Draft

Arcade Middle School
Initial Study/Proposed Mitigated Negative Declaration (IS/MND)

September 2022

Prepared for:

San Juan Unified School District

AECOM

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Appendices

Technical reports supporting work on the Arcade Middle School Project are available for review online: https://www.sanjuan.edu/arcademod.

Exhibits

Tables

ACRONYMS AND OTHER ABBREVIATIONS

°F	Fahrenheit
AB	Assembly Bill
ACMs	asbestos-containing materials
AEP	annual exceedance probability
amsl	above mean sea level
B.P.	Before Present
bgs	below the ground surface
BMPs	Best Management Practices
BSA	Biological Survey Area
ca.	circa
CAA	federal Clean Air Act
CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDE	California Department of Education
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CHRIS	California Historic Resources Information System Center
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalence
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
District	San Juan Unified School District
DOC	California Department of Conservation
DPM	diesel engine particulate matter
DPR	Department of Parks and Recreation
DSA	Division of the State Architect

DTSC	California Department of Toxic Substances Control
DWMR	Department of Waste Management & Recycling
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMT	emergency medical technicians
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
GHGs	greenhouse gases
GSP	Groundwater Sustainability Plan
GWP	Global warming potential
Handbook	California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*
Hz	hertz
in/sec	inches per second
IPaC	Information, Planning, and Conservation System
IPCC	Intergovernmental Panel on Climate Change
IS/MND	Initial Study/Proposed Mitigated Negative Declaration
lb/day	pounds per day
LDL	Larson Davis Laboratories
L_{dn}	Day-Night Noise Level
L_{eq}	Equivalent sound level
$L_{eq[h]}$	A-weighted equivalent sound level
LID	low impact development"
L_{max}	Maximum sound level
L_n	Statistical Descriptor
LRAs	Local responsibility areas"
MDR	Medium-Density Residential
mgd	million gallons per day
mph	miles per hour
MT	metric tons
MTBE	Methyl tert-butyl ether
N_2O	Nitrous oxide
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center

NEMDC	Natomas East Main Drainage Canal
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Natural Resources Conservation Service
NWI	National Wetlands Inventory
OSHA	Occupational Health and Safety Administration
PA	public address
PCWA	Placer County Water Agency
PM	particulate patter
PM_{10}	PM equal to or less than 10 micrometers in diameter
$PM_{2.5}$	PM equal to or less than 2.5 micrometers in diameter
PPV	peak particle velocity
RD-20	Multiple Family Residential
RD-20/PQP	Public/Quasi-Public
RegionalSan	Sacramento County Regional Sanitation District
RMS	root mean square
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
Sacramento County General Plan	Sacramento County General Plan of 2005-2030
SAQMD	Sacramento Air Quality Management District
SASD	Sacramento Area Sewer District
SB	Senate Bill
SB X7- 7	state Water Conservation Act of 2009
SCAQMD	South Coast Air Quality Management District
SCEMD	Sacramento County Environmental Management Department
SCOE	Sacramento County Office of Education
SEL	sound exposure level
SFNA	Sacramento Federal Nonattainment Area
SGMA	Sustainable Groundwater Management Act
SJUSD	San Juan Unified School District
SJWD	San Juan Water District
SLF	Sacred Lands Files
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SRAs	state responsibility areas”
SSWD	Sacramento Suburban Water District
SVAB	Sacramento Valley Air Basin
SVP	Society of Vertebrate Paleontology Guidelines

SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCRs	tribal cultural resources
THRIS	Tribal Historic Information System
TMDLs	total maximum daily loads
TMP	Transportation Management Plan
UAIC	United Auburn Indian Community of the Auburn Rancheria
UCMP	University of California, Berkeley Museum of Paleontology
USBR	U.S. Bureau of Reclamation
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	*Urban Water Management Plan*
VMT	vehicle miles traveled
WDRs	waste discharge requirements
WWTP	Wastewater Treatment Plant
µin/sec	micro inch per second

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1 INTRODUCTION

1.1 OVERVIEW

The San Juan Unified School District ("SJUSD" or "District") has prepared this Initial Study/Proposed Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines to address the environmental consequences of the proposed Arcade Middle School Project in the Arden-Arcade Community of unincorporated Sacramento County, California.

The proposed project would involve demolishing the existing school campus facilities and constructing a new middle school on the existing District-owned property.

CEQA requires that all state and local government agencies consider the environmental consequences of projects they propose to carry out or over which they have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance (CEQA Guidelines Section 15367). The District has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS/MND.

After the required public review of this document is complete, the District will consider adopting the proposed MND and a Mitigation Monitoring and Reporting Program, and will decide whether to proceed with the proposed project.

1.2 PURPOSE OF THE INITIAL STUDY

This document is an IS/MND prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). The purpose of this IS/MND is to (1) determine whether project implementation would result in potentially significant or significant effects on the environment; and (2) incorporate mitigation measures into the project design, as necessary, to eliminate the project's potentially significant or significant project effects or reduce them to a less-than-significant level.

If there is substantial evidence (such as the findings of an IS) that a project, either individually or cumulatively, may have a significant effect on the physical environment, the lead agency must prepare an Environmental Impact Report (EIR) (CEQA Guidelines Section 15064[a]). If the IS concludes that impacts would be less than significant, or that mitigation measures committed to by the applicant would clearly reduce impacts to a less-than-significant level, a negative declaration or MND can be prepared.

A negative declaration or MND is a written statement prepared by the lead agency describing the reasons why the proposed project would not have a significant impact on the environment, and therefore, would not require preparation of an environmental impact report (CEQA Guidelines Section 15371). According to Section 15070 of the CEQA Guidelines, a negative declaration or MND for a project subject to CEQA should be prepared when either:

- the initial study shows that there is no substantial evidence, in light of the whole record before the lead agency, that the project may have a significant impact on the environment; or

- the initial study identifies potentially significant impacts, but:

    - revisions made to the project plans or proposal before the proposed mitigated negative declaration is released for public review would avoid the impacts or mitigate the impacts to a point where clearly no significant impacts would occur; and

    - there is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant impact on the environment.

The District has analyzed the potential environmental impacts of the proposed project, determined that the proposed project's impacts would be less than significant or can be reduced to a less-than-significant level with the implementation of mitigation measures, and therefore has prepared this IS/MND.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. The analysis in this initial study concludes that the proposed project, with implementation of mitigation measures, would have no significant impacts. As such, further environmental review is not required by CEQA. The District would adopt a Mitigation Monitoring and Reporting Program to ensure that all required mitigation measures are implemented.

1.4 APPROVALS

Approval of the proposed project requires discretionary action by the District, which includes adopting the IS/MND and a Mitigation Monitoring and Reporting Program.

The proposed project would also be reviewed by the Office of Public School Construction of the California Department of General Services, Division of the State Architect, and by the California Department of Education (CDE). The CDE is responsible for approving the proposed site of any public school in California (Education Code Section 17213) to ensure that the location meets certain specific standards for public health and safety. Major constraints to selecting a given school site that could require additional investigation include high-voltage power lines, railroad tracks, earthquake faults, pipelines, airport runways, wetlands, hazardous waste sites, and excessive noise levels (Title 5 California Code of Regulations Sections 14010–14011).

Approvals that may be needed for construction and operation of the project may include, but are not necessarily limited to:

- California Department of Education/Division of State Architect—final school site and design approval (per California Education Code Section 17213).

- Central Valley Regional Water Quality Control Board—Clean Water Act Section 402 National Pollutant Discharge Elimination System, Stormwater General Permit.

- Sacramento Metropolitan Fire District—site plan review for emergency access and water availability.

- Sacramento Metropolitan Air Quality Management District—Authority to Construct, permit to operate.

- Sacramento Suburban Water District—domestic water supply and fire flow.
- Sacramento Area Sewer District—sewer connections and conveyance.
- Sacramento County—storm drain connection and stormwater runoff treatment, approval of a grading permit.

Other local, State, or federal approvals or permits may be necessary, pursuant to applicable laws and regulations.

1.5 DOCUMENT ORGANIZATION

This Initial Study is organized into five chapters:

- **Chapter 1, "Introduction,"** provides summary information about the proposed project and describes the purpose and content of the Initial Study, the project background, and the necessary permits and approvals.
- **Chapter 2, "Project Description,"** provides the project location, project objectives, and detailed project description and phasing.
- **Chapter 3, "Environmental Checklist,"** contains the completed initial study checklist. The checklist contains an assessment and discussion of impacts associated with each particular environmental issue. When the evaluation identifies potentially significant effects, as identified in the checklist, mitigation measures are provided to reduce such impacts to less-than-significant levels.
- **Chapter 4, "Summary of Mitigation Measures,"** contains the proposed mitigation measures to reduce potentially significant effects of the proposed project.
- **Chapter 5, "References,"** identifies the information sources used in preparing this Initial Study.

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2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND BACKGROUND

The project site is the existing Arcade Middle School campus, situated on existing District-owned school property at 3500 Edison Avenue, in the urbanized Arden-Arcade area of unincorporated Sacramento County, CA (Exhibit 2-1, Exhibit 2-2, and Exhibit 2-3). The property comprises three parcels totaling 11.24 acres southeast of the intersection of Watt and Edison Avenues.

Arcade Middle School serves students in grades 6–8, and had a total enrollment of 547 students for the 2020–2021 school year (California Department of Education 2022). The campus includes 51,123 square feet of building space, which includes a multi-purpose building for food services and athletics, classrooms, administration space, a library/media center, a music/art building, a building housing lockers and restrooms, and a separate storage building (formerly used as the District's bus barn). The campus also includes outdoor hardcourt and turf playfields, parking, and a drop-off and pick-up area adjacent to Edison Avenue (Exhibit 2-1 and Exhibit 2-2).

Arcade Middle School was originally constructed in 1938. Several additions to the school were made in 1945–1948, 1964, 1970, and 1998, and several modernizations were performed in 1999–2000, and 2010.

Land surrounding the project site is primarily single-family and multi-family residential, except for an office building north of Edison Avenue. The project site is zoned RD-20 (Multiple Family Residential) and the Sacramento County General Plan land use designation is MDR (Medium-Density Residential) (Sacramento County 2022). The Arden-Arcade Community Plan land use designation is RD-20/PQP (Public/Quasi-Public) (Sacramento County 1980). Schools are a primary, permitted use in areas that are zoned residential under the Sacramento County Zoning Code (Sacramento County 2021:Table 3.1).

Source: Google Earth 2021

Exhibit 2-1. Aerial View of Project Site and Existing Campus Facilities

Source: Google Earth 2020

Exhibit 2-2. View of Existing Arcade Middle School Entrance from Edison Avenue

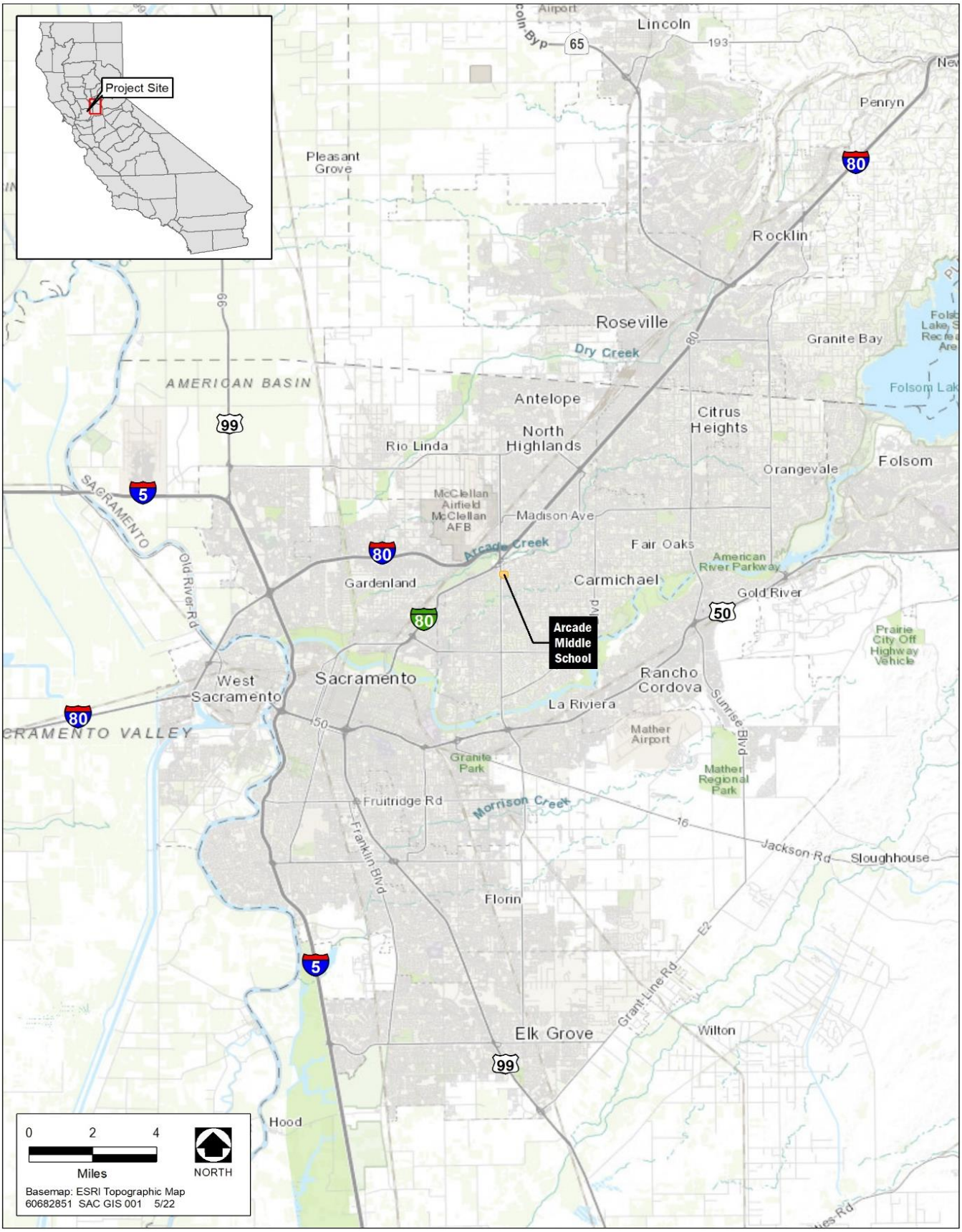


Exhibit 2-3. Regional Project Location

2.2 PROJECT CHARACTERISTICS

The proposed project is intended to modernize the existing school campus and provide an improved learning environment that better meets the needs of today's student body. The reconfigured school campus would help the District in its mission to embrace the current trend to shift from traditional teacher-centered to student-centered education. This mission includes a campus that is oriented towards integrating the whole student body as a community, through both interior and exterior spaces.

The existing buildings at the campus would be demolished. As shown in the conceptual site plan (Exhibit 2-4), the school campus would be designed to move the school buildings closer to the southern property line, away from Watt Avenue and Edison Avenues.

New school buildings would include administration, library, and student services; general classrooms; science, art, maker, and special education classrooms; and a multi-purpose building to accommodate food service, music, gymnasium, and locker rooms (Exhibit 2-4). Building exteriors would incorporate modern design features such as cantilevered roofs and covered walkways, architectural coatings designed to reduce glare, and connectivity between indoor and outdoor learning environments. An outdoor dining area with a shade trellis would be provided adjacent to the food service area. The school buildings would be oriented around a central interior quad (gathering space), which would include an outdoor amphitheater. Communications would be facilitated by a public address (PA) system that may be used outdoors around the campus buildings, when necessary. A new outdoor hardcourt basketball area would be developed south of Edison Avenue, and the existing turf soccer/baseball field in the northwestern portion of the campus would be refurbished.

A new sidewalk would be installed along the south side of Edison Avenue. New parking areas, which would be landscaped with trees, shrubs, and grass, would be constructed south of Edison Avenue (where the existing school buildings are located now). The student drop-off area would be relocated south of the new parking lot.

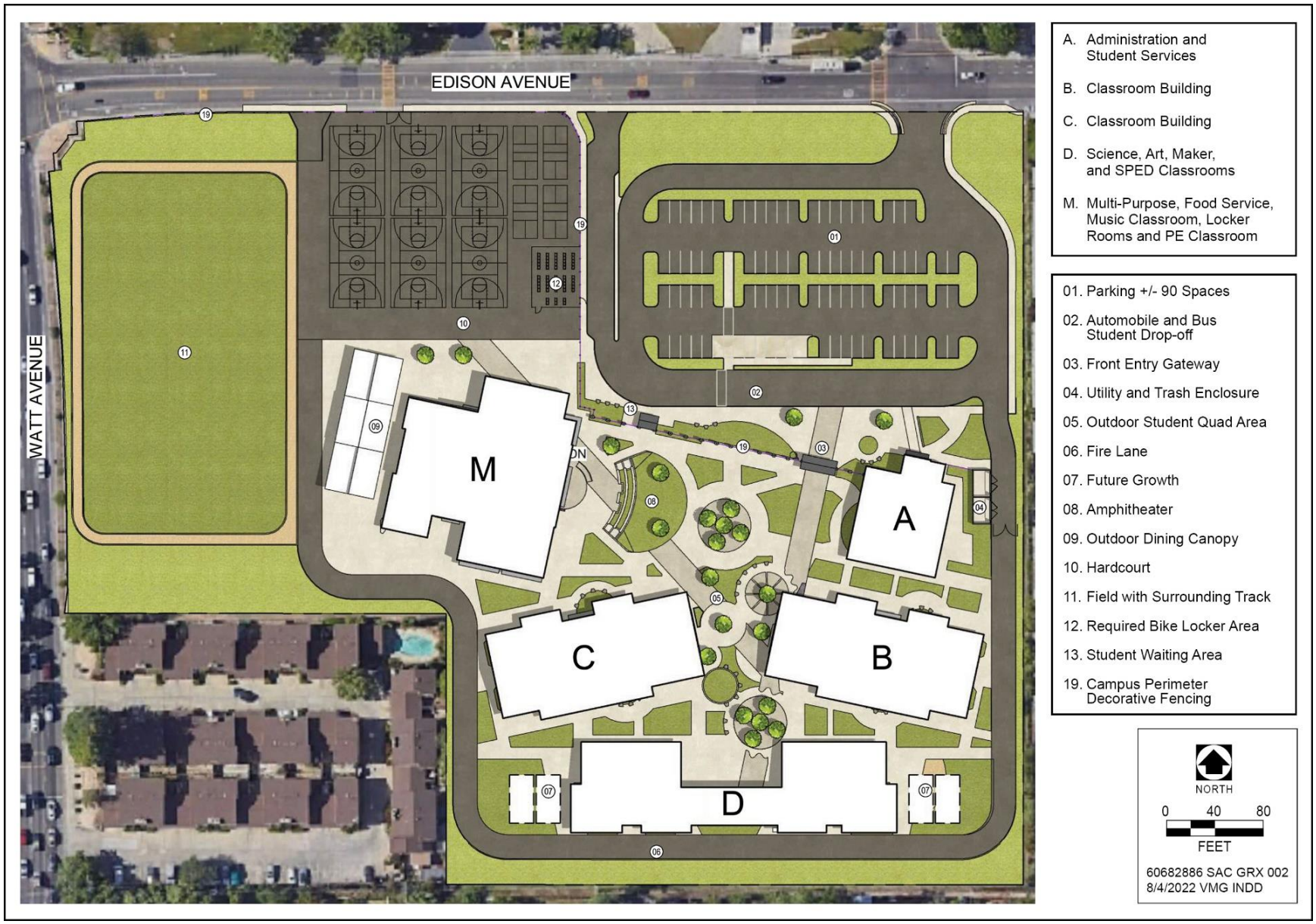
New drought-tolerant landscaping would be installed around the new buildings and the outdoor gathering and learning areas. Outdoor security lighting would be provided on the new school buildings. All nighttime lighting fixtures would be shielded and directed downward to prevent light spillover. The outdoor playfields would not be lighted at night.

