WATER WELL PUMP STATION NO. 372

DEVELOPMENT PERMIT APPLICATION NO. P19-04891

INITIAL STUDY/NEGATIVE DECLARATION

Project Sponsor:
City of Fresno
Department of Public Utilities
Utilities Planning & Engineering (UP&E)
2101 G Street Bldg. A
Fresno, CA 93706

Lead Agency:
City of Fresno
Planning and Development Department
2600 Fresno Street
Fresno, CA 93721

Prepared by:
Precision Civil Engineering, Inc.
1234 O Street
Fresno, CA 93721

June 21, 2021

PRECISION
CIVIL ENGINEERING, INC

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Negative Declaration

Lead Agency:
City of Fresno
Planning and Development Department
2600 Fresno Street
Fresno, CA 93721
(559) 621-8277

Project Name: Water Well Pump Station No. 372

Project Location: The Project is located at 3709 S. Northpointe Drive, Fresno, CA on the northwest corner of S. Northpointe Drive and Prime Avenue, between E. Central Avenue and E. North Avenue. (APN: 330-021-75ST)

Project Description: Development Permit Application No. P19-04891 was filed by Lito Bucu of the City of Fresno, Department of Public Utilities, Utilities Planning & Engineering (Applicant). The Applicant proposes to construct a water supply well at Pump Station 372 (Project). The Project entails drilling a new water well, construction of a perimeter chain link fencing, a 29' X 9'-4" equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of landscaping for screening. The site is sized and configured to accept future installation of an emergency generator and water treatment facilities including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank, if deemed necessary.

Environmental Determination: The City of Fresno has conducted an Initial Study, presented on the following pages, that considers the potential environmental impacts of the Project. The City proposes to adopt a Negative Declaration for the above-described Project. The environmental analysis contained in the Initial Study and Negative Declaration is tiered from Master Environmental Impact Report (MEIR) SCH No. 2012111015 prepared for the Fresno General Plan. A copy of the MEIR may be reviewed in the City of Fresno, Planning and Development Department as noted above (See Lead Agency).

The Project has been determined to be a subsequent project that is not fully within the scope of the MEIR SCH No. 2012111015 prepared for the Fresno General Plan. Pursuant to Public Resources Code Section 21157.1 and California Environmental Quality Act (CEQA) Guidelines Section15177, this Project has been evaluated with respect to each

item on the attached environmental checklist to determine whether this project may cause any additional significant effect on the environment which was not previously examined in the MEIR. After conducting a review of the adequacy of the MEIR pursuant to Public Resources Code, Section 21157.6(b)(1), the City of Fresno Planning and Development Department, as Lead Agency, finds that no substantial changes have occurred with respect to the circumstances under which the MEIR was certified and that no new information, which was not known and could not have been known at the time that the MEIR was certified as complete, has become available.

This completed environmental impact checklist form and its associated narrative reflect applicable comments of responsible and trustee agencies and research and analysis conducted to examine the interrelationship between the proposed project and the physical environment. The information contained in the Project application and its related environmental assessment application, responses to requests for comment, checklist, initial study narrative, and any attachments thereto, combine to form a record indicating that an initial study has been completed in compliance with the State CEQA Guidelines and the CEQA.

All new development activity and many non-physical projects contribute directly or indirectly toward cumulative impacts on the physical environment. It has been determined that the incremental effect contributed by this Project toward cumulative impacts is not considered substantial or significant in itself, and/or that cumulative impacts accruing from this project may be mitigated to less than significant with application of feasible mitigation measures.

Based upon the evaluation guided by the environmental checklist form, it was determined that there are no foreseeable impacts from the Project that are additional to those identified in the MEIR, and/or impacts which require mitigation measures not included in the MEIR Mitigation Measure Checklist.

The completed environmental checklist form indicates whether an impact is potentially significant, less than significant with mitigation, or less than significant.

For some categories of potential impacts, the checklist may indicate that a specific adverse environmental effect has been identified which is of sufficient magnitude to be of concern. Such an effect may be inherent in the nature and magnitude of the Project or may be related to the design and characteristics of the individual project. Effects so rated are not sufficient in themselves to require the preparation of an Environmental Impact Report and have been mitigated to the extent feasible. With the Project-specific mitigation

imposed, there is no substantial evidence in the record that this Project may have additional significant, direct, indirect or cumulative effects on the environment that are significant and that were not identified and analyzed in the MEIR. Both the MEIR mitigation checklist measures and the project-specific mitigation checklist measures will be imposed on this Project.

The Initial Study has concluded that the Project will not result in any adverse effects which fall within the "Mandatory Findings of Significance" contained in Section 15065 of the CEQA Guidelines. The finding is, therefore, made that the Project will not have a significant adverse effect on the environment.

Jose Valenzuela, Planner III Date
City of Fresno, Planning and Development Department

Initial Study

This Initial Study was prepared pursuant to the California Environmental Quality Act (CEQA) Public Resources Code Sections 21000 et seq., CEQA Guidelines Title 14, Sections 15000 et seq. of the California Code of Regulations.

Project Title	Water Well Pump Station No. 372 (Development Permit Application No. P19-04891)
Lead Agency Name and Address	City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
Contact Person and Phone Number	Jose Valenzuela, Planner III City of Fresno Planning and Development Department (559) 621-8070
Project Location	3709 S. Northpointe Drive, Fresno, CA: northwest corner of S. Northpointe Drive and Prime Avenue, between E Central Avenue and E North Avenue. (APN: 330-021-75ST)
Project Sponsor's Name and Address	Lito Bucu City of Fresno Department of Public Utilities, UP&E 2101 G Street Bldg A Fresno, CA 93706
Land Use Designation (General Plan and Community Plan)	Employment – Heavy Industrial (No Change)
Zoning Designation	IH – Heavy Industrial (No Change)
Project Description	Development Permit Application No. P19-04891 was filed by ***City of Fresno, Department of Public Utilities, UP&E***. The applicant proposes to construct a water supply well at Pump Station 372 ("Project"). The Project entails drilling a new water well, construction of a perimeter chain link fence a 29' X 9'-4" equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of frontage landscaping for screening. The site is sized and configured to

	accept future installation of an emergency generator and water treatment facilities including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank, if deemed necessary. This future project component is included in this analysis. Water Well Pump Station No. 372 will pump ground water into the City's water distribution system. The site has been sized and configured to accept water remediation facilities, primarily an Iron and Manganese Filtration system and Granulated Activated Carbon (GAC) treatment system. These facilities may be installed at some time in the future if synthetic organic compounds, such as agricultural pesticides (DBCP, EDB, etc.) or industrial solvents (PCE, TCP, etc.) are detected in the groundwater at significant concentrations. The use of GAC to adsorb organic compounds is well documented and has been identified by the EPA and California Department of Health Services (CDHS) as the Best Available Technology for this application. Since GAC will support a normally benign bacterial growth the UP&E may disinfect the treated effluent with a chlorine solution or ultra-violet (U.V.) should a GAC systems be required in the future. The well will be active at all times ready to serve but will only pump water when demand exist which is typically early morning and afternoon. The site will be secured most of the time, UP&E operations and maintenance crews will access the site a few times week to deliver disinfection chemicals and perform routine maintenance. The Parcel was created by deed through conveyance to a Public Entity. A 900-feet deep Test Bore and Monitoring Wells were completed between December 11, 2017 and December 22, 2017. The UP&E proposes to complete this well site's development in the following three phases. **Phase 1: Well Construction** 1. Well Drilling: A borehole is drilled with reverse rotary drilling equipment and the well casing, gravel pack, and cement sanitary seal are installed. 2. Well Development: A well development tool is used to clean the

	drilling fluids and fines such as clay and silts from the water bearing strata. Additional development is accomplished by pumping and surging large quantities of water from the well. A 24-hour pump test is then performed. 3. Equipment Installation: The pumping equipment (vertical turbine pump, column, shaft, electrical motor) and power supply (transformer and control panel) are installed. The well is disinfected and tested for bacterial and general water quality. At this point, the well is connected to the water main. The pump and other facilities are equipped to prevent public exposure to moving parts and electrical hazards. The pump station is then ready for operation. Construction of the pump station will take place in accordance with Appendix K of the California Environmental Quality Act (archaeological resources) and all applicable local ordinances and regulations. **Phase 2: Site Improvements** 1. Perimeter Fence and Landscaping: The pump station will be surrounded by a maximum seven-foot-tall chain link fencing and landscaped per the attached site plan. The landscaping will mature within five (5) years to screen equipment, including treatment facilities. The landscaping will be completed within six months of occupancy or at a time specified by the Development Department. 2. Other Site Improvements: If not existing, typical public works improvements, such as curb and gutter, lighting, street paving, sidewalks, etc. will be constructed within six months of the date development of surrounding public works improvements reach well site. In any event, these improvements shall be consistent with the conditions of the special permit. 3. Iron Manganese Filtration System: An Iron and Manganese Filtration system may be installed on the site. A filtration system designed and built as a package will be utilized for this Pump Station. Treatment will commence after installation of the facility. A similar system has been previously approved and operated at Pump Station 369 located at 11251 N. Alicante Drive. See exhibit A for additional information regarding Iron Manganese Treatment Filtration. **Phase 3: GAC Treatment Systems** If required to address water contamination, GAC vessels will be installed on the site. Preparation shall include construction of facilities consistent

<table>
<tr><td></td><td>with the special permit. Treatment will commence after installation of vessels and the GAC. Additional information regarding the GAC system operations including carbon change out procedure is available in the Mitigated Negative Declaration and Environmental Assessment No. C-90-40 (available in the offices of the Development Department) which is incorporated by reference into this statement as if set forth in full.</td></tr>
<tr><td>Surrounding Land Uses and Setting</td><td>
<table>
<tr><th></th><th>Planned Land Use</th><th>Existing Zoning</th><th>Existing Land Use</th></tr>
<tr><td>North</td><td>Employment – Heavy Industrial</td><td>IH – Heavy Industrial</td><td>Vacant</td></tr>
<tr><td>East</td><td>Employment – Heavy Industrial</td><td>IH – Heavy Industrial</td><td>Vacant</td></tr>
<tr><td>South</td><td>Open Space – Ponding Basin</td><td>OS – Open Space</td><td>Ponding Basin</td></tr>
<tr><td>West</td><td>Employment – Heavy Industrial</td><td>IH – Heavy Industrial</td><td>Amazon Fulfillment Center</td></tr>
</table>
</td></tr>
<tr><td>Required Approvals from Other Public Agencies</td><td>City of Fresno, Department of Public Works; City of Fresno, Department of Public Utilities, City of Fresno, Building and Safety Services Division; City of Fresno, Fire Department; Fresno Metropolitan Flood Control District; County of Fresno, Department of Public Health; County of Fresno, Department of Public Works and Planning; San Joaquin Valley Air Pollution Control District; Central Valley Regional Water Quality Control Board; California Public Utilities Commission.</td></tr>
<tr><td>Have California Native American tribes traditionally and culturally affiliated</td><td>The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with</td></tr>
</table>

with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1? If so, has consultation begun?	cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and supported by substantial evidence, chooses to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits. Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality. Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to Assembly Bill 52 (AB 52) A certified letter was mailed to the above-mentioned tribes on March 22, 2021. The 30-day comment period ended on April 20, 2021. Both tribes did not request consultation.

Environmental Factors Potentially Affected

Pursuant to PRC Section 21157.1(b) and CEQA Guidelines 15177(b)(2), the purpose of this Master Environmental Impact Report (MEIR) Initial Study is to analyze whether the subsequent Project was described in MEIR SCH No. 2012111015 and whether the subsequent Project may cause any additional significant effect on the environment, which was not previously examined in MEIR SCH No. 2012111015 adopted for the Fresno General Plan.

The Environmental Checklist is the analysis portion of this Negative Declaration (MND). This section provides an evaluation of the potential environmental impacts of the Project. The CEQA Guidelines require evaluation of the 20 environmental issues analyzed in this section, as well as the Mandatory Findings of Significance. 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. No boxes have been marked because no areas were determined to have a potentially significant impact.

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

Determination (To be Completed by the Lead Agency):

On the basis of this initial evaluation:

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

☐ I find that the proposed project is a subsequent project identified in the MEIR but that it is not fully within the scope of the MEIR because the proposed project could have a significant effect on the environment that was not examined in the MEIR. However, 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. The project specific mitigation measures and all applicable mitigation measures contained in the MEIR Mitigation

Measure Monitoring Checklist will be imposed upon the proposed project. 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 (EIR) 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 EIR 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.

Approved By:

Jose Valenzuela, Planner III Date
City of Fresno, Planning and Development Department

Project Overview

Lito Bucu of the City of Fresno, Department of Public Utilities, UP&E (Applicant) proposes the construction of Water Well Pump Station No. 372 (Project), consisting of a new water well, chain link fence, a 29’ x 9’-4” equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of perimeter landscaping for screening on a site (Project site) totaling 0.34-acres on the northwest corner of S. Northpointe Drive and Prime Avenue, between E. Central Avenue and E. North Avenue (APN: 330-021-75ST), herein referred to throughout the document as “proposed Project” or “Project.” Project details are provided below. The site is sized and configured to accept future installation of an emergency generator and water treatment facilities including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank, if deemed necessary. Water Well Pump Station No. 372 will pump ground water into the City's water distribution system.

Project Location

As shown in **Figure 1** below, the Project site is located on the northwest corner of S. Northpointe Drive and Prime Avenue, between E. Central Avenue and E. North Avenue and totals approximately ± 0.34-acres (APN: 330-021-75ST). The Parcel was created by a deed through conveyance to a Public Entity. The site is located immediately to the north of an existing ponding basin and to the south, east, and west of existing and future industrial development. The site is currently within the boundary of an existing construction site for the adjoining parcel to the north.

Figure 1. Project Location

Existing Setting

This section describes the existing conditions, surrounding conditions, as well as the General Plan Land Use Designation and Zoning Designation.

1. Existing Conditions

As shown in **Figure 1** above, the existing site is vacant with no improvements, structures, or vegetation. Historically, the site has been vacant prior to 1973. From the 1970s to approximately 2017, the site and adjoining properties to the west, north, and east were occupied by orchards. Construction activities for a large industrial warehouse to the northeast of the site began in 2017. The site is currently within the boundary of an existing construction site for the adjoining parcel to the north. A 900-foot test hole was drilled on the Project site for testing between December 11, 2017 and December 22, 2017. The test hole drilling involved drilling a small diameter hole and logging the encountered geologic formations in order to determine the best location and depth of the well. The test drilling confirmed the location of Water Well Pump Station No. 372.

2. Surrounding Conditions

As referenced in **Table 1** the Project site is surrounded primarily by vacant land, industrial development, and a water basin. to the north, south, east, and west. The two vacant adjoining parcels to the north are currently undergoing construction to develop industrial uses.

Table 1. Surrounding Land Uses

	Planned Land Use	**Zoning (E)**	**Land Use (E)**
North	Employment – Heavy Industrial	IH – Heavy Industrial	Vacant
East	Employment – Heavy Industrial	IH – Heavy Industrial	Vacant
South	Open Space – Ponding Basin	OS – Open Space	Ponding Basin
West	Employment – Heavy Industrial	IH – Heavy Industrial	Amazon Fulfillment Center

3. Land Use Designation

The Project site has a General Plan Land Use Designation of Employment – Heavy Industrial (See **Figure 2a**). The Project does not propose any change to the designated land use.

4. Zoning Designation

The Project site is within the IH – Heavy Industrial Zone District. No zone change is proposed by the Project (See **Figure 2b**).

Figure 2a. Land Use Map

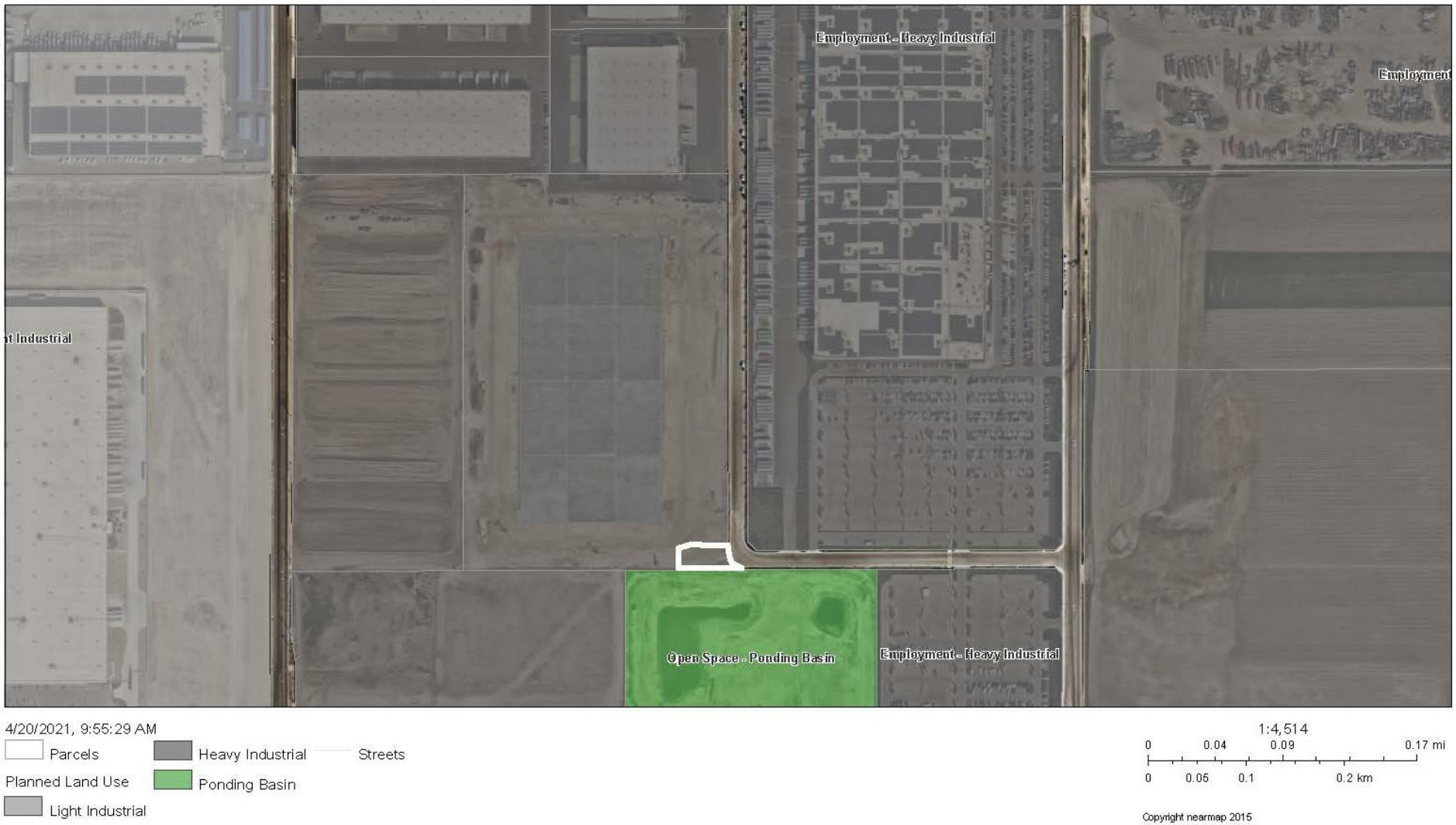
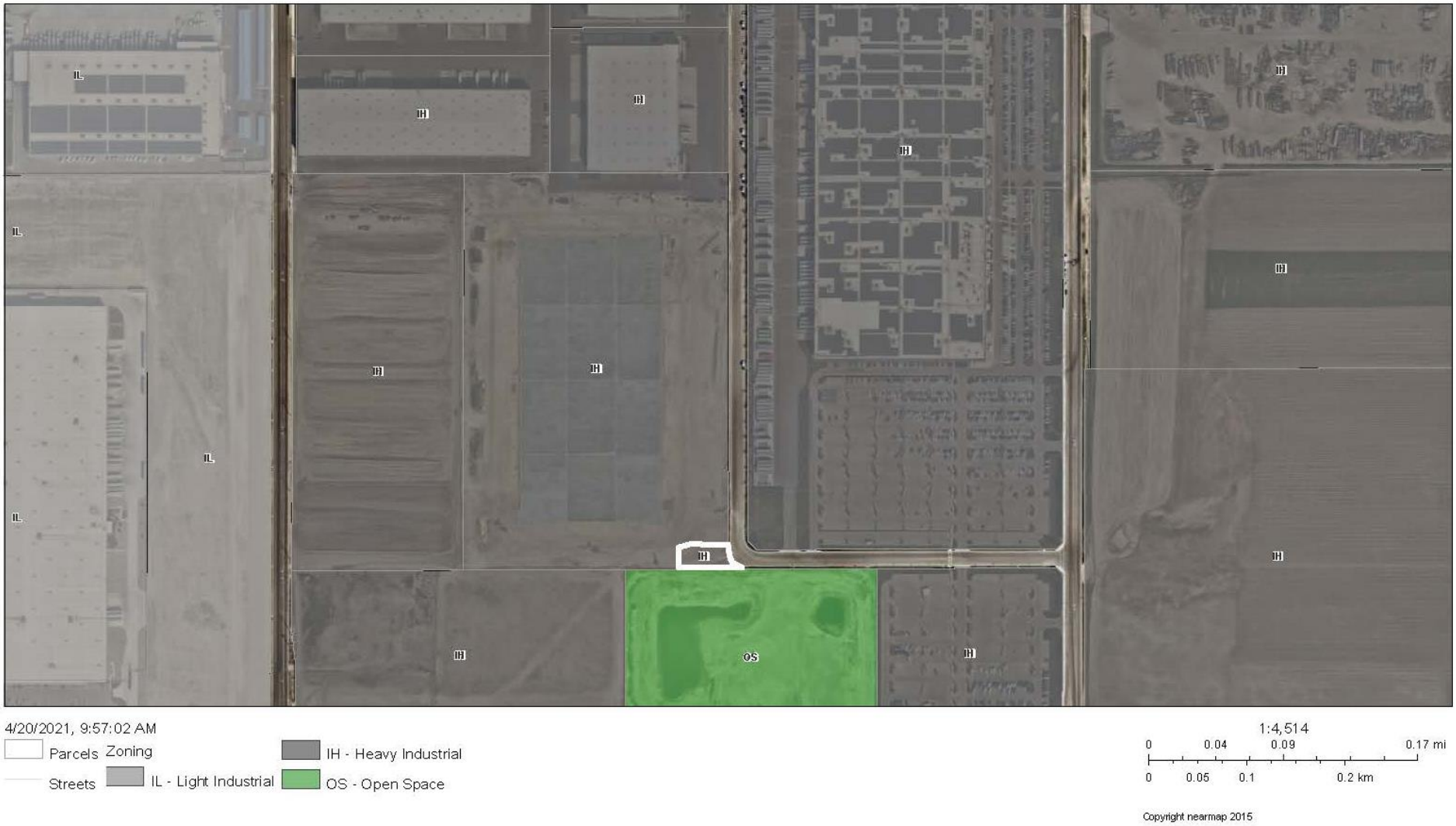


Figure 2 b. Zoning Map



Project Description

This section describes the components of the proposed Project in more detail, including site-preparation, proposed structures, and on- and off-site improvements.

1. Project Entitlements

The Project includes a Development Permit.

2. Project Construction and Phasing

The Project is anticipated to begin construction in October 2021 (Phase 1) with full buildout by November 2022. The expected phasing is shown below in **Table 2** but will be dependent on availability of resources. A description of each of the features is included below. The UP&E proposes to complete this well site's development in the following three (3) phases.

Table 2. Proposed Project Construction and Phasing

Phase	Activity	Timing
Phase 1: Well Construction	Well Drilling	October 2021
	Well Development	December 2021
	Equipment Installation	June 2022
Phase 2: Site Improvements	Perimeter Fence and Landscaping	November 2022
	Other Site Improvements	November 2022
	Iron Manganese Filtration System	Only if needed
Phase 3: GAC Treatment Systems	GAC Treatment Systems Installation (if required)	Only if needed

3. Site Preparation

Site preparation would include typical grading activities to ensure an adequately graded site for drainage purposes. Other site preparation would include minor excavation for the installation of utility infrastructure, for conveyance of water, sewer, stormwater, and irrigation. There are no existing improvements or structures on the site, so there would be no demolition required.

4. Project Components

This section describes the overall components of the Project, such as the proposed buildings, landscaping, vehicle and pedestrian circulation, and utilities.

Demolition

No structures would be demolished as part of this Project.

Well Construction

Well construction would be Phase 1 of Project Construction and consist of: 1) well drilling, 2) well development, and 3) equipment installation. First, a borehole is drilled with reverse rotary drilling equipment and the well casing, gravel pack, and cement sanitary seal are installed. Then, a well development tool is used to clean the drilling fluids and fines such as clay and silts from the water bearing strata. Additional development is accomplished by pumping and surging large quantities of water from the well. A 24-hour pump test is then performed. Lastly, the pumping equipment (vertical turbine pump, column, shaft, electrical motor) and power supply (transformer and control panel) are installed. The well is disinfected and tested for bacterial and general water quality. At this point, the well is connected to the water main. The pump and other facilities are equipped to prevent public exposure to moving parts and electrical hazards. The pump station is then ready for operation.

During Phase 2 of Project Construction, an Iron and Manganese Filtration system may be installed on the site. A filtration system designed and built as a package would be utilized for this Pump Station. Treatment will commence after installation of the facility. And, if required to address water contamination, GAC vessels would be installed on the site as part of Phase 3 of Project Construction. Preparation shall include construction of facilities consistent with the permit. Treatment would commence after installation of vessels and the GAC. Additional information regarding the GAC system operations including carbon change out procedure is available in the Mitigated Negative Declaration and Environmental Assessment No. C-90-40 (available in the offices of the Planning and Development Department) which is incorporated by reference into this statement as if set forth in full.

Conceptual Site Layout and Elevations

As shown in **Figure 3**, the Project entails drilling a new water well, construction of a perimeter chain link fencing, a 29’ X 9’-4” equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of front landscaping for screening. The site is sized and configured to accept future installation of an emergency generator and water treatment facilities including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank, if deemed necessary. The site area totals 14,659 sf. and the proposed building area comprises 250 sf. Conceptual elevations are shown in **Figure 4**. As shown, the maximum height of the masonry building is 10’., carbon vessels are 15’, manganese filters are 10’., and the perimeter chain link fence is 7’. There is also a proposed 10’ tall antenna (i.e., telemetry antenna) to be mounted on the masonry building.

Site Circulation and Parking

Typical public works improvements such as curb and gutter, lighting, street paving, and sidewalks would be constructed within six (6) months from the date that the development of surrounding public works improvements reach the Project site, anticipated to occur during Phase

2 of Project Construction. In any event, these improvements shall be consistent with the conditions of the permit. Regarding site circulation, the Project would be accessed by two (2) points of ingress and egress; one is proposed along S. Northpointe Drive and E. Prime Avenue with a 48' concrete driveway into the interior of the site and the other is proposed to the north of the site via an ingress/egress easement. The 15' drive approaches would be constructed per City of Fresno Public Works Standards P-2 and P-3, and vehicular entries would be secured by 5' and 10' chain link gates. Both gates would be closed at all times and would only be opened when UP&E crews perform routine maintenance or deliveries. Dedication of a pedestrian easement along the eastern exterior of the site is proposed with a minimum 4' path of travel. The sidewalk would be constructed per Public Works Standard P-5 along S. Northpointe Drive and E. Prime Avenue.

Landscaping

The Project would be landscaped per the Site Plan shown in Figure 3 and would occur during Phase 2 of Project Construction. Landscaping would consist of a 10' landscape strip along the site frontage on S. Northpointe Drive and E. Prime Avenue. The proposed landscape area comprises 1,000 sf. of the site. The landscaping would mature within five (5) years to screen equipment, including treatment facilities. The landscaping would be completed within six (6) months of occupancy or at a time specified by the Planning and Development Department.

Utilities

Utilities for the site would consist of water, sewer, electric, cable, gas, and stormwater infrastructure. Minor trenching and digging activities would be required for the installation of necessary pipelines to serve the site. All utility plans would be required to be reviewed and approved by the appropriate agency and/or department to ensure that installation occurs to pertinent codes and regulations. Other infrastructure includes an existing fire hydrant, existing sanitary sewer manhole, exiting water valve, and existing water meter box. Utilities are provided by and managed from a combination of agencies including the City, Fresno Irrigation District, Fresno Municipal Flood Control District, and Pacific Gas & Electric.

5. Project Design and Operations

This section describes the Project design and operations as it relates to air quality, hazards and hazardous materials, hydrology, and noise.

Air Quality

The Project design incorporates the following measures in regard to air quality impacts:

- The generation of construction-related dust will be controlled by observance of the San Joaquin Valley Unified Air Pollution Control District's Regulation VIII.

- The operation of the electrical pump, granular activated carbon filter, or chlorination equipment will not result in adverse impacts to air quality. Because of the minimal impacts associated with these operations, the SJVAPCD does not require permits for these operations.
- If an air stripping operation and/or an auxiliary diesel or natural gas engine greater than 50 h.p. is considered for this pump station, the UP&E will request an Authority to Construct certificate from the District prior to the operation of these facilities.

Hazards and Hazardous Materials

The Project design and operation incorporates the following measures in regard to hazards and hazardous materials:

- Ongoing monitoring of GAC absorption medium and frequent change-out to prevent saturation of the absorption site on carbon particles which trap and hold organic contaminants that would allow TCE and other contaminants to enter the drinking water supply.
- Containment of spent GAC in a sealed change-out system, with regeneration/disposal of the used carbon in a licensed facility (to be made a contract requirement of vendors who are hired by the City for GAC changeout).
- Prior to the installation of the post-filter disinfection system, the City may be required to complete and submit a Risk Management and Prevention Program to the Fresno County Community Health Department, Environmental Health System. Contact the Hazardous Materials Disclosure/Registration Program at (559) 445-3721 for more information.
- Removal and disposal of contaminated GAC is an activity which may require special handling as a hazardous waste. Spent GAC potentially produced by this operation must be stored and labeled in accordance with federal, state, and local governments requirements. Management of the carbon filtration facilities must be contracted to a fully licensed operator authorized by appropriate federal and state agencies.
- Prior to using an air stripper as a resource for remediation the Applicant must file a hazardous materials business plan and obtain a Permit to Operate from the SJVAPCD.
- Securing the wellhead treatment site by constructing a chain link fence with locking gate.
- A permit is required from Fire Prevention for hazardous materials storage on-site. A permit is also required for the above ground fuel tank located inside the future generator.

Hydrology and Water Quality

To eliminate any potential bacterial contamination, the UP&E would disinfect the water using chlorination prior to distribution. Chlorination will take place through Sodium hypochlorite generation from common salt, injection of sodium hypochlorite solution, or calcium hypochlorite tables as described above under Hazards and Hazardous Materials. In addition, Project design and normal operations will include the following.

