanton, 2020. 2020 Average Daily Traffic Volume Map. Available at: http://www.cityofpleasantonca.gov/gov/depts/cd/traffic/maps_and_information/traffic_counts.asp

Livermore Amador Valley Transit Authority, 2018. Wheels System Map, February 12, 2018. Available at: https://www.wheelsbus.com/services/route-map/.

3.2.18 Tribal Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVIII. TRIBAL CULTURAL RESOURCES —				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources. Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

A context for cultural, archaeological, and historical resources are discussed above in Section V. *Cultural Resources*.

Discussion

a.i) **Less than Significant with Mitigation.** Tribal cultural resources are: (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, in the California Register, or local register of historical resources, as defined in PRC Section 5020.1(k); or (2) a resource determined by the CEQA lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). For a cultural landscape to be considered a tribal cultural resource, it must be geographically defined in terms of the size and scope of the landscape (PRC Section 21074[b]). A historical resource, as defined in PRC Section 21084.1, unique archaeological resource, as defined in PRC Section 21083.2(g), or non-unique archaeological resource, as defined in PRC Section 21083.2(h), may also be a tribal cultural resource.

Through background research at the Northwest Information Center of the California Historical Resources Information System, no known archaeological resources that could be considered tribal cultural resources are listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC Section 5020.1(k), pursuant to PRC Section 21074(a)(1), would be impacted by the Project.

On January 11, 2022, ESA sent a request to the Native American Heritage Commission (NAHC) for a search of sacred lands file and a list of Native American tribes in the vicinity. The NAHC responded on February 1, 2022 indicating there were no sacred lands on file and provided a list of 13 tribal contacts. On February 9, 2022, the City of Pleasanton sent letters to the Native American tribes with a description of the Project, a map showing the Project location, and an invitation to consult on the Project. The City received one response from Wilton Rancheria on March 3, 2022 indicating that they had no concerns with the Project. No additional responses were received.

Based on the above discussion, the City did not identify any tribal cultural resources listed or eligible for listing in the California Register, nor did it determine any resources to be significant pursuant to criteria set forth in Subdivision (c) of PRC Section 5024.1. In the event that cultural materials are identified during Project implementation that are determined to be tribal cultural resources, implementation of **Mitigation Measure CUL-1a: Cultural Resources Awareness Training**, **Mitigation Measure CUL-1b: Inadvertent Discovery of Cultural Materials or Tribal Cultural Resources**, and **Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains**, outlined above in Section V, *Cultural Resources*, would reduce potentially significant impacts to less than significant. This mitigation would ensure that all personnel complete a cultural resources awareness training prior to any ground-disturbing activity and that work halt in the vicinity of a find until a qualified archaeologist and a Native American representative can make an assessment and provide additional recommendations. Therefore, impacts to tribal cultural resources would be less than significant with mitigation.

a.ii) **Less than Significant with Mitigation**. For the same reasons stated in the analysis of potential impacts on tribal cultural resources above for question a.i, impacts would be potentially significant; however, implementation of Mitigation Measure CUL-1a, Mitigation Measure CUL-1b, and Mitigation Measure CUL-2 would reduce impacts to less than significant.

References

See Section V.

3.2.19 Utilities and Service Systems

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

Discussion

a) **Less than Significant with Mitigation.** The Project consists of updating existing water treatment facilities and adding new water treatment facilities for PFAS currently found in groundwater sources and are the subject of this IS/MND. The Project would not interfere with or conflict with any applicable Regional Water Quality Control Board requirements for wastewater treatment. For a discussion of stormwater discharges and water quality associated with Project construction, please refer to Section X, Hydrology and Water Quality. The Project would not require additional natural gas or telecommunications service than that currently provided. Electrical service at the well sites would be replaced and, in some cases, new electrical would be constructed and service expanded. Any new electrical service would be installed within the well sites and not create environmental effects that are not already considered in this analysis. The environmental impacts associated with the Project are disclosed in this Initial Study, with mitigation measures proposed as necessary to reduce any potentially significant impacts to a less-than-significant level. As such, impacts of the Project would be less than significant with mitigation.