Emergency access within the school campus would be expanded, with a paved travel route for equipment southward from Edison Avenue, westward around the back of the new buildings along the southern end of the campus, and then northward to the hardcourt play areas.

All project-related facilities would be designed to meet the requirements of the Division of the State Architect (DSA).

Approximately 59,000 square feet of new building space would be constructed. The proposed project also includes improvements to on-site sewer, water, wastewater, and electrical systems as necessary in coordination with the current utility service providers to support modernization of the campus.

The proposed project would allow for an increase in the maximum student capacity. The existing capacity of Arden Middle School is 558 students and the proposed project would increase the school's capacity to a maximum of 650 students. The school would accommodate approximately 54 staff members in total.



Source: Lionakis 2022

Exhibit 2-4. Conceptual Site Plan

2.3 PROJECT DEMOLITION, CONSTRUCTION, AND STAGING

All construction equipment and vehicles would be staged on the existing school campus. Project-related demolition and construction is anticipated to take 21 months. New buildings would be constructed on-site and then existing facilities would be demolished, and the balance of outdoor recreation areas, landscaping, and circulation improvements completed.

The construction contractor will be responsible for erecting a chain-link fence with fabric screening or webbing around the construction area, to ensure that only authorized construction personnel and District representatives are allowed entry. In addition, warning signs indicating that the construction site poses a hazard to non-authorized personnel along with signs stating "No Admittance" would be posted on the fencing around the site.

Due to the age of the on-site structures, abatement of hazardous materials including asbestos-containing materials, lead-based paint, electrical equipment containing polychlorinated biphenyls, and fluorescent tubes containing mercury vapors and lights may be necessary as part of the demolition activities. The District will coordinate any required preconstruction work with the California Department of Toxic Substances Control (DTSC). Construction worker health and safety regulations and hazardous materials removal and disposal protocols would be implemented in accordance with applicable federal and state standards, including the California Division of Occupational Safety and Health and the Sacramento Air Quality Management District (SAQMD) regulations. The abatement contractor would be appropriately licensed and certified, and is required by law to comply with all local, state, and federal requirements regarding hazardous materials. Hazardous materials would be disposed of in an approved, off-site Class I or Class II landfill.

Demolition would be performed in a manner that maximizes salvage and recycling of materials. A minimum of 65 percent, by weight, of the solid waste generated would be diverted from landfill disposal through re-use and recycling. Materials to be recycled or re-used would be stored onsite in non-combustible containers. All demolition materials, waste, and debris that are not designated to be salvaged would become the project contractor's property and would be removed and disposed of in compliance with all local, state, and federal regulations.

2.4 PROJECT OBJECTIVES

SJUSD has identified the following Project Objectives to guide planning for the project site, as well as the analysis included within this environmental Initial Study:

- Reuse and modernize the existing school campus to meet SJUSD educational facility requirements in a manner that provides an improved learning environment that better meets the needs of today's student body.
- Provide for the educational needs of up to approximately 650 middle school (grades 6–8) students.
- Meet SJUSD geographical needs for school facilities within its service boundary and within the Arden-Arcade Community.
- Slow enrollment growth at nearby overcrowded middle schools.
- Provide safe school facilities that meet current educational and building energy efficiency requirements.
- Provide safe and efficient school site access for students and SJUSD staff.

3 ENVIRONMENTAL CHECKLIST

	Category	Project Information
1.	Project Title:	Arcade Middle School
2.	Lead Agency Name and Address:	San Juan Unified School District, 3738 Walnut Avenue Carmichael, CA 95608
3.	Contact Person and Phone Number:	Nicholas Arps, Director of Facilities Construction & Modernization San Juan Unified School District 3738 Walnut Avenue, Carmichael, CA 95608 (916) 971-7700, construction@sanjuan.edu
4.	Project Location:	3500 Edison Avenue, Sacramento, CA 95821
5.	Project Sponsor's Name and Address:	San Juan Unified School District
6.	General Plan Designation:	MDR (Medium-Density Residential)
7.	Zoning:	RD-20 (Multiple Family Residential)
8.	Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation.	The existing Arcade Middle School (originally constructed in 1938) would be demolished and the existing District-owned property would be redeveloped with a new, more modern school campus. The new school buildings would be located at the southern end of the property, where one of the outdoor turf playfields is currently located. Approximately 59,000 square feet of new building space would be constructed. New parking would be provided south of Edison Avenue. The proposed project also includes improvements to on-site sewer, water, wastewater, and electrical systems, as necessary, in coordination with the current utility service providers to support modernization of the campus.
9.	Surrounding Land Uses and Setting:	Single-family and multi-family residential, and one office building north of Edison Avenue.
10:	Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement)	California Department of Education/Division of State Architect, Central Valley Regional Water Quality Control Board, Sacramento Metropolitan Fire District, Sacramento Metropolitan Air Quality Management District, Sacramento Suburban Water District, Sacramento Area Sewer District, Sacramento County Engineering Department, Sacramento County Department of Water Resources

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

_____ _____

Printed Name Title

EVALUATION OF ENVIRONMENTAL IMPACTS

1. 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).
2. 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.
3. 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.
4. "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 in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, 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:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) 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.
6. 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.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. 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.
9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

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3.1 AESTHETICS

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

3.1.1 DISCUSSION

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

No Impact. The 11.24-acre project site is located southeast of the intersection of Watt Avenue and Edison Avenue in the urbanized Arden-Arcade area of unincorporated Sacramento County. The project site currently consists of the Arcade Middle School, which was originally constructed in 1938. Several additions to the school were made in 1945–1948, 1964, 1970, and 1998, and several modernizations were performed in 1999–2000, and 2010 (SJUSD 2013). The existing permanent buildings were constructed in the California finger-style, which followed the post-war 1950s design aesthetic of one-story buildings with flat roofs, and finger-like classroom corridors that isolated individual classrooms from other campus learning centers. These buildings are clad in stucco and are painted a tan color. Paved asphalt parking areas with limited landscaping (low-growing shrubs and several small urban street trees) are present in the northern part of the project site adjacent to Edison Avenue. Paved black asphalt hardcourt playfields are present in the middle of the project site, surrounding the existing classroom buildings on three sides. Black wrought-iron perimeter fencing with vertical bars is present on three sides of the property. Solid white fencing screens the southern property boundary from the adjacent single-family housing to the south. The southern third of the project site consists of turf playfields, which are also present in the western portion of the project site adjacent to Watt Avenue. Exhibit 3.1-1 through Exhibit 3.1-3 illustrate the existing visual character of the project site.

The existing viewshed to the north and west consists of a 6-lane major roadway (Watt Avenue) to the west and a 4-lane arterial roadway (Edison Avenue) to the north. Watt Avenue carries high traffic volumes – approximately 53,000 trips per day south of Auburn Boulevard (Sacramento County 2019). Beyond the roadways, residential buildings, urban landscaping, and wood power poles with overhead electrical lines are visible. The back sides of residential fencing and partial views of housing and associated landscaping are visible to the east and south.

Source: Google Earth 2020

Exhibit 3.1-1. View of Arcade Middle School entrance and administration building, looking southwest from Edison Avenue.

Source: Google Earth 2020

Exhibit 3.1-2. View of Arcade Middle School turf playfield and multi-purpose building, looking east from Watt Avenue.

Source: Google Earth 2020

Exhibit 3.1-3. View of Arcade Middle School former District bus barn building and classrooms, looking south from Edison Avenue.

There are no scenic vistas at the project site or in the project vicinity, which consists of an existing school at the corner of Watt Avenue and Edison Avenue in the urbanized Arden-Arcade area. Thus, there would be ***no impact***.

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

No Impact. There are no state- or locally-designated scenic highways in the project vicinity. Garden Highway, the closest locally-designated scenic highway, is approximately 5.5 miles to the southwest (Sacramento County 2020). State Route 160, the closest state-designated scenic highway, is approximately 13 miles to the southwest (California Department of Transportation 2019). Thus, there would be ***no impact***.

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. The project site is located at the corner of Watt Avenue and Edison Avenue in the urbanized Arden-Arcade area of unincorporated Sacramento County. The project site is zoned for residential development (Sacramento County 1980, 2022), and schools are a primary, permitted use in residential areas under the Sacramento County Zoning Code Chapter 3, Section 3.2.5 (Sacramento County 2021). The County Zoning Code does not include design guidelines related to schools, other than signage requirements (Section 5.10.1.M). Neither the Sacramento County General Plan (Sacramento County 2020) nor the Sacramento County Design Guidelines (Sacramento County 2018) contain standards or guidelines that are specific to school design; rather, they contain general guidelines that would apply to a variety of projects. These policies and guidelines are related to topics such as new development that complements the aesthetic style and character of nearby existing

development, pedestrian connections to adjacent areas, high-quality architectural design, incorporation of natural features such as trees and rock outcroppings into site-specific design, the use of anti-reflective exterior coatings, and the need for shielding of nighttime lighting to reduce light pollution. The redeveloped and modernized school campus would generally be consistent with these types of General Plan policies and the County's Design Guidelines, because these policies and guidelines include basic design principles that form the foundation of both functional and aesthetically pleasing architectural design and land use planning.

The project site currently includes old buildings in square blocks. The buildings span a nearly 70-year time period, and while they have been upgraded at various times to meet code requirements, the campus does not present a unified architectural style.

As shown in the site plan (Exhibit 2-4 in Chapter 2, "Project Description"), the school campus would be designed to move the school buildings closer to the southern property line, away from Edison Avenue. The new parking area would be landscaped with trees and shrubs and constructed adjacent to and south of Edison Avenue (where the existing school buildings are currently located). The existing buildings on campus would be demolished. The new buildings would be connected to new outdoor learning spaces, outdoor eating areas, and an outdoor amphitheater. The new buildings throughout the campus would be upgraded with new exterior architectural coatings, modern roof styles, new energy efficient windows and security light fixtures, new doors, and new landscaping. The existing turf playfield adjacent to Watt Avenue would be retained and refurbished, and new paved hardcourt playfields would be constructed south of Edison Avenue. The reconfigured school campus would help the District in its mission to embrace the current trend to shift from traditional teacher-centered to student-centered education. This mission includes a campus that is oriented towards integrating the whole student body as a community, through both interior and exterior spaces.

Although the District is not subject to local General Plan requirements, including the Design Guidelines, Arcade Middle School is designed to serve the public school needs of the community, and the District has considered the existing neighborhood characteristics in the new school design. The proposed project is required to conform to all CDE and DSA requirements, which are specific to schools. Because the entire school campus would be completely modernized and redesigned, the visual character and scenic quality of the project site would be improved as compared to existing conditions. Therefore, this impact is considered ***less than significant***.

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. As discussed above, the project site is located in the urbanized Arden-Arcade area. A high degree of nighttime lighting associated with roadways and office, public/quasi-public, and residential development is already presented adjacent to the project site and in the project vicinity. The existing Arcade Middle School contains minor nighttime security lighting.

The redeveloped school campus would also require minor new sources of nighttime lighting for security purposes associated with the buildings and facilities, access road, parking lots, and entryways, similar to existing conditions. The outdoor sports fields would not have lighting for nighttime use. Because the minor nighttime lighting at the new buildings would be similar in lumens to the existing nighttime lighting and would be shielded and directed downward, the proposed project would not result in new substantial sources of light or glare, and would not result in a substantial new source of nighttime skyglow effects. Therefore, this impact is considered ***less than significant***.

3.2 AGRICULTURE & FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 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?

No Impact. Based on a review of the 2018 Important Farmland Map for Sacramento County produced by the California Department of Conservation (DOC) under the Farmland Mapping and Monitoring Program (FMMP), the project site is designated as Urban and Built-Up Land (DOC 2018). There is no Farmland at the project site or

in the project vicinity, which is located in the urbanized Arden-Arcade area of unincorporated Sacramento County. The proposed project is an urban re-use project that consists of demolishing the existing Arcade Middle School and constructing a new, more modern school on the existing campus. There is no Farmland at the project site or in the project vicinity, which is located in the urbanized Arden-Arcade area. Thus, the proposed project would not result in conversion of the Farmland to a non-agricultural use, and there would be no impact.

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

No Impact. The project area is zoned primarily for residential land uses (Sacramento County 2022a). The Arden-Arcade Community Plan land use designation is RD-20/PQP (Public/Quasi-Public) (Sacramento County 1980). There are no Williamson Act contracts at the project site or in the project vicinity (Sacramento County 2022b), which is located in the urbanized Arden-Arcade area. Thus, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and there would be no impact.

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))?

No Impact. The existing Arcade Middle School was constructed in 1938. The project site is zoned and designated for residential land uses, which includes the existing school use (Sacramento County 2022a). The project site is not zoned or designated for forest land, timberland, or timberland production. Thus, there would be no impact.

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

No Impact. The project site is located in the urbanized Arden-Arcade area. Neither the project site nor the surrounding area contains any forest land. Thus, there would be impact.

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?

No Impact. There is no Farmland at the project site or in the project area. The proposed project is an urban infill project to modernize the existing Arcade Middle School. All construction and operational activities would take place on the existing school campus. Thus, the proposed project would no potential to result in the conversion of Farmland or forest land to other uses, and there would be no impact.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 ENVIRONMENTAL SETTING

The project site is located in the Sacramento Valley Air Basin (SVAB). The Sacramento Valley Air Basin climate is characterized by hot, dry summers and cool, rainy winters.

Typically, winds transport air pollutants northward out of the SVAB; however, during approximately half of the time from July to September, the wind pattern shifts southward, blowing air pollutants back into the SVAB and exacerbating the concentration of air pollutant emissions in the air basin. In addition, between winter storms, high pressure and light winds contribute to low-level temperature inversions and stable atmospheric conditions, resulting in the concentration of air pollutants.

Individual air pollutants at certain concentrations may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Six air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) as being of concern both on a nationwide and statewide level: ozone; carbon monoxide; nitrogen dioxide; sulfur dioxide; lead; and particulate patter (PM), which is subdivided into two classes based on particle size – PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

Health-based air quality standards have been established for these pollutants by EPA at the national level and by CARB at the state level. These standards are referred to as the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Both EPA and CARB designate areas of California as "attainment," "nonattainment," "maintenance," or "unclassified" for the various pollutant standards according to the federal Clean Air Act (CAA) and the

California CAA (CCAA), respectively. Because the air quality standards for these air pollutants are regulated using human and environment health-based criteria, they are commonly referred to as "criteria air pollutants."

Within the Sacramento Valley Air Basin, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. With respect to regional air quality, the SMAQMD region, including Sacramento County, is currently designated as nonattainment for the NAAQS and CAAQS for ozone, and nonattainment for the NAAQS for 24-hour $PM_{2.5}$, and the CAAQS for PM_{10}.

3.3.2 DISCUSSION

This section includes an evaluation of direct impacts, as well as cumulative effects given the nature of criteria air pollutant emissions impacts. This section also evaluates impacts related to pollutant concentrations, with a focus on how those pollutants could affect sensitive populations.

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

Less-than-Significant Impact with Mitigation Incorporated. Air quality plans describe air pollution control strategies to be implemented to bring an area that does not attain the NAAQS or CAAQS into compliance with those standards, or to maintain existing compliance with those standards, pursuant to the requirements of the CAA and CCAA.

SMAQMD has adopted air quality plans pursuant to regulatory requirements under EPA and CARB for the attainment and maintenance of federal and state ambient air quality standards. The goal of the air quality plans is to reduce criteria air pollutant emissions for which the SVAB is designated as nonattainment in order to achieve NAAQS and CAAQS by the earliest practicable date. For ozone nonattainment, the regional air quality management plan was developed to describe and demonstrate how the Sacramento Federal Nonattainment Area (SFNA) is meeting requirements under the federal CAA in demonstrating reasonable further progress and attainment of the NAAQS for ozone (SMAQMD 2017). For particulate matter, SMAQMD developed the $PM_{2.5}$ Maintenance Plan and Redesignation Request (SMAQMD 2013) to address how the region attained and would continue to attain the 24-hour $PM_{2.5}$ standard and the PM_{10} Implementation/Maintenance Plan and Redesignation Request for Sacramento County (SMAQMD 2010).

As documented in the SMAQMD CEQA Guide (SMAQMD 2021), the recommended construction and operational mass emissions thresholds for ozone precursors correlate to the NO_x and ROG reductions from heavy-duty vehicles and land use project emission reduction requirements committed to in the Ozone Attainment Plan for the Sacramento Federal Ozone Nonattainment Area; therefore, projects whose emissions would be less than the recommended thresholds of significance for criteria air pollutants would not conflict with or obstruct implementation of applicable air quality plans related to the attainment of ozone. Similarly, the construction and operational mass emissions thresholds for PM correlate to the SMAQMD's permitting offset trigger levels, which prevents deterioration of ambient air quality and ensures projects do not worsen the region's attainment status (SMAQMD 2015). Therefore, projects whose emissions do not exceed the recommended PM thresholds of significance would also not conflict with or obstruct implementation of the applicable air quality plans related to PM.

The proposed project construction-related activities would be required to comply with SMAQMD rules and regulations established, in part, to ensure implementation of and consistency with strategies and actions of the

applicable air quality plans, including but not limited to Rule 401 (Ringlemann Chart), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), and Rule 405 (Dust and Condensed Fumes). As discussed in detail in item b) below, modeled project construction and operational emissions would not exceed the SMAQMD thresholds of significance for any criteria pollutant. However, due to the nonattainment status of the SVAB with respect to ozone, PM_{10}, and $PM_{2.5}$, SMAQMD recommends that all construction projects implement the SMAQMD Basic Construction Emission Control Practices; without incorporation of SMAQMD's Basic Construction Emission Control Practices, the project's construction activities could potentially conflict with or obstruct implementation of the SMAQMD's air quality plans for PM. The impact is conservatively assumed to be ***potentially significant***.

Mitigation Measure 3.3-1: Implement the SMAQMD Basic Construction Emission Control Practices.