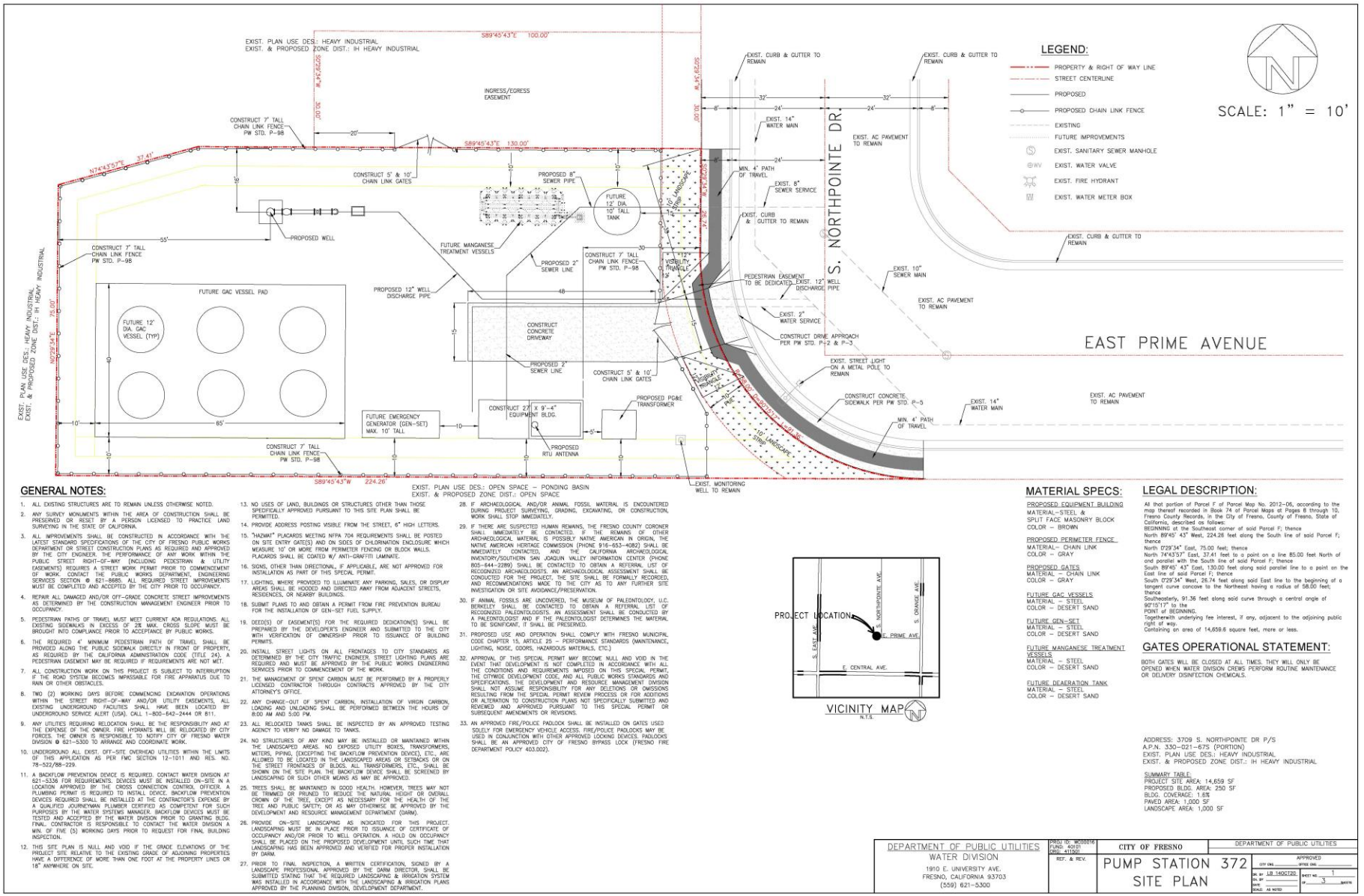
- Filing of a Report of Waste Discharge to characterize backwash water and determine the appropriate level of permitting and any Discharge Requirements.
- Measures to protect surface water and groundwater: The City of Fresno is directly responsible for ensuring that any discharge (e.g. pumped groundwater) during the project is permitted through appropriate waste discharge adopted by the CVWB or SWRCB.
- Filing of a Report of Waste Discharge to characterize backwash water and determine the appropriate level of permitting and any Discharge Requirements.
- Compliance with National Pollution Discharge Elimination System permitting regulations by filing a Notice of Intent (or notice of exemption).
- Addition of Pump Station No. 372 to the City's Master Hazardous Materials Business Plan, which has standards for containment and handling of these chemicals, staff training, placarding, and spill response.

Noise

The Project design incorporates the following measures in regard to noise.

- Installation of critically quiet mufflers, structural screening, and/or waterproof cowling or ducting.
- Retention and/or installation of appropriate landscaping.
- Installation and/or retention of a 7’ chain link fence.

Figure 3. Conceptual Site Plan



GENERAL NOTES:

1. ALL EXISTING STRUCTURES ARE TO REMAIN UNLESS OTHERWISE NOTED.
2. ANY SURVEY MONUMENTS WITHIN THE AREA OF CONSTRUCTION SHALL BE PRESERVED OR RESET BY A PERSON LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA.
3. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST STANDARD SPECIFICATIONS OF THE CITY OF FRESNO PUBLIC WORKS DEPARTMENT OR STREET CONSTRUCTION PLANS AS REQUIRED AND APPROVED BY THE CITY ENGINEER. THE PERFORMANCE OF ANY WORK WITHIN THE PUBLIC STREET RIGHT-OF-WAY (INCLUDING PEDESTRIAN & UTILITY EASEMENTS) REQUIRES A STREET WORK PERMIT PRIOR TO COMMENCEMENT OF WORK. CONTACT THE PUBLIC WORKS DEPARTMENT, ENGINEERING SERVICES SECTION @ 621-8685. ALL REQUIRED STREET IMPROVEMENTS MUST BE COMPLETED AND ACCEPTED BY THE CITY PRIOR TO OCCUPANCY.
4. REPAIR ALL DAMAGED AND/OR OFF-GRADE CONCRETE STREET IMPROVEMENTS AS DETERMINED BY THE CONSTRUCTION MANAGEMENT ENGINEER PRIOR TO OCCUPANCY.
5. PEDESTRIAN PATHS OF TRAVEL MUST MEET CURRENT ADA REGULATIONS. ALL EXISTING SIDEWALKS IN EXCESS OF 2% MAX. CROSS SLOPE MUST BE BROUGHT INTO COMPLIANCE PRIOR TO ACCEPTANCE BY PUBLIC WORKS.
6. THE REQUIRED 4' MINIMUM PEDESTRIAN PATH OF TRAVEL SHALL BE PROVIDED ALONG THE PUBLIC SIDEWALK DIRECTLY IN FRONT OF PROPERTY, AS REQUIRED BY THE CALIFORNIA ADMINISTRATION CODE (TITLE 24). A PEDESTRIAN EASEMENT MAY BE REQUIRED IF REQUIREMENTS ARE NOT MET.
7. ALL CONSTRUCTION WORK ON THIS PROJECT IS SUBJECT TO INTERRUPTION IF THE ROAD SYSTEM BECOMES IMPASSABLE FOR FIRE APPARATUS DUE TO RAIN OR OTHER OBSTACLES.
8. TWO (2) WORKING DAYS BEFORE COMMENCING EXCAVATION OPERATIONS WITHIN THE STREET RIGHT-OF-WAY AND/OR UTILITY EASEMENTS, ALL EXISTING UNDERGROUND FACILITIES SHALL HAVE BEEN LOCATED BY UNDERGROUND SERVICE ALERT (USA). CALL 1-800-642-2444 OR 811.
9. ANY UTILITIES REQUIRING RELOCATION SHALL BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE OWNER. FIRE HYDRANTS WILL BE RELOCATED BY CITY FORCES. THE OWNER IS RESPONSIBLE TO NOTIFY CITY OF FRESNO WATER DIVISION @ 621-5300 TO ARRANGE AND COORDINATE WORK.
10. UNDERGROUND ALL EXIST. OFF-SITE OVERHEAD UTILITIES WITHIN THE LIMITS OF THIS APPLICATION AS PER FMC SECTION 12-1011 AND RES. NO. 78-522/88-229.
11. A BACKFLOW PREVENTION DEVICE IS REQUIRED. CONTACT WATER DIVISION AT 621-5336 FOR REQUIREMENTS. DEVICES MUST BE INSTALLED ON-SITE IN A LOCATION APPROVED BY THE CROSS CONNECTION CONTROL OFFICER. A PLUMBING PERMIT IS REQUIRED TO INSTALL DEVICE. BACKFLOW PREVENTION DEVICES REQUIRED SHALL BE INSTALLED AT THE CONTRACTOR'S EXPENSE BY A QUALIFIED JOURNEYMAN PLUMBER CERTIFIED AS COMPETENT FOR SUCH PURPOSES BY THE WATER SYSTEMS MANAGER. BACKFLOW DEVICES MUST BE TESTED AND ACCEPTED BY THE WATER DIVISION PRIOR TO GRANTING BLDG. FINAL. CONTRACTOR IS RESPONSIBLE TO CONTACT THE WATER DIVISION A MIN. OF FIVE (5) WORKING DAYS PRIOR TO REQUEST FOR FINAL BUILDING INSPECTION.
12. THIS SITE PLAN IS NULL AND VOID IF THE GRADE ELEVATIONS OF THE PROJECT SITE RELATIVE TO THE EXISTING GRADE OF ADJOINING PROPERTIES HAVE A DIFFERENCE OF MORE THAN ONE FOOT AT THE PROPERTY LINES OR 18" ANYWHERE ON SITE.
13. NO USES OF LAND, BUILDINGS OR STRUCTURES OTHER THAN THOSE SPECIFICALLY APPROVED PURSUANT TO THIS SITE PLAN SHALL BE PERMITTED.
14. PROVIDE ADDRESS POSTING VISIBLE FROM THE STREET, 6" HIGH LETTERS.
15. "HAZMAT" PLACARDS MEETING NFPA 704 REQUIREMENTS SHALL BE POSTED ON SITE ENTRY GATE(S) AND ON SIDES OF CHLORINATION ENCLOSURE WHICH MEASURE 10' OR MORE FROM PERIMETER FENCING OR BLOCK WALLS. PLACARDS SHALL BE COATED W/ ANTI-GRAFFITI LAMINATE.
16. SIGNS, OTHER THAN DIRECTIONAL, IF APPLICABLE, ARE NOT APPROVED FOR INSTALLATION AS PART OF THIS SPECIAL PERMIT.
17. LIGHTING, WHERE PROVIDED TO ILLUMINATE ANY PARKING, SALES, OR DISPLAY AREAS SHALL BE HOODED AND DIRECTED AWAY FROM ADJACENT STREETS, RESIDENCES, OR NEARBY BUILDINGS.
18. SUBMIT PLANS TO AND OBTAIN A PERMIT FROM FIRE PREVENTION BUREAU FOR THE INSTALLATION OF GEN-SET FUEL SUPPLY.
19. DEED(S) OF EASEMENT(S) FOR THE REQUIRED DEDICATION(S) SHALL BE PREPARED BY THE DEVELOPER'S ENGINEER AND SUBMITTED TO THE CITY WITH VERIFICATION OF OWNERSHIP PRIOR TO ISSUANCE OF BUILDING PERMITS.
20. INSTALL STREET LIGHTS ON ALL FRONTAGES TO CITY STANDARDS AS DETERMINED BY THE CITY TRAFFIC ENGINEER. STREET LIGHTING PLANS ARE REQUIRED AND MUST BE APPROVED BY THE PUBLIC WORKS ENGINEERING SERVICES PRIOR TO COMMENCEMENT OF THE WORK.
21. THE MANAGEMENT OF SPENT CARBON MUST BE PERFORMED BY A PROPERLY LICENSED CONTRACTOR THROUGH CONTRACTS APPROVED BY THE CITY ATTORNEY'S OFFICE.
22. ANY CHANGE-OUT OF SPENT CARBON, INSTALLATION OF VIRGIN CARBON, LOADING AND UNLOADING SHALL BE PERFORMED BETWEEN THE HOURS OF 8:00 AM AND 5:00 PM.
23. ALL RELOCATED TANKS SHALL BE INSPECTED BY AN APPROVED TESTING AGENCY TO VERIFY NO DAMAGE TO TANKS.
24. NO STRUCTURES OF ANY KIND MAY BE INSTALLED OR MAINTAINED WITHIN THE LANDSCAPED AREAS. NO EXPOSED UTILITY BOXES, TRANSFORMERS, METERS, PIPING, (EXCEPTING THE BACKFLOW PREVENTION DEVICE), ETC., ARE ALLOWED TO BE LOCATED IN THE LANDSCAPED AREAS OR SETBACKS OR ON THE STREET FRONTAGES OF BLDGS. ALL TRANSFORMERS, ETC., SHALL BE SHOWN ON THE SITE PLAN. THE BACKFLOW DEVICE SHALL BE SCREENED BY LANDSCAPING OR SUCH OTHER MEANS AS MAY BE APPROVED.
25. TREES SHALL BE MAINTAINED IN GOOD HEALTH. HOWEVER, TREES MAY NOT BE TRIMMED OR PRUNED TO REDUCE THE NATURAL HEIGHT OR OVERALL CROWN OF THE TREE, EXCEPT AS NECESSARY FOR THE HEALTH OF THE TREE AND PUBLIC SAFETY; OR AS MAY OTHERWISE BE APPROVED BY THE DEVELOPMENT AND RESOURCE MANAGEMENT DEPARTMENT (DARM).
26. PROVIDE ON-SITE LANDSCAPING AS INDICATED FOR THIS PROJECT. LANDSCAPING MUST BE IN PLACE PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY AND/OR PRIOR TO WELL OPERATION. A HOLD ON OCCUPANCY SHALL BE PLACED ON THE PROPOSED DEVELOPMENT UNTIL SUCH TIME THAT LANDSCAPING HAS BEEN APPROVED AND VERIFIED FOR PROPER INSTALLATION BY DARM.
27. PRIOR TO FINAL INSPECTION, A WRITTEN CERTIFICATION, SIGNED BY A LANDSCAPE PROFESSIONAL APPROVED BY THE DARM DIRECTOR, SHALL BE SUBMITTED STATING THAT THE REQUIRED LANDSCAPING & IRRIGATION SYSTEM WAS INSTALLED IN ACCORDANCE WITH THE LANDSCAPING & IRRIGATION PLANS APPROVED BY THE PLANNING DIVISION, DEVELOPMENT DEPARTMENT.
28. IF ARCHAEOLOGICAL AND/OR ANIMAL FOSSIL MATERIAL IS ENCOUNTERED DURING PROJECT SURVEYING, GRADING, EXCAVATING, OR CONSTRUCTION, WORK SHALL STOP IMMEDIATELY.
29. IF THERE ARE SUSPECTED HUMAN REMAINS, THE FRESNO COUNTY CORONER SHALL IMMEDIATELY BE CONTACTED. IF THE REMAINS OF OTHER ARCHAEOLOGICAL MATERIAL IS POSSIBLY NATIVE AMERICAN IN ORIGIN, THE NATIVE AMERICAN HERITAGE COMMISSION (PHONE 916-653-4082) SHALL BE IMMEDIATELY CONTACTED, AND THE CALIFORNIA ARCHAEOLOGICAL INVENTORY/SOUTHERN SAN JOAQUIN VALLEY INFORMATION CENTER (PHONE 805-644-2289) SHALL BE CONTACTED TO OBTAIN A REFERRAL LIST OF RECOGNIZED ARCHAEOLOGISTS. AN ARCHAEOLOGICAL ASSESSMENT SHALL BE CONDUCTED FOR THE PROJECT. THE SITE SHALL BE FORMALLY RECORDED, AND RECOMMENDATIONS MADE TO THE CITY AS TO ANY FURTHER SITE INVESTIGATION OR SITE AVOIDANCE/PRESERVATION.
30. IF ANIMAL FOSSILS ARE UNCOVERED, THE MUSEUM OF PALEONTOLOGY, U.C. BERKELEY SHALL BE CONTACTED TO OBTAIN A REFERRAL LIST OF RECOGNIZED PALEONTOLOGISTS. AN ASSESSMENT SHALL BE CONDUCTED BY A PALEONTOLOGIST AND IF THE PALEONTOLOGIST DETERMINES THE MATERIAL TO BE SIGNIFICANT, IT SHALL BE PRESERVED.
31. PROPOSED USE AND OPERATION SHALL COMPLY WITH FRESNO MUNICIPAL CODE CHAPTER 15, ARTICLE 25 – PERFORMANCE STANDARDS (MAINTENANCE, LIGHTING, NOISE, ODORS, HAZARDOUS MATERIALS, ETC.)
32. APPROVAL OF THIS SPECIAL PERMIT MAY BECOME NULL AND VOID IN THE EVENT THAT DEVELOPMENT IS NOT COMPLETED IN ACCORDANCE WITH ALL THE CONDITIONS AND REQUIREMENTS IMPOSED ON THIS SPECIAL PERMIT, THE CITYWIDE DEVELOPMENT CODE, AND ALL PUBLIC WORKS STANDARDS AND SPECIFICATIONS. THE DEVELOPMENT AND RESOURCE MANAGEMENT DIVISION SHALL NOT ASSUME RESPONSIBILITY FOR ANY DELETIONS OR OMISSIONS RESULTING FROM THE SPECIAL PERMIT REVIEW PROCESS OR FOR ADDITIONS OR ALTERATION TO CONSTRUCTION PLANS NOT SPECIFICALLY SUBMITTED AND REVIEWED AND APPROVED PURSUANT TO THIS SPECIAL PERMIT OR SUBSEQUENT AMENDMENTS OR REVISIONS.
33. AN APPROVED FIRE/POLICE PADLOCK SHALL BE INSTALLED ON GATES USED SOLELY FOR EMERGENCY VEHICLE ACCESS. FIRE/POLICE PADLOCKS MAY BE USED IN CONJUNCTION WITH OTHER APPROVED LOCKING DEVICES. PADLOCKS SHALL BE AN APPROVED CITY OF FRESNO BYPASS LOCK (FRESNO FIRE DEPARTMENT POLICY 403.002).

MATERIAL SPECS:

PROPOSED EQUIPMENT BUILDING
MATERIAL–STEEL & SPLIT FACE MASONRY BLOCK
COLOR – BROWN

PROPOSED PERIMETER FENCE
MATERIAL– CHAIN LINK
COLOR – GRAY

PROPOSED GATES
MATERIAL – CHAIN LINK
COLOR – GRAY

FUTURE GAC VESSELS
MATERIAL – STEEL
COLOR – DESERT SAND

FUTURE GEN-SET
MATERIAL – STEEL
COLOR – DESERT SAND

FUTURE MANGANESE TREATMENT VESSELS
MATERIAL – STEEL
COLOR – DESERT SAND

FUTURE DEAERATION TANK
MATERIAL – STEEL
COLOR – DESERT SAND

LEGAL DESCRIPTION:

All that portion of Parcel F of Parcel Map No. 2012-06, according to the map thereof recorded in Book 74 of Parcel Maps at Pages 8 through 10, Fresno County Records, in the City of Fresno, County of Fresno, State of California, described as follows:
BEGINNING at the Southeast corner of said Parcel F; thence
North 89°45' 43" West, 224.26 feet along the South line of said Parcel F; thence
North 0°29'34" East, 75.00 feet; thence
North 74°43'57" East, 37.41 feet to a point on a line 85.00 feet North of and parallel with the South line of said Parcel F; thence
South 89°45' 43" East, 130.00 feet along said parallel line to a point on the East line of said Parcel F; thence
South 0°29'34" West, 26.74 feet along said East line to the beginning of a tangent curve concave to the Northeast having a radius of 58.00 feet; thence
Southeasterly, 91.36 feet along said curve through a central angle of 90°15'17" to the
POINT OF BEGINNING.
Together/with underlying fee interest, if any, adjacent to the adjoining public right of way.
Containing an area of 14,659.6 square feet, more or less.

GATES OPERATIONAL STATEMENT:

BOTH GATES WILL BE CLOSED AT ALL TIMES. THEY WILL ONLY BE OPENED WHEN WATER DIVISION CREWS PERFORM ROUTINE MAINTENANCE OR DELIVERY DISINFECTION CHEMICALS.

ADDRESS: 3709 S. NORTHPOINTE DR P/S
A.P.N. 330-021-67S (PORTION)
EXIST. PLAN USE DES.: HEAVY INDUSTRIAL
EXIST. & PROPOSED ZONE DIST.: IH HEAVY INDUSTRIAL

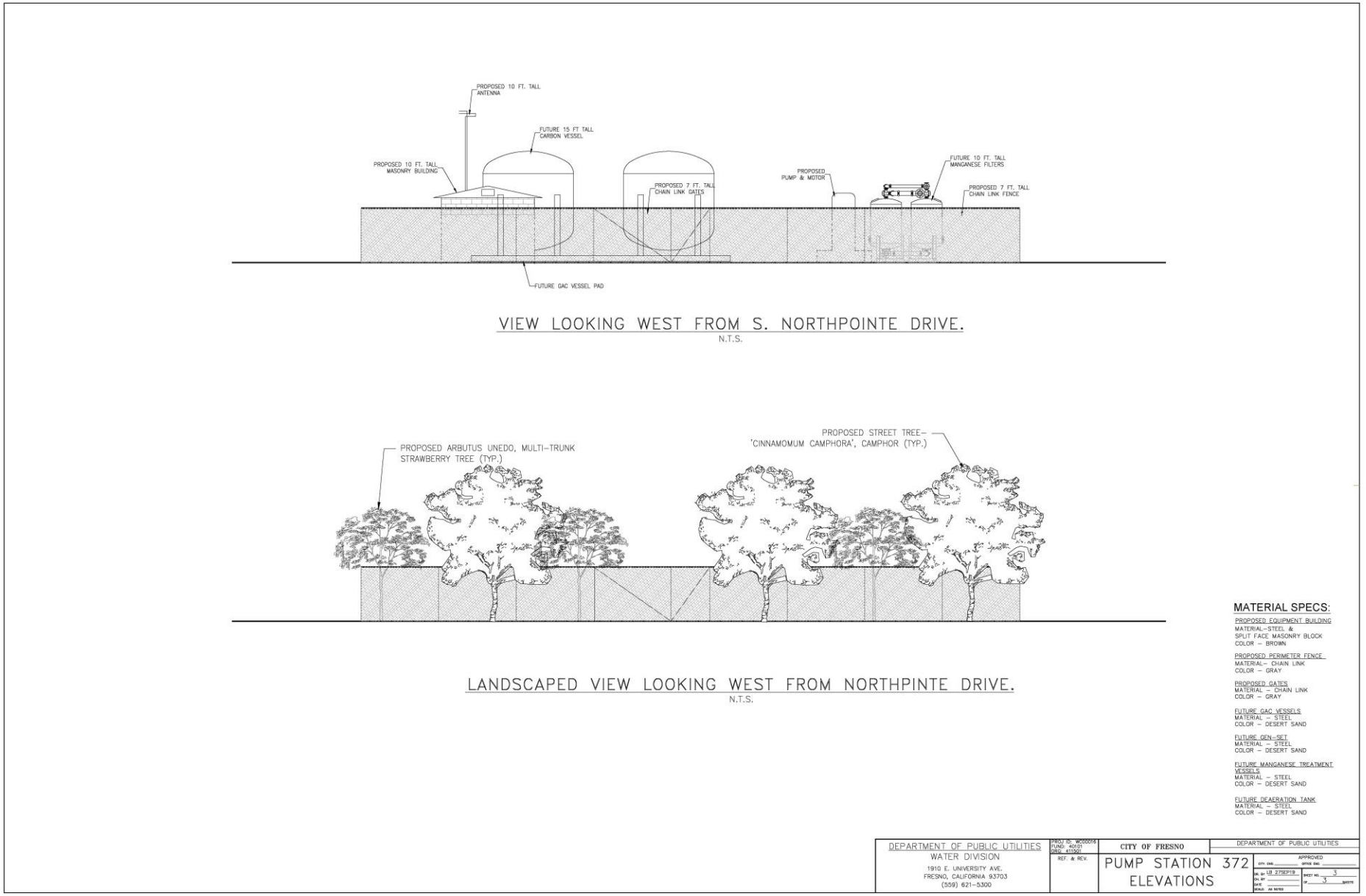
SUMMARY TABLE:
PROJECT SITE AREA: 14,659 SF
PROPOSED BLDG. AREA: 250 SF
BLDG. COVERAGE: 1.8%
PAVED AREA: 1,000 SF
LANDSCAPE AREA: 1,000 SF

DEPARTMENT OF PUBLIC UTILITIES
WATER DIVISION
1910 E. UNIVERSITY AVE.
FRESNO, CALIFORNIA 93703
(559) 621-5300

PROJ ID: WC00016
FUND: 4001
ORG: 41150
REF. & REV.

CITY OF FRESNO
DEPARTMENT OF PUBLIC UTILITIES
PUMP STATION 372
SITE PLAN
APPROVED
LB 140CT20

Figure 4. Conceptual Elevations, Front (West)



Required Project Approvals

The City of Fresno requires the following review, permits, and/or approvals for the proposed Project; however, other approvals not listed below may be required as identified throughout the entitlement process.

- Development Permit
- Grading Permit
- Building Permit
- Fresno Metropolitan Flood Control District
- San Joaquin Valley Air Pollution Control District
- Fresno County Department of Public Health, Environmental Health
- California Department of Health Services, Office of Drinking Water
- California State Water Resources Control Board

Environmental Checklist

This section provides an evaluation of the potential environmental impacts of the proposed project and are based on CEQA Guidelines Appendix G.

Evaluation Instructions

Evaluation instructions are as follows.

- For purposes of this Initial Study, the following answers have the corresponding meanings:

    - **"No Impact"** means the subsequent project will not cause any additional significant effect related to the threshold under consideration;
    - **"Less Than Significant Impact"** means there is an impact related to the threshold under consideration, but that impact is less than significant;
    - **"Less Than Significant with Mitigation Incorporation"** means there is a potentially significant impact related to the threshold under consideration; however, with the mitigation incorporated into the project, the impact is less than significant;
    - **"Potentially Significant Impact"** means there is an additional potentially significant effect related to the threshold under consideration.

- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors

as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

- Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

- "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described below, may be cross-referenced).

- Earlier analyses may be used where, pursuant to the tiering, program EIR, MEIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    - Earlier Analysis Used. Identify and state where they are available for review.
    - Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the MEIR or another earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on earlier analysis.
    - Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

- Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

- The explanation of each issue should identify:

    - The significance criteria or threshold, if any, used to evaluate each question; The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS – Except as provided in PRC Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality 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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

ENVIRONMENTAL SETTING

The 2014 Fresno General Plan does not identify or designate scenic vistas within the city limits or Sphere of Influence. Although no scenic vista has been designated, the General Plan identifies six (6) locations along the San Joaquin River bluffs as designated vista points from which views should be maintained. Scenic vistas within the Fresno Planning Area could provide distant views of features such as the San Joaquin River to the north and the foothills of the Sierra Nevada Mountains to the east. Distant views of the San

Joaquin River and areas north of the river can be seen from the river bluffs. However, the majority of these views are from private property. Partially obstructed views of the San Joaquin River can be seen from Weber Avenue, Milburn Avenue, McCampbell Drive, Valentine Avenue, Palm Avenue, State Route 41, Friant Road, and Woodward Park. Additionally, there are several locations throughout the eastern portion of the City that provide distant views of the Sierra Nevada foothills. It should be noted that these distant views of the Sierra Nevada foothills are impeded many days during the year by the poor air quality in the San Joaquin Valley Air Basin.

According to the California Department of Transportation (Caltrans) State Scenic Highway Mapping System, there is one eligible or officially designated State Scenic Highways within the City of Fresno Sphere of Influence. However, Fresno County has four eligible and one officially designated State Scenic Highways; the nearest designated or eligible highways are several miles north of the subject site.[1]

In order to protect and beautify its scenic corridors and vistas, the City outlines specific General Plan policies that regulate signs, utility lines, land use, and other activities that would detract from the aesthetic value of these corridors (See **Tables 1.1 and 1.2**).

Table 1.1. Fresno General Plan – Urban Form, Land Use, and Design Element

Objective D-2. Enhance the visual image of all "gateway" routes entering the Fresno Planning Area.
Policy D-2-a: Design Requirements for Gateways. Create unified design requirements for gateways to welcome travelers to the City's Activity Centers. Commentary: Gateway route designation will be considered for application to key access routes such as State Routes 99, 41, 168, and 180; passenger rail rights-of-way; Peach Avenue, McKinley Avenue, and Clinton Way where air travelers enter Fresno; Van Ness Avenue; Fulton, Divisadero, Tulare, and Fresno Streets; Belmont and Olive; and Blackstone, Abby, Shaw and Herndon Avenues.
Policy D-2-c: Highway Beautification. Work with Caltrans, the Fresno Council of Governments, Tree Fresno, neighboring jurisdictions, and other organizations to obtain funding for highway beautification programs.
Objective D-3. Create unified plans for Green Streets, using distinctive features reflecting Fresno's landscape heritage.
Policy D-3-a: Green Street Tree Planting. Create a Green Street Tree Planting Program, with a well-balanced variety and spacing of trees to establish continuous shading and visual continuity for each streetscape. Strive to achieve coherent

[1] California State Scenic Highway System Map, reviewed April 26, 2021

linkages between public and private spaces, prioritizing tree planting along tree-deficient Arterial Roadways in neighborhoods characterized by lower per capita rates of vehicle ownership.
Policy D-3-b: Funding for Green Street Tree Planting Program. Pursue funding for the Green Street Tree Planting Program, including landscaping of median islands.
Policy D-3-c: Local Streets as Urban Parkways. Develop local streets as "urban parkways," where appropriate, with landscaping and pedestrian spaces.
Policy D-3-d: Undergrounding Utilities. Partner with utility companies to continue to pursue the undergrounding of overhead utilities as feasible.
Objective D-4. Preserve and strengthen Fresno's overall image through design review and create a safe, walkable and attractive urban environment for the current and future generations of residents.
Policy D-4-f: Design Compatibility with Residential Uses. Strive to ensure that all new non- residential land uses are developed and maintained in a manner complementary to and compatible with adjacent residential land uses, to minimize interface problems with the surrounding environment and to be compatible with public facilities and services.
Objective D-5. Maintain and improve community appearance through programs that prevent and abate blighting influences.

Table 1.2. Fresno General Plan – Mobility and Transportation Element

Objective MT-3. Identify, promote and preserve scenic or aesthetically unique corridors by application of appropriate policies and regulations.
Policy MT-3-a: Scenic Corridors. Implement measures to preserve and enhance scenic qualities along scenic corridors or boulevards, including: • Van Ness Boulevard - Weldon to Shaw Avenues • Van Ness Extension - Shaw Avenue to the San Joaquin River Bluff • Kearney Boulevard - Fresno Street to Polk Avenue • Van Ness/Fulton couplet - Weldon Avenue to Divisadero • Butler Avenue - Peach to Fowler Avenues • Minnewawa Avenue - Belmont Avenue to Central Canal • Huntington Boulevard - First Street to Cedar Avenue • Shepherd Avenue - Friant Road to Willow Avenue • Audubon Drive - Blackstone to Herndon Avenues • Friant Road - Audubon to Millerton Roads • Tulare Avenue - Sunnyside to Armstrong Avenues • Ashlan Avenue- Palm to Maroa Avenues.
Policy MT-3-b: Preserve street trees lining designated scenic corridors or boulevards. Replace trees of the predominant type and in a comparable pattern to existing plantings if there is no detriment to public safety.

As mentioned above in the Project description, the Project site is located on the northwest corner of S. Northpointe Drive and Prime Avenue, between E. Central Avenue and E. North Avenue. In general, the Project site is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. As a result, the area is predominately characterized by industrial uses, as well as typical infrastructure such as roadways, streetlights, parking lots, and ambient light sources typical of industrial development.

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No Impact. As mentioned above, there are no identified or designated scenic vistas within the city limits or Sphere of Influence. Although the General Plan identifies locations along the San Joaquin River bluff, the Project site is located several miles south from these locations. As such, because the site is not located near any scenic vistas, the Project would have no impact and no mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. As previously mentioned, there are no designated scenic highways in the city of Fresno. Although the Fresno General Plan identifies scenic corridors within the city, the Project site is not located in the vicinity of such corridors. Further, the Project site does not contain any trees, rock outcroppings, or historic buildings. For these reasons, the Project would have no impact and no mitigation measures are required.

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?