b) **Less than Significant Impact.** The City of Pleasanton's 2020 Urban Water Management Plan (UWMP) analyzed water usage and concluded that the City will have sufficient water supplies to serve the City and reasonably foreseeable future development through 2045 (West Yost, 2021). The majority of the City's water supply is purchased from Zone 7, and the remaining amount is from wells owned by the City. The UWMP projected water

demand and supply from 2025 through 2045 under Normal, Single-Dry Year, and Multiple Dry-Year analyses. Under all three scenarios, the City would have sufficient supplies to meet demand through 2045. During multiple dry years, the City would have 3,500 AF of potable water in each year if a five-year drought. The Project would require approximately 600,000 gallons of water during the 28 months of project construction, including 98,000 gallons for dust suppression. This would be a relatively minor and limited timeframe amount of water, and therefore would have a less-than-significant impact on water supplies.

c) **Less than Significant Impact.** The Project would not require permanent wastewater treatment. Portable toilets would be provided at the project component sites during construction. Stormwater would be routed to existing storm drains and the new discharge piping associated with Well 9 and Well 10 would be connected to the City's existing pump-to-waste system. Portable toilets would be provided onsite for the estimated two to 10 construction workers per site over a period of approximately 28 months. The Dublin San Ramon Services District (DSRSD) and the Livermore Water Reclamation Plant (LWRP) both provide water collection and treatment services to the City. The DSRSD facility would be the closest facility provide service to the Project. The DSRSD currently owns over 8.5 million gallons per day (MGD) in wastewater secondary treatment capacity and 16.2 MGD in tertiary treatment capacity (West Yost, 2021). The Project needs would be negligible for wastewater treatment comparatively to the service capacity of DSRSD. Therefore, the impact would be less than significant.

d, e) **Less than Significant Impact.** The Project would create a minimal amount of solid waste to be transported and disposed of at the Pleasanton Transfer Station. This waste could include small amounts demolition debris and equipment packaging. The Pleasanton Transfer Station accepts residential, industrial franchise, and construction/demolition (C&D) waste. Residual waste at the station is disposed of at Vasco Road Landfill. Vasco Road Landfill accepts up to 2,745 CY of waste per day and has a remaining capacity of 6.0 million CY (Alameda County Waste Management, 2020).

The Project would not generate solid waste beyond levels within the capacity of the Vasco Road Landfill. The Project would comply with Alameda County's Municipal Code and the City of Pleasanton's Municipal Code related to solid waste (Alameda County Municipal Code, 2022) (City of Pleasanton Code Enforcement, 2022). The Project would also comply with the City Construction and Demolition Debris Recycling Requirements (City of Pleasanton C&D Requirements, 2022). Therefore, the impact related to compliance with solid waste management and reduction statutes would be less-than-significant impact.

References

Alameda County Municipal Code, 2022. Alameda County Municipal Code. Chapter 6.40 – Solid Waste Collection and Organics Waste Reduction. Available at: https://library.municode.com/CA/alameda_county/codes/code_of_ordinances?nodeId=TIT6HESA_CH6.40SOWACOORWARE. Accessed March 22, 2022.

Alameda County Waste Management, 2020. Alameda County Integrated Waste Management Plan. Countywide Element. Alameda Waste Management Authority. Accessed March 22, 2022.

City of Pleasanton C&D Requirements, 2022. The City of Pleasanton Construction and Demolition Debris Recycling Requirements. The City of Pleasanton. Available at: http://www.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?BlobID=23490 Accessed March 22, 2022.

City of Pleasanton Code Enforcement, 2022. Code Enforcement. The City of Pleasanton. Available at https://www.cityofpleasantonca.gov/gov/depts/cd/code/default.asp. Accessed March 22, 2022.