The San Juan Unified School District (SJUSD) shall require that the construction contractor/s comply with Basic Construction Emission Control Practices identified by the SMAQMD and listed below or as they may be updated in the future:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Significance after Mitigation

As stated above, emissions associated with long-term operations of the proposed project are consistent with those anticipated for the purposes of regional air quality attainment plans. With incorporation of Mitigation Measure 3.3-1, the proposed project's construction activities would be required to implement applicable emission control

practices and would not conflict with or obstruct an applicable air quality attainment plan. This impact would be ***less than significant with mitigation***.

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 with Mitigation Incorporated. The nonattainment status of regional pollutants is a result of past and present development within the SVAB, and this regional impact is cumulative in nature rather than being attributable to any one source. A single project's emissions may be individually limited, by could be cumulatively considerable when considered in combination with past, present, and future emissions sources within the air basin. The SMAQMD has established project-level construction and operational emissions thresholds of significance for ROG, NO_X, PM_{10}, and $PM_{2.5}$. If a project's emissions are below the SMAQMD thresholds of significance, the project is not considered to result in a cumulatively considerable contribution to a significant impact on regional air quality (SMAQMD 2020a).

Construction

Construction emissions are described as short-term or temporary in duration but have the potential to adversely affect air quality. Construction-related activities would result in temporary emissions of criteria air pollutants and ozone precursors from demolition and ground disturbing activities (e.g., excavation, grading, and clearing); exhaust emissions from use of off-road equipment, material delivery, and construction worker commutes; building construction; asphalt paving; and application of architectural coatings.

Construction-related emissions were modeled using the California Emissions Estimator Model (CalEEMod) Version 2022.1, which is the most current version of the SMAQMD-recommended model for estimating construction and operational emissions from land use development projects. Project-specific construction parameters (*e.g.*, building and pavement demolishment amounts, construction schedule, total acres disturbed, quantity of import material, amount of development per land use, estimated construction workers and construction-related vehicle trips) were used as inputs in the air quality analysis. Where project-specific information was not available, CalEEMod default parameters were used. Modeled construction-related emissions are compared to the applicable SMAQMD thresholds to determine significance.

As there can be differences in the emissions between winter and summer, Table 3.3-1 presents the maximum level of construction emissions in pounds per day for all criteria pollutants and annually for PM_{10}, and $PM_{2.5}$.

As shown in Table 3.3-1, the modeled daily unmitigated emissions generated by construction-related activities would not exceed the SMAQMD-recommended threshold of significance. However, due to the nonattainment status of the SVAB with respect to ozone, PM_{10}, and $PM_{2.5}$, SMAQMD recommends that all construction projects implement the SMAQMD Basic Construction Emission Control Practices (SMAQMD 2019). SMAQMD's Basic Construction Emission Control Practices include such measures as watering the construction site twice daily, limiting vehicle speeds on unpaved roadways to 15 miles per hour, minimizing vehicle idling, covering haul trucks transporting soil, and cleaning paved roads. This impact is conservatively assumed to be ***potentially significant***.

Table 3.3-1. Summary of Unmitigated Construction-Related Emissions of Criteria Air Pollutants and Precursors

Construction Year	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NOx (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
2022	4.27	43.4	9.83	5.81	0.19	**0.11**
2023	1.26	11.8	0.84	0.58	0.11	**0.08**
2024	20.9	32.7	4.78	1.88	0.10	**0.05**
SMAQMD Significance Threshold[1]	-	85	80	82	14.6	**15**
Emissions Exceed SMAQMD Threshold?	-	**No**	**No**	**No**	**No**	**No**

Notes: NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

[1] Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).

Modeled by AECOM in 2022. See technical reports online: https://www.sanjuan.edu/arcademod for additional details.

Operations

Once project-related construction is completed, additional pollutants would be emitted through the use, or operation, of the site. Such emissions sources would include motor vehicle trips to and from the site; fuel combustion from landscape maintenance equipment; natural gas combustion emissions from on-site natural gas use; evaporative emissions of ROG associated with the use of consumer products (paint, cleaning products, etc.); and evaporative emissions of ROG resulting from the intermittent re-application of architectural coatings. CalEEMod was used to estimate these long-term operational emissions, including emissions associated with area and energy sources (i.e., natural gas combustion, landscape maintenance, periodic architectural coatings, and consumer products), and vehicle trips to and from the school site.

The mobile source emissions analysis is based upon project-specific information for the estimated increase in staff and students. As a proposed rebuild and expansion of an existing school, building operations would be assumed to be more efficient than those of the existing much older buildings that would be demolished. Nonetheless, to ensure conservative results, the analysis of building energy related emissions accounts for the gross emissions of the proposed project and does not attempt to subtract current building energy related emissions from the emissions calculations. These gross long-term building energy related emissions missions along with the increase in operational-related mobile emissions are compared to the applicable SMAQMD thresholds of significance for project operations to determine significance.

While construction emissions are considered short-term and temporary, operational emissions are considered long-term and occur for the lifetime of the project. The resultant long-term operational emissions estimates are shown in Table 3.3-2.

Table 3.3-2. Summary of Operational Emissions of Criteria Air Pollutants and Precursors

Operational Sector	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NOx (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
Mobile	0.87	0.45	0.14	0.03	0.02	**< 0.005**
Area	1.83	0.02	< 0.005	< 0.005	< 0.005	**< 0.005**
Energy	0.02	0.36	0.03	0.03	< 0.005	**< 0.005**
Total Operational Emissions	2.72	0.80	0.17	0.06	0.02	**0.01**
SMAQMD Significance Threshold[1]	65	65	80	82	14.6	**15**
Emissions Exceed SMAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

1 Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).

Data compiled by AECOM in 2022. See technical reports online: https://www.sanjuan.edu/Page/52582 for additional details.

As shown in Table 3.3-2, total operational emissions would not approach or exceed any SMAQMD threshold. This comparison to the SMAQMD thresholds shows that operations would not contribute substantially to any existing or projected air quality violation and would not conflict with efforts to reach attainment of any air quality standards. Therefore, impacts to air quality from long-term operations of the project would be ***less than significant.***

Health Effects of Criteria Air Pollutants

Criteria air pollutants can have human health effects at various concentrations, dependent upon the duration of exposure and type of pollutant. CAAQS and NAAQS were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Similarly, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the NAAQS and CAAQS. With respect to regional air quality, the SMAQMD region, including Sacramento County, is currently designated as nonattainment for the NAAQS for ozone and 24-hour $PM_{2.5}$, and nonattainment for the CAAQS for ozone and PM_{10} (SMAQMD 2021). As noted above, projects that emit criteria air pollutants that exceed the SMAQMD thresholds of significance are considered to be "cumulatively considerable" and may contribute to the regional cumulative degradation of air quality that could result in impacts to human health.

Health effects associated with ozone include respiratory symptoms, worsening of lung disease, and damage to lung tissue. In recent years, a correlation has also been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality (EPA 2022). ROG and NO_X are precursors to ozone, for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of ROG and NO_X to regional ambient ozone concentrations is the result of complex photochemistry. The increases in ozone concentrations in the SVAB due to ozone precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of ozone precursors is speculative. Health effects associated with short- and long-term exposure to elevated concentrations

of PM_{10} include respiratory symptoms, aggravation of respiratory and cardiovascular diseases, a weakened immune system, and cancer (WHO 2013). $PM_{2.5}$ poses an increased health risk because these very small particles can be inhaled deep in the lungs and may contain substances that are particularly harmful to human health.

The proposed project would primarily generate criteria air pollutant emissions during the construction phase, and the primary pollutants of concern would be ozone precursors (ROG and NO_X) and PM. Adverse health effects induced by regional criteria pollutant emissions generated by the proposed project (ozone precursors and PM) are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). For these reasons, ozone precursors (ROG and NO_X) contribute to the formation of ground-borne ozone on a regional scale, where emissions of ROG and NO_X generated in one area may not equate to a specific ozone concentration in that same area. Similarly, some types of particulate pollutant may be transported over long distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased ozone or regional PM concentrations are the product of emissions generated by numerous sources throughout a region, as opposed to a single individual project.

Existing models have limited sensitivity to small changes in regional criteria pollutant concentrations, and as such, translating project-generated regional criteria pollutants to specific health effects would not produce meaningful results. In other words, minor increases in regional air pollution from project-generated ROG and NO_X would have nominal or negligible impacts on human health. Currently, CARB and EPA have not approved a quantitative method to meaningfully and consistently translate the mass emissions of criteria air pollutants from a project to quantified health effects. As explained in the amicus brief filed by the South Coast Air Quality Management District (SCAQMD) in the *Sierra Club v. County of Fresno* (2014) 26 Cal.App.4th 704, it "takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels" (SCAQMD 2015).

In 2020, SMAQMD published *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD 2020b), which provides a screening level analysis estimating the health effects of criteria ai pollutants and their precursors, as well as provides guidance for conducting a health effects analysis of a project that satisfies the requirements of the *Sierra Club v. County of Fresno*, 2018, 6 Cal. 5th 502 case ruling regarding the proposed Friant Ranch Project. The Guidance was prepared by conducting regional photochemical modeling and relies on the EPA's Benefits Mapping and Analysis Program to assess health impacts from ozone and $PM_{2.5}$. An analysis was conducted to estimate the level of health effects for a proposed project that has emissions at the maximum SMAQMD-recommended thresholds of significance using 41 hypothetical project locations, as well as a screening model conducted to estimate potential health effects for strategic areas where development is anticipated to cause exceedance of thresholds of significance. The results were used to develop two screening tools intended to support individual projects in analyzing health risks from criteria pollutants: the Minor Project Health Screening Tool for projects with criteria pollutant emissions below SMAQMD's adopted thresholds of significance, and the Strategic Area Project Health Screening Tool for projects with emissions between two and six times the SMAQMD threshold levels.

The modeling results support a conclusion that any one proposed project in the SFNA, which is inclusive of the proposed project site, with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants does not on its own lead to sizeable health effects. The findings of the SMAQMD screening modeling indicate that the mean health incidence for a project emitting at the threshold of significance levels at all

41 representative locations was less than 3 per year for mortality and less than 1.5 per year for other health outcomes evaluated. The maximum reported mortality rate is 22 incidences per year and all other health outcomes evaluated are under 9 per year from a project emitting 656 pounds/day of each NO_X, ROG, and $PM_{2.5}$ at the downtown Sacramento strategic area.

As shown in Table 3.3-1 and Table 3.3-2, project-related emissions during both construction and operational phases would be well below the SMAQMD-recommended thresholds of significance. In addition, the area and energy emissions presented in Table 3.3-2 for long-term area and energy related emissions (not including mobile source) are gross project emissions and do not account for the fact that the project would replace an existing school, and would have more energy efficient buildings than the current school. As described previously, the SMAQMD modeling indicated that for projects with emissions at or below the maximum SMAQMD thresholds of significance levels for criteria air pollutants, the project on its own does not lead to sizeable health effects. As discussed above, the nature of criteria pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible, and this preceding information and consideration is presented for informational purposes only.

Mitigation Measure 3.3-2: Implement Mitigation Measure 3.3-1.

Significance after Mitigation

As stated above, long-term operational emissions would be less than the SMAQMD-recommended thresholds of significance for operations without the need to implement mitigation. The recommended Mitigation Measure 3.3-1 detailed above requires SMAQMD-required emission control practices and construction-related emissions would be less than the SMAQMD-recommended thresholds of significance. This impact is ***less than significant with mitigation.***

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact with Mitigation Incorporated. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered sensitive receptors include schools, daycare centers, parks and playgrounds, and medical facilities.

Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent as the majority of the workers tend to stay indoors most of the time. Sensitive receptors nearest to the project are students of the school itself, as well as residences surrounding the school.

The project site is generally surrounded by residential uses and office buildings. Residential land uses are adjacent to the southern and eastern perimeters of the project site. To the west of the project site across Watt Avenue, there

are residences and a motel. North of the project site across Edison Avenue are office buildings and some residences. In addition, a pre-school and daycare are located approximately 500 feet from the northwest corner of the project site.

The exposure of sensitive receptors (e.g., existing off-site residents) to toxic air contaminant (TAC) emissions from short-term (construction) and long-term operational (mobile, stationary, and other) sources is discussed separately below.

Short-Term Construction Emissions and Exposure to TACs at Surrounding Land Uses

Construction would generate diesel engine particulate matter (DPM) emissions from the use of off-road diesel-powered equipment required for site grading and excavation, paving, and other construction activities. These activities may expose nearby receptors to TACs, including surrounding residents in adjacent areas; the nearest residence is located approximately 40-50 feet to the south and east of the project site. In addition, students at the school may be exposed during construction activities, as construction of the new buildings would occur while the existing buildings are still in use, and then demolition and paving activities would occur while the new school buildings are in use on the property. For this analysis, DPM is assumed to be equivalent to exhaust-generated $PM_{2.5}$, which is a subset of the total unmitigated PM presented in Table 3.3-1.

Health risk is a function of the concentration of contaminants in the environment and the duration of exposure to those contaminants. Concentrations of mobile-source DPM emissions are typically reduced by approximately 60 percent at a distance of around 300 feet (100 meters) (Zhu and Hinds 2002). Construction activities would be dispersed throughout the entire approximately 11.2-acre project site, so the majority of construction activities would take place farther away from each of the nearby sensitive receptors. The roadways and open space would help to disperse potential DPM.

The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent to which a person is exposed to the substance. As described above, unmitigated $PM_{2.5}$ emissions during construction would be a maximum of 5.8 lb./day (Table 3.3-1) but only 1.83 lb./day of the maximum daily emissions are from exhaust, while the remainder are fugitive dust PM. In addition, while the maximum daily $PM_{2.5}$ exhaust emissions is 1.83 lb./day, this includes emissions generated on-site from equipment and vehicles, as well as off-site from construction worker, vendor, and haul vehicles traveling to and from the site daily, and is a maximum that would only occur during peak activity in the initial year of construction; the average daily $PM_{2.5}$ emissions associated specifically with exhaust (and therefor representative of DPM emissions) that would occur over the construction period is less than 0.5 lb./day for all emissions, on- and off-site.

The risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. Health effects from TACs are often described in terms of individual cancer risk, which is based on a 30-year lifetime exposure to TACs (OEHHA 2015). The total construction period is projected to require 21 months. As a result, the exposure of sensitive receptors to construction emissions would be short term, intermittent, and temporary in nature. Even during this period of time, construction activities would vary in activity and equipment intensity, and would take place throughout the entirety of the project site. If the duration of construction activities near a sensitive receptor was for the entirety of 20 months, which is not anticipated, then the exposure would be less than five percent of the total exposure period used for typical health risk calculations (i.e., 30 years).

Because of the intermittent and temporary nature of construction activities, and the dispersive properties of TACs, as well as the fact that $PM_{2.5}$ exhaust emissions would be far less than one lb./day on average, the risk to sensitive receptors due to exposure to TACs from construction activities is reduced. It should also be noted that, with implementation of Mitigation Measure 3.3-1, potential TAC emissions from construction-related activities, particularly PM, would be further reduced, correlating to a reduction in potential exposure of sensitive receptors to TAC emissions during construction. However, the project would involve construction activities while there are students on the property, as the new school buildings would be built on the same property as the current school buildings. Therefore, although construction would be temporary and exposure limited, and students would not be on-site during the entire construction period, on-site emissions should be limited to minimize the exposure of on-site students to DPM from construction equipment. As a result, this impact is conservatively assumed to be ***potentially significant.***

Land Use Compatibility and Exposure to TACs from Nearby Land Uses

School land uses are not typically considered substantial sources of TACs; however, the proposed replacement school would result in an increase of daily traffic trips to and from the project site. Because children are particularly sensitive to elevated concentrations of TACs, CARB recommends that the project site be assessed with regard to the compatibility of surrounding land uses that may be sources of TAC emissions. This recommendation coincides with hazards evaluations required under CEQA and school siting requirements of the California Department of Education, as well.

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides guidance concerning land use compatibility with regard to sources of TAC emissions (CARB 2005). The handbook offers recommendations for siting sensitive receptors near uses associated with TACs (e.g., freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, industrial facilities). While the handbook is advisory and not regulatory, it offers the following recommendations that are pertinent to the proposed project:

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day.
- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.
- Avoid siting new sensitive land uses within 300 feet of a large gasoline station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gasoline dispensing facilities.
- Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation using perchloroethylene. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult the local air district. Do not site new sensitive land uses in the same building with dry-cleaning operations that use perchloroethylene.

The project site is consistent with all the recommendations described above per the CARB Handbook. The replacement school would be located approximately 1,500 feet from the nearest freeway (i.e., Capital City Freeway), which exceeds the 500-foot buffer recommended by CARB. In addition, the new school would not be located within 1,000 feet of a major service or maintenance rail yard, 300 feet of a large gasoline station, 50 feet

of a typical gasoline dispensing facility, or 500 feet of any dry-cleaning operation using perchloroethylene. Therefore, the siting of the school would be consistent with all of the CARB recommendations listed above to avoid and minimize impacts from TACs and thus would not result in the exposure of sensitive receptors to TACs that exceed the recommended thresholds. Within a 1,000 foot radius of the proposed project site, there are predominantly residential land uses and office spaces, with no industrial or agricultural land uses. As a result, this impact would be ***less than significant***.

Carbon Monoxide Hotspots

A mobile-source pollutant of localized concern is CO. Continuous engine exhaust may elevate localized CO concentrations, or "hot spots." The SMAQMD CEQA Guidance acknowledges that land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants that expose sensitive receptors to substantial pollutant concentrations, in part, because the predominant source of these pollutants is typically in the form of mobile-source exhaust from vehicle trips that occur throughout a network of roads and are not concentrated in a single location.

Emissions and ambient concentrations of CO have decreased substantially throughout California in the past three decades. The national statewide CO standard is attained statewide in California, and an exceedance of NAAQS or CAAQS in the region was last recorded in 1993. This is primarily attributable to requirements for cleaner vehicle emissions. CO hot spots are typically observed at heavily congested roadway intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations throughout the day. Construction sites are less likely to result in localized CO hot spots due to the nature of construction activities, which normally utilize diesel-powered equipment for intermittent or short durations. Note that while the SMAQMD CEQA guidance previously contained screening criteria to determine whether project impacts of localized CO concentrations were less than significant, this has been removed, and the CEQA guidance states: *"As of June 1, 2018, the US EPA documented that transportation conformity requirements no longer apply for CO in the Sacramento region. Sacramento has demonstrated 20 years of maintenance of the federal 8-hour CO standard."* (SMAQMD 2021).

The proposed project would not result in prolonged idling throughout the day, nor contribute substantially to regionally high-volume, congested roadways. It is anticipated that the proposed project would not result in substantial increases in daily trips in the project area because the project would be a replacement to the existing school and the additional traffic accommodated by the new facility would be relatively low. Finally, the surrounding intersections at which vehicle trips may increase are not locations of typically limited vertical and/or horizontal of ambient air (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadways), and therefore would not likely be subject to elevated concentrations of CO. Due to the low level of new trips that would be generated by the project, improved vehicle emissions standards for CO, and lack of conditions that would limit dispersion of CO emissions from vehicle exhaust, the proposed project would not violate air quality standards for CO nor have the potential to result in CO hotspots. Therefore, this impact is ***less than significant***.