Less than Significant Impact. As mentioned above, the Project area is characterized by industrial development and thereby, the existing visual character or quality of public views of the site and its surroundings is predominately industrial. The well equipment, power source, and GAC treatment system (if required) proposed in this area would have an industrial appearance in terms of color, size, and configuration, which would be consistent with the existing visual character or quality of public views of the area. The pump station

would be secured by a 7’ tall chain link fence in conformance with Public Works Standard P-98. In addition, the site frontage would feature a 10’ landscape perimeter as required by the Fresno Municipal Code. Therefore, the Project would not degrade the existing visual character or quality of public views of the site and its surroundings, nor would the Project conflict with applicable zoning and regulations governing scenic quality. As such, the Project would have a less than significant impact and no mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Generally, lighting impacts are associated with artificial lighting in evening hours either through interior lighting from windows or exterior lighting (e.g. street lighting, parking lot lighting, landscape lighting, etc.). Security lighting is proposed on the Project site to illuminate the pump station, which would create a new source of light or glare in the area for adjacent uses. However, pursuant to the Fresno Municipal Code, outdoor lighting is required to be hooded and directed so as not to subject adjacent properties to unwanted light and glare. Further, the Project would be subject to the 2014 Fresno General Plan Master Environmental Impact Report (MEIR) Mitigation Measures AES-1 and AES-3 which require lighting systems for street and parking area to be shielded and oriented away from adjacent properties. Therefore, the Project would have a less than significant impact and no mitigation measures are required.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the aesthetic related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. 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?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
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))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X

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?			X	

ENVIRONMENTAL SETTING

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). The assessment model was prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture farmland and impacts to forest resources, including timberland, to determine if there 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.

The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP) that provides maps and data for analyzing land use impacts to farmland. The FMMP produces the Important Farmland Finder as a resource map that shows quality (soils) and land use information. Agricultural land is rated according to soil quality and irrigation status, in addition to many other physical and chemical characteristics. The highest quality land is called "Prime Farmland." Maps are updated every two years.

The California Land Conservation Act of 1965 (i.e., the Williamson Act) allows local governments to enter contracts with private landowners to restrict parcels of land agricultural or open space uses. In return, property tax assessments of the restricted parcels are lower than full market value. The minimum length of a Williamson Act contract is 10 years and automatically renews upon its anniversary date; as such, the contract length is essentially indefinite.

DISCUSSION

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?

Less than Significant Impact. According to the FMMP, California Important Farmland Finder, the Project site is located on land that is designated as "Prime Farmland." This land designation is defined as irrigated land that has a good combination of physical and chemical features able to sustain long-term production of agricultural crops.[2] Despite the designation, the Project site does not contain any active farmland, including crops or farming operations. Historically, the Project site has not been used for farmland since early 2017 when the general Project area began to be converted to non-agricultural uses. As such, the Project would not remove any active farmland.

The conversion of farmland was examined in the General Plan MEIR. Pursuant to Section 15168(d) of the CEQA Guidelines, the 2014 General Plan MEIR is incorporated by reference into this document. The General Plan MEIR determined the impact of the conversion of farmland to non-agricultural uses to be significant and unavoidable and issued a Statement of Overriding Considerations within the area of Agricultural Resources. Specifically, the General Plan MEIR recognizes that despite implementation of the objectives and policies of the General Plan, project and cumulative impacts on agricultural resources will remain significant; and, that no feasible measures in addition to the objectives and policies of the General Plan are available. Thus, no mitigation measures were identified for conversion of Prime Farmland. On this basis, the Project as a non-agricultural use was contemplated and overridden in the MEIR when the planned land use designated was changed to Heavy Industrial. Thus, the Project would have a less than significant impact.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. As shown on Exhibit 5.2-2, Williamson Act Contracts of the Agricultural Resources Chapter of the General Plan MEIR, the Project site is not under a Williamson Act Contract. Further, the site is not currently zoned or designated for agricultural use. As a result, the Project would have no impact.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public

2 California Department of Conservation, "California Important Farmland Finder." Accessed April 15, 2021, https://maps.conservation.ca.gov/DLRP/CIFF/.

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))?

No Impact. The Project site does not contain forest land or timberland and it is not zoned for forestry or timberland uses. As a result, the Project would have no impact.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See discussion under Section 2(c).

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?

Less than Significant Impact. Although the Project site is considered Prime Farmland, the site is not zoned for or designated for agricultural uses, nor is it planned for agricultural uses. In addition, the site is not zoned or designated for forestry uses, nor is it planned for forestry uses. As such, the Project would have a less than significant impact and no mitigation measures are required.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management 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 (*e.g.*, by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?			X	
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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

ENVIRONMENTAL SETTING

The Project site is within the City of Fresno, in Fresno County, and within the San Joaquin Valley Air Basin (Air Basin). This region has chronic non-attainment of federal and state clean air standards for ozone/oxidants and particulate matter due to the combination of topography and climate. The San Joaquin Valley (Valley) is located in the center of the Air Basin, surrounded on three sides by mountain ranges, with prevailing winds carrying pollutants and pollutant precursors from urbanized areas to the north, in turn contributing pollutants and precursors to downwind air basins. The Mediterranean climate of this region, with a high number of sunny days and little or no measurable precipitation for several months of the year, fosters photochemical reactions in the atmosphere, creating ozone and particular matter.

The SJVAB is approximately 250 miles long and averages 35 miles wide and is the second largest air basin in the state. The SJVAB is defined by the Sierra Nevada in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi mountains in the south (6,000 to 8,000 feet in elevation). The Valley is basically flat with a slight downward gradient to the northwest. The Valley opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay. The Valley, thus, could be considered a "bowl" open only to the north.

The SJVAB has an "Inland Mediterranean" climate averaging over 260 sunny days per year. The Valley floor is characterized by warm, dry summers and cooler winters. During the summer, wind speed and direction data indicate that winds usually originate at the north end of the Valley, flow in a south-southeasterly direction through the Valley, through Tehachapi pass, and into the Southeast Desert Air Basin. In addition, the Altamont Pass serves as a funnel for pollutant transport from the San Francisco Bay Area Air Basin into the region. For the entire Valley, high daily temperature readings in the summer average 95°F.

During the winter, wind speed and directional data indicate that wind occasionally originates from the south end of the Valley and flows in a north-northwesterly direction as light, variable winds (less than 10 mph). Low wind speeds, combined with low inversion layers in the winter, create a climate conducive to high carbon monoxide (CO) and particulate matter (PM10 and PM2.5) concentrations. Temperatures below freezing are unusual, with average high temperatures in the winter are in the 50s. Highs in the 30s and 40s can occur on days with persistent fog and low cloudiness. The average daily low temperature is 45°F.

The vertical dispersion of air pollutants in the Valley is limited by the presence of persistent temperature inversions. Solar energy heats up the Earth's surface, which in turn radiates heat and warms the lower atmosphere. As altitude increases, the air temperature usually decreases due to increasing distance from the source of heat. A reversal of this atmospheric state, where the air temperature increases with height, is termed an inversion. Inversions can exist at the surface or at any height above the ground and tend to hold in the pollutants that are generated there.

These regional factors affect the accumulation and dispersion of air pollutants within the SJVAB. Air pollutant emissions overall are fairly constant throughout the year, yet the concentrations of pollutants in the air vary from day to day and even hour to hour. This variability is due to complex interactions of weather, climate, and topography, which affect the ability of the atmosphere to disperse pollutants. Conditions that move and mix the atmosphere help disperse pollutants, while conditions that cause the atmosphere to stagnate allow pollutants to concentrate. Local climatological effects, including topography, wind speed and direction, temperature, inversion layers, precipitation, and fog exacerbate the air quality problem in the SJVAB.

REGULATIONS

The Federal Clean Air Act required the US Environmental Protection Agency (EPA) to set standards, which state that certain pollutants should not exceed specified levels. Transportation conformity is required under the Federal Clean Air Act to ensure federally supported highway and transportation project activities are consistent with State implementation programs. Conformity means that transportation activities should not cause new air quality violations, worsen existing violations, or delay timely attainment of federal air quality standards. Conformity requires demonstration that State and regional transportation control measures in ozone nonattainment areas are implemented in a timely fashion.

California adopted stricter standards under the California Clean Air Act by requiring nonattainment areas to achieve and maintain the State ambient air quality standards by the earliest practicable date, and local Air Districts to develop plans for attaining the State ozone, carbon monoxide, sulfur dioxide and nitrogen dioxide standards. Under the California Health and Safety Code, the Air Resources Board is authorized to adopt regulations to protect public health and the environment through the mobile and stationary source airborne toxic control measures. These measures focus on reducing public exposure to diesel particulates and other toxic air contaminants. In California, the Pavely Clean Car Standard, the Low Carbon Fuel Standard, and implementation of the new national fuel standard will have dramatic impacts on reducing vehicle emissions.

Therefore, mobile emissions from cars and trucks are being reduced by State and Federal standards, based on air quality considerations and energy use.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is the local regional jurisdictional entity charged with administering Fresno's air quality management programs, including attainment planning, rule-making, rule enforcement, and monitoring under Federal and State Clean Air Acts and Clean Air Act Amendments. The SJVAPCD has the authority to regulate stationary sources for air pollution, including dust reduction during construction and stationary requirements. SJVAPCD developed Regulation 8 to establish controls for earthmoving activities, while Regulation 10 imposes fees to mitigate related emissions for new development projects within the Valley. In the past, lack of authority to regulate mobile source emissions has restricted SJVAPCD's ability to reduce emissions in the Valley and achieve compliance timelines for federal air quality standards. Individual projects may be subject to applicable SJVAPCD rules, regulations, and strategies, including:

- Regulation VIII includes 'Fugitive Dust Rules' related to the control of dust and fine particulate matter. This rule mandates the implementation of dust control measures to reduce the potential for dust to the lowest possible level. Well sites are exempt under service outages and/or emergency situations.
- Regulation IX for 'Mobile and Indirect Sources' requires an Indirect Source Review under Rule 9510 if a project attracts or generates mobile source activity that results in emission of pollutants. However, well drilling operations are generally exempt from Ambient Air Quality Analysis under the Small Project Analysis Level for stationary sources.
- 'Authority to Construct' certificate is required if an air stripping operations and/or diesel or natural gas engines greater than 50 horsepower are utilized. However, engines required to protect property or the public health during an emergency are exempt.

THRESHOLDS OF SIGNIFICANCE

The Air Quality Section of Appendix G of the 2021 CEQA Guidelines (Environmental Checklist Form) contains a list of effects to be assessed using the significance criteria established by the applicable air quality management or air pollution control district to determine if a project would:

a) Conflict with or obstruct implementation of the applicable air quality plan.
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).
d) Expose sensitive receptors to substantial pollutant concentrations.
e) Create objectionable odors affecting a substantial number of people.

To assess the air quality impact using these five (5) effects per CEQA guidelines, the San Joaquin Valley Air Pollution Control District (SJVAPCD) established significance thresholds. These thresholds of significance are outlined in the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) adopted in 2015 and are summarized as follows:

Criteria Pollutant Emissions

The significance of the impacts of the emissions from construction, operational nonpermitted equipment and activities, and operational permitted equipment and activities are evaluated separately. The thresholds of significance are based on a calendar year basis. For construction emissions, the annual emissions are evaluated on a rolling 12- month period. The 2015 GAMAQI contains thresholds for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$. The SJVAPCD's annual emission significance thresholds are:

- CO: 100 tons per year
- NO_x: 10 tons per year
- ROG: 10 tons per year
- So_x: 27 tons per year
- PM_{10}: 15 tons per year
- $PM_{2.5}$: 15 tons per year

Ambient Air Quality

Impacts on air quality result from emissions generated during short-term activities (construction) and long-term activities (operations). Construction-related emissions consist mainly of exhaust emissions (NOx and PM) from construction equipment and other mobile sources, and fugitive dust (PM) emissions from earth moving activities. Operational emissions are source specific and consist of permitted equipment and activities and non-permitted equipment and activities.

The SJVAPCD applies the following guidance in determining whether an ambient air quality analysis should be performed: when assessing the significance of project-related impacts on air quality, it should be noted that the impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all

enforceable mitigation measures. Under such circumstance, the SJVAPCD recommends that an ambient air quality analysis be performed.

Odors

The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants, and rendering plants. The SJVAPCD has identified these common types of facilities that have been known to produce odors in the Air Basin and has prepared screening levels for potential odor sources ranging from one (1) to two (2) miles of distance from the odor-producing facility to sensitive receptors.

Lastly, as previously mentioned, the Air Basin is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. The air quality standards have been set to protect public health, particularly the health of vulnerable people. Therefore, if the concentration of those contaminants exceeds the norm, some susceptible individuals in the population are likely to experience health effects. Concentration of the pollutant in the air, the length of time exposed and the individual's reaction are factors that affect the extent and nature of the health effects.

In regard to local measures and thresholds for air quality impacts, the Fresno General Resource and Conservation Element outlines goals, objectives, and policies for addressing air quality. A sample of applicable goals and policies are as follows.

Table 3.1. Fresno General Plan – Resource and Conservation Element

Objective RC-4: In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take necessary actions to achieve and maintain compliance with State and federal air quality standards for criteria pollutants.
Policy RC-4-a: Support Regional Efforts. Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan.
Policy RC-4-b: Conditions of Approval. Develop and incorporate air quality maintenance requirements, compatible with Air Quality Attainment and Maintenance Plans, as conditions of approval for General Plan amendments,

community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals.
Policy RC-4-c: Evaluate Impacts with Models. Continue to require the use of computer models used by SJVAPCD to evaluate the air quality impacts of plans and projects that require such environmental review by the City.

PROJECT DESIGN

The Project design incorporates the following measures in regard to air quality impacts:

- The generation of construction-related dust will be controlled by observance of the San Joaquin Valley Unified Air Pollution Control District's Regulation VIII.
- The operation of the electrical pump, granular activated carbon filter, or chlorination equipment will not result in adverse impacts to air quality. Because of the minimal impacts associated with these operations, the SJVAPCD does not require permits for these operations.
- If an air stripping operation and/or an auxiliary diesel or natural gas engine greater than 50 h.p. is considered for this pump station, the UP&E will request an Authority to Construct certificate from the District prior to the operation of these facilities.

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact. CalEEMod was used to determine the potential emissions of regulated criterion pollutants for the Project. **Table 3.2** below shows the Project totals (in tons per year) in relation to the SJVAPCD adopted thresholds outlined in the GAMAQI. The results shown used default CalEEMod factors with the exception of average daily trips which were changed to reflect the limited trip generation expected of the unmanned facility in addition to removal of demolition from the Construction factors, as demolition is not required for the Project. As shown, the estimated Construction and Operational emissions of the Project are significantly below all significant thresholds and the Project is therefore consistent with the GAMAQI. CalEEMod results are presented in **Appendix A.**

Table 3.2. CO, NO_x, ROG, PM_{10}, $PM_{2.5}$ Thresholds, Maximum

Emission Source (Tons Per Year)	CO	NO_x	ROG	PM_{10}	$PM_{2.5}$
Construction					
Construction, Unmitigated (maximum)	0.2036	0.2250	0.1237	0.0149	0.0122
Operational					
Operational, Unmitigated	0.0130	0.0154	0.0707	1.1700e-003	1.1700e-003
Total Emissions					
Construction and Operational	0.2166	0.2404	0.1944	1.1849	1.1822
Significance Threshold	100	10	10	15	15
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source*:* CalEEMod, Version 2016.3.2, ran on April 21, 2021

Additionally, the proposed project shall comply with all rules and regulations administered by the SJVAPCD including but not limited to Regulation VIII - Fugitive PM_{10} Prohibitions, Rules 8011-8081 which intend to minimize human-generated PM_{10} emissions (e.g. dust and dirt) and Indirect Source Review, Rule 9510 which intends to minimize NO_x and PM_{10} emissions through on-site mitigation or district-administered projects off-site. The Project design anticipates such requirements and incorporates the measures in regard to air quality impacts, as described above. Thus, any impacts related to construction activities of the Project would be regulated through SJVAPCD regulations and requirements.

Overall, the Project would not have potential emissions of regulated criterion pollutants that exceed the SJVAPCD adopted thresholds as outlined in the GAMAQI and the Project shall be conditioned to meet additional rules and regulations administered by the SJVAPCD to minimize and mitigate on-site emissions. Consequently, the Project would result in a less-than-significant impact.

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?

Less than Significant Impact. The San Joaquin Valley Air Basin is in non-attainment for ozone, PM_{10}, and $PM_{2.5}$, which means that certain pollutants' exposure levels are often higher than the normal air quality requirements. As discussed in item (a) above, the construction and operations of the Project would not exceed the thresholds of significance

for criteria pollutants as set by the GAMAQI (See **Table 3.2**). This analysis includes PM_{10}, and $PM_{2.5.}$ Thus, because the Project's potential emissions were determined to be below the SJVAPCD's regional significance thresholds, the Project would have a less than significant impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The nearest receptors are single-family homes to the south of the Project site. As stated in item (a) above, emissions during construction or operation would not reach the significance thresholds and would not be anticipated to result in concentrations that reach or surpass ambient air quality requirements. Therefore, the Project would have a less than significant impact on any known sensitive receptor.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Specific land uses that are considered sources of undesirable odors include landfills, transfer stations, composting facilities, sewage treatment plants, wastewater pump stations, asphalt batch plants and rendering plants. The Project would not consist of such land uses; rather, the Project proposes a water well pump station, thus, is unlikely to produce odors that would be considered to adversely affect a substantial number of people. Further, there are no major odor-generating sources within the Project area. Although some odors would be emitted during construction of the site (i.e., through diesel fuel and exhaust from equipment), these odors would be temporary and last only during construction activities. For these reasons, the odor impacts associated with the Project would be less-than-significant.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the air quality related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. 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?				X
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 US Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X

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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

ENVIRONMENTAL SETTING

Argonaut Ecological Consulting, Inc. conducted a field review of the Project Site on March 10, 2021. Before the field review, Argonaut Ecological Consulting also reviewed the California Natural Diversity Database to determine the known locations of potential special status species and the U.S. Fish and Wildlife Service's National Wetland Inventory Maps to determine the location of mapped wetlands and water features. The resulting Biological Evaluation Technical Memo determined that no wildlife or wildlife habitat is present on the site; no species were encountered during the review Further, the field review indicated that the site is within the boundary of an existing construction site, the site is devoid of vegetation except for an upland species associated with highly disturbed sites (Bermuda grass), and the site is highly disturbed from recent adjacent site development. Overall, Argonaut Ecological Consulting determined that for these reasons, no further biological studies are warranted or needed (**Appendix B**).

DISCUSSION

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

No Impact. As confirmed during the field review, the Project site is vacant, undeveloped, devoid of vegetative cover, and is surrounded by ongoing adjacent site development. The site contains some ruderal vegetation, namely Bermuda grass, which is consistent with vegetation found on highly disturbed sites. No trees or water features were present on the site. Further, no special-status wildlife species or signs of such species were present on the site; and, according to the field review, the highly disturbed condition of the site would preclude such species from occurring. For these reasons, the site does not provide essential habitat for special-status species, and as a result, the Project would have no impact and no mitigation measures are required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

No Impact. There are no riparian habitats or other sensitive natural communities identified on the Project site; and, the site does not contain any water features that would provide habitat for riparian or other sensitive natural communities. In addition, the site has been observed to be vacant, undeveloped, and highly disturbed as it is within an area experiencing ongoing site development for industrial uses. For these reasons, the Project would have no impact and no mitigation measures are required.

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?

No Impact. A search of the National Wetlands Inventory shows no federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) on the Project site or within the broader Project area.[3] This was confirmed by the field review and research conducted by Argonaut Ecological Consulting. Therefore, the Project would have no impact on state or federally protected wetlands and no mitigation measures are required.

[3] USGS, "National Wetlands Inventory." Accessed April 15, 2021, https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

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?

No Impact. As previously mentioned, the Project site is highly disturbed and is within the boundary of an existing construction site. As such, the Project site is disturbed and does not provide appropriate habitat for fish or wildlife species. In addition, the site does not contain any riparian or other sensitive natural community identified in local or regional plans, or by the National Wetlands Inventory. For these reasons, the Project would have no impact on native resident or migratory fish, or wildlife species and no mitigation measures are required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Although the City of Fresno does have policies related to preservation of biological resources, these policies do not apply to the Project because the Project site does not contain any biological resources, including habitats, waters or wetlands, trees, or vegetative cover. For example, most of the policies pertain to general long-term protection and preservation of biological resources including providing buffers for natural areas, implementing habitat restoration where applicable, protection/enhancement of the San Joaquin River area, and other similar policies. Further, the site is vacant, undeveloped, and highly disturbed. Consequently, due to the lack of any identified species, the Project would have no impact and no mitigation measures are required.

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?

No Impact. No habitat conservation plans or natural community conservation plans in the region pertain to natural resources, which exist on the Project site or in its immediate vicinity. Therefore, no actions or activities resulting from the implementation of the Project would conflict with such provisions and the Project would have no impact. No mitigation measures are required.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the biological resource related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			X	
c) Disturb any human remains, including those interred outside of formal cemeteries?			X	

ENVIRONMENTAL SETTING

Peak & Associates, Inc. conducted a records search and map review on April 6, 2021. The records search was conducted through the Southern San Joaquin Valley Information Center, determining that a portion of the site had been surveyed in 2014 for the South Fresno Economic Development Project Work Area for which construction is now underway. The closest resource identified was a segment of the Central Canal, 0.10 miles south of the Project site. The historical map review showed no natural water course, buildings, or structures in or near the Project area. Overall, the resulting Cultural Resources Evaluation Technical Memo determined that for these reasons, no further cultural resources studies are warranted or needed (**Appendix C**).

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less than Significant Impact. Based on the records search and map review conducted by Peak & Associates, there are no local, state, or federal designated historical resources on the Project site or within the Project area. The Project site is vacant, undeveloped, and

highly disturbed as it is within the construction boundary for development of an adjacent site. Nevertheless, there is some possibility that a non-visible, buried site may exist on the Project site. Therefore, due to the grading and ground disturbance from construction activities that would occur as a result of the Project, the Project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in General Plan MEIR. Thus, the Project would have a less than significant impact.

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

Less than Significant Impact. Based on the records search and map review conducted by Peak & Associates, there are no local, state, or federal designated historical resources on the Project site or within the Project area. The Project site is vacant, undeveloped, and highly disturbed as it is within the construction boundary for development of an adjacent site. Further, there is no evidence that cultural resources of any type (including historical, archaeological, paleontological, or unique geologic features) exist on the Project site. Nevertheless, there is some possibility that a non-visible, buried site may exist on the Project site. Therefore, due to the grading and ground disturbance from construction activities that would occur as a result of the Project, the Project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in General Plan MEIR. Thus, the Project would have a less than significant impact.

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

Less Than Significant Impact. It is not anticipated that the proposed project will disturb any human remains including those interred outside of formal cemeteries. In the event that human remains are identified during construction of the Project, then the Project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in the General Plan MEIR. Thus, the Project would have a less than significant impact.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. 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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

ENVIRONMENTAL SETTING

Appendix F of the State CEQA Guidelines requires consideration of the potentially significant energy use of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage. Per Appendix F of the CEQA Guidelines, the means to achieve the goal of conserving energy includes decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. A project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards or result in significant impacts in regards to project energy requirements, energy inefficiencies, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity or conflict or create an inconsistency with applicable plan, policy, or regulation.

The California Energy Commission updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years as part of the California Code of Regulations. The standards were established in 1978 in effort to reduce the state's energy consumption. They apply for new construction of, and additions and alterations to, residential and nonresidential buildings and relate to various energy efficiencies including

but not limited to ventilation, air conditioning, and lighting.[4] Part 11, or the California Green Building Standards Code (CALGreen), was developed in 2007 to meet the state goals for reducing Greenhouse Gas emissions pursuant to AB32. CALGreen covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.[5] The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. Additionally, the California Air Resources Board (CARB) oversees air pollution control efforts, regulations, and programs that contribute to reduction of energy consumption. Compliance with these energy efficiency regulations and programs ensure that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources.

Energy resources and conservation are discussed in the Resource Conservation Element of the Fresno General Plan. A sample of the City's energy policies are highlighted in **Table 6.1**.

Table 6.1. Fresno General Plan – Resource Conservation Element

Objective RC-2: Promote land uses that conserve resources.
Policy RC-4-a: Support Regional Efforts. Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan
Policy RC-7-c: Best Practices for Conservation. Require all City facilities and all new private development to follow U.S. Bureau of Reclamation Best Management Practices for water conservation, as warranted and appropriate.
Policy RC-8-h: Solar Assistance. Identify and publicize information about financial mechanisms for private solar installations and provide over-the-counter permitting for solar installations meeting specified standards, which may include maximum size (in kV) of units that can be so approved

[4] California Energy Commission, "2019 Building Energy Efficiency Standards." Accessed April 16, 2021, https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

5 California Department of General Services, "CALGreen." Accessed April 16, 2021, https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen.

DISCUSSION

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

Less than Significant Impact. The Project proposes the construction of a water supply well with associated site improvements, such as perimeter fence and landscaping and normal public works improvements such as curb, gutter, lighting, street paving, and sidewalks. Construction would include well drilling (i.e., drilling of a borehole) and installation of well casing, gravel pack, and cement sanitary seal. The pumping equipment (i.e., vertical turbine pump, column, shaft, electrical motor) and power supply (i.e., transformer and control panel) would then be installed, connected to the water main, and the pump station would be ready for operation.

There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities. All construction equipment shall conform to current emissions standards and related fuel efficiencies. In particular, construction and operations of the Project would be subject to applicable CARB regulations (Airborne Toxic Control Measure), California Code of Regulations (Title 13, Motor Vehicles), and Title 24 standards that include a broad set of energy conservation requirements (e.g. Lighting Power Density requirements). In addition, as a City facility, the Project would be required to follow U.S. Bureau of Reclamation Best Management Practices (BMPs) for water conservation, as warranted and appropriate. Enforcement of these regulations, requirements, and practices would thereby minimize or eliminate unnecessary or wasteful consumption of energy. In addition, the Project would be served by PG&E and would not require extensions of energy infrastructure or new energy supplies. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. As previously mentioned, the construction and operations of the Project would be subject to compliance with applicable CARB regulations, California Code of Regulations, and Title 24 standards that include a broad set of energy conservation requirements in addition to BMPs for water conservation. Thus, applicable state regulations and programs would be implemented to reduce energy waste.

Therefore, the Project would not conflict with any plans for renewable energy or energy efficiency and would have a less than significant impact.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GEOLOGY AND SOILS – Would the project:				
a) Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
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.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	

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

ENVIRONMENTAL SETTING

A Phase I Environmental Site Assessment was conducted by Moore Twining Associates, Inc. for the Project site and was issued on January 18, 2021. Environmental characteristics including topography, geology, soil, and hydrogeology were evaluated based on site observations and review of published literature and maps. In terms of the physical setting, the site assessment concluded that: the site has general sloping toward the west, a stormwater basin borders the site to the south, and the site is not located within a 1% or 0.2% annual chance flood hazard zone. In addition, the general soil characteristics show that the site comprises Hesperia – Fine Sandy Loam soils with moderately coarse textures, are well drained, have moderate infiltration rates, are deep and moderately deep, and are “moderately well” and “well drained.” Lastly, the site assessment found that the depth to first encountered groundwater is estimated to be approximately 110 feet.

In regard to the geology, the Project site is located within the southeast portion of the San Joaquin Valley which is part of the Great Valley Geomorphic Province that is bound on the east by the Sierra Nevada and to the west by the Coast Range. Fresno has no known active earthquake faults and is not in any Alquist-Priolo Special Studies Zones. The immediate Fresno area has extremely low seismic activity levels, although shaking may be felt from earthquakes whose epicenters lie to the east, west, and south. Known major faults are over 50 miles distant and include the San Andreas Fault, Coalinga area blind thrust fault(s), and the Long Valley, Owens Valley, and White Wolf/Tehachapi fault systems. The most serious threat to Fresno from a major earthquake in the Eastern Sierra would be flooding that could be caused by damage to dams on the upper reaches of the San Joaquin River.

DISCUSSION

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.

No Impact. There are no known active earthquake faults in Fresno, nor is Fresno within an Alquist-Priolo earthquake fault zone as established by the Alquist-Priolo Fault Zoning Act. Thus, the Project would have no impact and no mitigation measures are required.

ii. Strong seismic ground shaking?

Less than Significant Impact. The State classifies Fresno as a moderate seismic risk zone, Category "C" or "D," depending on the underlying soils and the location's proximity to known fault lines. The Project site is relatively flat with stable, native soils of the Hst Hesperia fine, sandy loam series: 0 percent slope, well drained, rare flooding, low capacity to transmit water, and a ± 80-inch depth-to-water table.[6] And, based on review of published data and a current understanding of the geologic framework and tectonic setting of the proposed development, the primary source of seismic shaking at this site is anticipated to be the Coast Ranges Sierra Block Fault, which is located approximately 48 miles southwest of the site. As mentioned above, there are no known active earthquake faults in Fresno and the Project site and vicinity are located in an area traditionally characterized by relatively low seismic activity. Further, the Project would be required to conform to current seismic protection standards in the California Building Code, which are intended to minimize potential risks. Therefore, because of the Project's stable soils and distance from active fault lines, the Project would have a less than significant impact and no mitigation measures are required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similarly to a fluid when subjected to high-intensity ground shaking. As previously described, there are no geologic hazards or unstable soil conditions known to exist on the Project site. The site is relatively flat with stable soils and no apparent unique or significant landforms. Further, development of the

6 US Department of Agriculture, Natural Resources Conservation Service, "Web Soil Survey." Accessed April 9, 2021, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

site would require compliance with the City's grading and drainage standards. Therefore, because of the Project's relatively flat topography, stability of soils, infrequency of seismic activity, and required compliance with City standards, the Project would have a less than significant impact and no mitigation measures are required.

iv. Landslides?

Less than Significant Impact. The General Plan MEIR recognizes that the Fresno Planning Area consists mostly of flat topography and as such, there is no risk of large landslides in the majority of the city with the exception of steep banks of rivers or creeks (i.e., San Joaquin Valley River Bluff). The topography of the Project site is relatively flat with stable, native soils, and the site is not susceptible to seismic activities, geologic instability, or landslides. Furthermore, the site is not in the vicinity of rivers or creeks that would be more susceptible to landslides. Therefore, there would be a less than significant impact and no mitigation measures are required.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. As previously discussed, the Project site is relatively flat with stable soil conditions and has been recently modified to accommodate construction equipment for the adjacent site development. Development of the Project site would require typical site preparation activities such as grading and trenching which may result in the potential for short-term soil disturbance or erosion impacts. The Project shall be subject to City standards for grading and drainage, including utilization of Best Management Practices to ensure that soil disturbance would not result in substantial soil erosion or the loss of topsoil. As a result, the Project would have a less than significant impact and no mitigation measures are required.

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?

Less Than Significant Impact. The Project site is not located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project enough to result in a landslide or any other catastrophic soil event. Further, as previously discussed, the site is relatively flat with stable soils and no apparent unique or significant landforms and the site and vicinity are located in an area traditionally characterized by relatively low seismic activity. As a result, the Project would have a less than significant impact and no mitigation measures are required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. The Phase I site assessment indicates that the subsurface of the Project site and vicinity is characterized by a thick sequence of unconsolidated sediments, primarily composed of alluvial fan deposits and flood plain overbank deposits including interbedded silts, sands, clays, and gravels. The site comprises stable, native soils that are well drained and have low capacity to transit water. Such sandy soils maintain consistent volume and density. Thus, the site does not consist of expansive soils with high shrink-swell potential and therefore would not create a substantial direct or indirect risk to life or property. The Project would have a less than significant impact and no mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project proposes a water supply well. No sewer or septic systems would be installed as part of the Project. Therefore, the Project would have no impact and no mitigation measures are required.

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

Less Than Significant Impact. As previously discussed in the Cultural Resources Section, there are no known paleontological resources on the Project site. However, the General Plan MEIR employs standard mitigation measures that ensure that unknown buried resources are protected during construction, including paleontological resources. As such, the Project would have a less than significant impact and no mitigation measures are required.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the geological related mitigation measures as identified in the attached MEIR Mitigation Monitoring Checklist dated October 21, 2016.