West Yost, 2021. 2021 Urban Water Management Plan Prepared for The City of Pleasanton. West Yost. June 2021.

3.2.20 Wildfire

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XX. WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The Project area is not located within a State Responsibility Area (SRA) and is not classified as a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE, 2022). The Project area fire responsibility is zoned as a Local Responsibility Area (LRA) by California Department of Forestry and Fire Protection (CAL FIRE) and is classified as a Non-VHFHSZ (CAL FIRE, 2008).

Discussion

a) **Less than Significant with Mitigation.** The Livermore-Pleasanton Fire Department (LPFD) actively enforces code and ordinances to ensure a reasonable degree of fire safety for facilities anticipated for occupancy in order to minimize the threat to life and property (City of Livermore, 2018). The City adopted an evacuation plan in 2002 as an annex to its Comprehensive Emergency Management Plan (City of Pleasanton, 2002). The Project would not construct any facilities for occupancy and, therefore, would not interfere, impair, or add burden to any emergency response plan enforced by LPFD.

Although the potential effects related to emergency response and access attributable to construction-related in-road work would be temporary, they would be potentially significant in the event of a wildfire. Refer to the discussion of Questions a.i-iii and a.v in Public Services for a discussion of potential effects to emergency access. As noted in Section X, Transportation, **Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan** requires a traffic control plan that would, in part, provide direction on detour routes, lane closures, temporary restoration during non-work periods, passage of emergency vehicles, etc. Implementation of this mitigation measure would ensure that the Project would not significantly impair an adopted emergency response or evacuation plan and the impact would be reduced to less than significant.

Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan. Please refer to Section XX, *Transportation*, for full description of Mitigation Measure TRA-1.

b) **Less than Significant Impact.** As mentioned above, the Project site does not contain substantial fuel (vegetation) and is not located in an area with steep slopes or prevailing winds which influence wildfire risk. Additionally, the Project component sites are not located in an area that has been designated as a high fire hazard severity zone. The Project would involve the construction and operation of the CTF, the replacement and rehabilitation of wells, and the installation of pipelines which would be located underground. Operation of the CTF and PFAS Facilities would involve the use of water pumps, electrical equipment, and an emergency generator. These facilities would be installed and operated in accordance with California Fire Code requirements and would not exacerbate fire risk. Rehabilitated wells and pipelines would be located underground and would not increase fire risk. Construction of the Project would involve drilling, excavation, installation of equipment, and the use of equipment and trucks for installation and construction. The use of these types of equipment has the potential to result in sparks that are a potential ignition source. However, due to the location of the Project in an urbanized setting without vegetation or fuels, the risk of sparks from construction exacerbating fire risk is minimal. Therefore, construction and operation of the Project would not exacerbate existing fire risk. Under this criterion, the impact would be less than significant.

c) **No Impact.** There would not be installation or maintenance of new access roads, fuel breaks, emergency water sources, other power lines, or utilities that would exacerbate fire risk or result in temporary ongoing impacts to the environment. Therefore, there would be no impact.

d) **No Impact.** As described under question b, the Project would not be located in an area with factors that contribute to elevated fire risk and the Project would not significantly exacerbate fire risk. Additionally, the Project component sites are located in a flat urbanized setting that does not have a significant risk of land slide (as discussed in Section XII, Geology and Soils) or flooding (as disclosed in Section X, Hydrology and Water Quality). Therefore, the likelihood of the Project to expose surrounding people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would be minimal to none. Under this criterion, there would be no impact.

References

CALFIRE, 2008. Very High Fire Hazard Severity Zones in LRA. As Recommended by CAL FIRE. September 2008. Available online: https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf. Accessed March 28, 2022.

CAL FIRE, 2022. The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) Fire Hazard Viewer, 2022. Available online: https://egis.fire.ca.gov/FHSZ/. Accessed March 28, 2022.