Mitigation Measure 3.3-3: Implement Construction DPM Emission Control Measures.

The SJUSD shall require that the construction contractor comply with the following additional construction DPM emission control measures:

- Use Tier 4 final certified engines for all on-site, diesel-powered construction equipment rated at equal to or greater than 50 horsepower (hp).
- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- Use electrical equipment when available, such as welders, concrete/industrial saws, pumps, sweepers, and/or aerial lifts.

Significance after Mitigation

As stated above, emissions associated with long-term operations of the proposed project would not result in the exposure of sensitive receptors to TACs. In addition, operational emissions would not violate air quality standards for CO nor have the potential to result in CO hotspots. However, the project's construction activities would result in the generation of DPM emission onsite, within the same 11.2-acre project site property on which existing students would continue to attend school. Mitigated emissions are shown in Table 3.3-3, including total $PM_{2.5}$, a portion of which includes DPM. With incorporation of Mitigation Measure 3.3-3, the use of Tier 4 final engines in equipment greater than or equal to 50 horsepower would reduce maximum daily $PM_{2.5}$ exhaust emissions by 75 to 90 percent (depending upon the year) in comparison to the fleet average emissions. In addition, the idling time for diesel powered construction equipment would be restricted to 2 minutes (more stringent than the 5-minute idling time limitation in California Code of Regulations, Title 13, sections 2449(d) and 2485), and the use of electrical equipment would be incorporated when available. Note that the emissions presented in Table 3.3-3 do not account for the use of any electrical equipment or the reduction of the idling time of 2 minutes under Mitigation Measure 3.3-3; these actions would further reduce the generation of DPM from construction activities. Nevertheless, as explained above, the use of Tier 4 equipment would substantially reduce DPM emissions and the potential exposure of sensitive receptors to such emissions. Therefore, this impact would be ***less than significant with mitigation***.

Table 3.3-3. Summary of Mitigated Construction-Related Emissions of Criteria Air Pollutants and Precursors

Construction Year	Maximum Daily Emissions ROG (pounds per day)	Maximum Daily Emissions NOx (pounds per day)	Maximum Daily Emissions PM_{10} (pounds per day)	Maximum Daily Emissions $PM_{2.5}$ (pounds per day)	Maximum Annual Emissions PM_{10} (tons per year)	Maximum Annual Emissions $PM_{2.5}$ (tons per year)
2022	0.91	4.98	7.94	4.08	0.14	**0.06**
2023	0.51	3.25	0.42	0.19	0.05	**0.03**
2024	20.2	7.92	3.64	0.83	0.07	**0.02**
SMAQMD Significance Threshold[1]	-	85	80	82	14.6	**15**
Emissions Exceed SMAQMD Threshold?	-	**No**	**No**	**No**	**No**	**No**

Notes: NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less; $PM_{2.5}$ = respirable particulate matter with an aerodynamic diameter of 2.5 micrometers or less; ROG = reactive organic gases; SMAQMD = Sacramento Metropolitan Air Quality Management District

[1] Represents SMAQMD Threshold of Significance with the application of Best Management Practices (BMPs) and Best Available Control Technology (BACT).

Modeled by AECOM in 2022. See technical reports online: https://www.sanjuan.edu/Page/52582 for additional details.

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

Less than Significant Impact with Mitigation Incorporated. The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines and emissions associated with asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Depending on the wind direction, residents to the south and to the east may be exposed to odors from diesel exhaust associated with grading and asphalt paving activities. However, because the prevailing wind direction is northern and therefore not in the direction of these residents, as well as the fact that odors would be temporary and disperse rapidly with distance from the source, construction-generated odors would not result in the frequent exposure of receptors to objectionable odor emissions. Furthermore, SJUSD is required to comply with applicable portions of SMAQMD Rules 402 (Nuisance) and 442 (Architectural Coatings), which would help ensure that odors generated by short-term construction would not affect a substantial number of people. Therefore, this impact would be ***less than significant***.

Schools are not typically considered to be sources of objectionable odors. Industries and/or facilities that are likely to emit objectionable odors include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and manufacturing plants. The proposed project would not include any of these types of facilities. Other minor sources of odor that could be generated during operations of the school include landscaping equipment and cooking for the cafeteria. These activities would take place intermittently each day, would be minor for a site of this size, and would be consistent with existing landscaping and food service activities on-site. As a result, this impact would be ***less than significant***.

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3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 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 Game or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. The proposed project site is the existing Arcade Middle School campus. A field survey was completed for the project to assess habitat quality and the potential for occurrence of special-status species (AECOM 2022). A report describes the results of a reconnaissance-level biological resources survey. The purpose of the survey was to evaluate habitats and sensitive biological resources present within and adjacent to the project site.

The project site consists of school buildings and managed fields used for recreation by the students. Land uses surrounding the project site are primarily residential, with more commercial and industrial land uses located further north and south.

Land cover for areas affected by the proposed project include urban (developed), managed recreational field, and disturbed (ruderal). Residential land uses surround the project site, and have very low-quality habitat for many species.

Developed land cover is present in the northeastern portion of the project site and is defined as areas developed by humans and devoid of vegetation, such as concrete sidewalks and other paved walkways, utility boxes, and concrete bollards. The developed areas within the project site are comprised entirely of the existing schoolyard, which includes areas paved with asphalt and buildings. No special-status species are expected to occur within these areas. Opportunistic bird species that are tolerant of human disturbance commonly use developed areas. Other wildlife that may use developed areas for cover and foraging include western fence lizard (*Sceloporus occidentalis*) and eastern fox squirrel (*Sciurus niger*).

The managed field land cover type is dominated by introduced, non-native species. The proposed project site has been previously filled and graded and planted with turf to be used as a recreational field for students. The vegetation community is dominated by unidentified planted grass and ruderal vegetation including pineapple weed (*Matricaria discoidea*), musk stork's bill (*Erodium moschatum*), cheeseweed (*Malva parviflora*), and dandelion (*Taraxacum officinale*). This managed field habitat may provide limited foraging, roosting, resting, and nesting sites for birds and small mammals. Wildlife that may be found in this land cover type includes opportunistic birds like American crow, rock pigeon (*Columba livia*), mourning dove, northern mockingbird (*Mimus polyglottos*), California scrub jay (*Aphelocoma californica*), and European starling. Other wildlife that may use developed areas for cover and foraging include western fence lizard and eastern fox squirrel.

Ruderal land cover is dominated by introduced, non-native species that thrive in disturbed places. A narrow band of ruderal vegetation is present in the southern portion of the project site, in between a chain link fence that marks the end of the schoolyard and a wooden fence that separates the neighboring residential property. The vegetation community is dominated by nonnative (some invasive) grasses including ripgut brome (*Bromus diandrus*) and wild oats (*Avena* spp.), with Italian thistle (*Carduus pycnocephalus*) and blackberry (*Rubus* spp.). One fig tree (*Ficus carica*) and one valley oak (*Quercus lobata*) were observed within this narrow patch of ruderal vegetation. This area is not open to public foot traffic, as its access is restricted on both sides by fences; trash was observed within this area. The ruderal vegetation does not appear to be maintained in any way. No wildlife was observed using the ruderal vegetation at the time of the survey, and no evidence of wildlife use (i.e., tracks, scat, or burrows) was found.

The biological resources report indicates that it is unlikely that any special-status wildlife species occur within or near the project site, due to a lack of suitable habitat, the highly disturbed nature of the ruderal vegetation and trees in the site, and the proximity of this site to traffic on Watt Avenue and neighboring residences. No special-status plant or wildlife species were observed in the proposed project site during the reconnaissance survey. Due to a lack of suitable habitat combined with the highly disturbed nature of the ruderal vegetation and trees in the site, and the proximity of this vegetation community to the busy Watt Avenue and neighboring residences, it is unlikely that candidate, sensitive, or special-status plant or wildlife species would occur in or near the project site.

A ***less-than-significant impact*** on special status wildlife species would occur as a result of project implementation.

The trees within the project site may provide suitable nesting habitat for migratory birds. Construction activities could have direct or indirect impacts to nesting migratory birds. Direct impacts could occur through removal of vegetation containing nests, and through noise and other disturbance during demolition and construction activities. Construction activities could potentially result in nest abandonment by the adults and mortality of chicks and eggs. Loss of the nests of common bird species would not result in a substantial impact on local or regional populations; however, destruction of bird nests is a violation of the Migratory Bird Treaty Act and Section 3503 of the California Fish and Game Code. The impact is considered ***potentially significant***.

Mitigation Measures 3.4-1. Avoid Impacts on Common Nesting Migratory Birds

San Juan Unified School District (SJUSD) shall require contractor/s to implement the following measures during demolition and construction activities to avoid adverse effects to special-status nesting birds and common nesting birds.

- Wherever feasible, the contractor will conduct construction activities that could potentially affect common nesting birds during the nesting season. The nesting season for common nesting birds (raptors, passerines) is February 1 to August 31 If construction activities are completed outside of these nesting seasons, no additional measures are required to avoid adverse effects on nesting birds.

- If construction activities that could affect suitable habitat for nesting birds cannot be conducted outside of the nesting seasons listed above, a qualified biologist shall complete pre-construction surveys for nesting birds. Surveys will be conducted by a qualified biologist within suitable nesting habitat that could be affected by construction activities (e.g., staging areas, access routes) and will include a 500-foot buffer area. The qualified biologist will complete preconstruction surveys within 1 week of the start of construction activities, and will be repeated if construction activities lapse for more than 1 week. If no nesting birds are detected during preconstruction surveys, no additional measures are required.

- If nesting birds have been identified by a qualified biologist in or adjacent to a construction area, the qualified biologist will establish a non-disturbance avoidance buffer for construction activities that would potentially affect the nesting birds. The buffer is 100 feet for passerines, 300 feet for raptors, and 200 feet for heron or egret rookeries. Buffers will be marked on plans and specifications and in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers.

- Construction activities will not occur within the buffer unless the qualified biologist determines that such construction activities would not adversely affect nesting activities. Construction activities that may impact special-status nesting birds occurring within the avoidance buffer/s described above will be monitored by a qualified biologist either continuously or periodically during work, as determined by the qualified biologist. The qualified biologist will be empowered to stop construction activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on nesting birds (e.g., nest abandonment). Buffers will be maintained until there is no longer a threat of

disturbance to the nesting bird (e.g., young have fledged, individuals have moved out of the area), as determined by a qualified biologist.

Significance after Mitigation:

These avoidance and minimization measures would reduce impacts to nesting birds to less-than-significant levels by requiring preconstruction surveys if construction occurs within the nesting season of birds with potential to occur near the project site and the establishment of non-disturbance buffers around active nests, if identified. This impact is ***less than significant with mitigation.***

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?

No Impact. The habitat present within the project site consists of developed, a managed field, and ruderal vegetation. None of these land cover types are designated as sensitive by any local, regional, state, or federal plans, policies, or regulations as being sensitive. Further, there is no riparian habitat present within the project site. There is ***no impact***. No mitigation is required.

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?

No Impact. No federally protected wetlands are located within the project site. No wetlands were observed within the biological resources survey, and no wetlands were identified during the database investigation. Additionally, the project site is restricted to the existing Arcade Middle School campus, which consists primarily of developed land cover (asphalt and buildings) and a managed field. During previous construction of the existing facilities, wetlands that may have existed within the project site would have been filled. An on-site stormwater drainage system is currently in place at the existing campus. The on-site system flows to off-site Sacramento County facilities. One off-site paved drainageway is located immediately south of the project site and is designed to transport runoff from the school and neighboring residential uses to an underground sewer system during rain events. Approximately 0.01 acres of the project footprint extends into this stormwater drain, however, no project activities are anticipated to take place within this drainageway. This stormwater drainage is separated from the school facilities by a chain link fence. There is ***no impact***. No mitigation is required.

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. Wildlife movement corridors link areas of suitable wildlife habitat that may otherwise be separated by rugged terrain, changes in vegetation, and/or areas of human disturbance or urban development. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. The fragmentation of natural habitat creates isolated "islands" of habitat that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations. The proposed project would not interfere with wildlife movement, migratory corridors, or nursery sites. This project does not contain any native wildlife nursery sites, waterways for fish passage, and does not

serve as a corridor for any migratory or native wildlife. As described above, this project site is located within the Arden-Arcade community, a developed area consisting primarily of residential and commercial land uses. Developed residential areas surround the project site on all sides. Therefore, no impact would result and no mitigation is required.

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

Less Than Significant with Mitigation Incorporated. The proposed project and construction activities would have direct or indirect impacts on native oak trees protected under the Sacramento County Tree Preservation and Protection Ordinance. Direct impacts would occur through the complete removal or trimming of protected trees.

The County of Sacramento Tree Protection Ordinance (Sacramento County Code Chapter 19.12 Tree Preservation and Protection) governs the removal and preservation of trees on public property and specified private property within the County. A tree inventory was conducted on April 2, 2022, by AECOM biologists under the guidance of International Society of Arboriculture (ISA) Certified Arborist, Keith Wright (#WE-10700A) and an Arborist Report prepared. All trees in the project site with a single trunk diameter at breast height (dbh) of 6" or greater, or multi-trunked tree having an aggregate diameter of 10 inches or greater were included in the inventory. Trees with more than 1/3rd of their canopy overhanging the project site were included in the inventory. The inventory consisted of visual assessments from ground level.

The tree inventory evaluated 47 trees total, 40 of which may be subject to removal to accommodate the proposed project. Five County protected native oak trees, all of which are valley oaks. The impact is ***potentially significant***.

Mitigation Measure 3.4-2: Avoid Impacts on Protected Trees

Prior to project construction, the San Juan Unified School District (District) shall contact the County of Sacramento's tree administrator to discuss the proposed activity and if deemed necessary, the tree administrator will inspect the site of the proposed activity. After consultation between the District and the tree administrator, if the tree administrator determines that a permit is required, the District shall apply for a permit and comply with relevant permit conditions, including permit conditions that may be met through on-site replanting and the landscaping plan. The application for a tree permit would contain the following information:

1. Location, size and species of the tree(s);
2. The type of activity for which the permit is sought;
3. A statement of the reasons for the activity; and
4. Funds for an arborist report, if applicable.

Significance after Mitigation

If determined to be necessary by Sacramento County, the District will obtain a permit for protected trees to be removed or trimmed. Compliance with the permit conditions will include tree protection and replanting (if applicable) or funding to provide for additional tree planting, which will reduce the impact to **less than significant**.

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. The proposed project is not within the planning area of any Habitat Conservation Area, Natural Community Conservation Plan, or other conservation plan. Thus, implementation of this project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other conservation plan. No impact would result from project implementation.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

3.5.1 DISCUSSION

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

No impact. The Arcade Middle School campus was evaluated for the California Register of Historical Resources (CRHR) and does not meet any of the criteria for listing and, therefore, is not a historical resource for the purposes of the California Environmental Quality Act (CEQA). Because Arcade Middle School is not a historical resource, there would be no impact from project construction activities. This property has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. There is ***no impact***.

A records search conducted by the North Central Information Center of the California Historical Resources Information System indicated that no previous cultural resources studies have been conducted within the project site, and two studies had been conducted with ¼ mile of the project site (Peak & Associates 1989 and Billat 2008). No previously recorded cultural resources were identified within the project site. One resource, the Del Paso Regional Park, sited approximately ¼ mile north of the project site, did not result in the identification of a significant cultural resource in the vicinity of the project site.

Cultural resource investigations consisted of an assessment of the built environment (i.e., the existing Arcade Middle School). AECOM Architectural Historian Chandra Miller conducted a site visit on July 5, 2022 to document the extant buildings on the property. The Arcade Middle School was recorded by AECOM on Department of Parks and Recreation (DPR) 523 series forms that includes a historical context and evaluations of significance (AECOM 2022).

- California Register of Historical Resources Criterion 1. The Arcade School campus is not significant because it is not associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. The school consists of six historic-age stages of building construction: 1923, Pre-war (1939-1943), Post-war (1945-1948), 1953, 1964, and 1970. While the Arcade School has been at this location since 1923, none of the original 1923 building sections remain. Research did not reveal that any of the extant, historic-age building sections have significant associations with important historic events. Rather, the buildings performed the necessary duties of a once

rural school that was heavily modified to keep pace with post-war population boom and research did not reveal that any of the extant historic-age buildings on this property gained significance within this context as required under this criterion.

- California Register of Historical Resources Criterion 2. The Arcade School campus does not have significant associations with the lives of persons important to local, California or national history. The buildings were associated with the lives of many students and teachers, none of whom appear to have made demonstrably important contributions to history while attending or teaching at the school. Local schools were named after a two teachers and principal who worked at the campus, teachers Mary Kelly and Gladys Dyer (Kelly-Dyer School dedicated in 1951) and Principal James R. Cowan (James R. Cowan School dedicated in 1959, now Cowan Fundamental School) (Cowan 1990: 56a, 79), but their contributions to education to not appear to rise to the level of significance within this context as required under this criterion.

- California Register of Historical Resources Criterion 3. The Arcade School campus is not significant because it does not embody the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values. As stated above, the campus was built in six historic-age construction stages and the master architect-designed Dean & Dean designed oldest portion of the school has been demolished. The architectural elements of the campus are fashioned after the "finger-plan" style that was introduced in 1940. While George Gordon Stafford was a prolific and respected school designer, his interpretation of "finger-plan" at Arcade School does not embody enough of the distinctive characteristics of a single type of architecture, or represent an important example in the evolution of school architecture as required for significance under this criterion. Additionally, the locker room building, library, and music building are also not important for their architecture.

- California Register of Historical Resources Criterion 4. The Arcade School campus does not appear to be a significant or likely source of important information regarding history. It does not appear to have any likelihood of yielding important information about historic construction materials or technologies that are not found elsewhere within the historic record.

- Integrity Analysis. In addition to meeting one or more of the CRHR criteria, a property must also retain a significant amount of its historic integrity to be considered eligible for listing. Historic integrity is made up of seven aspects: location, design, setting, materials, workmanship, feeling, and association. Because the 1923 school building sections have been demolished, the Arcade School campus lacks integrity of design, setting, materials, workmanship, feeling, and association to a potential period of significance of 1923.

Arcade Middle School is not a historical resource and therefore there would be ***no impact*** from project construction activities.

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

Less than Significant with Mitigation Incorporated. Previous studies and the current investigation did not result in the identification of archaeological resources in the proposed project site as defined by Section 15064.5 of CEQA. Because the proposed project is located in a non-depositional environment, subsurface deposits are most likely not present. Moreover, previous development and associated sub-surface excavation at the project site would further limit the likelihood of encountering buried cultural resources. However, a possibility still exists that

archaeological features could be discovered in the project site, including in areas where structures are not currently developed (e.g., grass playfields). The impact is considered ***potentially significant.***

Mitigation Measure 3.5-1: Unanticipated Cultural Resources

In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained by the District to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the District's expense.

a. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either (1) not cultural in origin; or (2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

b. If a potentially eligible resource is encountered, then the archaeologist and District staff shall arrange for either (1) total avoidance of the resource, if possible; or (2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the District for verification that the provisions of CEQA for managing unanticipated discoveries have been met.