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

ENVIRONMENTAL SETTING

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring greenhouse gases include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct greenhouse gases CO_2, CH_4, and N_2O occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 40, 150, and 20 percent, respectively (Intergovernmental Panel on Climate Change [IPCC], 2013).

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). The emissions from a single project will not cause global climate change, however, GHG

emissions from multiple projects throughout the world could result in a cumulative impact with respect to global climate change. Therefore, the analysis of GHGs and climate change presented in this section is presented in terms of the proposed project's contribution to cumulative impacts and potential to result in cumulatively considerable impacts related to GHGs and climate change.

Cumulative impacts are the collective impacts of one or more past, present, and future projects that, when combined, result in adverse changes to the environment. In determining the significance of a proposed project's contribution to anticipated adverse future conditions, a lead agency should generally undertake a two-step analysis. The first question is whether the combined effects from both the proposed project and other projects would be cumulatively significant. If the agency answers this inquiry in the affirmative, the second question is whether "the proposed project's incremental effects are cumulatively considerable" and thus significant in and of themselves.

The cumulative project list for this issue (climate change) comprises anthropogenic (i.e., human made) GHG emissions sources across the globe and no project alone would reasonably be expected to contribute to a noticeable incremental change to the global climate. However, legislation and executive orders on the subject of climate change in California have established a statewide context and process for developing an enforceable statewide cap on GHG emissions. Given the nature of environmental consequences from GHGs and global climate change, CEQA requires that lead agencies consider evaluating the cumulative impacts of GHGs. Small contributions to this cumulative impact (from which significant effects are occurring and are expected to worsen over time) may be potentially considerable and, therefore, significant.

In assessing the significance of impacts from GHG emissions, Section 15064.4(b) of the CEQA Guidelines states that a lead agency may consider the following:

- The extent to which the project may increase or reduce GHG emissions as compared to the environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The SJVAPCD's Guidance for Valley Land Use Agencies in Addressing GHG Impacts for New Projects Under CEQA (2009) provides screening criteria for climate change analyses, as well as draft guidance for the determination of significance. [7,8] These criteria are used to evaluate whether a project would result in a significant climate change impact (see below). Projects that meet one of these criteria would have less than significant impact on the global climate.

- Does the project comply with an adopted statewide, regional, or local plan for reduction or mitigation of GHG emissions? If no, then:
- Does the project achieve 29% GHG reductions by using approved Best Performance Standards (BPS)? If no, then
- Does the project achieve AB 32 targeted 29% GHG emission reductions compared with Business As Usual (BAU)?

Because BPS have not yet been adopted and identified for specific development projects, and because the City has not yet adopted a plan for reduction of GHG with which the Project can demonstrate compliance, the California Air Resources Board (CARB) 2017 Climate Change Scoping Plan will be used as an additional threshold of significance for this analysis as the adopted statewide plan for reduction or mitigation of GHGs. Assembly Bill (AB) 32 was enacted by the California State legislature in 2006 with the aim to reduce GHG emissions to levels of 1990 by 2020. Recommended actions to achieve these aims were adopted by the California Air Resources Board (CARB) in 2008 (i.e., the Climate Change Scoping Plan). The Scoping Plan involves several measures to reduce pollution and GHG emissions, indicating a decrease of GHG emissions to 389 million metric tons (MMT) of $CO2_e$ by 2030.

Additionally, the SJVAPCD requires quantification of GHG emissions for all projects which the lead agency has determined that an EIR is required. Although an EIR is not required for the proposed project, the GHG emissions are quantified below. Short-term construction and long-term operational GHG emissions for project buildout were estimated using CalEEModTM (v.2016.3.2). (See **Appendix A**). CalEEMod is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify GHG emissions from land use

[7] San Joaquin Valley Air Pollution Control District. (2009). Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Accessed April 16, 2021, http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf.

[8] San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act. Accessed April 16, 2021, http://www.valleyair.org/transportation/CEQA%20Rules/ERG%20Adopted%20_August%202000_.pdf

projects. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e$), based on the global warming potential of the individual pollutants.

DISCUSSION

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

The Project's estimated GHG emissions for construction and operation are presented in **Table 8.1.** below. In regard to construction, the SJVAPCD does not recommend assessing pollution associated with construction, as pollution-related construction will be temporary. As presented below, maximum short-term annual construction emissions of GHG associated with development of the project are estimated to be 30.2285 MTCO2e (2022). These construction GHG emissions are a one-time release. Cumulatively, these construction emissions would not generate a significant contribution to global climate change over the lifetime of the proposed project.

In regard to the long-term operational related GHG emissions, the estimated operational emissions for buildout of the Project incorporates the potential area source and vehicle emissions, and emissions associated with utility and water usage, and wastewater and solid waste generation. As described in Section 3. Air Quality above, the Operational emission estimates account for limited vehicle trips associated with the Project.

As shown, the annual mitigated operational GHG emissions associated with buildout of the proposed project would be 75 $MTCO_2e$. The estimated emissions are approximately 214% less than the 2005 BAU emissions for the Project, and thereby achieves the AB 32 targeted 29% GHG emission reductions compared with BAU.

Table 8.1. Project GHG Emissions (Metric Tons Per Year)

	Total CO_2	CH_4	N_2O	CO_2e
Construction				
Construction, Unmitigated (maximum)	30.0049	8.9400e-003	0.0000	30.2285
Operational				
Operational, Unmitigated	65.6536	0.3385	3.900e-004	75.0006
BAU – Operational, Unmitigated	224.8066	0.3794	3.3900e-003	235.3012
Percent Reduction (%) from BAU				214%

Source*:* CalEEMod, Version 2016.3.2, ran on April 21, 2021.

Additionally, as discussed in more detail below, the project would be generally consistent with the applicable goals and policies related to GHG reduction measures. Because of this, the proposed project will not occur at a scale or scope with potential to contribute substantially or cumulatively to the generation of greenhouse gas emissions and therefore the impact would be less than significant.

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

Less than Significant Impact. While the Fresno General Plan does not meet the criteria of the CEQA Guidelines 15064.4(b)(3) for an appropriate GHG emissions reduction program, it includes policies aimed at reducing vehicle travel and energy usage which would include GHG reductions. Therefore, the compatibility of the Project with the relevant policies of the General Plan are evaluated. The Project is consistent with several GHG related measures in the General Plan and the Scoping Plan as shown in **Table 8.2 and Table 8.3** below.

General Plan Compliance

In August 2014 the City of Fresno revised its General Plan which includes very few measures specifically relevant to climate change, however, some of the Air Quality and Circulation goals, policies, and action items will reduce GHG emissions as well as other pollutant emission thresholds, as they aim to eliminate driven vehicle miles and boost energy efficiency. The Project conforms to applicable items, as shown in **Table 8.2**.

Table 8.2. Plan Consistency

General Plan Policy	Project Consistency
Objective RC-4. In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take necessary actions to achieve and maintain compliance with State and federal air quality standards for criteria pollutants.	The Project would comply with all applicable policies and rules related to air quality and will thus comply with this policy.
RC-4-a Support Regional Efforts. Support and lead, where appropriate, regional, State and federal programs and actions for the improvement of air quality, especially the SJVAPCD's efforts to monitor and control air pollutants from both stationary and mobile sources and implement Reasonably Available Control Measures in the Ozone Attainment Plan**.**	City effort, not applicable.
RC-4-b Conditions of Approval. Develop and incorporate air quality maintenance requirements, compatible with Air Quality Attainment and Maintenance Plans, as conditions of approval for General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals**.**	The Fresno Municipal Code incorporates relevant general plan policies, including this policy, into development code requirements. Given that the City ensured all code requirements were met during the review of the Project, the Project complies with this policy.
RC-4-c Evaluate Impacts with Models. Continue to require the use of computer models used by SJVAPCD to evaluate the air quality impacts of plans and projects that require such environmental review by the City.	CalEEMod was used to analyze air quality impacts of this project. The findings of this model run are attached in Appendix A.
RC-4-d Forward Information. Forward information regarding proposed General Plan amendments, community plans, Specific Plans, neighborhood plans, Concept Plans, and development proposals that require air quality	The Project was routed by the City to the San Joaquin Valley Air Pollution Control District and they did not provide comments.

evaluation, and amendments to development regulations to the SJVAPCD for their review of potential air quality and health impacts.	
RC-4-k Electric Vehicle Charging. Develop standards to facilitate electric vehicle charging infrastructure in both new and existing public and private buildings, in order to accommodate these vehicles as the technology becomes more widespread**.**	Citywide requirement. The City has developed a streamlined entitlement process for EV Charging facilities.
Policy RC-2-a Link Land Use to Transportation. Promote mixed-use, higher density infill development in multi-modal corridors. Support land use patterns that make more efficient use of the transportation system and plan future transportation investments in areas of higher-intensity development. Discourage investment in infrastructure that would not meet these criteria.	The Project proposes the development of a water supply well in a developing area that would provide for potable water.
Policy UF-14-b Local Street Connectivity. Design local roadways to connect throughout neighborhoods and large private developments with adjacent major roadways and pathways of existing adjacent development. Create access for pedestrians and bicycles where a local street must dead end or be designed as a cul-de-sac to adjoining uses that provide services, shopping, and connecting pathways for access to the greater community area.	The Project proposes pedestrian sidewalks along the frontage of the site and roadway improvements are proposed as part of Phase 2 of Project construction.
Policy UF-14-c Block Length. Create development standards that provide desired and maximum block lengths in residential, retail, and mixed-use districts in order to enhance walkability.	Not applicable. This Project is in an industrial district.

State Scoping Plan

Assembly Bill 32 was enacted by the state in 2006 in an effort to reduce GHGs to 1990 levels by 2020. In 2008, the ARB adopted the Climate Change Scoping Plan in accordance with the requirements of AB 32 which outlines the actions recommended to achieve that aim. The Scoping Plan involves a number of measures to reduce the pollution from the State. The Project complies with several of the measures as described below.

Table 8.3. Scoping Plan Reduction Measures Consistency Analysis

Reduction Measure	**Consistency/Applicability Determination**
Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms.	As new construction, the Project is required to meet the State Building Energy Efficiency Standards (Title 24, Parts 6 and 11). Compliance with these energy efficiency regulations and programs ensure that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Therefore, the Project is consistent with this measure.
Renewable Portfolio Standard. Achieve 33% renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	This measure is a statewide measure that is not implemented by a project applicant or lead agency. Therefore, the measure is not applicable to the proposed project.
Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	This measure is a statewide measure that is not implemented by a project applicant or lead agency. Therefore, the measure is not applicable to the proposed project. However, when the measure is initiated, it would be applicable to vehicles that would access the Project site.
Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.	This measure refers to SB 375. SB 375 does not have requirements that directly apply to development projects.

	Therefore, the measure is not applicable to the Project.
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	This measure is a statewide measure that is not implemented by a project applicant or lead agency. Therefore, the measure is not applicable to the proposed project. However, when the measure is initiated, it would be applicable to light-duty vehicles that would access the Project site.
Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	This measure is implemented by electricity providers and existing solar programs throughout the State. Therefore, the measure is not applicable to the Project.
Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits.	While the Project is within an industrial district, the Project is not a large industrial source of emissions.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	As new construction, the Project is required to meet the State Building Energy Efficiency Standards (Title 24, Parts 6 and 11) (i.e., CALGreen). Compliance with these energy efficiency regulations and programs ensure that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Therefore, the Project is consistent with this measure.
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	The Fresno General Plan outlines goals and policies for source reduction and recycling. The Project is required to comply with these goals and policies during the approval process.

Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	As new construction, the Project is required to meet the State Building Energy Efficiency Standards (Title 24, Parts 6 and 11) (i.e., CALGreen). Compliance with these energy efficiency regulations and programs ensure that development will not result in wasteful, inefficient, or unnecessary consumption of energy sources. Therefore, the proposed project is consistent with this measure.

In reviewing the local goals and policies (see **Tables 8.2 and 8.3** above), the Project complies as it is proposed. In conclusion, the Project contains features that would reduce GHG emissions. These features are in accordance with several measures from the Scoping Plan and the Fresno General Plan. As such the Project would not conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs, and therefore the impact would be less than significant.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HAZARDS AND HAZARDOUS MATERIAL – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?			X	
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 for people residing or working in the project area?				X

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

ENVIRONMENTAL SETTING

For the purposes of this section, the term “hazardous materials” as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: causes human health effect
- Ignitable: has the ability to burn
- Corrosive: causes severe burns or damage to materials
- Reactive: causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Hazardous materials are routinely used, stored, and transported in Fresno that are associated with industrial and commercial/retail businesses, as well as in educational facilities, hospitals, and households. Hazardous waste generators may include industries, businesses, public and private institutions, and households. Federal, state, and local agencies maintain comprehensive databases that identify the location of facilities using large quantities of hazardous materials, as well as facilities generating

hazardous waste. Some of these facilities use certain classes of hazardous materials that require risk management plans to protect surrounding land uses.

A Phase I Environmental Site Assessment was conducted by Moore Twining Associates, Inc. for the Project site and was issued on January 18, 2021. The assessment included a historical aerial photograph review for indications of past site use and/or site activities which may have involved the manufacture, generation, use, storage and/or disposal of hazardous materials. Historically, the site and adjoining properties were either vacant or occupied by orchards until 2017 when the site and adjoining properties were cleared and graded for construction activities. The assessment did not find any reporting of contaminants of concern, including regulatory records or identified facilities on the EnviroStor or GeoTracker websites.

However, the assessment does recommend that prior to the sale, purchase, and/or development of the property that soil should be sampled. Given the size, type, and nature of the Project (i.e., water supply well on a 0.34-acre lot within an industrial area with no planned residential uses), and because any potential water contamination would be treated by the facility, the City of Fresno has elected to not take a soil sample for this Project site. In addition, the City previously completed a 900-feet deep test bore and monitoring wells for the Project site in December 2017 and determined that the water met minimum water quality standards with appropriate treatment.

The Project site is located approximately 0.60-miles from Orange Center Elementary School and approximately 4.50-miles from the Fresno-Chandler Executive Airport.

PROJECT DESIGN

The Project design and operation incorporate the following measures in regard to hazards and hazardous materials:

- Ongoing monitoring of GAC absorption medium and frequent change-out to prevent saturation of the absorption site on carbon particles which trap and hold organic contaminants that would allow TCE and other contaminants to enter the drinking water supply.
- Containment of spent GAC in a sealed change-out system, with regeneration/disposal of the used carbon in a licensed facility (to be made a contract requirement of vendors who are hired by the City for GAC changeout).
- Prior to the installation of the post-filter disinfection system, the City may be required to complete and submit a Risk Management and Prevention Program to the Fresno County Community Health Department, Environmental Health System.

Contact the Hazardous Materials Disclosure/Registration Program at (559) 445-3721 for more information.

- Removal and disposal of contaminated GAC is an activity which may require special handling as a hazardous waste. Spent GAC potentially produced by this operation must be stored and labeled in accordance with federal, state, and local governments requirements. Management of the carbon filtration facilities must be contracted to a fully licensed operator authorized by appropriate federal and state agencies.
- Prior to using an air stripper as a resource for remediation the Applicant must file a hazardous materials business plan and obtain a Permit to Operate from the SJVAPCD.
- Securing the wellhead treatment site by constructing a chain link fence with locking gate.
- A permit is required from Fire Prevention for hazardous materials storage on-site. A permit is also required for the above ground fuel tank located inside the future generator.

DISCUSSION

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

Less than Significant Impact with Mitigation Incorporated. A granular activated carbon (GAC) filtration system may be constructed on the well site to remove contaminants such as DBCP from the pumped ground water. This system will consist of two to six vessels approximately 12' in diameter by 15' in height. These vessels may be contained in a pit 5' deep to decrease their profile above grade. Contaminants will accumulate in these vessels until such time the GAC in the vessel is no longer effective in removing these contaminants. At that time, the compounds concentrated in the GAC make it a waste product which must be removed from the vessels and disposed of or regenerated by licensed operators in appropriate facilities. Mishandling of spent GAC could result in potential environmental consequences. However, based on a determination made by the Environmental Protection Agency on December 23, 1986, the spent GAC is not considered hazardous waste, subject to the following conditions:

1. The pesticide contamination in the water is a result of normal pesticide use.
2. The pesticide contamination in the water is not a result of deliberate discharge of these pesticides into the potable water source.

3. The pesticides do not fall under the definition of characteristic hazardous waste in Title 40 C.F.R. Section 261.20.

Pesticides in the City groundwater supply are, in fact, a result of normal pesticide uses in past farming operations, rather than a result of deliberate discharge of these pesticides into the potable water source. A review of the Environmental Fact Sheet on the Toxicity Characteristic Rule published by the EPA on March 1990 discloses that DBCP is not listed or defined as "characteristic hazardous waste" in Title 40 C.F.R. Section 261.20. Therefore, the spent GAC resulting from the operation of a filtration process is not considered a hazardous waste by EPA.

A similar conclusion was also made by Professor George P. Hanna of Engineering Research Institute, California State University, Fresno, in a letter dated July 19, 1990. He stated that "it is a well-established fact that GAC has a very high adsorption capacity for organic compounds like DBCP, and it has been shown that DBCP will tightly bond to the GAC and will not significantly desorb until put through a regeneration process." Therefore, it is concluded that the environmental risks associated with the handling and removal of the carbon are not significant.

Additional information relating to the GAC water filtration process was given by Cindy Forbes, district engineer for the Water Programs Division, California Department of Health Services, which is responsible for the enforcement of state and federal safe drinking water acts and implementation regulations. In a deposition taken on March 19, 1990, in the Superior Court, she indicated that the GAC filtration water treatment process is the only viable treatment alternative available for the removal of DBCP. It is also a proven technology for the treatment of drinking water recognized nationally by water districts, municipalities and other public entities.

The City Department of Public Utilities, UP&E, owner/operator of the pump station, proposes that the management of the carbon supply and change-out process be contracted to a fully licensed operator authorized by appropriate federal and state agencies. This management process will include the supply and installation of the virgin carbon in the vessels as well as the removal of spent carbon from the vessels and its transportation pursuant to Local, State and Federal Laws to a facility licensed to decontaminate such carbon through regeneration or incineration.

The exchange of clean virgin carbon for spent carbon is a "closed loop" process wherein the bulk carbon is hydraulically transferred through pressure hoses between the treatment vessels and the tanker trucks. This process is similar to but far less hazardous than the

common transfer of gasoline from a tanker truck to gas station storage tanks, which does not require an E.I.R.

Based on this analysis, it is determined that environmental effects related to the use, handling, or accidental release of spent GAC are not significant.

Chlorination

One of the following three methods of chlorination may be installed at a Fresno well site.

1. On-site sodium hypochlorite solution generation from common salt,
2. A 12.5 % sodium hypochlorite solution, or
3. Calcium hypochlorite tablets dissolved and injected into the water supply.

No chlorine gas is released to the atmosphere. The sodium hypochlorite solution, a class 8 corrosive, is stored, transported, and handled in accord with the manufacturer's material safety data sheet. When handled according to manufacturer's instructions, calcium hypochlorite tablets present an insignificant hazard associated with transportation, storage, and use.

1. Sodium Hypochlorite Generation from Common Salt. The hypochlorite generation process includes salt tablets and water to form brine and D.C. current. These variables are reacted to form 0.8% sodium hypochlorite under the following equation: NaCl + H2O + D.C. Amps = NaOCl + H2.

This 0.8% solution is injected into the water supply at the wellhead. The risk of leakage is remote and if this apparatus were disturbed, no concentration of chlorine gas would be released. The apparatus will be secured with bolts to discourage casual unauthorized opening and the building housing this equipment is well ventilated and secured with a locked gate. Salt tablets do not present a significant hazard associated with their transportation, storage, and use.

2. Injection of Sodium Hypochlorite Solution. This method uses 5% and 12% sodium hypochlorite solutions. The 5% solution is the type commonly found as household bleach. This solution is injected into the water supply at the wellhead. The solution is transported to the site where it is pumped into a tank at the pump station. The solution will be transported by truck in accordance with applicable materials handling standards.

3. Calcium Hypochlorite Tablets. This method uses solid calcium hypochlorite tablets placed in a device through which water is passed. The tablets dissolve and release a measured chlorine solution into the water.

Chlorine Hazards

The American Water Works Association Research Foundation notes that "chlorine is well established as a respiratory irritant and at high enough concentrations inhalation of chlorine can be fatal. However, if a person survives the acute phases, there is little permanent damage. Ingestion of bleach also presents a hazard, but this damage appears to be primarily due to the high alkalinity of the product." Beyond the minimal hazard to public health from the malfunction or molestation of the disinfection equipment currently in use, measures currently in effect to further reduce health risks are:

1. UP&E personnel are trained in the safe transportation and handling of these substances and Level 1 Hazardous Materials Response.
2. Pump stations will be surrounded by a 7' high chain-link fence with slats. Chlorination facilities will be enclosed in chain link fences with slats and covered with a roof. The relatively large porosity of this enclosure will assist ambient air movement in dispersing any off gasses.
3. Placards will be posted at all pump sites advising that these chemicals are under use.

Fresno County Environmental Health Department has requested that a Hazardous Materials Business Plan for GAC and/or chlorination facilities not be submitted unless and until Phase III is actually implemented. Business plans for other, nearly identically configured sites, using the same GAC equipment with similar flow rates and having identical operating procedures and requirements, have been approved by the Fresno County Health Department (reference C-90-40).

In conclusion, through Project design and intended safety measures described above, the Project would not have a potentially significant adverse impact from hazards or hazardous materials related to the Project. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. As described under item (a), through Project design and intended safety measures described, the Project would not have a potentially significant adverse impact from hazards or hazardous materials related to the Project. Therefore, the Project would have a less than significant impact.

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

Less than Significant Impact. The Project site is located approximately 0.60-miles from Orange Center Elementary School. As described under item (a) and (b) above, through Project design and intended safety measures described, the Project would not have a potentially significant adverse impact from hazards or hazardous materials related to the Project. Therefore, the Project would have a less than significant impact.

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?

Less than Significant Impact. According to the California Department of Toxic Substances Control EnviroStor database there are no listed hazardous sites in the vicinity of the Project site. Further, the Phase I Environmental Site Assessment conducted for the Project site found no hazardous material storage or recognized environmental conditions at the site. In addition, interviews did not indicate any negative environmental conditions associated with the property. Therefore, the Project would have a less than significant impact.

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

No Impact. The nearest public use airport is the Fresno-Chandler Executive Airport approximately ± 4.50 miles northwest of the Project site. The applicable airport land use plan for Fresno-Chandler Executive Airport is the Fresno County Airport Land Use Compatibility Plan adopted in December 2018. According to this land use plan, the Project site is located outside of the airport's Airport Influence Area. Therefore, the Project would have no impact.

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

Less than Significant Impact. The Project site is in an area undergoing extensive development and is thereby surrounded by existing infrastructure including roadways and utilities. Although the Project could result in temporary traffic detouring or closures during buildout, such delays would be temporary and would be coordinated with the City to ensure that safe access is maintained to and from the site. Further, the Project has been reviewed by City departments to ensure adequate site access and circulation is provided in the event of an emergency. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. Fresno is largely categorized as having little or no threat or moderate fire hazard, which is attributed to its impervious surface areas. The areas that are prone to wildfires are along the San Joaquin River Bluff due to steep terrain and vegetation. The Project site is several miles south of the San Joaquin River Bluff. Furthermore, the Project site is not identified by the California Department of Forestry and Fire Protection (Cal Fire), as a Very High Fire Hazard Severity Zone (VHFHSZ) and is within an area of local responsibility.[9] Given that the area in question is not considered a wildland, is not in a VHFHSZ, and would not be inhabited by people, the project would not expose people or structures to a significant risk involving wildfires. In terms of urban fires, the Project would be constructed in compliance with fire code standards including emergency access. Prior to occupancy, the City would ensure proper operation. Therefore, the proposed project would have a less than significant impact.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the hazards and hazardous materials related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

[9] Cal Fire, "FHSZ Viewer." Accessed on April 16, 2021, https://egis.fire.ca.gov/FHSZ/.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. 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?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:			X	
i) Result in a substantial erosion or siltation on- or off-site;			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			X	
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			X	
iv) Impede or redirect flood flows?			X	

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

ENVIRONMENTAL SETTING

Until 2004, groundwater was the sole source of water for the City. In June 2004, the 30 Million Gallon Per Day (MGD) Northeast Surface Water Treatment Facility ("NESWTF") began providing Fresno with water treated to drinking water standards and in May 2018, the 54 MGD Southeast Surface Water Treatment Facility ("SESWTF") became operational. In order to meet demands anticipated by the growth implicit in the 2025 Fresno General Plan further construction of surface water treatments facilities and recycled water facilities will be required. Surface water is used to replace lost groundwater through Fresno's intentional recharge program at the City-owned Leaky Acres, Nielsen Recharge Facility, and smaller facilities in Southeast Fresno. Fresno holds contracts to surface water supplies from Millerton Lake and contractual rights to surface water from Pine Flat Reservoir. In 2010, Fresno renewed its contract with the United States Bureau of Reclamation, which entitles the City to 60,000 acre-feet per year of Class 1 water into the extended future. This water supply has further increased the reliability of Fresno's water supply.

The 2010 Urban Water Management Plan, Figure 4-3 (incorporated by reference) illustrates the City of Fresno's goals to achieve a 'water balance' between supply and demand while decreasing reliance upon and use of groundwater. To achieve these goals the City is implementing a host of strategies, including:

- Intentional groundwater recharge through reclamation at the City's groundwater recharge facility at Leaky Acres (located northwest of Fresno-Yosemite international Airport), refurbish existing streams and canals to increase percolation, and recharge at Fresno Metropolitan Flood Control District's (FMFCD) storm water basins;

- Increase use of existing surface water entitlements from the Kings River, United States Bureau of Reclamation and Fresno Irrigation District for treatment at the

Northeast Storm Water Treatment Facility (NESWTF) and the new Southeast Storm Water Treatment Facility (SESWTF); and

Recycle wastewater at the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) for treatment and re-use for irrigation, and to percolation ponds for groundwater recharge. Further actions include the General Plan, Policy RC-6-d to prepare, adopt and implement a City of Fresno Recycled Water Master Plan.

In addition, Fresno General Plan policies require the City to maintain a comprehensive conservation program to help reduce per capita water usage and includes conservation programs such as landscaping standards for drought tolerance, irrigation control devices, leak detection and retrofits, water audits, public education and implementing US Bureau of Reclamation Best Management Practices for water conservation to maintain surface water entitlements.

Overall, Implementation of the Fresno General Plan policies, the Kings Basin Integrated Regional Water Management Plan, City of Fresno Urban Water Management Plan, Fresno-Area Regional Groundwater Management Plan, and City of Fresno Metropolitan Water Resource Management Plan and the applicable mitigation measures of approved environmental review documents will address the issues of providing an adequate, reliable, and sustainable water supply for the project's urban domestic and public safety consumptive purposes.

PROJECT DESIGN

To eliminate any potential bacterial contamination, the UP&E would disinfect the water using chlorination prior to distribution. Chlorination will take place through Sodium hypochlorite generation from common salt, injection of sodium hypochlorite solution, or calcium hypochlorite tables as described above in Section 8. HAZARDS AND HAZARDOUS MATERIAL. In addition, Project design and normal operations will include the following.

- Filing of a Report of Waste Discharge to characterize backwash water and determine the appropriate level of permitting and any Discharge Requirements.
- Measures to protect surface water and groundwater: The City of Fresno is directly responsible for ensuring that any discharge (e.g. pumped groundwater) during the project is permitted through appropriate waste discharge adopted by the CVWB or SWRCB.
- Filing of a Report of Waste Discharge to characterize backwash water and determine the appropriate level of permitting and any Discharge Requirements.

- Compliance with National Pollution Discharge Elimination System permitting regulations by filing a Notice of Intent (or notice of exemption).
- Addition of Pump Station No. 372 to the City's Master Hazardous Materials Business Plan, which has standards for containment and handling of these chemicals, staff training, placarding, and spill response.

DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact. To eliminate any potential bacterial contamination, the UP&E will disinfect the water using chlorination prior to distribution. Chlorination will take place through Sodium hypochlorite generation from common salt, injection of sodium hypochlorite solution, or calcium hypochlorite tables as described above in Section 8. Hazards and Hazardous Material. In addition, the Project design incorporates the following measures to reduce the impact on water quality.

Granular Activated Carbon
GAC facilities are utilized for the removal of less volatile organic compounds (VOC) such as DBCP, an agricultural pesticide found in much of the groundwater in the Fresno area. Information relating to the GAC water filtration process was given by Cindy Forbes, District Engineer for the Water Programs Division, CDHS, which is responsible for the enforcement of state and federal safe drinking water acts and implementation of regulations. In a deposition taken on March 19, 1990, in the California Superior Court, she indicated that the GAC filtration water treatment process is the only viable treatment alternative available for the removal of DBCP. It is also a proven technology, state of the art, for the treatment of drinking water, recognized nationally by a cross-section of water districts, municipalities and other public entities.

Pumping of groundwater in the project area could potentially accelerate the migration of known contaminants toward the project site as well as to the surrounding areas. However, if this occurs, all water contaminated with synthetic organic compounds or industrial solvents drawn from the subject well site would be subjected to the GAC treatment process which will remove the contaminants.

Backwash water, used GAC slurry, and other solid waste or liquid effluent created by wellhead treatment shall be properly handled and/or disposed of according to its waste hazard classification. If the carbon material is reconditioned, the Department of Public

Utilities shall ensure that the GAC recycling facility has proper handling and disposal procedures, in order to limit the City's "cradle to grave" responsibility for potentially hazardous materials. Documentation of proper "chain of custody" of used GAC shall be a condition of any carbon change-out contracts. If the GAC is to be regenerated or incinerated, the Department of Public Utilities shall ensure that the regeneration facility is fully permitted for the designated procedure and that a certificate of regeneration or destruction is obtained for each GAC load.

Iron Manganese Filtration System

An Iron and Manganese Filtration System would be installed on the site. Well waters containing iron and/or manganese, along with other dissolved contaminants such as H2S, organic carbon, arsenic, etc., are treated with chlorine prior to filtration. This step oxidizes these contaminants to a process-able form and provides a free chlorine residual to the water distribution system. The filtration step collects the iron and manganese and is continuously monitored with a chlorine residual analyzer to ensure complete oxidation of the contaminants.

Air Stripping

Air stripping is a simple, easy to automate process. Water contaminated with VOC is introduced into the top of a vertical tower and dispersed by a liquid distribution system over a bed of specially designed packing material. Packing consists of hollow plastic balls (similar to whiffle balls) or cylinders with numerous openings. This packing creates a large water surface area by breaking the contaminated liquid into fine droplets as it flows toward the bottom of the tower. Air is blown counter-current to the water flow, through the packing. VOCs pass from the liquid phase into the upward flowing air.

Whether the air used in air stripping requires treatment depends on state regulations. If the contaminant concentration is below a specific limit, the air can simply be released to the atmosphere. Above that limit, it must be treated, typically by destroying the contamination using thermal combustion or catalytic oxidation, or by adsorbing the contaminants using vapor phase GAC.

Overall, Project design and compliance with existing policies and standards in place would prevent degradation of water quality, all of which has been assessed during entitlement review. In addition, the well would filter water using the systems mentioned above to improve the water quality for the general public. For these reasons, the Project would have a less than significant impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. The development and use of the pump station are not expected to have a significant effect on the environment. The aquifer serving the Fresno area exceeds an average thickness of 300 feet and is large enough to withstand long periods of drought with relatively minor environmental impacts. The groundwater typically rises during years of high precipitation and drops in low precipitation years (as during the drought years of 1987-1990). During 1987 and 1988 the average drop in the groundwater table City-wide was about 2 feet per year. By contrast, between 1982 and 1984 the average groundwater table City-wide rose 3.2 feet.