City of Pleasanton, 2002. City of Pleasanton Comprehensive Emergency Management Plan. Available online: http://dev.cityofpleasantonca.gov/civicax/filebank/blobdload.aspx?blobid=22853.

City of Livermore, 2018. City of Livermore Emergency Operations Plan. January 2018. Available online: https://www.cityoflivermore.net/home/showpublisheddocument/2585/637253635408500000. Accessed March 28, 2022.

3.2.21 Mandatory Findings of Significance

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

Discussion

a, c) **Less than Significant with Mitigation Incorporated.** The analysis presented in this Initial Study has identified a number of potentially significant environmental impacts attributable to the Project. To reduce these impacts, a number of mitigation measures are proposed that will be included in the Project's Mitigation Monitoring and Reporting Program (MMRP) upon adoption of this Mitigated Negative Declaration and approval of the Project. As required by CEQA, these mitigation measures are required to be implemented as directed herein. With implementation of the mitigation measures presented herein, the Project does not have the potential to degrade the quality of the environment, including fish or wildlife species or their habitat, plant or animal communities, important examples of the major periods of California history or prehistory, or adverse effects on human beings. These impacts would be less than significant with mitigation.

b) **Less than Significant with Mitigation Incorporated.** A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). As defined by the State of California, cumulative impacts reflect "the change in the environment which results from the incremental impact of the Proposed Project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355[b]).

Consideration of past, present, and reasonably foreseeable projects in the Project area and vicinity indicate that the PFAS Improvement and Well Rehabilitation Project would have a less than significant cumulative impact. Planned projects or areas anticipated for future build-out within the vicinity, or projects that are of a similar nature in the Project area in Pleasanton, include the following:

- ***Santa Rita Road Landscape Improvements (Mohr Avenue to Valley Avenue).*** The work will consist of landscape renovations on Santa Rita Road between Mohr Avenue and Valley Avenue and includes the replacement of existing landscaping and irrigation with new apparatus in medians and parkways strips. As of the date of this report, the City's contract is out for bid with no confirmed construction date(s).
- ***Carpenter's Union Training Center Expansion, 2350 Santa Rita Road.*** This project is the replacement and expansion of the Carpenter's Union Training Center. As of the date of this report, this project is currently under construction with no confirmed completion date.
- ***Livermore-Pleasanton Fire District Fire Station 3 Redevelopment (3200 Santa Rita Road).*** This project involves the demolition and replacement of the existing fire station and construction of an 8,740-square-foot facility with apparatus bays, living quarters, and related site and landscaping improvements. Construction began in February, 2021, with no confirmed completion date.
- ***Amador Community Park Playground Replacements.*** This project is currently under design with no confirmed construction date.
- ***Police Shooting Range, CIP 22482 (3313 Busch Road).*** This project is currently under design with no confirmed construction date.

For this analysis of potential cumulative effects of the Project, the most direct materials and equipment delivery haul routes for the Project are assumed to be from I-580 via Santa Rita Road. The Santa Rita Road landscape improvements, Carpenter's Union Training Center Expansion, and Livermore-Pleasanton Fire District Fire Station 3 Redevelopment projects are located along this section of Santa Rita Road between I-580 and the project component sites. As there are no confirmed construction dates published for these projects, the evaluation conservatively assumes they would be under construction concurrently with the Project. Based on the existing ADT volumes on study area roadways shown in Table 12 and the estimated number of construction-related project trips (158 one-way trips), construction activities would increase the ADT volume on study area roadways by no more than 3.7 percent – too small of a change to be perceived by the average motorist. Also, a detailed traffic plan would be required by the City of Pleasanton for overweight vehicles to limit potential vehicular conflicts on area roadways. It is assumed the cumulative projects would also be required to implement such a plan if they require use of overweight vehicles. Additionally, the Project would be required to implement a Project-specific traffic control plan under Mitigation Measure TRA-1. Based on the small percent increase in traffic generated by Project construction, as well as compliance with City requirements and Mitigation Measure TRA-1, the Project's impact to traffic in this area would not be cumulatively considerable.