Significance after Mitigation

Mitigation Measure 3.5-1 provides appropriate actions for inadvertant discovery of cultural resources (excluding human remains, which are addressed below). Implementation of Mitigation Measure 3.5-1 would reduce potential impacts on previously undiscovered cultural resources to a less-than-significant level because compliance with the above-listed procedures would address concerns about loss of, or substantial adverse changes to, significant cultural resources. If an inadvertent discovery of cultural materials is made during project-related construction activities, disturbances in the area of the find must be halted and appropriate treatment and protection measures must be implemented, all in consultation with a professional archaeologist and/or Native American monitor. As a result, this impact would be ***less than significant with mitigation.***

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

Less than Significant with Mitigation Incorporated. There has been no indication or evidence that the area has been used for human burials in the recent or distant past. Therefore, human remains are unlikely to be encountered. Project construction would involve grading, trenching, excavation, and potentially other earthmoving activities. Human remains are unlikely to be encountered. However, in the unlikely event that human remains are discovered during subsurface activities, they could be inadvertently disturbed and damaged. Therefore, this impact would be ***potentially significant***.

Mitigation Measure 3.5-2: Unanticipated Human Remains

Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the District shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

Significance after Mitigation

Mitigation Measure 3.5-2 provides appropriate actions for inadvertent discovery of human remains. If remains are encountered, the above-described mitigation measure would require compliance with the procedures in the California Section 7050.5 of the Health and Safety Code and Public Resources Code 5097.98. Public Resources Code Section 5097.94 identifies the responsibilities for acting upon notification of a discovery of Native American human remains. These procedures are specifically designed to reduce the potential adverse effect of project implementation related to human remains by requiring that the human remains are treated in an appropriate and respectful manner and in accordance with applicable laws and regulations. As a result, this impact would be ***less than significant with mitigation***.

3.6 ENERGY

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

3.6.1 DISCUSSION

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

The project is proposed on an existing school site with access to all required utilities and transportation infrastructure, reducing energy that would otherwise be required to extend utilities or transportation infrastructure to the project site.

Construction equipment and haul trucks would consume fuel during the construction process; however, limited grading and access to existing utilities and transportation infrastructure would minimize energy demands during construction. During operations, the project would require fuel for vehicles and equipment used by site maintenance workers, similar to existing site maintenance activities. The constructed project would improve operational energy efficiency on-site by replacing older buildings with new energy-efficient buildings that will comply with the current version of the CalGreen Code.

The Sacramento Area Council of Governments (SACOG), pursuant to the Sustainable Communities and Climate Protection Act of 2008 (SB 375) incorporates State-developed GHG emissions targets for passenger vehicle emissions into a "sustainable communities strategy" as part of its regional transportation plan. SACOG has also developed analysis and mapping showing the location of low VMT areas within the region. The project site is within a low VMT area, as identified by SACOG – an area where the density, mix of land uses, access to non-vehicular transportation options, and other factors result in a reduced need for vehicular transportation and associated transportation energy demand compared to the balance of the region.[1]

Therefore, the proposed project would not adversely affect energy resources or energy conservation. The project would not result in unnecessary or wasteful use of energy. The project's energy demand would not constitute a wasteful, inefficient, or unnecessary use of energy. The impact is **less than significant**.

1 Please see SACOG's website for more details: https://sacog.maps.arcgis.com/apps/webappviewer/index.html?id=0eac172e44514776b2f30e4324652f88&extent=-13567338.6225%2C4599309.7898%2C-13330078.0867%2C4789485.1162%2C102100.

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

The proposed project would not conflict with a state or local plan for renewable energy. There is no relevant state or local plan that would conflict with this reconstruction of an existing school. There is ***no impact***.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.7.1 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 California Geological Survey Special Publication 42.)

No Impact. The project site is not located within or adjacent to a fault zoned under the Alquist-Priolo Earthquake Fault Zone Act, or any other known fault. The nearest fault zoned under the Alquist-Priolo Act is the Green

Valley Fault, approximately 47 miles to the southwest (California Geological Survey 2022). Thus, there would be no impact.

ii) Strong seismic ground shaking?

Less-than-Significant (Beneficial) Impact. The Sacramento Valley has historically experienced a very low level of seismic activity. The nearest potentially active faults are located approximately 25 miles northeast in the Foothills Fault System, and active faults are located approximately 35 miles northwest in the Dunnigan Hills and 47 miles west in the Coast Ranges (Jennings and Bryant 2010). The nearest active faults are located approximately 35–47 miles to the northwest and southwest, respectively.

The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude of the earthquake, and site soil conditions. The 2016 map showing the probabilistic *Earthquake Shaking Potential for California* (digitized by the California Department of Conservation in 2018) indicates that the project site has the lowest potential shaking hazard intensities. Regions in the low intensity categories are distant from known, active faults and are projected to experience lower levels of shaking less frequently. In most earthquakes, only weaker, masonry buildings would be damaged. However, very infrequent large magnitudes earthquakes could still cause strong ground shaking (Branum, et al. 2016).

All project-related facilities would be designed and constructed in accordance with standard engineering practices and CDE requirements, including California Code of Regulations Title 5, Division, Chapter 14, Sections 14001-14036, which requires preparation of a site-specific geotechnical and engineering report that contains recommendations to reduce seismic, geologic, and soils hazards. The purpose of the proposed project is to provide a new, modernized school campus that better meets the needs of today's student and teacher populations. The new school buildings are required by law to be designed and constructed in accordance with the current edition of the CBC, which contains engineering and design requirements that are specifically intended to reduce the loss of life and property from seismic hazards. Because the original school buildings were constructed in 1938 with various additions and modernizations over time, the proposed project would result in an improvement in terms of seismic safety by constructing new buildings that meet the current building standards code. Therefore, this impact would be beneficial (***less than significant***) and no mitigation would be required.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, becoming similar to quicksand. Factors determining liquefaction potential are soil type, level and duration of ground motions, and depth to groundwater. Liquefaction is most likely to occur in low-lying areas where the substrate consists of poorly consolidated to unconsolidated water-saturated sediments, recent Holocene-age sediments, or deposits of artificial fill. The project site is underlain by compacted artificial fill and stable, well cemented Pleistocene-age sediments, and the nearest seismic sources are at least 25 miles away. Furthermore, the depth to groundwater at the project site is approximately 80–100 feet (California Department of Water Resources [DWR] 2021). Therefore, liquefaction would not represent a hazard at the project site, and there would be ***no impact***.

iv) Landslides?

No Impact. The project site is located on a nearly flat alluvial plain in the central Sacramento Valley. There are no steep slopes at the project site or in the project vicinity where landslides could occur. Thus, there would be ***no impact***.

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

Less-than-Significant Impact. Based on a review of U.S. Natural Resources Conservation Service (NRCS 2021) soil survey data, the northeastern portion of the project site where the existing buildings are located is classified as Urban Land (i.e., artificial fill). The remainder of the project site consists of the San Joaquin-Urban Land complex, 0–3 percent slopes. Urban Land is not rated by NRCS in terms of soil characteristics. The San Joaquin-Urban Land complex, where the turf playfields are currently located, is rated by NRCS with a moderate water erosion hazard, a moderate stormwater runoff potential, a moderately high wind erosion hazard, and a low shrink-swell potential.

Project implementation would include earthmoving activities on an approximately 11-acre existing school campus. Based on NRCS soil survey data for Sacramento County, the project site consists of Urban Land (i.e., artificial fill underneath the existing buildings and parking areas), and the San Joaquin-Urban land complex. The San Joaquin-Urban land complex has a moderately high wind erosion hazard, a moderate water erosion hazard, and a moderate stormwater runoff potential. Earthwork would include soil removal; grading; trenching and pipe installation; installation of building, road, and parking lot foundations; and landscaping. Construction activities during the winter months would expose soils to rain events, which could mobilize loose soil and result soil erosion. Subsequent soil transport during storm events could result in sedimentation both within and downstream of the project site. Furthermore, earthmoving activities during the summer months could result in wind erosion.

All project-related facilities would be designed and constructed in accordance with standard engineering practices and CDE requirements, including California Code of Regulations Title 5, Division, Chapter 14, Sections 14001-14036, which requires preparation of a site-specific geotechnical and engineering report that contains recommendations to reduce seismic, geologic, and soils hazards, including soil erosion.

Furthermore, as discussed in detail in Section 3.10, “Hydrology and Water Quality,” because the proposed project would disturb more than 1 acre of land, the District would be required by law to prepare a Storm Water Pollution Prevention Plan (SWPPP) and to implement associated Best Management Practices (BMPs) that are specifically designed to reduce construction-related erosion. Construction techniques that could be implemented to reduce the potential for stormwater runoff may include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that could be implemented to reduce erosion may include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas.

Compliance with CDE requirements along with preparation of a SWPPP and implementation of BMPs designed to control stormwater runoff and reduce erosion, would result in a ***less-than-significant impact***.

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. Approximately one-third of the project site is composed of compacted artificial fill (underneath the existing buildings and parking lots). Most of the proposed new school buildings would be constructed in the southern portion of the project site, within the San Joaquin-Urban Land complex soil type. The NRCS (2021) ratings indicate that this soil type is not limited for construction of small commercial buildings such as those required for the new school campus. The depth to groundwater in the project area is approximately 80–100 feet below the ground surface (DWR 2021), and the project site is underlain by compacted artificial fill and the stable Pleistocene-age Riverbank Formation. Furthermore, there are no creek banks where lateral spreading would represent a hazard, and since the project site and the surrounding area are flat landslides would not represent a hazard. Therefore, hazards from construction in unstable soils are unlikely. Compliance with the CBC and CDE requirements to prepare geotechnical engineering reports that include specific recommendations for construction in unstable soils (if any are found to be present) would ensure that buildings, roads, and parking lots are designed appropriately based on site-specific conditions. Thus, this impact would be ***less than significant***.

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

No Impact. As noted in c) above, approximately one-third of the project site consists of compacted artificial fill underneath the existing buildings. Most of the proposed new school buildings would be constructed in the southern portion of the project site, within the San Joaquin-Urban Land complex soil type. NRCS (2021) soil survey data indicate that this soil type has a low expansion potential. Thus, there would be ***no impact***.

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?

No Impact. The project site is located within the area served by a municipal wastewater system. Wastewater generated by the existing school is conveyed via local facilities operated by the Sacramento Area Sewer District (SASD) and larger regional facilities operated by the Sacramento County Regional Sanitation District (RegionalSan) to the Sacramento Regional Wastewater Treatment Plant (WWTP) for treatment. The reconfigured school buildings on the project site would install new on-site connections (as needed) to existing off-site underground SASD conveyance lines. Because the proposed project would not require installation of a septic system or alternative wastewater disposal system, there would be ***no impact***.

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

Less than Significant with Mitigation Incorporated. Based on geologic mapping prepared by Gutierrez (2011), the project site is located in the Pleistocene-age Riverbank Formation. The results of a paleontological resources records search performed at the University of California, Berkeley Museum of Paleontology (UCMP) on May 9, 2022 indicate there are no recorded fossil localities at the project site. However, the Riverbank Formation is known to contain unique, scientifically important vertebrate fossil remains. Nine recorded vertebrate fossil localities in the Sacramento area have yielded remains of Rancholabrean-age mammoth, bison, camel, coyote, horse, Harlan's ground sloth, mammoth, antelope, deer, rabbit, woodrat, fish, mole, mice, squirrel, snake, and

gophers, dire wolf, frog, Pacific pond turtle, and the family Anatidae (ducks, geese, and swans) (UCMP 2022, Jefferson 1991a and 1991b, Kolber 2004, Hilton et al. 2000). The closest recorded vertebrate fossil localities are at Chicken Ranch Slough, from the Riverbank Formation, approximately 1.5 miles southwest of the project site (UCMP 2022). There are numerous vertebrate fossil localities from the Riverbank Formation and from similar unnamed Rancholabrean-age alluvial sediments in Yolo, San Joaquin, Merced, Stanislaus, Fresno, and Madera Counties, in addition to Sacramento County (UCMP 2022, Jefferson 1991a and 1991b). Because of the high number of vertebrate fossils that have been recovered from the Riverbank Formation throughout the Central Valley, it is considered paleontologically sensitive.

The Riverbank Formation is composed of weathered reddish gravel, sand, and silt comprising older alluvial fans and terraces of the American River and other major rivers and streams in the Sacramento Valley. The sediments of the Riverbank Formation were deposited approximately 130,000–450,000 years B.P. (Helley and Harwood 1985). As described previously, vertebrate fossil specimens have been recovered from the Riverbank Formation in various locations throughout the greater Sacramento area and the Sacramento and San Joaquin valleys. Therefore, it is considered to be paleontologically sensitive.

The project site was developed as a school in 1938, with various additions and modernizations over the years. Based on NRCS (2021) soil survey data, the project site consists of (1) compacted artificial fill (underneath the existing buildings, roads, and parking lots), and (2) the Riverbank Formation underneath the existing turf grass. Therefore, any fossils that may have originally been present at the project site have likely long since been destroyed during repeated development at the school campus from 1938 to the present. However, because the new school would be reconfigured and facilities would be located on different parts of the project site, and given that excavation ranging from 6–8 feet below the ground surface may be required for utilities, project-related construction activities could result in accidental damage to or destruction of unique paleontological resources. Therefore, this impact is considered ***potentially significant***.

Mitigation Measure 3.7-1: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

To minimize the potential for destruction of, or damage to potentially unique, scientifically important paleontological resources during earth-moving activities, the San Juan Unified School District contractor/s shall implement the measures described below.

- Prior to the start of earthmoving activities at the project site, inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.

- If paleontological resources are discovered during earthmoving activities, immediately cease work in the vicinity of the find and notify the San Juan Unified School District. Retain a qualified paleontologist to evaluate the resource and prepare a recovery plan based on Society of Vertebrate Paleontology Guidelines (SVP 2010). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any

specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the District to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-1 would reduce project-related impacts on unique paleontological resources to a **less-than-significant** level because construction workers would be alerted to the possibility of encountering paleontological resources and, in the event that resources were discovered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 DISCUSSION

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

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

Less-than-Significant Impact, Less-than-Cumulatively-Considerable Impact. Certain gases in Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by Earth's surface, and a smaller portion of this radiation is reflected toward space through the atmosphere. Infrared radiation is selectively absorbed by GHGs. As a result, infrared radiation released from Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth.

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation, and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of 1. The other main GHGs that have been attributed to human activity include CH_4, which has a GWP of 27 and 29.8 for fossil and non-fossil sources, respectively, and N_2O, which has a GWP of 273 (IPCC 2021). For example, 1 ton of N_2O has the same contribution to the greenhouse effect as approximately 273 tons of CO_2. The concept of CO_2 equivalence (CO_2e) is used to account for the different GWP potentials of GHGs. GHG emissions are typically measured in terms of pounds or tons of CO_2e and are often expressed in metric tons (MT) CO_2e.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. As noted in the Sacramento Valley Regional Report of the California's Fourth Climate Change Assessment (Houlton and Lund 2018), climate change is expected to make the Sacramento region hotter, drier, and increasingly prone to extremes like megadroughts, flooding, and large wildfires. These changing conditions are likely to affect water and energy availability, agricultural systems, plants and wildlife, public health, housing, and quality of life.

This section includes an evaluation of direct and indirect impacts from the proposed project. The proposed project will not, by itself, contribute significantly to climate change; however, cumulative emissions from many projects and plans all contribute to global GHG concentrations and the climate system. Unlike criteria air pollutants and toxic air contaminants that tend to have more localized or regional impacts, GHG emissions are pollutants of a global concern because of their relatively longer atmospheric lifetimes compared to air pollutant emissions and effect on the climate globally. Therefore, this section considers the project's cumulative contribution to the significant cumulative impact of climate change.

SUMMARY OF PROJECT GHG EMISSIONS

Project implementation would generate short-term construction and long-term operational GHG emissions. Construction-related GHG emissions would cease following construction of the project. Operational emissions are considered long-term and assumed to occur for the lifetime the project. Construction-related GHG emissions would be generated primarily from exhaust emissions associated with off-road construction equipment, construction worker commutes, and vendor and haul truck trips. Operational GHG emissions can be categorized into direct and indirect GHG emissions. Direct GHG emissions are those emissions that are generated at the location of consumption or use. For example, mobile-source emissions are direct emissions because GHG emissions are generated as a vehicle is operated. Conversely, indirect emissions are those emissions that occur at a different time or location from the point of consumption or use. For example, electricity-related GHG emissions are indirect emission because as a consumer uses electricity, the fuel combustion and emissions associated with creating that electricity likely occurred off-site or at a different time. Other indirect GHG emissions include emissions associated with solid waste disposal and water consumption.

STATE LEGISLATIVE FRAMEWORK

The California Air Resources Board (CARB) has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this establishes a broad framework for the State's long-term GHG reduction and climate change adaptation program. Of particular importance is Assembly Bill (AB) 32, which established a statewide goal to reduce GHG emissions back to 1990 levels by 2020, which California achieved as a state, and Senate Bill (SB) 375 which supports AB 32 through coordinated transportation and land use planning with the goal of more sustainable communities. SB 32 extends the State's GHG policies and establishes a near-term GHG reduction goal of 40% below 1990 emissions levels by 2030. Executive Order (EO) S-03-05 identifies a longer-term goal for 2050. EO S-03-05 has set forth a reduction target to reduce GHG emissions by 80 percent below 1990 levels by 2050. Executive Order B-55-18 established a new statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The Executive Order states that this new goal is in addition to the existing statewide targets of reduction GHG emissions. CARB has adopted the Climate Change Scoping Plan, which contains the main strategies California will implement to achieve the required GHG reductions required by AB 32.

LOCAL AIR DISTRICT RECOMMENDATIONS FOR SIGNIFICANCE DETERMINATIONS

The project site is located within unincorporated Sacramento County in an area regulated by the Sacramento Metropolitan Air Quality Management District (SMAQMD). SMAQMD has developed Recommended GHG Emissions Thresholds of Significance, which established thresholds of significance for GHG emissions designed to analyze a project's compliance with applicable State laws, including AB 32 and SB 32 (SMAQMD 2021). The SMAQMD developed the thresholds for Sacramento County based on determining Sacramento County's share of

statewide 2030 GHG emissions by sector, determining the share of Sacramento County 2030 emissions from existing development versus new development, allocating 2030 GHG emissions from new development among land uses and place types to set numeric thresholds. For the purposes of determining whether the proposed project's construction-related and operational GHG emissions may result in a cumulatively considerable contribution to the cumulative impact of climate change, SMAQMD has developed the following numeric significance thresholds for land development and construction projects (SMAQMD 2020a):

- The annual construction-related emissions exceed 1,100 MT CO_2e per year; or
- The annual operation emissions exceed 1,100 MT CO_2e per year.