The City of Fresno is entitled to 60,000-acre feet of surface water from the Bureau of Reclamation and 85,000-acre feet from the Kings River. Presently the surface water is being used for recharge of groundwater at a rate of about fifty (50) percent of the amount that the City pumps out of the aquifer. This is considered to be a favorable ratio. To ensure a long-term adequate water supply for the Fresno area, the City is expanding its artificial recharge program.

Other sources of groundwater recharge include:

- Infiltration of direct precipitation;
- Subsurface inflows;
- Canal and intermittent stream seepage;
- Infiltration of storm water runoff at flood control basins;
- Percolation of treated wastewater; and
- Deep percolation of excess applied water from domestic and agricultural irrigation

In addition, the development of a pump station does not necessarily result in a net reduction of the groundwater. Groundwater recharge is currently adequate to mitigate any significant impact of well extraction. A well is intended to serve existing and planned urban development which itself was the subject to environmental and service delivery analysis. For these reasons, the Project would have a less than significant impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?
ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?
iii. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
iv. Impede or redirect flood flows?

Less than Significant Impact. The Project site is located within an area undergoing development of industrial uses. The site is generally flat and does not contain streams or rivers that would be altered as a result of the Project. Further, some of the infrastructure surrounding the site, such as storm drains, are already in place or are planned to be installed from existing and ongoing development. In its current state, the site is pervious as it is undeveloped, and as a result, the Project would increase impervious surfaces by installing paving, concrete pads, and sidewalks. However, the drainage pattern is proposed to be constructed per existing regulations and has been reviewed by the City and FMFCD to ensure proper drainage. Consequently, this review and approval by City engineers and FMFCD would mean that the Project result in a less-than-significant impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. The Project site is designated as Zone X on the most recent Flood Insurance Rate Map (FIRM) No. 06047C045G dated February 18, 2009. Zone X is an area of minimal flood hazards with a 0.2 percent-annual-chance of flood (i.e., 500-year flood). Therefore, as a low-risk area, the Project would have a less than significant impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project is subject to compliance with all water quality control plans and other hydrological requirements established by the City of Fresno. In fact, the installation of the well would help bring the Project into compliance with City goals

and policies for water quality control and sustainable groundwater management. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the hydrology and water quality related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?			X	
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?			X	

ENVIRONMENTAL SETTING

As mentioned above in the Project description, the Project site is located on the northwest corner of S. Northpointe Drive and Prime Avenue, between E. Central Avenue and E. North Avenue. In general, the Project site is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. As a result, the area is predominately characterized by industrial uses, as well as typical infrastructure such as roadways, streetlights, parking lots, and ambient light sources typical of industrial development.

DISCUSSION

a) Physically divide an established community?

Less than Significant Impact. Typically, physical division of an established community is associated with new, intersecting roadways, or new incompatible uses inconsistent with the planned or existing land uses. The Project site is an undeveloped, vacant property within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. Thus, the area is predominately characterized by industrial uses, as well as typical infrastructure such as roadways, streetlights, parking lots, and ambient light sources typical of industrial development. As a result, this area can generally be classified as an established community. Further, the

Project is consistent with the planned land uses and zone district, as it proposes the construction of a water supply well.

As such, the Project does not represent a significant change in the surrounding area as it will develop a vacant and undeveloped property with a use that is compatible with the planned and existing land uses within the area. Further, the Project does not propose any new roadways as it is within a developing area that has existing infrastructure (i.e., roadways). For these reasons, the Project would have a less than significant impact.

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?

Less than Significant Impact. The proposed use of the Project site as a water supply well is consistent with the site land use designation and zone district. Further, through the entitlement process, the Project is reviewed for compliance with applicable regulations inclusive of those adopted for the purpose of avoiding or mitigating environmental effects. Overall, the entitlement process will ensure that the Project complies with the General Plan, Municipal Code, and any other applicable policies. As such, the Project would have a less than significant impact.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. 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?				X
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?				X

DISCUSSION

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?

No Impact. The Project site is not located in an area designated for mineral resource preservation or recovery. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, the Project would have no impact.

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

No Impact. As described above, the Project site is not located in an area designated for mineral resource preservation or recovery. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Further, the site is not delineated on the General Plan, a Specific Plan, or other land use plan as a locally important mineral resource recovery site, therefore, it would not result in the loss of availability of a locally important mineral resource. Therefore, the Project would have no impact.

Mitigation Measures

None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. 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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

ENVIRONMENTAL SETTING

As previously mentioned, the Project site is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. As a result, the area is predominately characterized by industrial uses and ambient noise typical of industrial development.

The City of Fresno Noise Element of the General Plan identifies the maximum appropriate noise level exposure (for residential land uses) for outdoor activity areas to be 65 dB DNL (decibels A weighted), 60 db DNL for stationary sources impinging upon residential uses, 45 db DNL for interior living areas.

Fresno Municipal Code, Section 10-101, et seq. (i.e., the Noise Ordinance of the City of Fresno) sets forth the criteria for measuring and regulating noise emissions in the City. The Ordinance prohibits any person from making any sound or noise which causes discomfort or annoyance to any reasonable person of normal sensitivity residing or working in the area, unless such noise or sound is specifically authorized by or in accordance with this article. Ambient noise levels are established as follows.

Zone District	Time	Sound Level Decibels
Residential	10 pm to 7 am	50
Residential	7 pm to 10 pm	55
Residential	7 am to 7 pm	60
Commercial	10 pm to 7 am	60
Commercial	7 am to 10 pm	65
Industrial	Anytime	70

Any noise or sound exceeding the ambient noise level at the property line by more than five (5) decibels shall be deemed to be prima facie evidence of a violation of section 10-105 of the Fresno Municipal Code.

In regard to pump stations, the City of Fresno relies on electrical power to operate its water production system. This system functions within the noise standard set by the General Plan and Fresno Municipal Code. With an inventory of over 250 wells, the lack of water service caused by electrical grid failure may expose the public to clear and imminent danger by drastically reducing the fire suppression capabilities of the City or by precluding water supplies to correctional facilities, hospitals, or persons with medical conditions that require an uninterrupted clean water supply. These potential impacts demand immediate action; an uninterrupted water service is necessary to restore property to a safe condition or to mitigate the effects of an electrical power failure until electricity is restored.

In response to this event, the UP&E developed an emergency plan to ensure a safe, reliable, and economical water supply in the event of future sustained blackouts. The foundation of the plan is an emergency power system to provide a baseline water service for limited domestic service and fire suppression uses in the event of an electrical power failure and until PG&E can restore electrical services. Designated pump stations will be permanently equipped with standby diesel-powered electrical generators (gen sets) that will automatically start when the water system pressure drops due to electrical power supply interruption. Power failure can occur on a citywide or local basis. Other elements of the emergency plan that are under development include coordination with other

emergency agencies, distribution system modifications, staffing plans, and a conservation program.

A gen set is a 100 to 400 horsepower diesel-powered electrical generator capable of generating up to 600 kilowatts of electricity and will be selected to match the energy demand of the particular pump station. They will store diesel fuel in internal tanks in amounts sufficient to operate the engine for no less than eight hours. These fuel tanks will have secondary containment in the event of primary tank failure. Gen sets will be activated automatically in response to a drop in the water distribution system pressure due to widespread electrical power failure. They will stop once PG&E electrical power is restored. Other start-ups will include routine maintenance during daylight business hours. Power supply will include the pump motor, radio telemetry equipment, and disinfection equipment. Gen sets will be used on an emergency basis during power outages. The generators will require periodic testing with a load approximately once a month and without a load approximately once a week, for short durations.

There are several important considerations that render this impact of gen sets as less than significant. Foremost, the gen sets will only provide water service for domestic and emergency use during an electrical power outage. This is necessary to protect public health, safety, and welfare. Second, an emergency is defined by the CEQA as an occurrence, not a condition; the emergency would be of limited duration and normal quiet pump station operations would resume with the restoration of grid system electrical power. Third, the provisions in the Fresno Municipal Code and the General Plan Noise Element are intended to address development issues with horizons which may extend into decades, not hours. Noise impacts, therefore, are established and analyzed in the Ordinance and the General Plan on the basis of long-term duration of the noise event.

PROJECT DESIGN

The Project design incorporates the following measures in regard to noise impacts:

- Installation of critically quiet mufflers, structural screening, and/or waterproof cowling or ducting.
- Retention and/or installation of appropriate landscaping.
- Installation and/or retention of a 7’ chain link fence.

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 in other applicable local, state, or federal standards?

Less than Significant Impact. Although the Project would result in increased ambient noise level at the Project site, compliance with Fresno Municipal Code Section 10-101, et seq requirements would result in the Project's compliance with applicable standards. Two (2) noise generating sources of the Project would include construction (short-term, temporary) and operational (long-term) noise.

Short-Term Noise: Construction

Construction and testing of the water supply well pump station would result in short-term noise impacts. This is not expected to result in a significant impact because the noise would be generated during daylight hours and not during evening or more noise-sensitive time periods; and, the increase in noise would cease upon completion of the Project. Further, pump station construction typically takes place in the midst of new development before an area is fully built-out or developed. As is the case for this Project, the site is within a developing industrial area that is experiencing ongoing development of vacant sites. For these reasons, the Project would have a less-than-significant impact in regard to construction noise impacts.

Long-Term Noise: Operations

As previously mentioned, the City of Fresno relies on electrical power to operate its water production system. According to the General Plan MEIR, noise will occur from motors and pumps, especially from natural-gas-powered engines used to operate the water supply well pump station. In addition to these engines, noise may be expected from the operation of an air blower during an air stripping process. If an air stripper is used, the blower would be housed in a facility on-site that would reduce the noise to a level compatible with the acceptable ambient noise levels established for industrial uses. Lastly, the Project site consists of space for a future emergency gen set (described above) on concrete pads that will store diesel fuel in internal tanks to operate the engine for no less than eight (8) hours.

Well sites are commonly located adjacent to residential, commercial, and industrial uses. In this case, the proposed well site is adjacent to industrial uses. Thus, there are limited noise-sensitive receivers (i.e., residences, hospitals, schools) in proximity to the proposed gen set. However, to alleviate noise from the future gen set and other machinery operation, the gen set would be located 10' from property lines and would be located on the southern portion of the site abutting the existing ponding basin. The pump station would also be surrounded by a 7' perimeter chain-link fence with slabs, frontage landscaping, and a gate opening facing the street. This Project design would help buffer

the neighboring uses from the gen set noise when in operation. The gen set may also be equipped with critically quiet mufflers, structural screening, and/or a weatherproof cowling or ducting that will result in incidental noise reduction. Maintenance activities that require engine operation would be restricted to less sensitive hours between 8 a.m. and 5 p.m., Monday through Friday.

Because the noise associated with the gen set would occur infrequently and only during weekday daylight hours or on a short-term emergency basis, the impacts normally associated with this noise level are not significant. This is consistent with the treatment by the Fresno Municipal Code Section 10-109(a) of construction-related noise which is exempt provided such work takes place between the hours of 7 a.m. and 10 p.m. on any day except Sunday. Finally, gen sets when in operation are determined to be "emergency work" and thus their operation is exempt from the Ordinance provisions. Therefore, with mitigation provided, the proposed project will not have a potentially significant adverse impact from noise. In conclusion, with the project design, impacts form noise will be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. As described under item (a) above, the Project is not expected to generate any potentially significant adverse impacts from noise. Construction noise impacts would be temporary and insignificant; and, operational noise impacts would be reduced by project design as described above. Further, construction or operation of the Project would not involve equipment that would generate substantial groundborne vibration. Thus, because of the nature of the proposed use, the Project would result in minimal impacts related to groundborne vibration and noise levels.

c) 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 expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest public use airport is the Fresno-Chandler Executive Airport approximately ± 4.50 miles northwest of the Project site. The applicable airport land use plan for Fresno-Chandler Executive Airport is the Fresno County Airport Land Use Compatibility Plan adopted in December 2018. According to this land use plan, the Project site is located outside of the airport’s Airport Influence Area. Therefore, the Project would have no impact.

Mitigation Measures

None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?			X	

ENVIRONMENTAL SETTING

The Project is located on an undeveloped and vacant site that is planned for Employment – Heavy Industrial and is within the IH – Heavy Industrial Zone District. In general, the Project site is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. As a result, the area is predominately characterized by industrial uses as well as typical infrastructure such as roadways and utilities.

DISCUSSION

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)?

Less than Significant Impact. Well sites are commonly located adjacent to residential, commercial, and industrial uses. In this case, the proposed well site is adjacent to existing and future industrial uses. Because the area is currently undergoing development, there is existing infrastructure in place such as roadways and utilities and the Project does not propose any new roadways or utilities. Further, the Project area is planned for growth in development of industrial uses. The Project is consistent with the planned land use

designation and zoning district for this area and would not require extension of roads or utilities. In addition, the Project does not represent a significant change in the surrounding area as it will develop a vacant and undeveloped property with a use that is compatible with the planned and existing land uses within the area. For these reasons, the Project would not induce substantial unplanned population growth directly or indirectly and would therefore have a less than significant impact.

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

Less than Significant Impact. The Project site is undeveloped, vacant, and planned for industrial uses. Adjacent properties are undergoing development for industrial uses. Construction of the water well supply pump station on an undeveloped, vacant site planned for industrial uses within an industrial area would not displace people or housing. Therefore, the Project would have a less than significant impact.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:			X	
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?				X
iv. Parks?			X	
v. Other public facilities?				X

ENVIRONMENTAL SETTING

The Project is located within the incorporated area of Fresno and consists of the development of a water supply well system. No residences or businesses are proposed.

DISCUSSION

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection? **Less than Significant Impact.** The subject site is located

within two (2) miles of Fire Station No. 7. The Project would require a review and permit from City Fire and/or County Environmental Health for hazardous materials storage on-site. A permit is also required for the above ground fuel tank located inside the future generator. The installation of the generator must meet the requirements of the City of Fresno Fire Prevention Bureau Policy 01-32 and the Fire Department would require access to the site. As a condition of project approval, bypass locks would be required for all gates to allow emergency access to the site. For these reasons, the Project would not result in the need for new or expanded fire protection services and thereby would have a less than significant impact.

ii. Police protection? **Less than Significant Impact.** The subject site is located within three (3) miles of the southeast Police Station. Due to the nature of the Project (i.e., an unmanned water supply well pump station), the Project would result in few (if any) calls for service and thereby would have a less than significant impact.

iii. Schools? **No Impact.** The Project does not include residential development that would generate a new population that would require any additional services and thereby would not result in the need for new or expanded school facilities. In addition, because the Project is a public facility, it is exempt from school fees.

iv. Parks? **Less than Significant Impact.** The Project site is located within a developing industrial area and, the Project itself would not result in new employees or residents. Thereby would not result in the need for new or expanded park facilities. However, to mitigate any potential impacts, the Project is subject to required impact fees at the time building permits are obtained.

v. Other public facilities? **No Impact.** As previously described, the Project would construct a water supply well on a vacant lot. The Project itself would not result in an increase in employees or residents that would require other public services such as libraries or post offices. Therefore, the Project would not result in the need for new or physically altered facilities to provide other public services.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the public service-related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION - Would the project:				
a) 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?			X	
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?			X	

ENVIRONMENTAL SETTING

The Project is located on an undeveloped and vacant site that is planned for Employment – Heavy Industrial and is within the IH – Heavy Industrial Zone District. In general, the Project site is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites. As a result, the area is predominately characterized by industrial uses. There are no existing or planned parks within the Project vicinity.

DISCUSSION

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

Less than Significant Impact. Park and recreational facilities are typically impacted by an increase in use from proposed residential development. Because of the nature of the Project, a water supply well pump station, and the characteristics of the Project area (i.e., industrial), there would be no increased demand for recreational services associated with the Project; rather, the Project would serve existing and planned uses for the Project area.

However, to mitigate any potential impacts, the Project is subject to required impact fees at the time building permits are obtained. Therefore, the Project would have a less than significant impact on the physical condition of existing recreational facilities.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less than Significant Impact. Given that the Project would not cause an increased need for recreational facilities, as described under item (a), the Project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. In addition, the Project does not propose parks or recreational facilities. However, to mitigate any potential impacts, the Project is subject to required impact fees at the time building permits are obtained. Therefore, the Project would have a less than significant impact in this regard.

Mitigation Measures
None Required.

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

ENVIRONMENTAL SETTING

Under Senate Bill 743 (SB 743), traffic impacts are related to Vehicle Miles Traveled (VMT). The VMT metric became mandatory on July 1, 2020. The Fresno Council of Governments (COG) produced the "Fresno County SB 743 Implementation Regional Guidelines" in July 2020 to provide regional guidance and recommendations for local agencies regarding VMT analysis, project screening, significance thresholds, and mitigation strategies.[10] For local thresholds and guidelines, the City of Fresno adopted the "CEQA Guidelines for Vehicle Miles Traveled Thresholds" on June 25, 2020, which provide Fresno-specific VMT thresholds and guidelines for VMT CEQA traffic analyses of projects and plans.[11] Both guidance documents are based on the Office of Planning and

[10] Fresno Council of Governments. 2020. Fresno County SB 743 Implementation Regional Guidelines. Accessed April 29, 2021, https://www.fresnocog.org/wp-content/uploads/2020/07/Fresno-COG-VMT-Report-1.pdf#nameddest=proj-screening

[11] City of Fresno. 2020. CEQA Guidelines for Vehicle Miles Traveled Thresholds. Accessed April 29, 2021, https://www.fresno.gov/darm/wp-content/uploads/sites/10/2021/01/CEQA-Guidelines-for-Vehicle-Miles-Traveled-Final-Adopted-Version.pdf

Research's "Technical Advisory on Evaluating Transportation Impacts in CEQA" that was produced in 2018.[12]

According to the guidance for VMT CEQA traffic analyses, the first step is to determine if a project can be screened out using the project screening criteria. The following criteria are most applicable to the Project given the type of development and its location.

1. **The project is located in a low-VMT zone (residential and office projects only).** The City of Fresno has elected to use the County as the region. The City of Fresno established a threshold for land use developments, specifically residential and office/industrial of 13 percent or more than the existing regional VMT per capita as indicative of a significant environmental impact. The Fresno COG developed the Fresno County – VMT Screening Application (i.e., the region-wide screening map) for use by local agencies in determining project VMT zones.

2. **Project is a low trip generator (i.e. less than 500 daily trips generated).** The City of Fresno's threshold is based on the OPR recommendation of a volume of 110 average daily trips (ADT). This recommendation is based on a CEQA categorical exemption regarding development in an area where public infrastructure is available to allow for a maximum planned development and where the project is not located in an environmentally sensible area.

DISCUSSION

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

Less than Significant Impact. As mentioned above, LOS is not to be considered as a threshold of significance when looking at traffic impacts; however, a brief analysis is provided because of the City's General Plan policy related to maintaining acceptable LOS. The Project would be required to comply with all project level requirements implemented by a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. The Project, during entitlement review, would be required to incorporate design standards and conditions contained in the Fresno Municipal Code and General Plan, some of which are intended

[12] Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Accessed April 29, 2021, https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

to increase alternative modes of travel by requiring street design that accommodates multi-modal transportation facilities. Thus, it can be determined that the Project would not conflict with a transportation related plan, policy or ordinance and the impact would be less than significant.

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

Vehicle Miles Traveled:

Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, dated June 25, 2020, pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can

be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The proposed Project is eligible to screen out because as shown in **Figure 17.1**, the Project site is categorized as "Low," meaning that the parcel average VMT/employee is more than 13% lower than the regional average. Regarding ADT, the estimated vehicle trips to the Project site are minimal and include a single vehicle for weekly well maintenance, bi-monthly chlorine deliveries, and monthly landscape maintenance. As such, the Project would generate only occasional maintenance vehicle trips to the site which would be less than expected for an industrial use and thereby less than the threshold volume of 110 ADT. In addition, the Project site is within an area that has existing public infrastructure (i.e., roadways) and is not within an environmentally sensitive area. For these reasons, the Project would not conflict or be inconsistent with CEQA and instead, would have a less than significant impact as it relates to VMT.

In conclusion, the Project will result in a less than significant VMT impact and is consistent with CEQA Guidelines section 15064.3(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)?

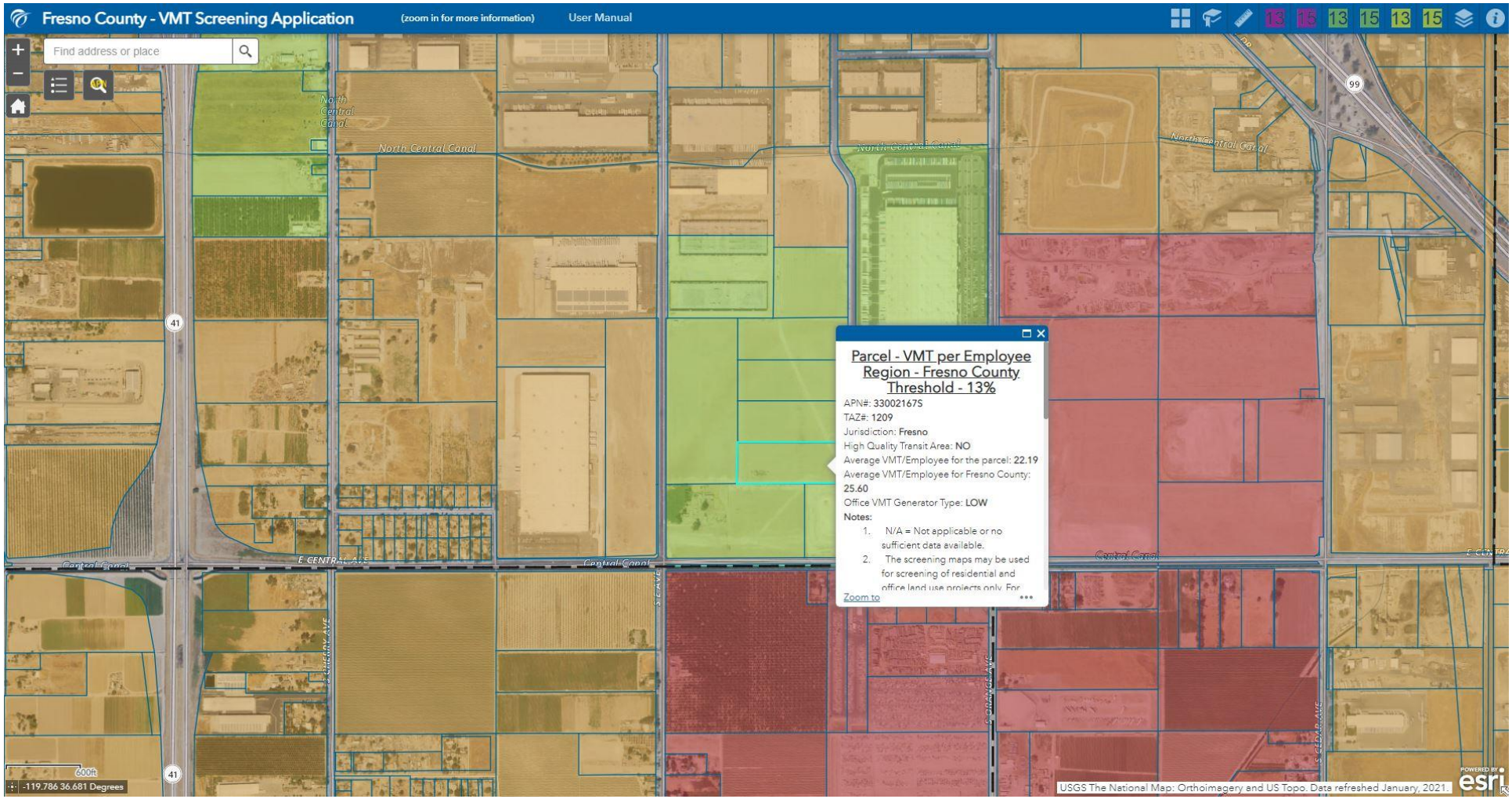
Less than Significant Impact. The Project design does not contain any features that would create a hazard or incompatible uses. The Project site is within an area that is undergoing development of industrial uses on vacant sites, and as a result, is within an area with typical infrastructure such as roadways that have been previously constructed to City roadway standards. Further, the Project does not propose any incompatible uses as it is consistent with the planned land use designation and zoning district. In addition, the Project has been reviewed and conditioned by the Fire Department and Department of Public Works to ensure that the site layout conforms to applicable regulations and codes. Therefore, the Project would be consistent with and adhere to design and site layout guidelines and would thereby have a less than significant impact.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project does not involve a change to any emergency response plan. Access points to the Project site have been reviewed and conditioned by the Fire Department and Department of Public Works to ensure that the site layout conforms to applicable regulations and codes, and thereby would remain accessible to emergency vehicles for emergency access. Thus, the Project would have a less than significant impact.

Mitigation Measures
None Required.

Figure 17.1. Fresno County – VMT Screening Threshold, Project Site



ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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:			X	
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,				X
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 PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

ENVIRONMENTAL SETTING

Assembly Bill 52 (AB 52) requires consultation with California Native American tribes during the CEQA process to determine potential effects of proposed projects on a tribal cultural resource. Pursuant to Public Resources Code (PRC) Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias.

Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Currently, the Table Mountain Rancheria Tribe and the Dumna Wo Wah Tribe have requested to be notified pursuant to AB 52. On March 22, 2021, consistent with AB 52, invitations to consult on the Project were mailed to the two (2) tribes within the Project area. Pursuant to AB 52, tribes have up to 30 days to request consultation. No requests for consultation were requested during that time. The 30-day period ended on April 20, 2021. Both tribes did not request consultation.

Further, Peak & Associates, Inc. conducted a records search and map review on April 6, 2021. The records search was conducted through the Southern San Joaquin Valley Information Center, determining that a portion of the site had been surveyed in 2014 for the South Fresno Economic Development Project Work Area for which construction is now underway. The closest resource identified was a segment of the Central Canal, 0.10 miles south of the Project site. The historical map review showed no natural water course, buildings, or structures in or near the Project area. Overall, the resulting Cultural

Resources Evaluation Technical Memo determined that for these reasons, no further cultural resources studies are warranted or needed.

DISCUSSION

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

No Impact. As discussed in the Cultural Resources section, the Project site does not contain any property or site features that are eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k). As such, the Project would have no impact.

    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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact. As mentioned above, the City invited two (2) tribes to consult on the Project under AB 52. No tribes requested consultation within the 30-day response period. While there is no evidence that tribal cultural resources exist on the Project site, there is some possibility that hidden and buried resources may exist in the area with no surface evidence. In the event of the accidental discovery and recognition of previously unknown resources before or during grading activities, the proposed project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in the General Plan MEIR. With incorporation of these measures, the Project would have a less than significant impact.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. 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 effect?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water 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?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

ENVIRONMENTAL SETTING

The Project proposes the construction of a water supply well pump station to supply potable water via upgrades to the water supply system. No residential uses are proposed as part of this Project; and, the Project is within an area predominately characterized by existing and future industrial uses. Furthermore, given the nature of the Project, operations would be controlled remotely with limited staff visits for maintenance and check-ins.

DISCUSSION

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

Less than Significant Impact. The Project would have a less than significant impact on water, wastewater, stormwater drainage facilities, electrical power, natural gas, and telecommunications facilities and would not result in the construction or relocation of which could cause significant environmental effects:

i. **Water.** The purpose of the Project is to enable the City to supply potable water through upgrades to the water supply system, by constructing a new water supply well pump station. As discussed in Section 9, Hydrology and Water Quality, implementation of the General Plan policies, multiple regional, area and City water management planning documents, and the applicable mitigation measures of approved environmental review documents will address the issues of providing an adequate, reliable, and sustainable water supply for the project's urban domestic and public safety consumptive purposes. The installation and operation of the well and wellhead treatment will ensure an available supply of potable water. Thus, operation of the well will not in and of itself signify a corresponding increase in groundwater use. Therefore, the Project would have a less than significant impact on water facilities.

ii. **Wastewater.** The Project would include a new wastewater connection to account for wastewater generated from any chlorine injection. However, the wastewater generated would be minimal as the Project proposes the construction and operation of a water supply well pump station which would be operated remotely. Therefore, staff visits to the site would be limited to maintenance and check-ins on the facility. Further, the Department of Public

Utilities reviewed the Project and confirmed that sanitary sewer facilities are available to provide service to the Project site subject to installation requirements. For these reasons, impacts related to wastewater treatment capacity would be less than significant.

iii. **Stormwater Drainage Facilities.** Storm water facilities have been provided to the Project site as improvements required for development of the Project area and are currently in place. The new well would connect to existing water mains and facilities located within existing public street rights-of-way and subsequently connected to the existing public water infrastructure. Therefore, the Project would have a less than significant impact on stormwater drainage facilities.

iv. **Electrical Power.** The Project would be served by PG&E and would not require extensions of energy infrastructure or new energy supplies. Therefore, the Project would not result in impacts related to electrical power.

v. **Natural Gas.** The Project does not include any natural gas utility improvements. Therefore, the Project would not require or result in the relocation or construction of new or expanded natural gas facilities. As such, the Project would not result in impacts related to natural gas.

vi. **Telecommunications.** Given the nature of the Project (i.e., water supply well pump station), the Project would not increase the demand for telecommunications facilities, nor would the Project require or result in the relocation or construction of new or expanded telecommunications facilities. Therefore, the Project would not result in impacts related to telecommunications.

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

Less than Significant Impact. As stated in criteria (a) above, the Project would ensure an available supply of potable water within an area that is undergoing development. Thus, operation of the well will not in and of itself signify a corresponding increase in groundwater use and therefore, the Project would have a less than significant impact.

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

Last than Significant Impact. The Project proposes the construction and operation of a water supply well pump station which would be operated remotely. Therefore, staff visits to the site would be limited to maintenance and check-ins on the facility. Furthermore, the Project would not include new wastewater connections and as a result, impacts related to wastewater treatment capacity are not applicable. For these reasons, the Project would have a less than significant impact.

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

Less than Significant Impact. The Project site is vacant and undeveloped and has been cleared and modified to accommodate storage of construction equipment for development adjacent to the site. Therefore, Project construction is not expected to generate significant amounts of solid waste during construction given that there are no existing structures or features on-site. In addition, operation of the Project would occur remotely and there would be no on-site staff. As a result, the Project operations would not generate substantial amounts of solid waste. Therefore, any solid waste generated by the Project would be limited due to the nature of the use. Section VIII, for hazardous wastes requires a Hazardous Materials Business Plan relating to the procedures and safe operation of the proposed GAC facilities being prepared by the UP&E and approved by the County Environmental Health Department prior to commencement of operation of the GAC facilities. This Hazardous Materials Business Plan details all necessary procedures and safety measures in the event of an emergency or the remote possibility that an accidental release of spent carbon may occur. For these reasons, the Project would have a less than significant impact.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. As mentioned above, the Project construction and operations would not generate substantial amounts of solid waste and thus, the Project would not conflict with any federal, state, and local management and reduction statutes and regulations related to solid waste. If solid waste is generated, the Project would be subject to compliance with existing and future statutes and regulations by the City, state, or federal law. Therefore, the Project would have a less than significant impact.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the utilities and service systems related mitigation measures as identified in the attached MEIR Mitigation Monitoring and Reporting Program dated June 21, 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. 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?			X	
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?			X	
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?				X
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?				X

ENVIRONMENTAL SETTING

Fresno is largely categorized as having little or no threat or moderate fire hazard, which is attributed to its impervious surface areas. The areas that are prone to wildfires are along the San Joaquin River Bluff due to steep terrain and vegetation.