The Amador Community Park Playground Replacements project is located on the western side of the park, approximately 700 feet northwest of the Well 9 site and pipeline approaching the site from the east. Delivery of the new playground equipment and travel route for City employees assigned to the playground project would likely access the site from the entrance from Black Avenue. Given the limited scope of the replacement of the playground (i.e., limited to the immediate playground area, small work area, distance from the Well 9 site), the contribution to the Project's air quality, noise, and traffic impacts when taken together with the playground project would not be cumulatively considerable.

The Police Shooting Range project at 3313 Busch Road is located approximately 850 feet to the east of the Well 8/CTF site. As the work associated with development of the range is assumed to occur within the bounds of the property at 3313 Busch Road, the impacts associated with that project would also be assumed to be limited to that parcel. While traffic associated with that project would approach the site from the west on Busch Road – just as traffic would for this Project – it is assumed that the shooting range project's workforce would be small and not contribute a substantial amount of traffic to Busch Road. As noted above, this Project's construction activities are estimated to increase the ADT volume on study area roadways by no more than 3.7 percent. When taken together with the Police Shooting Range project, this Project's impact to traffic on Busch Road would not be cumulatively considerable.

The Project would not have impacts to agriculture or forestry resources, land use and planning, mineral resources, or population and housing that would combine with other projects. The proposed activities could have impacts with respect to aesthetics, biological and cultural resources, energy, geology, soils, seismicity, paleontological resources, hazards and hazardous materials, hydrology and water quality, noise, recreation, transportation and traffic, tribal cultural resources, utilities and service systems, and wildfire. However, such impacts would be limited to the Project site and, where necessary, mitigated such that they would not substantially combine with other off-site impacts.

However, the Project's potential construction impacts with respect to air quality and GHG emissions could extend beyond the site to combine with impacts from other projects. As described in above in Air Quality (Section III) and Greenhouse Gas Emissions (Section VIII), BAAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable in developing its CEQA significance thresholds. BAAQMD considers projects that result in emissions that exceed its CEQA significance thresholds to result in individual impacts that are cumulatively considerable and significant. As discussed in these sections, the Project's emissions would be limited to the construction period and to periodic testing of the proposed emergency standby generator at the ozonation plant during operations and would be below BAAQMD's cumulatively considerable threshold. This impact would be less than significant.

Mitigation Measures

The following mitigation measures will be implemented to ensure that the Project would not have a cumulative effect on the environment when considered together with other projects. The full text of these measures is found in the respective resource analysis in this Initial Study.

Mitigation Measure AQ-1: Best Management Practices.

Mitigation Measure AQ-2: Tier 4 Engines

Mitigation Measure BIO-1: Protection of Nesting Birds.

Mitigation Measure BIO-2: Protection of Roosting Bats.

Mitigation Measure CUL-1a: Cultural Resource Awareness Training.

Mitigation Measure CUL-1b: Inadvertent Discovery of Cultural Materials or Tribal Cultural Resources

Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.

Mitigation Measure GEO-1: Inadvertent Discovery of Paleontological Resources.

Mitigation Measure NOI-1: Daytime Construction.

Mitigation Measure NOI-2: Nighttime Construction (10:00 p.m. to 7:00 a.m.) along Santa Rita Road and at Well 10.

Mitigation Measure TRA-1: Construction Traffic Control/Traffic Management Plan.

References

City of Pleasanton, Department of Community Development, 2022. *Community Development* (Community Development Department website). Accessed at: https://www.cityofpleasantonca.gov/gov/depts/cd/default.asp

City of Pleasanton, Department of Engineering, 2022. *Projects* (Engineering Department website). Accessed at: http://admin.cityofpleasantonca.gov/gov/depts/engineering/projects/default.asp

CHAPTER 4
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