In April 2020, SMAQMD adopted an update to their land development project operational GHG threshold, which was intended to allow a project to demonstrate consistency with CARB's 2017 Climate Change Scoping Plan. SMAQMD's technical support document, "Greenhouse Gas Thresholds for Sacramento County", identifies certain design features and a transportation performance standard that are recommended for development projects in order to demonstrate less-than-cumulatively-considerable GHG emissions effects (SMAQMD 2020b). The design features are known as Tier 1 and Tier 2 BMPs:

- BMP 1 – projects shall be designed and constructed without natural gas infrastructure; and
- BMP 2 – projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle (EV) capable spaces shall instead be EV ready.

According to SMAQMD's recommendations, if a project implements the above-described BMP 1 and BMP 2, and the resulting emissions are less than 1,100 MT CO_2e per year, the GHG emissions impact would less than cumulatively considerable (less than significant). If emissions exceed 1,100 metric tons/year, then the project must implement BMP 3:

- BMP 3 – residential projects shall achieve a 15% reduction in vehicle miles traveled per resident and office projects shall achieve a 15% reduction in vehicle miles traveled per worker compared to existing average vehicle miles traveled for the county, and retail projects shall achieve a no net increase in total vehicle miles traveled to show consistency with SB 743.

There is no transportation performance standard in BMP 3 for how school projects. If the project implements the BMP 1 and 2 design features, and then can meet the BMP 3 transportation performance standard, then SMAQMD recommends that the operational GHG emissions can be considered less than cumulatively considerable.

Approach to Analysis and Significance Determination

Considering that GHG emissions impact analysis and significance determination are established by the State legislative framework, the analysis in this section answers the two checklist questions in CEQA Guidelines Appendix G in a single impact assessment. Whether or not the proposed project would generate GHG emissions that would result in a substantial contribution to the significant impact of climate change or conflict with an applicable plan, policy, or regulation adopted for the purposes of reduction GHG emissions depends on whether the proposed project would comply with the SMAQMD thresholds of significance.

PROJECT ANALYSIS

GHG emissions as a result of the proposed project were estimated using CalEEMod version 2022.1. The CalEEMod estimates of direct emissions associated with the project's construction- related emission sources, as well as operational mobile (e.g., student and staff-related vehicles) and area (e.g., landscape maintenance equipment), sources; and indirect emissions associated with operational energy (i.e., electricity), water (i.e., conveyance and distribution), and solid waste (i.e., decomposition) sources. Table 3.8-1 presents a summary of the project's potential annual construction and operational GHG emissions to compare with the applicable threshold of significance.

Table 3.8-1. GHG Emissions Associated with Construction and Operation of the Project– Construction GHG Emission

Emissions Source	GHG Emissions (MT CO_2e / year)
Maximum Annual Construction Emissions	284
Total Potential Construction Emissions	631
Operational Area Emissions	1.2
Operational Energy Emissions	172
Operational Mobile Emissions	54
Operational Water Emissions	1.8
Operational Waste Emissions	37
Total Annual Operational Emissions	266
SMAQMD Threshold of Significance (Construction-related or Operational)	**1,100**
Exceed Thresholds?	**No**

Notes: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide emissions; SMAQMD = Sacramento Metropolitan Air Quality Management District.
Source: Modeled by AECOM 2022. See technical reports online: https://www.sanjuan.edu/arcademod for additional details.

As shown in Table 3.8-1, total construction-related emissions of the project would be approximately 631 MT CO_2e; these emissions would be generated over approximately 21 months, with a maximum annual emission of 284 MT CO_2e. Thus, construction-related emissions would be well below the SMAQMD-recommended bright-line threshold for construction activities. Operational emissions are also substantially below the SMAQMD bright-line threshold of operational emissions. In addition, the above emissions do not account for the fact that existing older facilities, operations of which currently generally GHG emissions, would be replaced by more efficient buildings and related operational emissions sources. Even the sum of total construction emissions and annual operational emissions is below the SMAQMD-recommended threshold of 1,100 metric tons of CO_2e/year.

The Sacramento Area Council of Governments (SACOG), pursuant to the Sustainable Communities and Climate Protection Act of 2008 (SB 375) incorporates State-developed GHG emissions targets for passenger vehicle emissions into a "sustainable communities strategy" as part of its regional transportation plan. SACOG has also developed analysis and mapping showing the location of low VMT areas within the region. The proposed Arcade Middle School project site is within a low-VMT area, as identified by SACOG – an area where the density, mix

of land uses, access to non-vehicular transportation options, and other factors result in a reduced need for vehicular transportation compared to the balance of the region.[1]

Even without accounting for the fact that the project would replace much older less energy efficiency buildings, project emissions associated with short-term construction and long-term operations of the proposed project would not exceed the SMAQMD-recommended threshold of 1,100 metric tons of CO_2e/year. The project is located in a low-VMT area as identified by SACOG as being 15 percent less VMT per capita than the overall regional average, Therefore, this impact is considered ***less than cumulatively considerable*** (***less than significant***).

[1] Please see SACOG's website for more details: https://sacog.maps.arcgis.com/apps/webappviewer/index.html?id=0eac172e44514776b2f30e4324652f88&extent=-13567338.6225%2C4599309.7898%2C-13330078.0867%2C4789485.1162%2C102100

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3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 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. AECOM performed a search of publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the "Cortese List") to determine whether any known hazardous materials are present either in or within 0.25 mile of the project site. These searches included the EnviroStor database maintained by the California Department of Toxic Substances Control (DTSC 2022), and the GeoTracker database maintained by the State Water Resources Control Board (SWRCB 2022). In addition, AECOM performed a search of the U.S. Environmental Protection Agency's (USEPA 2021) National Priorities List (Superfund) database. AECOM also prepared a Phase I Environmental Site Assessment (ESA) in general accordance with the scope and limitations of ASTM Standard Practice Designation E 1527-21.

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because human exposure to lead was determined by EPA and the Occupational Health and Safety Administration (OSHA) to be an adverse human health risk,

particularly to young children. Demolition of structures containing lead-based paint requires specific remediation activities regulated by federal, state, and regional and local laws.

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to lodge in lung tissue and cause health problems. The presence of asbestos-containing materials (ACMs) in existing buildings poses an inhalation threat only if the ACMs are in a friable state. If the ACMs are not friable, then there is no inhalation hazard because asbestos fibers remain bound in the material matrix. People exposed to asbestos may develop lung cancer and mesothelioma. Emissions of asbestos fibers to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation), are regulated locally by SMAQMD in accordance with EPA's Asbestos National Emission Standards for Hazardous Air Pollutants.

Transportation of hazardous materials on area roadways is regulated by the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans), and use of these materials is regulated by DTSC, as outlined in CCR Title 22. The District and its construction contractors would be required to use, store, and transport hazardous materials in compliance with applicable federal and State regulations during project construction and operation. Because the project would be required to implement and comply with existing hazardous material regulations, and because each of these regulations is specifically designed to protect the public health through improved procedures for the handling of hazardous materials, better technology in the equipment used to transport these materials, and a more coordinated quicker response to emergencies, this impact would be ***less than significant***.

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

Less-than-Significant Impact. Due to the age of some of the on-site buildings and underground pipelines, asbestos and lead-based paint could be encountered during project-related demolition activities. However, the handling and disposal of these materials is regulated by SMAQMD, OSHA, and EPA. Because the District and its construction contractors are required to comply with these materials handling regulations, and because the project-related construction area would be fenced to exclude the presence of students and other non-authorized personnel, project-related impacts related to asbestos and lead-based paint would be less than significant. Please see Mitigation Measure 3.9-1 below for additional recommendations related to asbestos and lead-based paint.

Construction and operation of the proposed project would involve the use of small amounts of hazardous materials such as fuel, oils, paints, and solvents. However, the use of these materials is heavily regulated at both the state and federal level. Furthermore, because the proposed project would disturb more than 1 acre of land, the District is required by law to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) with appropriate best management practices (BMPs), such as spill prevention and contingency measures to reduce the potential for accidental spills and procedures for implementation of appropriate and timely cleanup activities if spills do occur. Therefore, this impact would be less than significant.

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

No Impact. The proposed project would be implemented at the site of the existing Arcade Middle School, which would be demolished. The project site would be redeveloped with a new, more modern school campus that would

better serve the needs of today's students and teachers. Currently, the existing school buildings are on the north side of the property immediately adjacent to Edison Avenue. As part of the proposed layout, the new school buildings would be located adjacent to the southern property boundary, while areas closer to Edison Avenue would be used for parking. This would provide not only an increased factor of safety for both students and teachers on the campus, but would also reduce the vehicular noise level in the campus buildings and the new outdoor common areas, thereby promoting a better learning environment. Minor amounts of hazardous materials such as fuel, oils, paints, and solvents would be used during construction activities (some of which could occur while school classes are in session), and would also be stored on-site during the project's operational phase. The construction area would be surrounded by exclusionary fencing, and long-term storage of hazardous materials on site would occur in locked areas to exclude students. None of the materials used at the project site would be acutely hazardous. There are no other schools within 0.25 mile of the project site. Thus, there would be no impact.

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

Less than Significant with Mitigation Incorporated. The project site is on the Cortese List as a result of soil contamination from an old 600-gallon diesel underground storage tank (UST) that was used to fill a former boiler. Because the UST is underground within a small, fenced courtyard (off limits to students) and surrounding by buildings, it was not possible to remove it without potentially undermining and damaging the adjacent building foundations. Therefore, the UST was closed in place in accordance with Sacramento County Environmental Management Department (SCEMD) requirements, which included UST cleaning and filling with a concrete slurry in 2000. A total of seven soil samples were collected in 2001 at depths ranging from 10.5 to 41 feet below the ground surface (bgs). Methyl tert-butyl ether (MTBE) and benzene were not detected in any soil samples. Five of the samples, all of which were collected at a depth of 21 feet or more bgs, did not detect any constituents of concern. The soil sample collected at approximately 10 feet bgs detected toluene, ethylbenzene, and xylenes, but the concentrations were below regulatory thresholds. The two soil samples from 10.5 and 16 feet bgs, respectively, contained total petroleum hydrocarbons at levels that exceeded regulatory thresholds (SCEMD 2021). Contaminated soil removal by excavation was not possible, for the reasons described above. Because the depth to groundwater at the project site is approximately 80–100 feet (California Department of Water Resources 2021) and soil samples collected from 21–41 feet bgs did not detect any constituents of concern, it was concluded that no groundwater contamination was present. Additional near-surface soil testing, and soil testing underneath the existing buildings, has been requested by the regulatory agencies (SWRCB 2021).

Sampling for constituents of concern was not performed in the top 10 feet of soil. Further testing and soil removal in the vicinity of the UST was not possible due to the presence of the existing buildings, which could be destabilized from the removal of soil underneath the foundations. The proposed project would include demolition of the existing buildings and capping of underground utilities, along with construction of a new parking lot and landscaping on top of the area where the UST is located. Demolition, excavation, and grading could expose workers to contaminated soil, and the closed-in-place UST may need to be removed to accommodate the new campus layout. Therefore, this impact is considered ***potentially significant***.

Two closed Cortese-listed sites are approximately 0.25 mile north of the project site: a Shell Service Station (at the northeast corner of Auburn Boulevard and Watt Avenue) and an Arco Service Station (at the northwest corner of Auburn Boulevard and Watt Avenue). Groundwater underneath both service stations is contaminated, but the contaminant plumes do not extend off the properties (SWRCB 2021). These sites do not present a human health or environmental hazard from construction or operation at the project site.

The nearest Superfund site is the former McClellan Air Force Base (now Sacramento McClellan Airport), approximately 1.25 miles to the northwest. Treatment for contaminated groundwater (north of Interstate 80) is ongoing (USEPA 2021).

Mitigation Measure 3.9-1: Perform Soils and Vapor Testing, Prepare a Report of Findings, and Implement Remedial Actions as Necessary.

To minimize the potential for adverse human health and environmental effects associated with soil contamination at the project site, the District shall implement the measures listed below.

- Prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to conduct soil and soil vapor sampling in the area of the diesel UST that was filled-in-place in order to assess the potential for soil and soil vapor impacts to the subject property and to Conduct soil vapor sampling on-site to assess potential for vapor encroachment conditions (VECs) from off-site sources, i.e. the apparent historical USTs to the north across Edison Avenue. The results of which shall be tested by a qualified environmental laboratory. The remediation firm shall prepare a report of findings and recommendations, which shall be submitted to the California Department of Toxic Substances Control. If the laboratory testing results indicate that constituents of concern are not present in the soil at levels that exceed the applicable environmental screening levels, no further mitigation shall be required.

- Although not a recognized environmental concern, prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to collect and analyze soil sample(s) in the area of the Sacramento Municipal Utility District (SMUD) pad on the northwest corner side of the site for polychlorinated biphenyls (PCBs).

- Although not a recognized environmental concern, prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to collect and analyze soil samples throughout the subject property for asbestos, lead-based paint, and pesticide (termiticide).

- If any constituents of concern exceed the applicable environmental screening levels, the report shall include recommendations for remediation, which may include excavation of contaminated soil and replacement with clean fill dirt. The report shall also make recommendations as to whether or not the existing closed-in-place UST (and any associated piping) may be left in place or shall be removed, based on the proposed project design. The San Juan Unified School District shall consult with the California Department of Toxic Substances Control, and shall implement the selected remedy for soil cleanup.

Significance after Mitigation

Implementing Mitigation Measure 3.9-1 would reduce the project's potentially significant impact on human health and the environment because soil and vapor testing would be performed, and in the event that contamination was discovered at concentrations that exceed the applicable environmental screening levels, soil contamination would be remediated prior to the start of earthmoving activities. In addition, the existing closed-in-place UST would be removed, if necessary.

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

No Impact. The nearest airport is the Sacramento McClellan Airport (the site of the former McClellan Air Force Base) approximately 1.25 miles northwest of the project site. The project site is adjacent to, but just outside of, the Sacramento McClellan Airport (formerly the McClellan Air Force Base) influence area (Sacramento Airport Land Use Commission 1992:50). Redevelopment of the existing school campus with a new, more modern school (which would not be taller than two stories in height), would have no effect on airport safety hazards. Students and workers at the redeveloped campus would be subject to the same noise levels from airport operations that occurs under existing conditions. Thus, there would be ***no impact***. Airport noise is evaluated in Section 3.13, "Noise," of this IS/MND. (Please see Section 3.13, "Noise," for an evaluation of airport noise hazards.)

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

Less-than-Significant Impact. The approximately 11-acre project site is developed with the existing Arcade Middle School, which would be demolished. Construction materials, equipment, and personnel would be staged on site during construction of the new school. The project site is accessible by emergency vehicles from the west via Watt Avenue and from the north via Edison Avenue. The relatively limited amount of proposed redevelopment and the limited amount of associated construction would result in only minor increases in short-term, temporary, construction-related traffic on local roadways. Emergency access, parent drop off, bus loading areas, and on-site parking would all be designed in accordance with CDE requirements (California Code of Regulations Title 5, Division, Chapter 14, Section 14030), which are intended to provide for the safety of all persons during the project's operational phase. Therefore, project-related construction activities would not substantially impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. This impact is considered ***less than significant***.

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

No Impact. The project site is located in the urbanized Arden-Arcade area, and is not within or near a State Responsibility Area or a very high fire hazard severity zone. The project site consists of the Arcade Middle School buildings and parking lots, with turf grass playfields and a few urban shade trees around the perimeter. The existing Arcade Middle School is currently served by the Sacramento Metropolitan Fire District, and those services would continue in the future after the existing campus is redeveloped with modernized school buildings. Thus, there would be ***no impact***. (See Section 3.20, "Wildfire," for additional analyses related to wildland fire hazards, which were determined to result in no impact.)

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3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; or	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 DISCUSSION

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

Less-than-Significant Impact. The Sacramento County Department of Water Resources Drainage Division is the organization primarily responsible for stormwater drainage and flood control within the urbanized and urbanizing portions of unincorporated Sacramento County, including the project area. The drainage and flood control system operated and maintained by Sacramento County consists of 1,443 miles of storm drain pipe, 400 miles of creeks and open channels, 33 pump stations, and 18 detention basins. The project site is also located within Sacramento County Water Agency Zone 11B, which was created to provide funds for the construction of major drainage facilities. Funding for Zone 11B activities is provided by fees collected at the time of development. (Sacramento County 2022.)

A paved (cement) stormwater drainage ditch that is approximately 6 feet wide and 2 feet deep parallels the southern project site boundary. An on-site stormwater drainage system is currently in place at the existing campus. The on-site system directs flows to off-site Sacramento County facilities.

The Arcade Creek Watershed drains southwest and discharges into the NEMDC/Steelhead Creek, which in turn discharges into the Sacramento River just above the confluence with the American River.

As required by the Porter-Cologne Water Quality Control Act, the Central Valley Regional Water Quality Control Board (RWQCB) has designated beneficial uses for water body segments in its jurisdiction (including the Sacramento River), along with water quality criteria necessary to protect these uses, as contained in the *Sacramento and San Joaquin River Basin Plan* (Central Valley RWQCB 2018). In addition, the Clean Water Act (CWA) Section 303(d) requires states to identify impaired waters where the permit standards, any other enforceable limits, or adopted water quality standards are still unattained. The CWA also requires states to develop total maximum daily loads (TMDLs) to improve the water quality of impaired water bodies. TMDLs are the quantities of pollutants that can be safely assimilated by a water body without violating water quality standards. TMDLs are developed for impaired water bodies to maintain beneficial uses as designated in the applicable Basin Plan, achieve water quality objectives, and reduce the potential for future water quality degradation. National Pollutant Discharge Elimination System (NPDES) permits for water discharges must take into account the pollutants for which a water body is listed as impaired.

Table 3.10-1 lists impaired water bodies included in the SWRCB's 303(d) list that could receive runoff from the proposed project, including the pollutants of concern and whether they have approved TMDLs. Even if a stream is not included in the SWRCB's 303(d) list, any upstream tributary to a 303(d)-listed stream could contribute pollutants to the listed segment.

The proposed project would require construction on approximately 8.7 acres of the 11.24-acre project site. Because groundwater is located 80–100 feet bgs (DWR 2022), the need for construction dewatering is unlikely. Project construction would require demolition of existing buildings and pavement, vegetation removal (from the existing turf playfield in the southern portion of the project site), excavation, grading, material stockpiling, and staging at the project site, which would temporarily disturb surface soils. These activities would expose soil to the erosive forces of wind and water. The soil could be transported via the storm drainage system to the NEMDC/Steelhead Creek and ultimately to the Sacramento River, thereby increasing turbidity and degrading water quality.

Erosion and construction-related wastes have the potential to degrade water quality and beneficial uses if they enter runoff and flow into waterways, potentially altering the dissolved oxygen content, temperature, pH, suspended sediment and turbidity levels, and/or nutrient content of receiving waters or causing toxic effects in the aquatic environment. Therefore, project-related construction activities could violate water quality standards or otherwise substantially degrade water quality.