DISCUSSION

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

Less than Significant Impact. The Project would be required to comply with adopted emergency response plans. As such, any wildfire risk to the Project or people would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant Impact. The Project site is several miles south of the San Joaquin River Bluff. Furthermore, the Project site is not identified by the California Department of Forestry and Fire Protection (Cal Fire), as a Very High Fire Hazard Severity Zone (VHFHSZ) and is within an area of local responsibility.[13] Given that the area in question is not considered a wildland, is not in a VHFHSZ, and would not be inhabited by people, the project would not expose people or structures to a significant risk involving wildfires. In terms of urban fires, the Project would be constructed in compliance with fire code standards including emergency access. Prior to occupancy, the City would ensure proper operation. Therefore, the proposed project would have a less than significant impact.

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?

No Impact. The Project is located within a developing industrial area of the city and is surrounded by existing industrial uses and ongoing industrial development of vacant sites and thus will not require the installation or maintenance of facilities that may exacerbate fire risk or result in 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?

[13] Cal Fire, "FHSZ Viewer." Accessed on April 16, 2021, https://egis.fire.ca.gov/FHSZ/.

No Impact. The Project site is an infill property adjacent to existing industrial uses and ongoing industrial development of vacant sites. Further, the site is relatively flat. Therefore, the Project would have no impact given the highly developed nature of the area, the lack of slopes, and lack of conditions that increase wildfire risk.

Mitigation Measures
None Required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to 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, 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?			X	
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

DISCUSSION

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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. The analyses of environmental issues contained in this Initial Study indicate that the proposed project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Standard requirements that will be implemented through the tentative tract map process will be incorporated in the project to reduce all potentially significant impacts to less than significant. In addition, General Plan MEIR Mitigation measures and project specific mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to less than significant Therefore, the proposed project would have a less than significant impact.

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

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All project-related impacts were determined to be less than significant. The proposed project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). As such, project impacts are not considered to be cumulatively considerable given the insignificance of project induced impacts. The impact is therefore less than significant.

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

Less than Significant Impact. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Standard requirements and conditions have been incorporated in the project to reduce all potentially significant impacts to less than significant. Therefore, the proposed project would have a less than significant impact.

References

Pursuant to CEQA Guidelines Section 15063(a)(3), the following expert opinion, technical studies, and substantial evidence has been referenced and/or cited in the discussion included in the Initial Study.

Cal Fire, “FHSZ Viewer.”

California Department of Conservation, “California Important Farmland Finder.”

California Department of Conservation, “EQ Zapp: California Earthquake Hazards Zone Application.”

California Department of Fish and Wildlife, “Biogeographic Information and Observation System.”

California Department of General Services, “CALGreen.”

California Energy Commission, “2019 Building Energy Efficiency Standards.”

California Environmental Protection Agency. (2005). Air Quality and Land Use Handbook: A Community Health Perspective.

Caltrans, “Scenic Highways,” California Department of Transportation.

City of Fresno. (2020). Program Environmental Impact Report, Public Review Draft.

City of Fresno. (2020). CEQA Guidelines for Vehicle Miles Traveled Thresholds.

City of Fresno, California. (2014). City of Fresno General Plan.

City of Fresno, California. (2021). City of Fresno Municipal Code.

Fresno Council of Governments. (2020). Fresno County – VMT Screening Application.

Fresno Council of Governments. (2020). Fresno County SB 743 Implementation Regional Guidelines.

Fresno County Airport Land Use Compatibility Plan (2018)

Office of Planning and Research. (2018). Technical Advisory on Evaluating Transportation Impacts in CEQA.

San Joaquin Valley Air Pollution Control District. (2000). Environmental Review Guidelines: Procedures for Implementing the California Environmental Quality Act.

San Joaquin Valley Air Pollution Control District. (2015). Guidance for Assessing and Mitigating Air Quality Impacts.

San Joaquin Valley Air Pollution Control District. (2009). Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA.

US Department of Agriculture, Natural Resources Conservation Service, “Web Soil Survey.”

USGS, “National Wetlands Inventory.”

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Appendix A: CalEEMOD Results Summary (Annual & BAU)

Performed by Precision Civil Engineering, Inc. on April 21, 2021, CalEEMod Version 2016.3.2.

Pump Station 372

Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No structures on site, so demolition is not required.

Demolition -

Trips and VMT - No demolition is required.

Vehicle Trips - The facility is unmanned and does not have any employees or visitors.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	10/15/2021	10/3/2021
tblTripsAndVMT	WorkerTripNumber	10.00	0.00
tblVehicleTrips	ST_TR	1.32	0.00
tblVehicleTrips	SU_TR	0.68	0.00
tblVehicleTrips	WD_TR	6.97	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0221	0.2250	0.2036	3.4000e-004	2.7100e-003	0.0122	0.0149	9.0000e-004	0.0113	0.0122	0.0000	30.0049	30.0049	8.9400e-003	0.0000	30.2285
2022	0.1237	0.1925	0.1990	3.4000e-004	1.8500e-003	9.8900e-003	0.0117	5.0000e-004	9.1300e-003	9.6300e-003	0.0000	29.5267	29.5267	8.6800e-003	0.0000	29.7437
Maximum	**0.1237**	**0.2250**	**0.2036**	**3.4000e-004**	**2.7100e-003**	**0.0122**	**0.0149**	**9.0000e-004**	**0.0113**	**0.0122**	**0.0000**	**30.0049**	**30.0049**	**8.9400e-003**	**0.0000**	**30.2285**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0221	0.2250	0.2036	3.4000e-004	2.7100e-003	0.0122	0.0149	9.0000e-004	0.0113	0.0122	0.0000	30.0049	30.0049	8.9400e-003	0.0000	30.2285
2022	0.1237	0.1925	0.1990	3.4000e-004	1.8500e-003	9.8900e-003	0.0117	5.0000e-004	9.1300e-003	9.6300e-003	0.0000	29.5267	29.5267	8.6800e-003	0.0000	29.7436
Maximum	**0.1237**	**0.2250**	**0.2036**	**3.4000e-004**	**2.7100e-003**	**0.0122**	**0.0149**	**9.0000e-004**	**0.0113**	**0.0122**	**0.0000**	**30.0049**	**30.0049**	**8.9400e-003**	**0.0000**	**30.2285**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-4-2021	1-3-2022	0.2557	0.2557
2	1-4-2022	4-3-2022	0.3100	0.3100
		Highest	0.3100	0.3100

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0690	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	55.1931	55.1931	2.0600e-003	6.7000e-004	55.4432
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1005	5.4602	6.5607	0.1133	2.7200e-003	10.2032
Total	**0.0707**	**0.0154**	**0.0130**	**9.0000e-005**	**0.0000**	**1.1700e-003**	**1.1700e-003**	**0.0000**	**1.1700e-003**	**1.1700e-003**	**4.8761**	**60.6536**	**65.5297**	**0.3385**	**3.3900e-003**	**75.0006**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0690	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Energy	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	55.1931	55.1931	2.0600e-003	6.7000e-004	55.4432
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1005	5.4602	6.5607	0.1133	2.7200e-003	10.2032
Total	**0.0707**	**0.0154**	**0.0130**	**9.0000e-005**	**0.0000**	**1.1700e-003**	**1.1700e-003**	**0.0000**	**1.1700e-003**	**1.1700e-003**	**4.8761**	**60.6536**	**65.5297**	**0.3385**	**3.3900e-003**	**75.0006**

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

3.0 Construction Detail

Construction Phase

Pump Station 372 - Fresno County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/4/2021	10/3/2021	5	0	
2	Site Preparation	Site Preparation	10/16/2021	10/18/2021	5	1	
3	Grading	Grading	10/19/2021	10/20/2021	5	2	
4	Building Construction	Building Construction	10/21/2021	3/9/2022	5	100	
5	Paving	Paving	3/10/2022	3/16/2022	5	5	
6	Architectural Coating	Architectural Coating	3/17/2022	3/23/2022	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

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

3.2 Demolition - 2021

Unmitigated Construction Off-Site

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

Mitigated Construction On-Site

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

3.2 Demolition - 2021

Mitigated Construction Off-Site

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

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	**3.2000e-004**	**3.9100e-003**	**2.0100e-003**	**0.0000**	**2.7000e-004**	**1.5000e-004**	**4.2000e-004**	**3.0000e-005**	**1.4000e-004**	**1.7000e-004**	**0.0000**	**0.4276**	**0.4276**	**1.4000e-004**	**0.0000**	**0.4310**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0167	0.0167	0.0000	0.0000	0.0167
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0167**	**0.0167**	**0.0000**	**0.0000**	**0.0167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2000e-004	3.9100e-003	2.0100e-003	0.0000		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	0.4276	0.4276	1.4000e-004	0.0000	0.4310
Total	**3.2000e-004**	**3.9100e-003**	**2.0100e-003**	**0.0000**	**2.7000e-004**	**1.5000e-004**	**4.2000e-004**	**3.0000e-005**	**1.4000e-004**	**1.7000e-004**	**0.0000**	**0.4276**	**0.4276**	**1.4000e-004**	**0.0000**	**0.4310**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0167	0.0167	0.0000	0.0000	0.0167
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0167**	**0.0167**	**0.0000**	**0.0000**	**0.0167**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	**8.0000e-004**	**7.2500e-003**	**7.5700e-003**	**1.0000e-005**	**7.5000e-004**	**4.1000e-004**	**1.1600e-003**	**4.1000e-004**	**3.9000e-004**	**8.0000e-004**	**0.0000**	**1.0409**	**1.0409**	**1.9000e-004**	**0.0000**	**1.0458**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0668	0.0668	0.0000	0.0000	0.0669
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0668**	**0.0668**	**0.0000**	**0.0000**	**0.0669**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.2500e-003	7.5700e-003	1.0000e-005		4.1000e-004	4.1000e-004		3.9000e-004	3.9000e-004	0.0000	1.0409	1.0409	1.9000e-004	0.0000	1.0458
Total	**8.0000e-004**	**7.2500e-003**	**7.5700e-003**	**1.0000e-005**	**7.5000e-004**	**4.1000e-004**	**1.1600e-003**	**4.1000e-004**	**3.9000e-004**	**8.0000e-004**	**0.0000**	**1.0409**	**1.0409**	**1.9000e-004**	**0.0000**	**1.0458**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0668	0.0668	0.0000	0.0000	0.0669
Total	**4.0000e-005**	**2.0000e-005**	**2.5000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0668**	**0.0668**	**0.0000**	**0.0000**	**0.0669**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0202	0.2076	0.1889	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0213	26.0213	8.4200e-003	0.0000	26.2317
Total	**0.0202**	**0.2076**	**0.1889**	**3.0000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**26.0213**	**26.0213**	**8.4200e-003**	**0.0000**	**26.2317**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.8500e-003	8.9000e-004	1.0000e-005	3.4000e-004	2.0000e-005	3.6000e-004	1.0000e-004	2.0000e-005	1.1000e-004	0.0000	1.3892	1.3892	1.7000e-004	0.0000	1.3934
Worker	6.2000e-004	3.8000e-004	3.9300e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0424	1.0424	3.0000e-005	0.0000	1.0431
Total	**7.8000e-004**	**6.2300e-003**	**4.8200e-003**	**2.0000e-005**	**1.5900e-003**	**3.0000e-005**	**1.6100e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.4316**	**2.4316**	**2.0000e-004**	**0.0000**	**2.4364**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0202	0.2076	0.1889	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0213	26.0213	8.4200e-003	0.0000	26.2317
Total	**0.0202**	**0.2076**	**0.1889**	**3.0000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**26.0213**	**26.0213**	**8.4200e-003**	**0.0000**	**26.2317**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.8500e-003	8.9000e-004	1.0000e-005	3.4000e-004	2.0000e-005	3.6000e-004	1.0000e-004	2.0000e-005	1.1000e-004	0.0000	1.3892	1.3892	1.7000e-004	0.0000	1.3934
Worker	6.2000e-004	3.8000e-004	3.9300e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2500e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0424	1.0424	3.0000e-005	0.0000	1.0431
Total	**7.8000e-004**	**6.2300e-003**	**4.8200e-003**	**2.0000e-005**	**1.5900e-003**	**3.0000e-005**	**1.6100e-003**	**4.3000e-004**	**3.0000e-005**	**4.5000e-004**	**0.0000**	**2.4316**	**2.4316**	**2.0000e-004**	**0.0000**	**2.4364**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.1686	0.1717	2.7000e-004		8.9300e-003	8.9300e-003		8.2100e-003	8.2100e-003	0.0000	24.0355	24.0355	7.7700e-003	0.0000	24.2298
Total	**0.0165**	**0.1686**	**0.1717**	**2.7000e-004**		**8.9300e-003**	**8.9300e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**24.0355**	**24.0355**	**7.7700e-003**	**0.0000**	**24.2298**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	5.1200e-003	7.6000e-004	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2701	1.2701	1.5000e-004	0.0000	1.2738
Worker	5.3000e-004	3.1000e-004	3.3100e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9277	0.9277	2.0000e-005	0.0000	0.9282
Total	**6.6000e-004**	**5.4300e-003**	**4.0700e-003**	**2.0000e-005**	**1.4700e-003**	**2.0000e-005**	**1.4900e-003**	**4.0000e-004**	**2.0000e-005**	**4.1000e-004**	**0.0000**	**2.1977**	**2.1977**	**1.7000e-004**	**0.0000**	**2.2020**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0165	0.1686	0.1717	2.7000e-004		8.9300e-003	8.9300e-003		8.2100e-003	8.2100e-003	0.0000	24.0354	24.0354	7.7700e-003	0.0000	24.2298
Total	**0.0165**	**0.1686**	**0.1717**	**2.7000e-004**		**8.9300e-003**	**8.9300e-003**		**8.2100e-003**	**8.2100e-003**	**0.0000**	**24.0354**	**24.0354**	**7.7700e-003**	**0.0000**	**24.2298**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	5.1200e-003	7.6000e-004	1.0000e-005	3.2000e-004	1.0000e-005	3.3000e-004	9.0000e-005	1.0000e-005	1.0000e-004	0.0000	1.2701	1.2701	1.5000e-004	0.0000	1.2738
Worker	5.3000e-004	3.1000e-004	3.3100e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9277	0.9277	2.0000e-005	0.0000	0.9282
Total	**6.6000e-004**	**5.4300e-003**	**4.0700e-003**	**2.0000e-005**	**1.4700e-003**	**2.0000e-005**	**1.4900e-003**	**4.0000e-004**	**2.0000e-005**	**4.1000e-004**	**0.0000**	**2.1977**	**2.1977**	**1.7000e-004**	**0.0000**	**2.2020**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0148	0.0176	3.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	2.3492	2.3492	6.8000e-004	0.0000	2.3663
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6200e-003**	**0.0148**	**0.0176**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.3492**	**2.3492**	**6.8000e-004**	**0.0000**	**2.3663**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2899	0.2899	1.0000e-005	0.0000	0.2901
Total	**1.7000e-004**	**1.0000e-004**	**1.0300e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2899**	**0.2899**	**1.0000e-005**	**0.0000**	**0.2901**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6200e-003	0.0148	0.0176	3.0000e-005		7.4000e-004	7.4000e-004		6.9000e-004	6.9000e-004	0.0000	2.3492	2.3492	6.8000e-004	0.0000	2.3663
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.6200e-003**	**0.0148**	**0.0176**	**3.0000e-005**		**7.4000e-004**	**7.4000e-004**		**6.9000e-004**	**6.9000e-004**	**0.0000**	**2.3492**	**2.3492**	**6.8000e-004**	**0.0000**	**2.3663**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7000e-004	1.0000e-004	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2899	0.2899	1.0000e-005	0.0000	0.2901
Total	**1.7000e-004**	**1.0000e-004**	**1.0300e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**0.2899**	**0.2899**	**1.0000e-005**	**0.0000**	**0.2901**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1043					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.1048**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0161	0.0161	0.0000	0.0000	0.0161
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0161**	**0.0161**	**0.0000**	**0.0000**	**0.0161**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1043					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1000e-004	3.5200e-003	4.5300e-003	1.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	**0.1048**	**3.5200e-003**	**4.5300e-003**	**1.0000e-005**		**2.0000e-004**	**2.0000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**0.6383**	**0.6383**	**4.0000e-005**	**0.0000**	**0.6394**

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	6.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0161	0.0161	0.0000	0.0000	0.0161
Total	**1.0000e-005**	**1.0000e-005**	**6.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0161**	**0.0161**	**0.0000**	**0.0000**	**0.0161**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.492212	0.031147	0.169820	0.116157	0.015815	0.004502	0.033398	0.126328	0.002363	0.001519	0.005062	0.001083	0.000594

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38.4876	38.4876	1.7400e-003	3.6000e-004	38.6384
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38.4876	38.4876	1.7400e-003	3.6000e-004	38.6384
NaturalGas Mitigated	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
NaturalGas Unmitigated	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	313050	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
Total		**1.6900e-003**	**0.0154**	**0.0129**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.7055**	**16.7055**	**3.2000e-004**	**3.1000e-004**	**16.8048**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	313050	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
Total		**1.6900e-003**	**0.0154**	**0.0129**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.7055**	**16.7055**	**3.2000e-004**	**3.1000e-004**	**16.8048**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	132300	38.4876	1.7400e-003	3.6000e-004	38.6384
Total		**38.4876**	**1.7400e-003**	**3.6000e-004**	**38.6384**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	132300	38.4876	1.7400e-003	3.6000e-004	38.6384
Total		**38.4876**	**1.7400e-003**	**3.6000e-004**	**38.6384**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0690	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Unmitigated	0.0690	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**0.0690**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	2.9000e-004
Total	**0.0690**	**0.0000**	**1.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**2.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.5607	0.1133	2.7200e-003	10.2032
Unmitigated	6.5607	0.1133	2.7200e-003	10.2032

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	6.5607	0.1133	2.7200e-003	10.2032
Total		**6.5607**	**0.1133**	**2.7200e-003**	**10.2032**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	6.5607	0.1133	2.7200e-003	10.2032
Total		**6.5607**	**0.1133**	**2.7200e-003**	**10.2032**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7756	0.2231	0.0000	9.3540
Unmitigated	3.7756	0.2231	0.0000	9.3540

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	9.3540
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	9.3540
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Pump Station 372

Fresno County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	15.00	1000sqft	0.34	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2005
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Demolition -

Trips and VMT - No demolition is required.

Vehicle Trips - The facility is unmanned and does not have any employees or visitors.

Architectural Coating -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	0.3700	1.1877	0.5946	8.4200e-003	4.9600e-003	0.0971	0.1020	1.5100e-003	0.0970	0.0985	0.0000	76.9329	76.9329	0.0167	0.0000	77.3499
Maximum	**0.3700**	**1.1877**	**0.5946**	**8.4200e-003**	**4.9600e-003**	**0.0971**	**0.1020**	**1.5100e-003**	**0.0970**	**0.0985**	**0.0000**	**76.9329**	**76.9329**	**0.0167**	**0.0000**	**77.3499**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2005	0.3700	1.1877	0.5946	8.4200e-003	4.9600e-003	0.0971	0.1020	1.5100e-003	0.0970	0.0985	0.0000	76.9328	76.9328	0.0167	0.0000	77.3498
Maximum	**0.3700**	**1.1877**	**0.5946**	**8.4200e-003**	**4.9600e-003**	**0.0971**	**0.1020**	**1.5100e-003**	**0.0970**	**0.0985**	**0.0000**	**76.9328**	**76.9328**	**0.0167**	**0.0000**	**77.3498**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-3-2005	4-2-2005	0.7438	0.7438
2	4-3-2005	7-2-2005	0.8023	0.8023
		Highest	0.8023	0.8023

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0690	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004
Energy	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	55.1931	55.1931	2.0600e-003	6.7000e-004	55.4432
Mobile	0.1656	1.1266	1.5689	8.2200e-003	0.0885	0.0278	0.1163	0.0239	0.0266	0.0505	0.0000	159.2768	159.2768	0.0410	0.0000	160.3005
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1005	5.4602	6.5607	0.1133	2.7200e-003	10.2032
Total	**0.2363**	**1.1419**	**1.5819**	**8.3100e-003**	**0.0885**	**0.0290**	**0.1175**	**0.0239**	**0.0278**	**0.0517**	**4.8761**	**219.9305**	**224.8066**	**0.3794**	**3.3900e-003**	**235.3012**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0690	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004
Energy	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	55.1931	55.1931	2.0600e-003	6.7000e-004	55.4432
Mobile	0.1656	1.1266	1.5689	8.2200e-003	0.0885	0.0278	0.1163	0.0239	0.0266	0.0505	0.0000	159.2768	159.2768	0.0410	0.0000	160.3005
Waste						0.0000	0.0000		0.0000	0.0000	3.7756	0.0000	3.7756	0.2231	0.0000	9.3540
Water						0.0000	0.0000		0.0000	0.0000	1.1005	5.4602	6.5607	0.1133	2.7200e-003	10.2032
Total	**0.2363**	**1.1419**	**1.5819**	**8.3100e-003**	**0.0885**	**0.0290**	**0.1175**	**0.0239**	**0.0278**	**0.0517**	**4.8761**	**219.9305**	**224.8066**	**0.3794**	**3.3900e-003**	**235.3012**

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

3.0 Construction Detail

Construction Phase

Pump Station 372 - Fresno County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/3/2005	1/14/2005	5	10	
2	Site Preparation	Site Preparation	1/15/2005	1/17/2005	5	1	
3	Grading	Grading	1/18/2005	1/19/2005	5	2	
4	Building Construction	Building Construction	1/20/2005	6/8/2005	5	100	
5	Paving	Paving	6/9/2005	6/15/2005	5	5	
6	Architectural Coating	Architectural Coating	6/16/2005	6/22/2005	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	6.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0157	0.0935	0.0444	6.6000e-004		8.0100e-003	8.0100e-003		8.0100e-003	8.0100e-003	0.0000	5.6973	5.6973	1.2800e-003	0.0000	5.7293
Total	**0.0157**	**0.0935**	**0.0444**	**6.6000e-004**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**0.0000**	**5.6973**	**5.6973**	**1.2800e-003**	**0.0000**	**5.7293**

3.2 Demolition - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	7.5000e-004	6.9400e-003	0.0000	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.1000e-004	0.0000	0.4170	0.4170	5.0000e-005	0.0000	0.4182
Total	**7.8000e-004**	**7.5000e-004**	**6.9400e-003**	**0.0000**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**1.1000e-004**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**0.4170**	**0.4170**	**5.0000e-005**	**0.0000**	**0.4182**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0157	0.0935	0.0444	6.6000e-004		8.0100e-003	8.0100e-003		8.0100e-003	8.0100e-003	0.0000	5.6973	5.6973	1.2800e-003	0.0000	5.7293
Total	**0.0157**	**0.0935**	**0.0444**	**6.6000e-004**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**0.0000**	**8.0100e-003**	**8.0100e-003**	**0.0000**	**5.6973**	**5.6973**	**1.2800e-003**	**0.0000**	**5.7293**

3.2 Demolition - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	7.5000e-004	6.9400e-003	0.0000	4.0000e-004	1.0000e-005	4.1000e-004	1.1000e-004	1.0000e-005	1.1000e-004	0.0000	0.4170	0.4170	5.0000e-005	0.0000	0.4182
Total	**7.8000e-004**	**7.5000e-004**	**6.9400e-003**	**0.0000**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**1.1000e-004**	**1.0000e-005**	**1.1000e-004**	**0.0000**	**0.4170**	**0.4170**	**5.0000e-005**	**0.0000**	**0.4182**

3.3 Site Preparation - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-003	7.9300e-003	2.8000e-003	6.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.5117	0.5117	8.0000e-005	0.0000	0.5138
Total	**1.0000e-003**	**7.9300e-003**	**2.8000e-003**	**6.0000e-005**	**2.7000e-004**	**4.7000e-004**	**7.4000e-004**	**3.0000e-005**	**4.7000e-004**	**5.0000e-004**	**0.0000**	**0.5117**	**0.5117**	**8.0000e-005**	**0.0000**	**0.5138**

3.3 Site Preparation - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0209	0.0209	0.0000	0.0000	0.0209
Total	**4.0000e-005**	**4.0000e-005**	**3.5000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0209**	**0.0209**	**0.0000**	**0.0000**	**0.0209**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0000e-003	7.9300e-003	2.8000e-003	6.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.5117	0.5117	8.0000e-005	0.0000	0.5138
Total	**1.0000e-003**	**7.9300e-003**	**2.8000e-003**	**6.0000e-005**	**2.7000e-004**	**4.7000e-004**	**7.4000e-004**	**3.0000e-005**	**4.7000e-004**	**5.0000e-004**	**0.0000**	**0.5117**	**0.5117**	**8.0000e-005**	**0.0000**	**0.5138**

3.3 Site Preparation - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0209	0.0209	0.0000	0.0000	0.0209
Total	**4.0000e-005**	**4.0000e-005**	**3.5000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0209**	**0.0209**	**0.0000**	**0.0000**	**0.0209**

3.4 Grading - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1400e-003	0.0187	8.8800e-003	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	1.1395	1.1395	2.6000e-004	0.0000	1.1459
Total	**3.1400e-003**	**0.0187**	**8.8800e-003**	**1.3000e-004**	**7.5000e-004**	**1.6000e-003**	**2.3500e-003**	**4.1000e-004**	**1.6000e-003**	**2.0100e-003**	**0.0000**	**1.1395**	**1.1395**	**2.6000e-004**	**0.0000**	**1.1459**

3.4 Grading - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.5000e-004	1.3900e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0834	0.0834	1.0000e-005	0.0000	0.0837
Total	**1.6000e-004**	**1.5000e-004**	**1.3900e-003**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0834**	**0.0834**	**1.0000e-005**	**0.0000**	**0.0837**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.5000e-004	0.0000	7.5000e-004	4.1000e-004	0.0000	4.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1400e-003	0.0187	8.8800e-003	1.3000e-004		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	1.1395	1.1395	2.6000e-004	0.0000	1.1459
Total	**3.1400e-003**	**0.0187**	**8.8800e-003**	**1.3000e-004**	**7.5000e-004**	**1.6000e-003**	**2.3500e-003**	**4.1000e-004**	**1.6000e-003**	**2.0100e-003**	**0.0000**	**1.1395**	**1.1395**	**2.6000e-004**	**0.0000**	**1.1459**

3.4 Grading - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.5000e-004	1.3900e-003	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0834	0.0834	1.0000e-005	0.0000	0.0837
Total	**1.6000e-004**	**1.5000e-004**	**1.3900e-003**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0834**	**0.0834**	**1.0000e-005**	**0.0000**	**0.0837**

3.5 Building Construction - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1579	0.9706	0.4395	6.8700e-003		0.0815	0.0815		0.0815	0.0815	0.0000	60.0010	60.0010	0.0129	0.0000	60.3232
Total	**0.1579**	**0.9706**	**0.4395**	**6.8700e-003**		**0.0815**	**0.0815**		**0.0815**	**0.0815**	**0.0000**	**60.0010**	**60.0010**	**0.0129**	**0.0000**	**60.3232**

3.5 Building Construction - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2000e-003	0.0350	0.0157	2.6000e-004	6.6000e-004	1.0200e-003	1.6900e-003	1.9000e-004	9.8000e-004	1.1700e-003	0.0000	2.7776	2.7776	1.0400e-003	0.0000	2.8035
Worker	4.6600e-003	4.5300e-003	0.0417	3.0000e-005	2.4000e-003	5.0000e-005	2.4500e-003	6.4000e-004	5.0000e-005	6.9000e-004	0.0000	2.5018	2.5018	3.0000e-004	0.0000	2.5094
Total	**7.8600e-003**	**0.0396**	**0.0574**	**2.9000e-004**	**3.0600e-003**	**1.0700e-003**	**4.1400e-003**	**8.3000e-004**	**1.0300e-003**	**1.8600e-003**	**0.0000**	**5.2794**	**5.2794**	**1.3400e-003**	**0.0000**	**5.3130**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1579	0.9706	0.4395	6.8700e-003		0.0815	0.0815		0.0815	0.0815	0.0000	60.0009	60.0009	0.0129	0.0000	60.3231
Total	**0.1579**	**0.9706**	**0.4395**	**6.8700e-003**		**0.0815**	**0.0815**		**0.0815**	**0.0815**	**0.0000**	**60.0009**	**60.0009**	**0.0129**	**0.0000**	**60.3231**

3.5 Building Construction - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2000e-003	0.0350	0.0157	2.6000e-004	6.6000e-004	1.0200e-003	1.6900e-003	1.9000e-004	9.8000e-004	1.1700e-003	0.0000	2.7776	2.7776	1.0400e-003	0.0000	2.8035
Worker	4.6600e-003	4.5300e-003	0.0417	3.0000e-005	2.4000e-003	5.0000e-005	2.4500e-003	6.4000e-004	5.0000e-005	6.9000e-004	0.0000	2.5018	2.5018	3.0000e-004	0.0000	2.5094
Total	**7.8600e-003**	**0.0396**	**0.0574**	**2.9000e-004**	**3.0600e-003**	**1.0700e-003**	**4.1400e-003**	**8.3000e-004**	**1.0300e-003**	**1.8600e-003**	**0.0000**	**5.2794**	**5.2794**	**1.3400e-003**	**0.0000**	**5.3130**

3.6 Paving - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9900e-003	0.0450	0.0213	3.3000e-004		3.4000e-003	3.4000e-003		3.4000e-003	3.4000e-003	0.0000	2.7483	2.7483	5.7000e-004	0.0000	2.7625
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9900e-003**	**0.0450**	**0.0213**	**3.3000e-004**		**3.4000e-003**	**3.4000e-003**		**3.4000e-003**	**3.4000e-003**	**0.0000**	**2.7483**	**2.7483**	**5.7000e-004**	**0.0000**	**2.7625**

3.6 Paving - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	6.8000e-004	6.2500e-003	0.0000	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.0000e-004	0.0000	0.3753	0.3753	5.0000e-005	0.0000	0.3764
Total	**7.0000e-004**	**6.8000e-004**	**6.2500e-003**	**0.0000**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**1.0000e-004**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**0.3753**	**0.3753**	**5.0000e-005**	**0.0000**	**0.3764**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.9900e-003	0.0450	0.0213	3.3000e-004		3.4000e-003	3.4000e-003		3.4000e-003	3.4000e-003	0.0000	2.7483	2.7483	5.7000e-004	0.0000	2.7625
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9900e-003**	**0.0450**	**0.0213**	**3.3000e-004**		**3.4000e-003**	**3.4000e-003**		**3.4000e-003**	**3.4000e-003**	**0.0000**	**2.7483**	**2.7483**	**5.7000e-004**	**0.0000**	**2.7625**

3.6 Paving - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	6.8000e-004	6.2500e-003	0.0000	3.6000e-004	1.0000e-005	3.7000e-004	1.0000e-004	1.0000e-005	1.0000e-004	0.0000	0.3753	0.3753	5.0000e-005	0.0000	0.3764
Total	**7.0000e-004**	**6.8000e-004**	**6.2500e-003**	**0.0000**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**1.0000e-004**	**1.0000e-005**	**1.0000e-004**	**0.0000**	**0.3753**	**0.3753**	**5.0000e-005**	**0.0000**	**0.3764**

3.7 Architectural Coating - 2005

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8800e-003	0.0107	5.2000e-003	7.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	0.6383	0.6383	1.5000e-004	0.0000	0.6422
Total	**0.1757**	**0.0107**	**5.2000e-003**	**7.0000e-005**		**9.6000e-004**	**9.6000e-004**		**9.6000e-004**	**9.6000e-004**	**0.0000**	**0.6383**	**0.6383**	**1.5000e-004**	**0.0000**	**0.6422**

3.7 Architectural Coating - 2005

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0209	0.0209	0.0000	0.0000	0.0209
Total	**4.0000e-005**	**4.0000e-005**	**3.5000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0209**	**0.0209**	**0.0000**	**0.0000**	**0.0209**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1738					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8800e-003	0.0107	5.2000e-003	7.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	0.6383	0.6383	1.5000e-004	0.0000	0.6422
Total	**0.1757**	**0.0107**	**5.2000e-003**	**7.0000e-005**		**9.6000e-004**	**9.6000e-004**		**9.6000e-004**	**9.6000e-004**	**0.0000**	**0.6383**	**0.6383**	**1.5000e-004**	**0.0000**	**0.6422**

3.7 Architectural Coating - 2005

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	4.0000e-005	3.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0209	0.0209	0.0000	0.0000	0.0209
Total	**4.0000e-005**	**4.0000e-005**	**3.5000e-004**	**0.0000**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**1.0000e-005**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0209**	**0.0209**	**0.0000**	**0.0000**	**0.0209**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1656	1.1266	1.5689	8.2200e-003	0.0885	0.0278	0.1163	0.0239	0.0266	0.0505	0.0000	159.2768	159.2768	0.0410	0.0000	160.3005
Unmitigated	0.1656	1.1266	1.5689	8.2200e-003	0.0885	0.0278	0.1163	0.0239	0.0266	0.0505	0.0000	159.2768	159.2768	0.0410	0.0000	160.3005

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	104.55	19.80	10.20	230,537	230,537
Total	104.55	19.80	10.20	230,537	230,537

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.415876	0.061183	0.150996	0.176036	0.035163	0.006973	0.031964	0.109874	0.002099	0.001787	0.005269	0.001212	0.001569

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38.4876	38.4876	1.7400e-003	3.6000e-004	38.6384
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	38.4876	38.4876	1.7400e-003	3.6000e-004	38.6384
NaturalGas Mitigated	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
NaturalGas Unmitigated	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	313050	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
Total		**1.6900e-003**	**0.0154**	**0.0129**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.7055**	**16.7055**	**3.2000e-004**	**3.1000e-004**	**16.8048**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	313050	1.6900e-003	0.0154	0.0129	9.0000e-005		1.1700e-003	1.1700e-003		1.1700e-003	1.1700e-003	0.0000	16.7055	16.7055	3.2000e-004	3.1000e-004	16.8048
Total		**1.6900e-003**	**0.0154**	**0.0129**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.1700e-003**	**1.1700e-003**	**0.0000**	**16.7055**	**16.7055**	**3.2000e-004**	**3.1000e-004**	**16.8048**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	132300	38.4876	1.7400e-003	3.6000e-004	38.6384
Total		**38.4876**	**1.7400e-003**	**3.6000e-004**	**38.6384**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	132300	38.4876	1.7400e-003	3.6000e-004	38.6384
Total		**38.4876**	**1.7400e-003**	**3.6000e-004**	**38.6384**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0690	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004
Unmitigated	0.0690	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004
Total	**0.0690**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**3.0000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0586					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.7000e-004	2.7000e-004	0.0000	0.0000	3.0000e-004
Total	**0.0690**	**0.0000**	**1.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.7000e-004**	**2.7000e-004**	**0.0000**	**0.0000**	**3.0000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.5607	0.1133	2.7200e-003	10.2032
Unmitigated	6.5607	0.1133	2.7200e-003	10.2032

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	6.5607	0.1133	2.7200e-003	10.2032
Total		**6.5607**	**0.1133**	**2.7200e-003**	**10.2032**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	3.46875 / 0	6.5607	0.1133	2.7200e-003	10.2032
Total		**6.5607**	**0.1133**	**2.7200e-003**	**10.2032**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.7756	0.2231	0.0000	9.3540
Unmitigated	3.7756	0.2231	0.0000	9.3540

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	9.3540
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	18.6	3.7756	0.2231	0.0000	9.3540
Total		**3.7756**	**0.2231**	**0.0000**	**9.3540**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B: Biological Resources Memo

Prepared by Argonaut Ecological Consulting, Inc. on March 10, 2021.