Table 3.10-1. Section 303(d) List of Impaired Waterbodies

Impaired Water Body	Pollutant	Pollutant Source	TMDL Status
Arcade Creek	Copper	Unknown	Expected in 2021; not yet approved
	Malathion	Unknown	Expected in 2021; not yet approved
	Toxicity	Unknown	Expected in 2021; not yet approved
	Pyrethroids	Unknown	Approved in 2019
	Diazinon	Urban runoff, storm sewers	Approved in 2004
	Chlorpyrifos	Urban runoff, storm sewers	Approved in 2004
NEMDC/Steelhead Creek (downstream of Arcade Creek confluence)	Polychlorinated biphenyls (PCBs)	Unknown	Expected in 2020; not yet approved
	Mercury	Unknown	Expected in 2027
Sacramento River (Knights Landing to the Delta)	Chlordane	Unknown	Expected in 2021; not yet approved
	Dichlorodiphenyltrichloro-ethane (DDT)	Unknown	Expected in 2027
	Mercury	Gold mining settlements and local mercury mining (historic); erosion and drainage from abandoned mines (ongoing)	Expected in 2012; not yet approved
	Dieldrin	Unknown	Expected in 2022
	Polychlorinated biphenyls (PCBs)	Unknown	Expected in 2012; not yet approved
	Toxicity	Unknown	Expected in 2027

Notes: TMDL = total maximum daily load; NEMDC = Natomas East Main Drainage Canal
Source: State Water Resources Control Board 2021

NPDES Municipal Stormwater Permit issued by the Central Valley Regional Water Quality Board (Order No. R5-2016-0040-010) (Central Valley RWQCB 2016). The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County has also established a Stormwater Ordinance (Sacramento County Municipal Code Chapter 15.12), which prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks.

The project is required by law to comply with the provisions of the SWRCB's *NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order 2012-0006-DWQ) (Construction General Permit) (SWRCB 2012). The Construction General Permit regulates stormwater discharges for construction activities under the CWA and applies to all land-disturbing construction activities that would disturb 1 acre or more. The project applicant must submit a notice of intent to discharge to the Central Valley RWQCB, and must prepare and implement a SWPPP that includes BMPs to minimize those discharges. All NPDES permits have inspection, monitoring, and reporting requirements. Central Valley RWQCB requires dischargers to implement construction and operational design features and BMPs that are specifically intended to reduce the potential for downstream hydromodification. The Construction General Permit also requires implementation of BMPs that are designed to prevent accidental spills of hazardous

materials during the construction phase to the maximum extent practicable, and the SWPPP must include procedures for immediate cleanup should any releases occur. Central Valley RWQCB also has the authority to issue waivers to reports of waste discharge requirements (WDRs) and/or WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.

Because the project applicant is required by law to comply with Central Valley RWQCB requirements to obtain WDRs (if applicable) and comply with the provisions therein, and to prepare and implement a SWPPP with associated BMPs specifically designed to protect beneficial uses of downstream waterbodies in compliance with the federal CWA, the state Porter-Cologne Water Quality Act, and the regional Basin Plan (*Water Quality Control Plan for the Sacramento and San Joaquin River Basins* [Central Valley RWQCB 2018]), this impact would be ***less than significant***.

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

Less-than-Significant Impact. The project site was developed as a school campus in 1938, with various additions and modifications over the years. Approximately 5.7 acres of the 11.24-acre project site are currently covered with impermeable surfaces (i.e., buildings and pavement). The redeveloped school campus would result in conversion of an existing outdoor turf playfield in the southern portion of the project site to classrooms and other school buildings, which would add approximately 3 acres of impervious surfaces. The remaining approximately 2.5-acre outdoor turf playfield in the western portion of the project site would continue to provide for groundwater recharge at the project site. Modeling performed for the GSP for the North American Subbasin determined that with projected development through the year 2040 and implementation of projects and management actions that will be undertaken in the Subbasin to promote groundwater sustainability, there will be a net increase in groundwater storage (GEI Consultants 2021). The small, approximately 3-acre decrease in permeable surfaces at the project site is accounted for in regional development through the year 2040 as part of the GSP's Projected Conditions Groundwater Budget. Therefore, the proposed project would not interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded.

As discussed in detail in Section 3.19, "Utilities and Service Systems," the existing Arcade Middle School campus is served with potable water by the Sacramento Suburban Water District (SSWD). SSWD provides a combination of groundwater pumped from a network of approximately 70 wells, and purchased surface water, as its supply sources. Groundwater is obtained from the southern portion of the North American Groundwater Subbasin. SSWD has determined that sufficient water supplies will be available in all water year types during the 2025–2045 planning horizon, to serve future projected development (Brown & Caldwell 2021). There are no on-site groundwater wells at the existing school campus. Under the proposed project, the campus would continue to receive water from SSWD in the same manner as it does currently. Redevelopment of the existing school campus would not require the installation of on-site groundwater wells, and the small increase in student capacity at the redeveloped school would not result in an increase in the need for potable water such that SSWD would need to drill additional groundwater wells to support its regional supply. Furthermore, since more recent building code requirements increase both indoor and outdoor water conservation, the project could actually reduce water demand compared to existing conditions. Therefore, the proposed project would not substantially decrease

groundwater supplies such that sustainable groundwater management of the basin would be impeded. This impact would be ***less than significant***.

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?

Less-than-Significant Impact. The project site is in the urbanized Arden-Arcade area, just east of the city of Sacramento within the Sacramento River Basin. The Sacramento River Basin encompasses about 27,000 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta to the southeast. The project site is situated in the Arcade Creek Watershed (Hydrologic Unit Code 12), which encompasses approximately 25,053 acres from the Placer County line in the northeast to the Natomas East Main Drainage Canal (NEMDC)/Steelhead Creek in the southwest. The existing school campus is approximately 0.4 mile south of Arcade Creek.

The Central Valley RWQCB requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow the rate of water movement and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The project site already contains an existing school campus with an existing drainage system. As part of the school campus redevelopment, the District would include the use of "low impact development" (LID) techniques in the proposed project design, to the extent feasible, to reduce the amount of imperviousness on the site, since this would reduce the volume of runoff and therefore would reduce the size/cost of stormwater quality treatment required. Examples of LID techniques that could be implemented to reduce stormwater runoff include the following:

- Conditioning the soil in landscape areas to promote increased infiltration.
- Planting trees to promote retention of water.
- Providing vegetative swales to promote infiltration and evapotranspiration.
- Providing surface or underground detention basins, with or without infiltration.

Redevelopment of the existing school campus would include an appropriately designed and engineered stormwater runoff collection and treatment system for the project's operational phase to meet applicable CDE and Central Valley RWQCB requirements. Conditioned topsoil would be placed in new planters. A variety of trees of various sizes would be planted. Swales would be provided on-site, and stormwater treatment devices would also be provided in areas that cannot connect to swales. Underground detention facilities would be installed for localized flood control of stormwater runoff, where necessary. Overall, stormwater runoff increases during operations are expected to be negligible compared to the pre-redevelopment state, reduced further by LID measures. Furthermore, as discussed in detail in criterion a) above, the District would prepare and implement a SWPPP with appropriate BMPs specifically designed to reduce erosion and downstream siltation during project construction. Therefore, this impact would be ***less than significant***.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

Less-than-Significant Impact. According to the most recent Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program, the project site is in unshaded Zone X—an area of minimal flood hazard (FEMA 2012). Furthermore, the project site is not located in a 200-year flood (0.5% annual exceedance probability [AEP]) hazard area as mapped by the U.S. Army Corps of Engineers and the Reclamation Board in 2002, or in a California Department of Water Resources (DWR) 100-year (1% AEP) Awareness Floodplain (DWR 2022).

Because the school buildings and parking lots would be reconfigured on the campus, the on-site stormwater drainage system would require reconfiguration. A drainage study would be prepared to calculate the runoff rates using the hydrology standards contained in Volume 2 of the Sacramento City/County Drainage Manual using the "Sacramento Method" (Sacramento County Department of Water Resources and City of Sacramento Utilities Engineering Department 1996). The calculated Sacramento Method runoff rates for both 10-year and 100-year storm events would be used to design the necessary modifications to the existing storm drainage system. The District would design the new school facilities such that stormwater runoff rates and volumes would either be maintained or reduced from their current state, so as not to pose a potential for downstream flooding. Furthermore, the LID strategies listed in criterion c) i) above would also help to reduce the rate and volume of stormwater runoff. Finally, the project site is not located in a FEMA flood zone (FEMA 2012). Therefore, this impact would be ***less than significant***.

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?

Less-than-Significant Impact. The proposed project includes changes and upgrades, where necessary, to the existing on-site drainage system to accommodate the proposed new school facilities. The minor increase in student capacity at the redeveloped school would not exceed the capacity of the existing Sacramento County Department of Water Resources Drainage Division storm drain facilities. As described in criterion c) i) above, the modified drainage system for the new school facilities would include pollutant source and/or treatment control measures as required by the Central Valley RWQCB. Therefore, this impact would be ***less than significant***.

iv) Impede or redirect flood flows?

No Impact. The project site is not located in a flood hazard zone (FEMA 2012, DWR 2022). Therefore, the proposed redevelopment of the existing Arcade Middle School campus would not impede or redirect flood flows, and there would be ***no impact***.

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

No Impact. As discussed in criterion c) iv) above, the project site is not located in a flood hazard zone. The Pacific Ocean is approximately 95 miles west of the project site; therefore, tsunamis would not represent a hazard. There are no large bodies of water in the immediately project vicinity that would be subject to seiche hazards; furthermore, the project region is generally not subject to strong seismic ground shaking (Branum et al. 2016) and

therefore seiche hazards are unlikely. Therefore, the proposed redevelopment of the existing Arcade Middle School campus would not risk release of pollutants due to project inundation, and there would be ***no impact***.

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

Less-than-Significant Impact. For the same reasons described in criteria a) and b) above, the proposed project would not conflict with or obstruct implementation of the regional Basin Plan (*Water Quality Control Plan for the Sacramento and San Joaquin River Basins* [Central Valley RWQCB 2018] or the *North American Subbasin Groundwater Sustainability Plan* (GEI Consultants 2021). Therefore, this impact would be ***less than significant***.

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3.11 LAND USE AND PLANNING

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

3.11.1 DISCUSSION

a) Physically divide an established community?

No Impact. The project site is located in the urbanized Arden-Arcade area, which encompasses approximately 18 square miles east of downtown Sacramento. The Arcade Middle School, originally built in 1938, currently occupies the site. Land surrounding the project site consists of single-family and multi-family residential uses, with an office building on the north side of Edison Avenue north of the project site. Construction of a new, more modern school which would be better suited to meet the needs of today's students and teachers on the existing school campus, would not physically divide an established community. Thus, there would be ***no 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?

No Impact. The *Sacramento County General Plan of 2005-2030* (Sacramento County General Plan), amended in 2020, includes various community plans covering locations throughout the county. The project site is located within the Arden-Arcade Community Plan (Sacramento County 1980). These plans identify the need for public facilities and services in the County and provide the basis for county zoning and approvals, as well as other regulatory actions.

The project site is zoned RD-20 (Multiple Family Residential) and the Sacramento County General Plan land use designation is MDR (Medium-Density Residential) (Sacramento County 2022). The Arden-Arcade Community Plan land use designation is RD-20/PQP (Public/Quasi-Public) (Sacramento County 1980). Schools are a primary, permitted use in areas that are zoned residential under the Sacramento County Zoning Code Chapter 3, Section 3.2.5 (Sacramento County 2021:Table 3.1).

The project site would continue to be used as a school, consistent with existing land use and zoning designations. The proposed project would not conflict with policies or objectives adopted in the Sacramento County General Plan or the Arden-Arcade Community Plan. Thus, there would be ***no impact***.

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3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

3.12.1 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. Under the Surface Mining and Reclamation Act (SMARA), the State Mining and Geology Board may designate certain mineral deposits as being regionally significant to satisfy future needs. The board's decision to designate an area is based on a classification report prepared by the California Geological Survey (CGS) and on input from agencies and the public.

The project site lies within the designated Sacramento-Fairfield Production-Consumption Region for Portland cement concrete aggregate. CGS has classified the entire project site as MRZ-1: areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence (O'Neal and Gius 2018). Active aggregate mineral resource production in Sacramento County is located along ancestral channels of the American River (south of U.S. 50) and the Cosumnes River (near Rancho Murieta). Kaolin clay deposits are present in the Sierra Nevada foothills.

The project site is not located in a designated regionally important area of known mineral resources (i.e., MRZ-2), and is not located within a designated locally important area of known mineral resources under the *Sacramento County General Plan of 2005-2030* (Sacramento County General Plan) (Sacramento County 2020). The project site is located in the urbanized Arden-Arcade area, which is classified as MRZ-1: areas where no significant minerals are present (O'Neal and Gius 2018). Thus, there would be ***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. The Sacramento County General Plan (Sacramento County 2020) indicates that the only locally important mineral resource recovery sites in the county are those designated by CGS as MRZ-2. In the project region, these MRZ-2 areas for aggregate minerals are located along the active and ancestral channels of the American and Cosumnes Rivers. Additional MRZ-2 areas for kaolin clay are located in the Sierra Nevada foothills. As described in a) above, there are no mineral resources at the project site or in the immediate project vicinity, which consists primarily of single-family and multi-family residential development. Thus, there would be ***no impact***.

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3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

3.12.1 DISCUSSION

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?

The existing noise environment within the project area is primarily influenced by surface-transportation noise emanating from vehicular traffic on Watt Avenue and Edison Avenue. Existing school activities (public announcement and school playgrounds) contribute to noise environment in the area. Existing commercial uses also contribute to the noise environment at existing adjacent residential uses due to loading dock activities, parking lot vehicle movements, and vocalizations. Intermittent noise from outdoor activities at the surrounding residences (e.g., vocalizations, operation of landscaping equipment, car doors slamming, and dogs barking), also influences the existing noise environment.

An ambient noise survey was conducted in the vicinity of the project site from June 6 to June 7, 2022. The purpose of the survey was to establish existing noise conditions. Ambient noise measurements were conducted near existing noise-sensitive uses at various locations within the project area. The results of the noise survey are shown in Table 3.13-1.

Exhibit 3.13-1 shows the locations of the ambient noise measurement sites. Three long-term (24-hour) measurements (LT-1, LT-2, and LT-3) were conducted at the project site boundaries by the nearest off-site noise-sensitive uses. As shown in Table 3.13-1, measured ambient noise levels at the noise-sensitive land uses closest to the project site range from 57 dBA to 66 dBA L_{dn}.[1]

1 The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ears decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). All noise levels reported in this section are in terms of A-weighting. There is a strong correlation between A-weighted sound levels and community response to noise.

Exhibit 3.13-1. Ambient Noise Survey

Table 3.13-1. Summary of Ambient Noise Level Survey Results in the Vicinity of the Project Site

Site	Location	Date	Time	Duration	L_{eq} Measured	L_{max} Sound Level, dBA	L_{50} Daytime	L_{90} 7 a.m.– 7 p.m.	L_{dn} 7 a.m.– 7 p.m.
LT-1	Within Project Site (Northern Boundary)	June 6/7, 2022	11:00	24 Hour	63.4	85.0	56.9	79.4	65.1
LT-2	Within Project Site (Southern Boundary)	June 6/7, 2022	12:00	24 Hour	66.0	82.2	55.8	70.6	65.9
LT-3	Within Project Site (by the Pool, Watt Avenue Gardens Townhomes, 3700 Watt Avenue)	June 6/7, 2022	12:00	24 Hour	54.5	72.3	49.4	63.1	57.0

Notes: dBA = A-weighted decibels; L_{eq} = equivalent sound level (the sound energy averaged over a continuous period of time); L_{max} = maximum instantaneous sound level; LT = Long-term measurement

Noise-level measurements were completed using a Larson Davis Laboratories (LDL) Model 824 precision integrating sound-level meter. The meter was calibrated before the measurements using an LDL Model CAL200 acoustical calibrator. The meter was programmed to recorded A-weighted sound levels using a "slow" response. The equipment used complies with all pertinent requirements of the American National Standards Institute for Class 1 sound-level meters (ANSI S1.4).

Source: Data compiled by AECOM in 2022

Short-Term Project-Generated Construction Source Noise

Less than Significant with Mitigation Incorporated. Construction of proposed structures would occur on the project site and include site preparation (e.g., excavation, and construction); material transport; construction of the new facilities, and related-support structures; and other miscellaneous activities (e.g., paving).

Site preparation generates the highest anticipated noise levels due to construction activities as the equipment mix would include earth-moving equipment such as scrapers, dozers, loaders, and a motor grader. The simultaneous operation of on-site construction equipment associated with the proposed project, as identified above, could result in combined noise levels up to approximately 86 dB L_{eq} at 50 feet from the center of construction activity.[2]

Based upon the equipment noise levels, usage factors, and a typical noise-attenuation rate of 6 dB for every doubling of distance, exterior noise levels at noise-sensitive receptors located within 100 feet of the project site could be as high as 80 dB L_{eq} and 86dB L_{eq} at 50 feet.[3] Table 3.13-2 summarizes modeled construction noise levels compared to existing noise levels at noise-sensitive locations measured during the ambient noise survey.

2 Equivalent sound level (Leq): An average of the sound energy occurring over a specified time period. In effect, the Leq is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a 1-hour period. Maximum sound level (Lmax): The highest instantaneous sound level measured during a specified period. Ldn (Day-Night Noise Level): The 24-hour Leq with a 10 dB "penalty" applied during nighttime noise-sensitive hours, 10:00 p.m. through 7:00 a.m. The Ldn attempts to account for the fact that noise during this specific period of time is a potential source of disturbance with respect to normal sleeping hours.

3 Sound from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, and the sound level attenuates (decreases) at a rate of 6 dB for each doubling of distance from a point/stationary source. Roadways and highways and, to some extent, moving trains consist of several localized noise sources on a defined path; these are treated as "line" sources, which approximate the effect of several point sources. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. Therefore, noise from a line source attenuates less with distance than noise from a point source with increased distance.

Table 3.13-2. Ambient and Project Construction Noise Levels at Closest Sensitive Receptors

Receiver	Distance (ft) From Acoustical Center Between Noise-Sensitive Receiver locations and Proposed Construction Areas	Ambient Noise (Exterior Noise Level, dBA L_{eq})	Project Noise (Exterior Noise Level, dBA L_{eq})	Project Noise, Doors/Windows Open (Interior Noise Level, dBA L_{eq})	Project Noise, Doors/Windows Closed (EPA) (Interior Noise Level, dBA L_{eq})
Residences to the north	100	63	80	65	55
Residences to the south	50	66	86	71	61
Residences to the southwest	50	55	86	71	61

Refer to https://www.sanjuan.edu/arcademod for modeling input parameters and output results.

dBA = A-weighted decibels

EPA = U.S. Environmental Protection Agency

ft = foot/feet

L_{eq} = Equivalent Noise Level

Sources: Modeled by AECOM 2022

As shown in Table 3.13-2, daytime project construction noise levels at the closest noise sensitive backyard area, located approximately 50 to 100 feet from the acoustical center of proposed construction activities, could reach as high as 86 dB $L_{eq.}$ This peak, maximum construction noise level is based on a conservative assumption of all equipment operating at the same location and at the same time. However, not all equipment would operate at the same time. A more representative assumption would be that, at any given time, approximately 50 percent of the equipment would operate on-site simultaneously, which would reduce the maximum construction noise level by 3 dB compared to this peak, maximum noise level.