ARGONAUT ECOLOGICAL CONSULTING, INC.

Technical Memorandum

To: Jenna Chilingerian, Associate Planner
Precision Civil Engineering, Inc.

From: Kathy Kinsland, Senior Biologist

Subject: Biological Evaluation of the Proposed City of Fresno Pump Station 372

The proposed Pump Station 372 is located at 3709 S. Northpointe Drive, Fresno, California (Assessor's Parcel No. 330-021-75ST). The Project entails drilling a new water well, constructing a perimeter masonry block wall, metal gates, a 29' X 9-4" equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of perimeter landscaping for screening. The site is sized and configured to accept the future installation of an emergency generator and water treatment facilities, including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank if deemed necessary. The pump station study area is roughly 0.3 acres in size (See Figure 1).

Argonaut Ecological Consulting, Inc. conducted a site review on March 10, 2021. Before the field review, we reviewed the California Natural Diversity Database to determine the known locations of potential special status species and the U.S. Fish and Wildlife Service's National Wetland Inventory Maps to determine the location mapped wetlands and water features. There are no known special status species records on or adjacent to near the Study Area and no mapped water features except for the stormwater basin immediately south of the Study Area. Based on available aerial photography, the site appears to be highly disturbed from recent adjacent site development.

The field review confirmed the accuracy of the recent aerial photography. The site is within the boundary of an existing construction site. At the time of the site visit, there was no active construction. A large backhoe was staged in the center of the Study Area. The entire Study Area, including the adjacent padded building site, was devoid of vegetation except for a few weedy species in the southeast corner and under the chain-link fence along the south boundary (see attached photographs). The weeds consisted of upland species associated with highly disturbed sites (Bermuda grass primarily). The surface soils are sandy. The east boundary is fenced, and a construction entrance is immediately north of the Study Area.

No wildlife or wildlife habitat is present. No wildlife species were encountered during the review. Construction of the proposed Pump Station 372 would not have any impact on wildlife habitat, special status species or their habitat, or aquatic features. Our finding is that further biological studies are warranted or needed.

ARGONAUT ECOLOGICAL CONSULTING, INC.

Photographic Documentation

Client: Precision Civil Engineering, Inc.
Location: Prime/Northpoint Drive Fresno, CA
Site Name: Pump Station 372
Photograph Date: 03/1/221

Prepared by: Argonaut Ecological, Inc.
Photographer K. Kinsland

Photo 1: View south from Northpoint Avenue toward Study Area and construction entrance.

Client: Precision Civil Engineering, Inc.
Location: Prime/Northpoint Drive Fresno, CA
Site Name: Pump Station 372
Photograph Date: 03/1/221

Prepared by: Argonaut Ecological, Inc.
Photographer K. Kinsland

Photo 2: Photograph taken from just inside fence line, looking south at Study Area. .

Client: Precision Civil Engineering, Inc.
Location: Prime/Northpoint Drive Fresno, CA
Site Name: Pump Station 372
Photograph Date: 03/1/221

Prepared by: Argonaut Ecological, Inc.
Photographer K. Kinsland

Photo 3: View of eastern edge of Study Area showing some existing utility structures

Client: Precision Civil Engineering, Inc.
Location: Prime/Northpoint Drive Fresno, CA
Site Name: Pump Station 372
Photograph Date: 03/1/221

Prepared by: Argonaut Ecological, Inc.
Photographer K. Kinsland

Photo 4: View of southern edge of Study Area (stormwater basin in background).

Client: Precision Civil Engineering, Inc.
Location: Prime/Northpoint Drive Fresno, CA
Site Name: Pump Station 372
Photograph Date: 03/1/221

Prepared by: Argonaut Ecological, Inc.
Photographer K. Kinsland

Photo 5: View of northern edge of Study Area. Gravel area is part of construction entrance.

PEAK & ASSOCIATES, INC.
CONSULTING ARCHEOLOGY

April 6, 2021

Jenna Chilingerian, Associate Planner
Precision Civil Engineering, Inc.
1234 "O" Street
Fresno, CA 93721

Subject: Pump Station 372

Dear Ms. Chilingerian:

Project Description:

Pump Station 372 is located at 3709 S. Northpointe Drive, Fresno, California (Assessor's Parcel No. 330-021-75ST). The Project entails drilling a new water well, construction of a perimeter masonry block wall, metal gates, a 29' X 9-4" equipment building to house electrical panels and chemical injection equipment, a telemetry antenna, and installation of perimeter landscaping for screening. The site is sized and configured to accept future installation of an emergency generator and water treatment facilities including an iron and manganese filtration system, granulated activated carbon (GAC) treatment system, and a de-aeration tank, if deemed necessary.

Record Search:

Peak & Associates conducted a records search through the Southern San Joaquin Valley Information Center for the proposed site of the pumping station and a 0.125-mile radius around the site (Search no. 21-202, attached). The western one-third of the small site had been surveyed in 2014 for the South Fresno Economic Development Project Work Area. No sites were found in the portion of the project area surveyed. The closest resource is a segment of the Central Canal, about 0.1 miles south of the project area, recorded as P-10-004677.

Map Review:

The 1923 Fresno South USGS topographic map shows no natural water courses in proximity to the project area, suggesting it would not be a desirable location for prehistoric period occupation or use. Later Fresno South USGS topographic maps (1946, 1963, 1972) do not indicate any buildings or structures in or near the project area.

Conclusions:

Based on the previous survey and the low sensitivity of the project site, we do not believe additional survey is warranted for the pump station. As always, should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, an archeologist should be consulted for on-the-spot evaluation. If the bone appears to be human, state law requires that the Fresno County Coroner be contacted. If the Coroner determines that the bone is human and is most likely Native American in origin, they must contact the Native American Heritage Commission (916-322-7791).

Sincerely,

Melinda A. Peak

Melinda A Peak
Principal Investigator

- 3941 Park Drive, Suite 20#329, El Dorado Hills, CA 95762/Phone: (916)939-2405/peakinc@sbcglobal.net
- 3161 Godman Avenue, Suite A, Chico, CA 95973/Phone: (530)342-2800/peakinc@yahoo.com

Appendix C: Cultural Resources Memo

Prepared by Peak & Associates, Inc. on April 6, 2021.

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

3/29/2021

Robert Gerry
Peak & Associates, Inc.
3941 Park Drive, Suite 20-329
El Dorado Hills, CA 95762

Re: Fresno Pump Station
Records Search File No.: 21-101

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Fresno South USGS 7.5' quad. The following reflects the results of the records search for the project area and the 0.125 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☒ custom GIS maps ☐ GIS data

Resources within project area:	None
Resources within 0.125 mile radius:	P-10-004677
Reports within project area:	FR-02687
Reports within 0.125 mile radius:	FR-00277

Resource Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☒ enclosed	☐ not requested	☐ nothing listed
OHP Built Environment Resources Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☒ not requested	☐ nothing listed

Caltrans Bridge Survey: Not available at SSJVIC; please see https://dot.ca.gov/programs/environmental-analysis/cultural-studies/california-historical-bridges-tunnels

Ethnographic Information: Not available at SSJVIC

Historical Literature: Not available at SSJVIC

Historical Maps: Not available at SSJVIC; please see http://historicalmaps.arcgis.com/usgs/

Local Inventories: Not available at SSJVIC

GLO and/or Rancho Plat Maps: Not available at SSJVIC; please see http://www.glorecords.blm.gov/search/default.aspx#searchTabIndex=0&searchByTypeIndex=1 and/or http://www.oac.cdlib.org/view?docId=hb8489p15p;developer=local;style=oac4;doc.view=items

Shipwreck Inventory: Not available at SSJVIC; please see https://www.slc.ca.gov/shipwrecks/

Soil Survey Maps: Not available at SSJVIC; please see http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

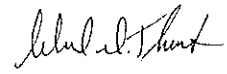
The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

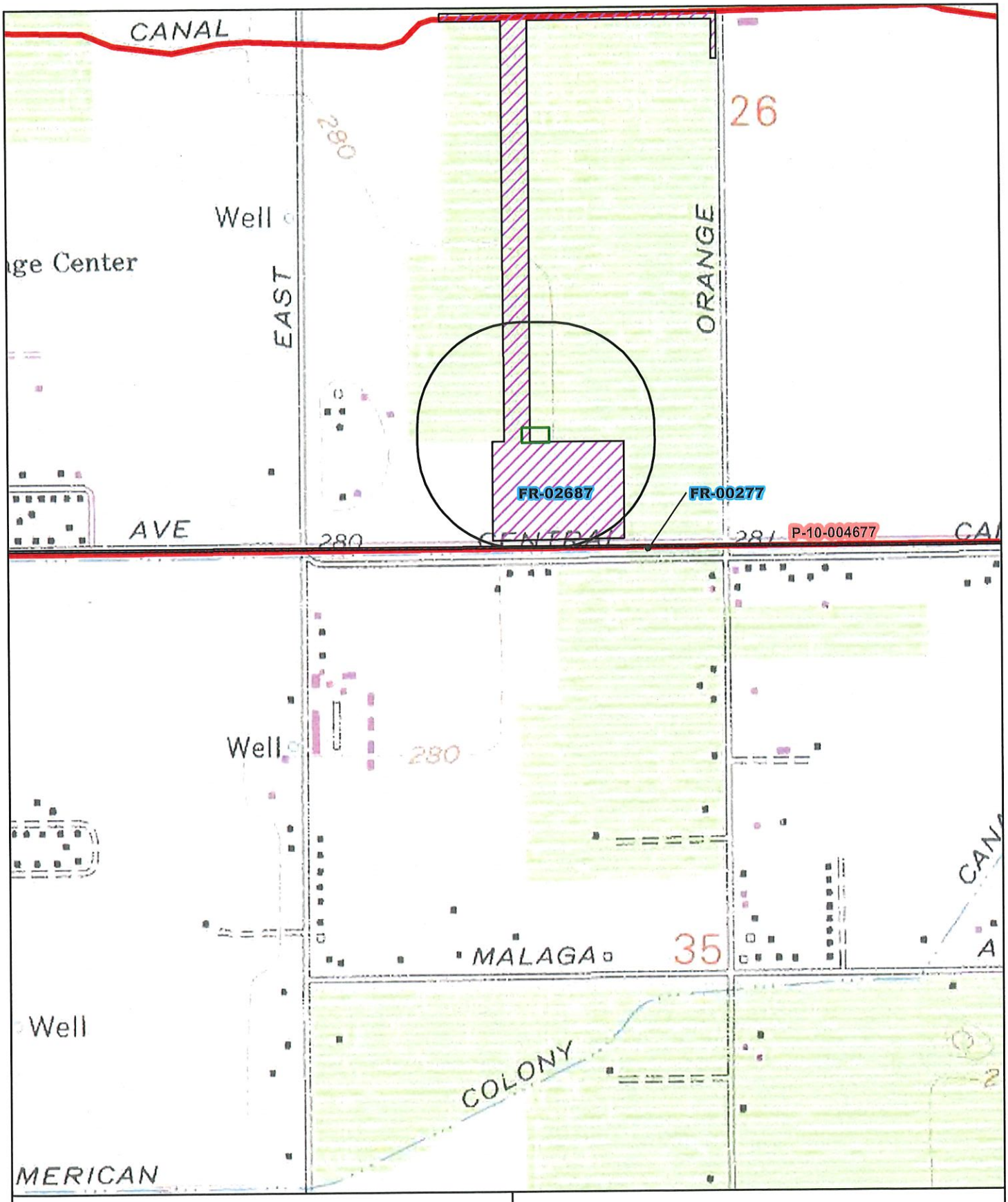
Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,



Digitally signed by Celeste M. Thomson
Date: 2021.03.29 09:29:13 -07'00'

Celeste M. Thomson
Coordinator



May depict confidential cultural resource locations.
Do not distribute.

0 0.05 0.1 0.2 Miles

0 0.075 0.15 0.3 Kilometers

N

Project Area

Record Search radius

SSJV Information Center Record Search 21-101
Requester: Robert Gerry, Peak & Associates, Inc.
Project Name: Fresno Pump Station
USGS 7.5' Quad(s): Fresno South
County: Fresno

Appendix D: MEIR Mitigation Measure Monitoring Checklist

For EA No. P19-04891 and prepared on June 21, 2021.

MEIR Mitigation Measure Monitoring Checklist for EA No. P19-04891

June 2021

INCORPORATING MEASURES FROM THE MASTER ENVIRONMENTAL IMPACT REPORT (MEIR) CERTIFIED FOR THE CITY OF FRESNO GENERAL PLAN UPDATE (SCH No. 2012111015)

This mitigation measure monitoring and reporting checklist was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15097 and Section 21081.6 of the Public Resources Code (PRC). It was certified as part of the Fresno City Council's approval of the MEIR for the Fresno General Plan update (Fresno City Council Resolution 2014-225, adopted December 18, 2014).

Letter designations to the right of each MEIR mitigation measure listed in this Exhibit note how the mitigation measure relates to the environmental assessment of the above-listed project, according to the key found at right and at the bottoms of the following pages:

A - Incorporated into Project
B - Mitigated
C - Mitigation in Progress
D - Responsible Agency Contacted
E - Part of City-wide Program
F - Not Applicable

The timing of implementing each mitigation measure is identified in in the checklist, as well as identifies the entity responsible for verifying that the mitigation measures applied to a project are performed. Project applicants are responsible for providing evidence that mitigation measures are implemented. As lead agency, the City of Fresno is responsible for verifying that mitigation is performed/completed.

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Aesthetics:								
AES-1. Lighting systems for street and parking areas shall include shields to direct light to the roadway surfaces and parking areas. Vertical shields on the light fixtures shall also be used to direct light away from adjacent light sensitive land uses such as residences. **Verification comments:**	Prior to issuance of building permits	Public Works Department (PW) and Planning and Development Department	**X**				**X**	
Aesthetics *(continued)*:								

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
AES-2: Lighting systems for public facilities such as active play areas shall provide adequate illumination for the activity; however, low intensity light fixtures and shields shall be used to minimize spillover light onto adjacent properties. **Verification comments:**	Prior to issuance of building permits	Planning and Development Department	**X**				**X**	
AES-3: Lighting systems for non-residential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur. **Verification comments:**	Prior to issuance of building permits	Planning and Development Department	**X**				**X**	
AES-4: Lighting systems for freestanding signs shall not exceed 100 foot Lamberts (FT-L) when adjacent to streets which have an average light intensity of less than 2.0 horizontal footcandles and shall not exceed 500 FT-L when adjacent to streets which have an average light intensity of 2.0 horizontal footcandles or greater. **Verification comments:**	Prior to issuance of building permits	Planning and Development Department						**X**

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Aesthetics *(continued)*:								
AES-5: Materials used on building facades shall be non-reflective. **Verification comments:**	Prior to development project approval	Planning and Development Department	**X**					
Air Quality:								
AIR-1: Projects that include five or more heavy-duty truck deliveries per day with sensitive receptors located within 300 feet of the truck loading area shall provide a screening analysis to determine if the project has the potential to exceed criteria pollutant concentration based standards and thresholds for NO2 and PM2.5. If projects exceed screening criteria, refined dispersion modeling and health risk assessment shall be accomplished and if needed, mitigation measures to reduce impacts shall be included in the project to reduce the impacts to the extent feasible. Mitigation measures include but are not limited to: • Locate loading docks and truck access routes as far from sensitive receptors as reasonably possible considering site design limitations to comply with other City design standards. • Post signs requiring drivers to limit idling to 5 minutes or less. **Verification comments:**	Prior to development project approval	Planning and Development Department						**X**

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Air Quality *(continued)***:**

AIR-2: Projects that result in an increased cancer risk of 10 in a million or exceed criteria pollutant ambient air quality standards shall implement site-specific measures that reduce toxic air contaminant (TAC) exposure to reduce excess cancer risk to less than 10 in a million. Possible control measures include but are not limited to: • Locate loading docks and truck access routes as far from sensitive receptors as reasonably possible considering site design limitations to comply with other City design standards. • Post signs requiring drivers to limit idling to 5 minutes or less • Construct block walls to reduce the flow of emissions toward sensitive receptors • Install a vegetative barrier downwind from the TAC source that can absorb a portion of the diesel PM emissions • For projects proposing to locate a new building containing sensitive receptors near existing sources of TAC emissions, install HEPA filters in HVAC systems to reduce TAC emission levels exceeding risk thresholds. • Install heating and cooling services at truck stops to eliminate the need for idling during overnight stops to run onboard systems. *(continued on next page)*	Prior to development project approval	Planning and Development Department						**X**

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Air Quality *(continued)***:**								
AIR-2 *(continued from previous page)* • For large distribution centers where the owner controls the vehicle fleet, provide facilities to support alternative fueled trucks powered by fuels such as natural gas or bio-diesel • Utilize electric powered material handling equipment where feasible for the weight and volume of material to be moved. **Verification comments:**	*[see previous page]*	*[see previous page]*						
AIR-3: Require developers proposing projects on ARB's list of projects in its Air Quality and Land Use Handbook (Handbook) warranting special consideration to prepare a cumulative health risk assessment when sensitive receptors are located within the distance screening criteria of the facility as listed in the ARB Handbook. **Verification comments:**	Prior to development project approval	Planning and Development Department					**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Air Quality *(continued)***:**								
AIR-4: Require developers of projects containing sensitive receptors to provide a cumulative health risk assessment at project locations exceeding ARB Land Use Handbook distance screening criteria or newer criteria that may be developed by the San Joaquin Valley Air Pollution Control District (SJVAPCD). **Verification comments:**	Prior to development project approval	Planning and Development Department					**X**	
AIR-5: Require developers of projects with the potential to generate significant odor impacts as determined through review of SJVAPCD odor complaint history for similar facilities and consultation with the SJVAPCD to prepare an odor impact assessment and to implement odor control measures recommended by the SJVAPCD or the City to the extent needed to reduce the impact to less than significant. **Verification comments:**	Prior to development project approval	Planning and Development Department				**X**	**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources:								
BIO-1: Construction of a proposed project should avoid, where possible, vegetation communities that provide suitable habitat for a special-status species known to occur within the Planning Area. If construction within potentially suitable habitat must occur, the presence/absence of any special-status plant or wildlife species must be determined prior to construction, to determine if the habitat supports any special-status species. If special-status species are determined to occupy any portion of a project site, avoidance and minimization measures shall be incorporated into the construction phase of a project to avoid direct or incidental take of a listed species to the greatest extent feasible. **Verification comments:**	Prior to development project approval	Planning and Development Department	**X**				**X**	
BIO-2: Direct or incidental take of any state or federally listed species should be avoided to the greatest extent feasible. If construction of a proposed project will result in the direct or incidental take of a listed species, consultation with the resources agencies and/or additional permitting may be required. Agency consultation through the California Department of Fish and Wildlife (CDFW) 2081 and U.S. Fish and Wildlife Service (USFWS) Section 7 or Section 10 permitting processes must take place prior to any action that *(continued on next page)*	Prior to development project approval	Planning and Development Department	**X**				**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources *(continued)*:								
BIO-2 *(continued from previous page)* may result in the direct or incidental take of a listed species. Specific mitigation measures for direct or incidental impacts to a listed species will be determined on a case-by-case basis through agency consultation. **Verification comments:**	*[see previous page]*	*[see previous page]*						
BIO-3: Development within the Planning Area should avoid, where possible, special-status natural communities and vegetation communities that provide suitable habitat for special-status species. If a proposed project will result in the loss of a special-status natural community or suitable habitat for special-status species, compensatory habitat-based mitigation is required under CEQA and the California Endangered Species Act (CESA). Mitigation will consist of preserving on-site habitat, restoring similar habitat or purchasing off-site credits from an approved mitigation bank. Compensatory mitigation will be determined through consultation with the City and/or resource agencies. An appropriate mitigation strategy and ratio will be agreed upon by the developer and lead agency to reduce project impacts to special-status natural communities to a less than significant *(continued on next page)*	Prior to development project approval	Planning and Development Department	**X**				**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Biological Resources *(continued)***:**

BIO-3 *(continued from previous page)***:** level. Agreed-upon mitigation ratios will depend on the quality of the habitat and presence/absence of a special-status species. The specific mitigation for project level impacts will be determined on a case-by-case basis. **Verification comments:**	*[see previous page]*	*[see previous page]*						
BIO-4: Proposed projects within the Planning Area should avoid, if possible, construction within the general nesting season of February through August for avian species protected under Fish and Game Code 3500 and the Migratory Bird Treaty Act (MBTA), if it is determined that suitable nesting habitat occurs on a project site. If construction cannot avoid the nesting season, a pre-construction clearance survey must be conducted to determine if any nesting birds or nesting activity is observed on or within 500-feet of a project site. If an active nest is observed during the survey, a biological monitor must be on site to ensure that no proposed project activities would impact the active nest. A suitable buffer will be established around the active nest until the nestlings have fledged and the nest is no longer active. Project activities *(continued on next page)*	Prior to development project approval and during construction activities	Planning and Development Department	**X**				**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources *(continued)*:								
BIO-4 *(continued from previous page)*: may continue in the vicinity of the nest only at the discretion of the biological monitor. **Verification comments:**	*[see previous page]*	*[see previous page]*						
BIO-5: If a proposed project will result in the removal or impact to any riparian habitat and/or a special-status natural community with potential to occur in the Planning Area, compensatory habitat-based mitigation shall be required to reduce project impacts. Compensatory mitigation must involve the preservation or restoration or the purchase of off-site mitigation credits for impacts to riparian habitat and/or a special-status natural community. Mitigation must be conducted in-kind or within an approved mitigation bank in the region. The specific mitigation ratio for habitat-based mitigation will be determined through consultation with the appropriate agency (*i.e.*, CDFW or USFWS) on a case-by-case basis. **Verification comments:**	Prior to development project approval	Planning and Development Department						**X**

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources *(continued)*:								
BIO-6: Project impacts that occur to riparian habitat may also result in significant impacts to streambeds or waterways protected under Section 1600 of Fish and Wildlife Code and Section 404 of the CWA. CDFW and/or USACE consultation, determination of mitigation strategy, and regulatory permitting to reduce impacts, as required for projects that remove riparian habitat and/or alter a streambed or waterway, shall be implemented. **Verification comments:**	Prior to development project approval	Planning and Development Department						X
BIO-7: Project-related impacts to riparian habitat or a special-status natural community may result in direct or incidental impacts to special-status species associated with riparian or wetland habitats. Project impacts to special-status species associated with riparian habitat shall be mitigated through agency consultation, development of a mitigation strategy, and/or issuing incidental take permits for the specific special-status species, as determined by the CDFW and/or USFWS. **Verification comments:**	Prior to development project approval	Planning and Development Department						X

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources *(continued)*:								
BIO-8: If a proposed project will result in the significant alteration or fill of a federally protected wetland, a formal wetland delineation conducted according to U.S. Army Corps of Engineers (USACE) accepted methodology is required for each project to determine the extent of wetlands on a project site. The delineation shall be used to determine if federal permitting and mitigation strategy are required to reduce project impacts. Acquisition of permits from USACE for the fill of wetlands and USACE approval of a wetland mitigation plan would ensure a "no net loss" of wetland habitat within the Planning Area. Appropriate wetland mitigation/creation shall be implemented in a ratio according to the size of the impacted wetland. **Verification comments:**	Prior to development project approval	Planning and Development Department						**X**
BIO-9: In addition to regulatory agency permitting, Best Management Practices (BMPs) identified from a list provided by the USACE shall be incorporated into the design and construction phase of the project to ensure that no pollutants or siltation drain into a federally protected wetland. Project design features such as fencing, appropriate drainage and *(continued on next page)*	Prior to development project approval; but for long-term operational BMPs, prior to issuance of occupancy	Planning and Development Department	**X**			**X**		

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Biological Resources *(continued)*:								
BIO-9 *(continued from previous page)*: incorporating detention basins shall assist in ensuring project-related impacts to wetland habitat are minimized to the greatest extent feasible. **Verification comments:**	*[see previous page]*	*[see previous page]*						
Cultural Resources:								
CUL-1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and *(continued on next page)*	Prior to commencement of, and during, construction activities	Planning and Development Department	**X**				**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Cultural Resources *(continued)***:**

CUL-1 *(continued from previous page)* recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-germ preservation to allow future scientific study. **Verification comments:**	*[see previous page]*	*[see previous page]*						
CUL-2: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for prehistoric archaeological resources shall be conducted. The following procedures shall be followed. If prehistoric resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that buried prehistoric *(continued on next page)*	Prior to commencement of, and during, construction activities	Planning and Development Department	**X**					

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Cultural Resources *(continued)***:**

CUL-2 *(continued from previous page)* archaeological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified archaeologist shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with CEQA Guidelines Section 15064.5. If the resources are determined to be unique prehistoric archaeological resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any prehistoric archaeological artifacts recovered as a result of mitigation shall be provided *(continued on next page)*	*[see previous page]*	*[see previous page]*	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Cultural Resources *(continued)***:**

CUL-2 *(further continued from previous two pages)* to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study. If prehistoric resources are found during the field survey or literature review, the resources shall be inventoried using appropriate State record forms and submit the forms to the Southern San Joaquin Valley Information Center. The resources shall be evaluated for significance. If the resources are found to be significant, measures shall be identified by the qualified archaeologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the resources found during the field survey or literature review shall include an archaeological monitor. The monitoring period shall be determined by the qualified archaeologist. If additional prehistoric archaeological resources are found during *(continued on next page)*	*[see Page 14]*	*[see Page 14]*	

Cultural Resources *(continued)*:

A - Incorporated into Project
B - Mitigated
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
CUL-2 *(further continued from previous three pages)* excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed. **Verification comments:**	*[see Page 14]*	*[see Page 14]*						
CUL-3: Subsequent to a preliminary City review of the project grading plans, if there is evidence that a project will include excavation or construction activities within previously undisturbed soils, a field survey and literature search for unique paleontological/geological resources shall be conducted. The following procedures shall be followed: If unique paleontological/geological resources are not found during either the field survey or literature search, excavation and/or construction activities can commence. In the event that unique paleontological/geological resources are discovered during excavation and/or construction activities, construction shall stop in the immediate vicinity of the find and a qualified paleontologist shall be consulted to determine whether the resource requires further study. The qualified paleontologist shall make recommendations to the City on the measures that shall be implemented to protect the discovered *(continued on next page)*	Prior to commencement of, and during, construction activities	Planning and Development Department	**X**					

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
CUL-3 *(continued from previous page)* resources, including but not limited to, excavation of the finds and evaluation of the finds. If the resources are determined to be significant, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any paleontological/geological resources recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study. If unique paleontological/geological resources are found during the field survey or literature review, the resources shall be inventoried and evaluated for significance. If the resources are found to be significant, mitigation measures shall be identified by the qualified paleontologist. Similar to above, appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. In addition, appropriate mitigation for excavation and construction activities in the vicinity of the *(continued on next page)*	*[see previous page]*	*[see previous page]*						

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Cultural Resources *(continued)***:**

CUL-3 *(further continued from previous two pages)* resources found during the field survey or literature review shall include a paleontological monitor. The monitoring period shall be determined by the qualified paleontologist. If additional paleontological/geological resources are found during excavation and/or construction activities, the procedure identified above for the discovery of unknown resources shall be followed. **Verification comments:**	*[see Page 17]*	*[see Page 17]*						
CUL-4: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most *(continued on next page)*	Prior to commencement of, and during, construction activities	Planning and Development Department	**X**				**X**	

A - Incorporated into Project
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Cultural Resources *(continued)***:**

CUL-4 *(continued from previous page)* likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment. **Verification comments:**	*[see previous page]*	*[see previous page]*	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hazards and Hazardous Materials								
HAZ-1: Re-designate the existing vacant land proposed for low density residential located northwest of the intersection of East Garland Avenue and North Dearing Avenue and located within Fresno Yosemite International Airport Zone 1-RPZ, to Open Space. **Verification comments:**	Prior to development approvals	Planning and Development Department						**X**
HAZ-2: Limit the proposed low density residential (1 to 3 dwelling units per acre) located northwest of the airport, and located within Fresno Yosemite International Airport Zone 3-Inner Turning Area, to 2 dwelling units per acre or less. **Verification comments:**	Prior to development approvals	Planning and Development Department						**X**
HAZ-3: Re-designate the current area within Fresno Yosemite International Airport Zone 5-Sideline located northeast of the airport to Public Facilities-Airport or Open Space. **Verification comments:**	Prior to development approvals	Planning and Development Department						**X**

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hazards and Hazardous Materials *(continued)*:								
HAZ-4: Re-designate the current vacant lots at the northeast corner of Kearney Boulevard and South Thorne Avenue to Public Facilities-Airport or Open Space. **Verification comments:**	Prior to development approvals	Planning and Development Department						**X**
HAZ-5: Prohibit residential uses within Safety Zone 1 northwest of the Hawes Avenue and South Thorne Avenue intersection. **Verification comments:**	Prior to development approvals	Planning and Development Department						**X**
HAZ-6: Establish an alternative Emergency Operations Center in the event the current Emergency Operations Center is under redevelopment or blocked. **Verification comments:**	Prior to redevelopment of the current Emergency Operations Center	Fresno Fire Department and Mayor/ City Manager's Office						**X**

A - Incorporated into Project
B - Mitigated
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hydrology and Water Quality								
HYD-1: The City shall develop and implement water conservation measures to reduce the per capita water use to 215 gallons per capita per day. **Verification comments:**	Prior to water demand exceeding water supply	Department of Public Utilities (DPU)					**X**	
HYD-2: The City shall continue to be an active participant in the Kings Water Authority and the implementation of the Kings Basin IRWMP. **Verification comments:**	Ongoing	DPU					**X**	
HYD-5.1: The City and partnering agencies shall implement the following measures to reduce the impacts on the capacity of existing or planned storm drainage Master Plan collection systems to less than significant. • Implement the existing Storm Drainage Master Plan (SDMP) for collection systems in drainage areas where the amount of imperviousness is unaffected by the change in land uses. *(continued on next page)*	Prior to exceedance of capacity of existing stormwater drainage facilities	Fresno Metropolitan Flood Control District (FMFCD), Planning and Development Department, and PW	**X**			**X**	**X**	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Hydrology and Water Quality *(continued)***:**

HYD-5.1 *(continued from previous page)* • Update the SDMP in those drainage areas where the amount of imperviousness increased due to the change in land uses to determine the changes in the collection systems that would need to occur to provide adequate capacity for the stormwater runoff from the increased imperviousness. • Implement the updated SDMP to provide stormwater collection systems that have sufficient capacity to convey the peak runoff rates from the areas of increased imperviousness. Require developments that increase site imperviousness to install, operate, and maintain FMFCD approved on-site detention systems to reduce the peak runoff rates resulting from the increased imperviousness to the peak runoff rates that will not exceed the capacity of the existing stormwater collection systems. **Verification comments:**	*[see previous page]*	*[see previous page]*	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hydrology and Water Quality *(continued)*:								
HYD-5.2: The City and partnering agencies shall implement the following measures to reduce the impacts on the capacity of existing or planned storm drainage Master Plan retention basins to less than significant: Consult the SDMP to analyze the impacts to existing and planned retention basins to determine remedial measures required to reduce the impact on retention basin capacity to less than significant. Remedial measures would include: • Increase the size of the retention basin through the purchase of more land or deepening the basin or a combination for planned retention basins. • Increase the size of the emergency relief pump capacity required to pump excess runoff volume out of the basin and into adjacent canal that convey the stormwater to a disposal facility for existing retention basins. • Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce runoff volume to the runoff volume that will not exceed the capacity of the existing retention basins. **Verification comments:**	Prior to exceedance of capacity of existing retention basin facilities	FMFCD, Planning and Development Department, and PW				X	X	

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B - Mitigated
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hydrology and Water Quality *(continued)*:								
HYD-5.3: The City and partnering agencies shall implement the following measures to reduce the impacts on the capacity of existing or planned storm drainage Master Plan urban detention (stormwater quality) basins to less than significant. Consult the SDMP to determine the impacts to the urban detention basin weir overflow rates and determine remedial measures required to reduce the impact on the detention basin capacity to less than significant. Remedial measures would include: • Modify overflow weir to maintain the suspended solids removal rates adopted by the FMFCD Board of Directors. • Increase the size of the urban detention basin to increase residence time by purchasing more land. The existing detention basins are already at the adopted design depth. • Require developments that increase runoff volume to install, operate, and maintain, Low Impact Development (LID) measures to reduce peak runoff rates and runoff volume to the runoff rates and volumes that will not exceed the weir overflow rates of the existing urban detention basins. **Verification comments:**	Prior to exceedance of capacity of existing urban detention basin (stormwater quality) facilities	FMFCD, Planning and Development Department, and PW					**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Hydrology and Water Quality *(continued)***:**

HYD-5.4: The City shall implement the following measures to reduce the impacts on the capacity of existing or planned storm drainage Master Plan pump disposal systems to less than significant. • Consult the SDMP to determine the extent and degree to which the capacity of the existing pump system will be exceeded. • Require new developments to install, operate, and maintain FMFCD design standard on-site detention facilities to reduce peak stormwater runoff rates to existing planned peak runoff rates. • Provide additional pump system capacity to maximum allowed by existing permitting to increase the capacity to match or exceed the peak runoff rates determined by the SDMP. **Verification comments:**	Prior to exceedance of capacity of existing pump disposal systems	FMFCD, Planning and Development Department, and PW					**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Hydrology and Water Quality *(continued)***:**								
HYD-5.5: The City shall work with FMFCD to develop and adopt an update to the SDMP for the Southeast Development Area that would be adequately designed to collect, convey and dispose of runoff at the rates and volumes which would be generated by the planned land uses in that area. **Verification comments:**	Prior to development approvals in the Southeast Development Area	FMFCD, Planning and Development Department, and PW					X	
Public Services:								
PS-1: As future fire facilities are planned, the fire department shall evaluate if specific environmental effects would occur. Typical impacts from fire facilities include noise, traffic, and lighting. Typical mitigation to reduce these impacts includes: • *Noise:* Barriers and setbacks on the fire department sites. • *Traffic:* Traffic devices for circulation and a "keep clear zone" during emergency responses. • *Lighting:* Provision of hoods and deflectors on lighting fixtures on the fire department sites. **Verification comments:**	During the planning process for future fire department facilities	Planning and Development Department					X	

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B - Mitigated
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D - Responsible Agency Contacted
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Public Services *(continued)*:								
PS-2: As future police facilities are planned, the police department shall evaluate if specific environmental effects would occur. Typical impacts from police facilities include noise, traffic, and lighting. Typical mitigation to reduce potential impacts from police department facilities includes: • *Noise:* Barriers and setbacks on the police department sites. • *Traffic:* Traffic devices for circulation. • *Lighting:* Provision of hoods and deflectors on lighting fixtures on the police department sites. **Verification comments:**	During the planning process for future Police Department facilities	Planning and Development Department					X	
PS-3: As future public and private school facilities are planned, school districts shall evaluate if specific environmental effects would occur with regard to public schools, and Planning and Development Department shall evaluate other school facilities. Typical impacts from school facilities include noise, traffic, and lighting. Typical mitigation to reduce potential impacts from school facilities includes: *(continued on next page)*	During the planning process for future school facilities	Planning and Development Department, local school districts, and the Division of the State Architect					X	

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B - Mitigated
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Public Services *(continued)***:**

PS-3 *(continued from previous page)* • *Noise*: Barriers and setbacks placed on school sites. • *Traffic*: Traffic devices for circulation. • *Lighting*: Provision of hoods and deflectors on lighting fixtures for stadium lights. **Verification comments:**	*[see previous page]*	*[see previous page]*						
PS-4: As future parks and recreational facilities are planned, the City shall evaluate if specific environmental effects would occur. Typical impacts from school facilities include noise, traffic, and lighting. Typical mitigation to reduce potential impacts from park and recreational facilities includes: • *Noise*: Barriers and setbacks placed on school sites. • *Traffic*: Traffic devices for circulation. • *Lighting*: Provision of hoods and deflectors on lighting fixtures for outdoor play area/field lights. **Verification comments:**	During the planning process for future park and recreation facilities	Planning and Development Department					**X**	

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Public Services *(continued)***:**								
PS-5: As future detention, court, library, and hospital facilities are planned, the appropriate agencies shall evaluate if specific environmental effects would occur. Typical impacts from court, library, and hospital facilities include noise, traffic, and lighting. Typical mitigation to reduce potential impacts includes: • *Noise:* Barriers and setbacks placed on school sites. • *Traffic:* Traffic devices for circulation. • *Lighting:* Provision of hoods and deflectors on outdoor lighting fixtures. **Verification comments:**	During the planning process for future detention, court, library, and hospital facilities	Planning and Development Department, to the extent that agencies constructing these facilities are subject to City of Fresno regulation					X	
Utilities and Service Systems								
USS-1: The City shall develop and implement a wastewater master plan update. **Verification comments:**	Prior to wastewater conveyance and treatment demand exceeding capacity	DPU					X	

A - Incorporated into Project
B - Mitigated
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-2: Prior to exceeding existing wastewater treatment capacity, the City shall evaluate the wastewater system and shall not approve additional development that contributes wastewater to the wastewater treatment facility that could exceed capacity until additional capacity is provided. By approximately the year 2025, the City shall construct the following improvements: • Construct an approximately 70 MGD expansion of the Regional Wastewater Treatment and Reclamation Facility and obtain revised waste discharge permits as the generation of wastewater is increased. • Construct an approximately 0.49 MGD expansion of the North Facility and obtain revised waste discharge permits as the generation of wastewater is increased. **Verification comments:**	Prior to exceeding existing wastewater treatment capacity	DPU					**X**	
USS-3: Prior to exceeding existing wastewater treatment capacity, the City shall evaluate the wastewater system and shall not approve additional development that contributes wastewater to the wastewater treatment facility that could exceed capacity until additional capacity is provided. After *(continued on next page)*	Prior to exceeding existing wastewater treatment capacity	DPU						**X**

A - Incorporated into Project
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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems *(continued)***:**

USS-3 *(continued from previous page)* approximately the year 2025, the City shall construct the following improvements: • Construct an approximately 24 MGD wastewater treatment facility within the Southeast Development Area and obtain revised waste discharge requirements as the generation of wastewater is increased. • Construct an approximately 9.6 MGD expansion of the Regional Wastewater Treatment and Reclamation Facility and obtain revised waste discharge permits as the generation of wastewater is increased. **Verification comments:**	*[see previous page]*	*[see previous page]*						
USS-4: A Traffic Control/Traffic Management Plan to address traffic impacts during construction of water and sewer facilities shall be prepared and implemented, subject to approval by the City (and Fresno County, when work is being done in unincorporated area roadways). The plan shall identify access and parking restrictions, pavement markings and signage, and hours of construction and for deliveries. It shall include haul routes, the notification plan, and coordination with emergency service providers and schools. **Verification comments:**	Prior to construction of water and sewer facilities	PW for work in the City; PW and Fresno County Public Works and Planning when unincorporated area roadways are involved					**X**	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-5: Prior to exceeding capacity within the existing wastewater collection system facilities, the City shall evaluate the wastewater collection system and shall not approve additional development that would generate additional wastewater and exceed the capacity of a facility until additional capacity is provided. By approximately the year 2025, the following capacity improvements shall be provided. • Orange Avenue Trunk Sewer: This facility shall be improved between Dakota and Jensen Avenues. Approximately 37,240 feet of new sewer main shall be installed and approximately 5,760 feet of existing sewer main shall be rehabilitated. The size of the new sewer main shall range from 27 inches to 42 inches in diameter. The associated project designations in the 2006 Wastewater Master Plan are RS03A, RL02, C01-REP, C02-REP, C03-REP, C04-REP, C05-REP, C06-REL and C07-REP. • Marks Avenue Trunk Sewer: This facility shall be improved between Clinton Avenue and Kearney Boulevard. Approximately 12,150 feet of new sewer main shall be installed. The size of the new sewer main shall range from 33 inches to 60 inches in diameter. The associated project designations in the 2006 Wastewater Master Plan are CM1-REP and CM2-REP. *(continued on next page)*	Prior to exceeding capacity within the existing wastewater collection system facilities	DPU					**X**	

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-5 *(continued from previous page)* • North Avenue Trunk Sewer: This facility shall be improved between Polk and Fruit Avenues and also between Orange and Maple Avenues. Approximately 25,700 feet of new sewer main shall be installed. The size of the new sewer main shall range from 48 inches to 66 inches in diameter. The associated project designations in the 2006 Wastewater Master Plan are CN1-REL1 and CN3-REL1. • Ashlan Avenue Trunk Sewer: This facility shall be improved between Hughes and West Avenues and also between Fruit and Blackstone Avenues. Approximately 9,260 feet of new sewer main shall be installed. The size of the new sewer main shall range from 24 inches to 36 inches in diameter. The associated project designations in the 2006 Wastewater Master Plan are CA1-REL and CA2-REP. **Verification comments:**	*[see previous page]*	*[see previous page]*						

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-6: Prior to exceeding capacity within the existing 28 pipeline segments shown in Figures 1 and 2 in Appendix J-1, the City shall evaluate the wastewater collection system and shall not approve additional development that would generate additional wastewater and exceed the capacity of one of the 28 pipeline segments until additional capacity is provided. **Verification comments:**	Prior to exceeding capacity within the existing 28 pipeline segments shown in Figures 1 and 2 in Appendix J-1 of the MEIR	DPU					X	
USS-7: Prior to exceeding existing water supply capacity, the City shall evaluate the water supply system and shall not approve additional development that demand additional water until additional capacity is provided. By approximately the year 2025, the following capacity improvements shall be provided. • Construct an approximately 80 million gallon per day (MGD) surface water treatment facility near the intersection of Armstrong and Olive Avenues, in accordance with Chapter 9 and Figure 9-1 of the City of Fresno Metropolitan Water Resources Management Plan Update (2014 Metro Plan Update) Phase 2 Report, dated January 2012. *(continued on next page)*	Prior to exceeding existing water supply capacity	DPU					X	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-7 *(continued from previous page)* • Construct an approximately 30 MGD expansion of the existing northeast surface water treatment facility for a total capacity of 60 MGD, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct an approximately 20 MGD surface water treatment facility in the southwest portion of the City, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. **Verification comments:**	*[see previous page]*	*[see previous page]*						
USS-8: Prior to exceeding capacity within the existing water conveyance facilities, the City shall evaluate the water conveyance system and shall not approve additional development that would demand additional water and exceed the capacity of a facility until additional capacity is provided. The following capacity improvements shall be provided by approximately 2025. • Construct 65 new groundwater wells, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. *(continued on next page)*	Prior to exceeding capacity within the existing water conveyance facilities	DPU					**X**	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-8 *(continued from previous page)* • Construct a 2.0 million gallon potable water reservoir (Reservoir T2) near the intersection of Clovis and California Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct a 3.0 million gallon potable water reservoir (Reservoir T3) near the intersection of Temperance and Dakota Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct a 3.0 million gallon potable water reservoir (Reservoir T4) in the Downtown Planning Area, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct a 4.0 million gallon potable water reservoir (Reservoir T5) near the intersection of Ashlan and Chestnut Avenues, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct a 4.0 million gallon potable water reservoir (Reservoir T6) near the intersection of Ashlan Avenue and Highway 99, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. *(continued on next page)*	*[see previous page]*	*[see previous page]*						

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-8 *(continued from previous two pages)* • Construct 50.3 miles of regional water transmission mains ranging in size from 24-inch to 48-inch diameter, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. • Construct 95.9 miles of 16-inch diameter transmission grid mains, in accordance with Chapter 9 and Figure 9-1 of the 2014 Metro Plan Update. **Verification comments:**	*[see Page 37]*	*[see Page 37]*						
USS-9: Prior to exceeding capacity within the existing water conveyance facilities, the City shall evaluate the water conveyance system and shall not approve additional development that would demand additional water and exceed the capacity of a facility until additional capacity is provided. The following capacity improvements shall be provided after approximately the year 2025 and additional water conveyance facilities shall be provided prior to exceedance of capacity within the water conveyance facilities to accommodate full buildout of the General Plan Update. *(continued on next page)*	Prior to exceeding capacity within the existing water conveyance facilities	DPU					**X**	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems *(continued)*:								
USS-9 *(continued from previous page)* • Construct a 4.0 million gallon potable water reservoir (SEDA Reservoir 1) within the northern part of the Southeast Development Area. • Construct a 4.0 million gallon potable water reservoir (SEDA Reservoir 2) within the southern part of the Southeast Development Area. Additional water conveyance facilities shall be provided prior to exceedance of capacity within the water conveyance facilities to accommodate full buildout of the General Plan Update. **Verification comments:**	*[see previous page]*	*[see previous page]*						
Utilities and Service Systems - *Hydrology and Water Quality*								
USS-10: In order to maintain Fresno Irrigation District canal operability, FMFCD shall maintain operational intermittent flows during the dry season, within defined channel capacity and downstream capture capabilities, for recharge. **Verification comments:**	During the dry season	Fresno Irrigation District (FID)				**X**		

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources:*								
USS-11: When FMFCD proposes to provide drainage service outside of urbanized areas: (a) FMFCD shall conduct preliminary investigations on undeveloped lands outside of highly urbanized areas. These investigations shall examine wetland hydrology, vegetation and soil types. These preliminary investigations shall be the basis for making a determination on whether or not more in-depth wetland studies shall be necessary. If the proposed project site does not exhibit wetland hydrology, support a prevalence of wetland vegetation and wetland soil types then no further action is required. (b) Where proposed activities could have an impact on areas verified by the Corps as jurisdictional wetlands or waters of the U.S. (urban and rural streams, seasonal wetlands, and vernal pools), FMFCD shall obtain the necessary Clean Water Act, Section 404 permits for activities where fill material shall be placed in a wetland, obstruct the flow or circulation of waters of the United States, impair or reduce the reach of such waters. As part of FMFCD's Memorandum of Understanding with CDFG, Section 404 and 401 permits would be obtained from the U.S. Army Corps of Engineers and from the *(continued on next page)*	Prior to development approvals outside of highly urbanized areas	California Regional Water Quality Control Board (RWQCB), and USACE				**X**		

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems - *Biological Resources* *(continued)**:***

USS-11 *(continued from previous page)* Regional Water Quality Control Board for any activity involving filling of jurisdictional waters). At a minimum, to meet "no net loss policy," the permits shall require replacement of wetland habitat at a 1**:**1 ratio. (c) Where proposed activities could have an impact on areas verified by the Corps as jurisdictional wetlands or waters of the U.S. (urban and rural streams, seasonal wetlands, and vernal pools), FMFCD shall submit and implement a wetland mitigation plan based on the wetland acreage verified by the U.S. Army Corps of Engineers. The wetland mitigation plan shall be prepared by a qualified biologist or wetland scientist experienced in wetland creation, and shall include the following or equally effective elements: i. Specific location, size, and existing hydrology and soils within the wetland creation area. ii. Wetland mitigation techniques, seed source, planting specifications, and required buffer setbacks. In addition, the mitigation plan shall ensure adequate water supply is provided to the created wetlands in order to maintain the proper *(continued on next page)*	*[see previous page]*	*[see previous page]*	

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems - *Biological Resources* *(continued)**:***

USS-11 *(continued from previous two pages)* hydrologic regimes required by the different types of wetlands created. Provisions to ensure the wetland water supply is maintained in perpetuity shall be included in the plan. iii. A monitoring program for restored, enhanced, created, and preserved wetlands on the project site. A monitoring program is required to meet three objectives; 1) establish a wetland creation success criteria to be met; 2) to specify monitoring methodology; 3) to identify as far as is possible, specific remedial actions that will be required in order to achieve the success criteria; and 4) to document the degree of success achieved in establishing wetland vegetation. (d) A monitoring plan shall be developed and implemented by a qualified biologist to monitor results of any on-site wetland restoration and creation for five years. The monitoring plan shall include specific success criteria, frequency and timing of monitoring, and assessment of whether or not maintenance activities are being carried out and how these shall be adjusted if necessary. *(continued on next page)*	*[see Page 41]*	*[see Page 41]*	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources* *(continued)**:***								
USS-11 *(continued from previous three pages)* If monitoring reveals that success criteria are not being met, remedial habitat creation or restoration should be designed and implemented by a qualified biologist and subject to five years of monitoring as described above. Or (e) In lieu of developing a mitigation plan that outlines the avoidance, purchase, or creation of wetlands, FMFCD could purchase mitigation credits through a Corps approved Mitigation Bank. **Verification comments:**	*[see Page 41]*	*[see Page 41]*						
USS-12: When FMFCD proposes to provide drainage service outside in areas that support seasonal wetlands or vernal pools: (a) During facility design and prior to initiation of ground disturbing activities in areas that support seasonal wetlands or vernal pools, FMFCD shall conduct a preliminary rare plant assessment. The assessment will determine the likelihood on whether or not the project site could support rare plants. If it is determined that the project site would not support rare plants, then no further *(continued on next page)*	During facility design and prior to initiation of ground disturbing activities in areas that support seasonal wetlands or vernal pools	California Department of Fish & Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS)				**X**		

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems - *Biological Resources* *(continued)**:***

USS-12 *(continued from previous page)* action is required. However, if the project site has the potential to support rare plants; then a rare plant survey shall be conducted. Rare plant surveys shall be conducted by qualified biologists in accordance with the most current CDFG/USFWS guidelines or protocols and shall be conducted at the time of year when the plants in question are identifiable. (b) Based on the results of the survey, prior to design approval, FMFCD shall coordinate with CDFG and/or implement a Section 7 consultation with USFWS, shall determine whether the project facility would result in a significant impact to any special status plant species. Evaluation of project impacts shall consider the following: • The status of the species in question (*e.g.*, officially listed by the State or Federal Endangered Species Acts). • The relative density and distribution of the on-site occurrence versus typical occurrences of the species in question. *(continued on next page)*	*[see previous page]*	*[see previous page]*	

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources* *(continued)***:**								
USS-12 *(continued from previous two pages)* • The habitat quality of the on-site occurrence relative to historic, current or potential distribution of the population. (c) Prior to design approval, and in consultation with the CDFG and/or the USFWS, FMFCD shall prepare and implement a mitigation plan, in accordance with any applicable State and/or federal statutes or laws, that reduces impacts to a less than significant level. **Verification comments:**	*[see Page 44]*	*[see Page 44]*						
USS-13: When FMFCD proposes to provide drainage service outside in areas that support seasonal wetlands or vernal pools: (a) During facility design and prior to initiation of ground disturbing activities in areas that support seasonal wetlands or vernal pools, FMFCD shall conduct a preliminary survey to determine the presence of listed vernal pool crustaceans. *(continued on next page)*	During facility design and prior to initiation of ground disturbing activities in areas that support seasonal wetlands or vernal pools	CDFW and USFWS				**X**		

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B - Mitigated
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources* *(continued)***:**								
USS-13 *(continued from previous page)* (b) If potential habitat (vernal pools, seasonally inundated areas) or fairy shrimp exist within areas proposed to be disturbed, FMFCD shall complete the first and second phase of fairy shrimp presence or absence surveys. If an absence finding is determined and accepted by the USFWS, then no further mitigation shall be required for fairy shrimp. (c) If fairy shrimp are found to be present within vernal pools or other areas of inundation to be impacted by the implementation of storm drainage facilities, FMFCD shall mitigate impacts on fairy shrimp habitat in accordance with the USFWS requirements of the Programmatic Biological Opinion. This shall include on-site or off-site creation and/or preservation of fairy shrimp habitat at ratios ranging from 3:1 to 5:1 depending on the habitat impacted and the choice of on-site or off-site mitigation. Or mitigation shall be the purchase of mitigation credit through an accredited mitigation bank. **Verification comments:**	*[see previous page]*	*[see previous page]*						

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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources* *(continued)***:**								
USS-14: When FMFCD proposes to construct drainage facilities in an area where elderberry bushes may occur: (a) During facility design and prior to initiation of construction activities, FMFCD shall conduct a project-specific survey for all potential Valley Elderberry Longhorn Beetle (VELB) habitats (elderberry shrubs), including a stem count and an assessment of historic or current VELB habitat. (b) FMFCD shall avoid and protect all potential identified VELB habitat where feasible. (c) Where avoidance is infeasible, develop and implement a VELB mitigation plan in accordance with the most current USFWS mitigation guidelines for unavoidable take of VELB habitat pursuant to either Section 7 or Section 10(a) of the Federal Endangered Species Act. The mitigation plan shall include, but might not be limited to, relocation of elderberry shrubs, planting of elderberry shrubs, and monitoring of relocated and planted elderberry shrubs. **Verification comments:**	During facility design and prior to initiation of construction activities	CDFW and USFWS				**X**		

A - Incorporated into Project
B - Mitigated
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D - Responsible Agency Contacted
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems - *Biological Resources* *(continued)***:**								
USS-15: Prior to ground disturbing activities during nesting season (March through July) for a project that supports bird nesting habitat, FMFCD shall conduct a survey of trees. If nests are found during the survey, a qualified biologist shall assess the nesting activity on the project site. If active nests are located, no construction activities shall be allowed within 250 feet of the nest until the young have fledged. If construction activities are planned during the no n-breeding period (August through February), a nest survey is not necessary. **Verification comments:**	Prior to ground disturbing activities during nesting season (March through July) for a project that supports bird nesting habitat	CDFW and USFWS				X		
USS-16: When FMFCD proposes to construct drainage facilities in an area that supports bird nesting habitat: (a) FMFCD shall conduct a pre-construction breeding-season survey (approximately February 1 through August 31) of proposed project sites in suitable habitat (levee and canal berms, open grasslands with suitable burrows) during the same calendar year that construction is planned to begin. If phased construction procedures are planned for the proposed project, the results of the above survey shall be valid only for the season when it is conducted. *(continued on next page)*	Prior to ground disturbing activities during nesting season (March through July) for a project that supports bird nesting habitat	CDFW and USFWS				X		

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems - *Biological Resources* *(continued)***:**

USS-16 *(continued from previous page)* (b) During the construction stage, FMFCD shall avoid all burrowing owl nest sites potentially disturbed by project construction during the breeding season while the nest is occupied with adults and/or young. The occupied nest site shall be monitored by a qualified biologist to determine when the nest is no longer used. Avoidance shall include the establishment of a 160-foot diameter non-disturbance buffer zone around the nest site. Disturbance of any nest sites shall only occur outside of the breeding season and when the nests are unoccupied based on monitoring by a qualified biologist. The buffer zone shall be delineated by highly visible temporary construction fencing. Based on approval by CDFG, pre-construction and pre-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance. Burrowing owls can be passively excluded from potential nest sites in the construction area, either by closing the burrows or placing one-way doors in the burrows according to current CDFG protocol. Burrows shall be examined not more than 30 days before construction to ensure that no owls have recolonized the area of construction. *(continued on next page)*	*[see previous page]*	*[see previous page]*	

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MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems - *Biological Resources* *(continued)***:**

USS-16 *(continued from previous two pages)* For each burrow destroyed, a new burrow shall be created (by installing artificial burrows at a ratio of 2:1 on protected lands nearby. **Verification comments:**	*[see Page 49]*	*[see Page 49]*						
USS-17: When FMFCD proposes to construct drainage facilities in the San Joaquin River corridor: (a) FMFCD shall not conduct instream activities in the San Joaquin River between October 15 and April 15. If this is not feasible, FMFCD shall consult with the National Marine Fisheries Service and CDFW on the appropriate measures to be implemented in order to protect listed salmonids in the San Joaquin River. (b) Riparian vegetation shading the main–channel that is removed or damaged shall be replaced at a ratio and quantity sufficient to maintain the existing shading of the channel. The location of replacement trees on or within *(continued on next page)*	During instream activities conducted between October 15 and April 15	National Marine Fisheries Service (NMFS), CDFW, and Central Valley Flood Protection Board (CVFPB)				X		

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B - Mitigated
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems / *Biological Resources* *(continued)***:**

USS-17 *(continued from previous page)* FMFCD berms, detention ponds or river channels shall be approved by FMFCD and the Central Valley Flood Protection Board. **Verification comments:**	*[see previous page]*	*[see previous page]*						

Utilities and Service Systems – *Recreation / Trails*:

USS-18: When FMFCD updates its District Service Plan: Prior to final design approval of all elements of the District Services Plan, FMFCD shall consult with Fresno County, City of Fresno, and City of Clovis to determine if any element would temporarily disrupt or permanently displace adopted existing or planned trails and associated recreational facilities as a result of the proposed District Services Plan. If the proposed project would not temporarily disrupt or permanently displace adopted existing or planned trails, no further mitigation is necessary. If the proposed project would have an effect on the trails and associated facilities, FMFCD shall implement the following: *(continued on next page)*	Prior to final design approval of all elements of the District Services Plan	Planning and Development Department, PW, City of Clovis, and County of Fresno				**X**		

A - Incorporated into Project
B - Mitigated
C - Mitigation in Process
D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F

Utilities and Service Systems – *Recreation / Trails* *(continued)*:

USS-18 *(continued from previous page)* (a) If short-term disruption of adopted existing or planned trails and associated recreational facilities occur, FMFCD shall consult and coordinate with Fresno County, City of Fresno, and City of Clovis to temporarily re-route the trails and associated facilities. (b) If permanent displacement of the adopted existing or planned trails and associated recreational facilities occur, the appropriate design modifications to prevent permanent displacement shall be implemented in the final project design or FMFCD shall replace these facilities. **Verification comments:**	*[see previous page]*	*[see previous page]*						

Utilities and Service Systems – *Air Quality*:

USS-19: When District drainage facilities are constructed, FMFCD shall: (a) Minimize idling time of construction equipment vehicles to no more than ten minutes, or require that engines be shut off when not in use. *(continued on next page)*	During storm water drainage facility construction activities	Fresno Metropolitan Flood Control District and SJVAPCD				**X**		

A - Incorporated into Project
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D - Responsible Agency Contacted
E - Part of City-Wide Program
F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems – *Air Quality* *(continued)***:**								
USS-19 *(continued from previous page)* (b) Construction shall be curtailed as much as possible when the Air Quality Index (AQI) is above 150. AQI forecasts can be found on the SJVAPCD web site. (c) Off-road trucks should be equipped with on-road engines if possible. (d) Construction equipment should have engines that meet the current off-road engine emission standard (as certified by CARB), or be re-powered with an engine that meets this standard. **Verification comments:**	*[see previous page]*	*[see previous page]*						
Utilities and Service Systems – *Adequacy of Storm Water Drainage Facilities*:								
USS-20: Prior to exceeding capacity within the existing storm water drainage facilities, the City shall coordinate with FMFCD to evaluate the storm water drainage system and shall not approve additional development that would convey additional storm water to a facility that would experience an exceedance of capacity until the necessary additional capacity is provided. **Verification comments:**	Prior to exceeding capacity within the existing storm water drainage facilities	FMFCD, PW, and Planning and Development Department				X	X	

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D - Responsible Agency Contacted
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F - Not Applicable

MITIGATION MEASURE	WHEN IMPLEMENTED	COMPLIANCE VERIFIED BY	A	B	C	D	E	F
Utilities and Service Systems – *Adequacy of Water Supply Capacity*:								
USS-21: Prior to exceeding existing water supply capacity, the City shall evaluate the water supply system and shall not approve additional development that demand additional water until additional capacity is provided. By approximately the year 2025, the City shall construct an approximately 25,000 AF/year tertiary recycled water expansion to the Fresno-Clovis Regional Wastewater Reclamation Facility in accordance with the 2013 Recycled Water Master Plan and the 2014 City of Fresno Metropolitan Water Resources Management Plan update. Implementation of Mitigation Measure USS-5 is also required prior to approximately the year 2025. **Verification comments:**	Prior to exceeding existing water supply capacity	DPU and Planning and Development Department				X	X	
Utilities and Service Systems – *Adequacy of Landfill Capacity*:								
USS-22: Prior to exceeding landfill capacity, the City shall evaluate additional landfill locations and shall not approve additional development that could contribute solid waste to a landfill that is at capacity until additional capacity is provided. **Verification comments:**	Prior to exceeding landfill capacity	DPU and Planning and Development Department					X	

A - Incorporated into Project
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D - Responsible Agency Contacted
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F - Not Applicable