The residences to the southwest have the lowest existing ambient noise levels – these residences also have an existing concrete masonry wall between the noise-sensitive portions of the property and the project site – a wall that would provide noise attenuation that would provide benefits during construction. The equipment anticipated to produce the highest levels of noise would be used to demolish concrete slabs and footings and the residential area to the south would be relatively less impacted by this activity given the relative distance between these residences to the south of the project site and the proposed demolition activities on the northern portion of the project site. Residences to the east of the project site are set back by a driveway and parking area and the outdoor gathering spaces associated with these residences are located on the east of the first row of buildings, with the buildings providing some noise attenuation benefit for these outdoor gathering spaces during demolition and construction.

The Sacramento County Code Noise Control Ordinance contains performance standards for the purpose of preventing unnecessary, excessive and offensive noise levels within the county. Section 6.68.090 of the Sacramento County Code establishes that noise associated with construction, repair, remodeling, demolition, paving, or grading is exempt from the Noise Ordinance, provided said activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m.

Nevertheless, if construction activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) or construction equipment were not properly equipped with noise control devices, construction-generated source noise could result in annoyance and/or sleep disruption of occupants of the nearby existing noise-sensitive land uses (e.g., residences) and create a substantial temporary increase in ambient noise levels in the direct vicinity of the project site. Potential construction-related project impacts on existing noise-sensitive land uses are therefore considered **potentially significant**.

Mitigation Measure 3.13-1: Implement Measures to Reduce Short-Term, Construction-Related Noise.

San Juan Unified School District will require the selected contractor to implement the following noise-reduction and noise-control measures during construction activities:

- Provide written notification to the residents south of the project site and within 500 feet[4] from the southern project boundary at least three weeks prior to construction, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to contact regarding construction noise. Designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Post contact information in conspicuous locations adjacent to the site with contact information regarding construction noise and activities. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification.

- Prohibit the start-up of machines or equipment between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m.

- Restrict the use of bells, whistles, alarms, and horns for safety-warning purposes.

- Equip all construction equipment with noise-reduction devices, such as mufflers to minimize construction noise and operate all internal combustion engines with exhaust and intake silencers.

- All impact tools will be shrouded or shielded, and all intake and exhaust ports on power equipment will be muffled or shielded.

- Locate fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes as far as feasible from noise-sensitive receptors.

- Avoid the use of hand jackhammers within 200 feet of the outdoor activity areas of occupied noise-sensitive receptors during demolition activities.

4 Building rows located within 500 feet of the construction site, would shield construction noise. Therefore, construction noise would be attenuated to ambient level beyond this distance.

Significance after Mitigation

Implementation of Mitigation Measure 3.13-1 would reduce the potentially significant impact resulting from construction activities to a **less-than-significant level** because it would ensure that construction activities would avoid noise-sensitive hours, reduce equipment noise levels, and reduce other sources of noise on-site. In addition, as noted, residences to the southwest have an existing concrete masonry wall that would provide noise attenuation that would provide benefits during construction. As also noted, residences to the south of the project site would be relatively less affected by demolition activities because of distance attenuation. The outdoor gathering spaces associated with residences to the east are located on the east of the first row of buildings, with the buildings providing some noise attenuation benefit for these outdoor gathering spaces during demolition and construction.

Long-Term Project-Generated Stationary Source Noise

Mechanical Building Equipment (HVAC)

Less than Significant with Mitigation Incorporated. The County of Sacramento General Plan Noise Element (County of Sacramento 2017) provides several policies related to land use and noise compatibility. While these policies do not directly apply to the project, they are presented for context. For non-transportation noise sources, the County has established interior and exterior noise standards for daytime and nighttime hours (Table 3.13-3).

Table 3.13-3. Non-Transportation Noise Standards (dBA), Sacramento County Noise Element

Receiving Land Use	Median L_{50}[6] Outdoor Area[1, 2] Daytime	Maximum (L_{max}) Outdoor Area[1, 2] Daytime	Median L_{50} Nighttime	Maximum (L_{max}) Nighttime	Median L_{50} Interior[3] Day & Night	Maximum (L_{max}) Interior[3] Day & Night
All Residential	55	75	50	70	35	55
Transient Lodging[4]	55	75	50	70	35	55
Hospitals & Nursing Homes[5,6]	55	75	50	70	35	55
Theaters & Auditoriums[6]	-	-	-	-	35	55
Churches, Meeting Halls, [6] Schools, Libraries, etc. [6]	55	75	-	-	35	60
Office Buildings[6]	60	75	-	-	45	65
Commercial Buildings[6]	-	-	-	-	45	65
Playgrounds, Parks, etc.[6]	65	75	-	-	-	-
Industry[6]	60	80	-	-	50	70

Notes:

1 The standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.

2 Sensitive areas are defined in acoustic terminology section.

3 Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.

4 Outdoor activity areas of transient lodging facilities are not commonly used during nighttime hours.

5 Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients

6 The outdoor activity areas of these uses (if any) are not typically utilized during nighttime hours.

7 Where median (L_{50}) noise level data is not available for a particular noise source, average (L_{eq}) values may be substituted for the standards of this table provided the noise source in question operates for at least 30 minutes of an hour. If the source in question operates less than 30 minutes per hour, then the maximum noise level standards shown would apply.

Source: Sacramento County 2017

Mechanical building equipment (e.g., heating, ventilation, and air conditioning systems or HVAC) could result in noise levels of approximately 90 dBA at 3 feet from the source or 65 dBA at 50 feet, assuming no shielding (U.S. EPA 1971).

The closest residential uses would be approximately 100 feet to from the proposed school buildings, resulting in a combined modeled noise level of 59 dBA L_{eq}, assuming no shielding.[5] However, normally these mechanical equipment systems are shielded from direct public exposure, by enclosures and/or by the roof edges, which substantially reduces noise exposure, at least by 10 dB[6]. The resulting noise from the HVAC at the closest noise-sensitive uses would be 50 dB L_{eq}, or lower. Noise levels associated with future mechanical equipment would be lower for residences located farther away. The predicted noise levels from HVAC system would not exceed County of Sacramento's performance standard of 55 dB L_{eq}. Existing ambient noise levels at the residential uses to the west and south of the project site range between 55 and 66 dBA L_{eq}. Adding 50 dB L_{eq} noise from HVAC to the existing noise environment, would only increase the ambient level by 1 dB. In typical noisy environments, noise-level changes of 1 to 2 dB are not perceptible by the healthy human ear.[7] The impact is ***less than significant***.

Public Address System

The Public Address (PA) system within the school buildings would generate a noise level of up to 84 dBA L_{eq} feet at 3 feet (AECOM 2018). The nearest noise-sensitive receptor to the proposed school buildings is located approximately 100 feet. The resulting noise level at the nearest noise-sensitive receptor would be 54 dB L_{eq}. The predicted noise levels from PA system would not exceed County of Sacramento's performance standard of 55 dB L_{eq}. Existing ambient noise levels at the residential uses to the west and south of the project site range between 55 and 66 dBA L_{eq}. Adding 54 dB L_{eq} noise from PA system to the existing noise environment, would increase the ambient level by less than 3 dB.[8] Therefore, this impact is considered **less than significant**.

Parking Lot Activities

Less-than-Significant Impact. The proposed project would introduce 90 new parking stalls approximately 200 feet from adjacent noise-sensitive residential uses to the east. Based upon previous noise measurements, the sound exposure level (SEL) associated with a parking event is approximately 71 dB SEL at 50 feet. Assuming that each parking stall adjacent to residential uses were to fill and empty (90 parking events total) during the peak hour, the noise level is predicted to be 43 dBA L_{eq} at 200 feet from the center of the parking stalls. The predicted noise levels from parking lot activities would not exceed County of Sacramento's performance standard of 55 dB L_{eq}. Existing ambient noise levels at the residential uses to the west of the project site range between 51 and 68 dBA

5 These distances are intended to represent locations on proposed buildings where rooftop mechanical equipment could be located.

6 Effective noise barriers typically reduce noise levels by 5 to 10 decibels (dB), cutting the loudness of traffic noise by as much as one half (FHWA 2017).

7 Doubling sound energy results in a 3-dB increase in sound. In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear; however, people can begin to detect 3-dB increases in noise levels. An increase of 5 dB is generally perceived as distinctly noticeable and a 10-dB increase is generally perceived as a doubling of loudness.

8 Doubling sound energy results in a 3-dB increase in sound. In typical noisy environments, noise-level changes of 1 to 2 dB are generally not perceptible by the healthy human ear; however, people can begin to detect 3-dB increases in noise levels. An increase of 5 dB is generally perceived as distinctly noticeable and a 10-dB increase is generally perceived as a doubling of loudness.

L_{eq}. Therefore, noise levels associated with parking would not be distinguishable from the existing ambient noise levels. As a result, this impact would be ***less than significant***.

Playfield Activities

Less-than-Significant Impact. The playfields would only be used during the day and would not have lighting for nighttime use. At a distance of 100 feet from an elementary school playground being used by 100 students, average noise levels of 60 dB L_{eq}, can be expected (Sacramento County 2017). The nearest noise-sensitive receptor to the proposed playfields is located approximately 200 feet to the south from the nearest playground (Exhibit 2-4). The resulting noise level at the nearest noise-sensitive receptor would be 54 dB L_{eq}. The predicted noise levels from playfield activities would not exceed County of Sacramento's performance standard of 55 dB L_{eq}. Furthermore, Section 6.68.090 of the Sacramento County Code exempts noise from parks, public playgrounds, and school grounds, provided they are owned and operated by a public entity (such as NUSD) or by a private school. Based on noise modeling, playfield activities would not substantially increase ambient noise levels. In addition, playfield activities would not result in a substantial permanent increase (more than 3–5 dB) in ambient noise levels in the project vicinity above levels existing without the project (Table 3.13-1). Therefore, this impact is considered ***less than significant***.

Increase in Project Area Traffic

Less-than-Significant Impact. For transportation noise sources, the County of Sacramento has established interior and exterior noise standards of 40 dB L_{dn} and 65 dB L_{dn}, respectively, for school uses.

The project would increase the maximum capacity of the school to 650 – this is a theoretical increase of 92 students compared to the existing capacity of 558 students. Typically, traffic volumes have to double before the associated increase in noise levels is noticeable (3 dBA L_{dn}) along roadways (Caltrans 2013). The incremental addition of proposed project traffic would not cause a doubling of those volumes. Consequently, construction of the proposed project would not result in a noticeable change in the traffic noise contours of area roadways. Long-term, off-site operational traffic source noise would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As a result, this impact would be **less than significant**.

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

Less-than-Significant Impact. Groundborne vibration is energy transmitted in waves through the ground. Vibration attenuates at a rate of approximately 50 percent for each doubling of distance from the source. This approach considers only the attenuation from geometric spreading and tends to provide for a conservative assessment of vibration levels at the receiver.

Vibration is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. Vibration typically is described by its peak and root-mean-square (RMS) amplitudes. The RMS value can be considered an average value over a given time interval. The peak vibration velocity is the same as the "peak particle velocity" (PPV), generally presented in units of inches per second. PPV is the maximum instantaneous positive or negative peak of the vibration signal and is generally used to assess the potential for damage to buildings and structures. The RMS amplitude typically is used to assess human annoyance to vibration, and the

abbreviation "VdB" is used in this document for vibration decibels to reduce the potential for confusion with sound decibels.

Construction activities have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

As discussed above, on-site construction equipment could include scrapers, dozers, loaders, and a motor grader. According to Federal Transit Administration (FTA 2018), vibration level associated with the use of a large dozer is 0.089 inches per second (in/sec) peak particle velocity (PPV) and 87 vibration decibels (VdB referenced to 1 micro inch per second [μin/sec] and based on the root mean square [RMS]) velocity amplitude) at 25 feet. Table 3.13-4 summarizes modeled construction vibration levels at noise-sensitive locations.

Table 3.13-4. Project Construction Vibration Levels at Closest Sensitive Receptors

Receiver	Location	Shortest Distance (ft) Between Noise-Sensitive Uses and Proposed Construction Areas	PPV Vibration Levels	VdB Vibration Levels
Off-site	Off-site, along the fence by residences to the south	50	0.031	78
Off-site	Off-site, along the fence by residences to the west	50	0.031	78
Off-site	Off-site, north of the project site	100	0.011	69

Source: FTA, Transit Noise and Vibration Impact Assessment, September 2018.
Modeled by AECOM 2022.

Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels of approximately 0.031 in/sec PPV and 78 VdB at the closest existing sensitive receptor could occur during construction. These vibration levels would not exceed Caltrans's recommended standard of 0.2 in/sec PPV (Caltrans 2020) with respect to the prevention of structural damage for normal buildings or the FTA's maximum-acceptable vibration standard of 80 VdB (Federal Transit Administration 2018) with respect to human annoyance for residential uses. The long-term operation of the proposed project would not include any perceptible vibration sources, and short-term construction would not result in the exposure of persons or structures to or generation of excessive groundborne vibration or groundborne noise levels. As a result, this impact would be ***less than significant***.

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?

Less-than-Significant Impact. The project site is located within 2 nautical miles of McClellan AFB, which is located approximately 1.5 nautical miles to the north of the project site. However, the project would not require any use of aircraft and the project workers would be required to follow on-site safety measures including for loud noise from the construction equipment. Also, the project site is located between the 60 dB and 65 dB noise contours for the airport (SACOG Open Data Portal 2021). Per Sacramento County General Plan Noise Element (Sacramento County 2017), school uses are permitted in aircraft environments up to 70 dB CNEL. Thus, this impact would be ***less than significant***.

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3.14 POPULATION AND HOUSING

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

3.14.1 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)?

No Impact. The project site is located in the Arden-Arcade area, which is a Census-Designated Place in unincorporated Sacramento County that encompasses approximately 18 square miles east of the city of Sacramento. The project site is surrounded primarily by residential development, with areas of commercial-mixed use, public/quasi-public (places of worship and schools), and small parks. At the time of the 2020 Census, the Arden-Arcade area had a population of 94,649, of which approximately 65 percent were white, 21 percent Hispanic or Latino, and 11 percent were black or African American. As of 2020, approximately 61 percent of the population over the age of 16 was employed in the civilian labor force. There are approximately 2.43 persons per household, on average, and a total of 38,274 households. The median household income is $52,694, and approximately 22 percent of the population lives below the poverty level. (U.S. Census Bureau 2020).

The proposed project consists of the redevelopment of the existing Arcade Fundamental Middle School campus with a new, more modern school. Arcade Fundamental Middle School has occupied the site since 1938, and the proposed project would provide modernization of learning facilities.

The existing capacity of Arcade Fundamental Middle School is 558 and this project would increase the school's maximum capacity to 650 (Lopez, pers. comm., 2022). The proposed project does not include a residential component. No new houses would be built as a result of the project. The proposed project would replace and improve existing on-site utilities and transportation facilities. The proposed project does not include an extension of roads or other infrastructure that would induce population growth, would not increase the population in the area, and would not contribute to population growth in the area. Therefore, the proposed project would have ***no impact***.

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

No Impact. The proposed project would take place entirely within the existing Arcade Fundamental Middle School campus. Therefore, it would not displace any homes. Because no homes would be displaced, a substantial number of people would also not be displaced. Thus, there would be ***no impact***.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.15.1 DISCUSSION

a) 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:

Fire protection?

No Impact. The Sacramento Metropolitan Fire District serves a population of over 745,000 in a 359-square-mile service area. The Operations Branch (firefighting and emergency medical technicians [EMT] oversees all aspects of the District's emergency services, which are delivered from 41 stations with daily shift staffing of 160 personnel (Metro Fire 2022). The closest fire station to the project site is Station No. 103, located at 3824 Watt Avenue, approximately 385 feet northeast of the project site.

The existing Arcade Fundamental Middle School is currently served by the Sacramento Metropolitan Fire District. The modernized school would continue to be served by this provider, and would not increase the need for additional fire-fighting personnel, facilities, or equipment. Thus, there would be ***no impact***.

Police protection?

No Impact. The North Division of the Sacramento County Sheriff's Department provides patrol services for approximately 415,000 people living in the communities of Arden-Arcade, Carmichael, Fair Oaks, Gold River, Orangevale, Foothill Farms, Antelope, North Highlands, Rio Linda, Elverta, and the Garden Highway. The North Division is currently staffed with 134 sworn officers and a support staff of 19. The patrol officers serving the

above areas work out of the Garfield Station, located at 5510 Garfield Avenue, approximately 3.7 miles northeast of the project site (Sacramento County Sheriff's Office, North Division 2022).

The existing Arcade Fundamental Middle School is currently served by the North Division of the Sacramento County Sheriff's Department. The modernized school would continue to be served by this provider, and would not increase the need for additional police personnel, facilities, or equipment. Thus, there would be ***no impact***.

Schools?

Less-than-Significant Impact. The project site is home to Arcade Middle School, a public school in the San Juan Unified School District. Arcade Middle School serves students in grades 6-8, and has a total capacity of 558 students in 2022 (Lopez, pers. comm., 2022).

The proposed project is a school project. The existing Arcade Fundamental Middle School would be demolished, and a new, more modern school would be constructed on the current school campus. The proposed project would enable the District to better meet the needs of today's students and teachers, The existing capacity of Arcade Fundamental Middle School is 558 students and this project would increase the school's capacity to 650 students (Lopez, pers. comm., 2022). Environmental impacts associated with redevelopment of a new school on the existing campus are evaluated in the individual topic areas throughout this Initial Study. Where necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a ***less-than-significant*** level. No other impacts would result beyond those addressed in the other topical sections of this analysis.

Parks?

No Impact. The proposed project entails redevelopment of the existing Arcade Fundamental Middle School on the current school campus. All recreational facilities necessary for children attending the school during school hours would be provided on campus. The project does not include new housing that would result in a demand for additional off-campus park facilities. Thus, there would be ***no impact***.

Other public facilities?

No Impact. The proposed project entails redevelopment of the existing Arcade Middle School on the current school campus. The new, more modern school campus would have no effect on other public facilities. Thus, there would be ***no impact***.

3.16 RECREATION

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

3.16.1 DISCUSSION

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

No Impact. The project site is located in the urbanized Arden-Arcade area of unincorporated Sacramento County, and is within the Mission Oaks Recreation and Park District. There are three neighborhood and community parks in the vicinity of the project site: Gibbons, Mission North, and Eastern Oak (Sacramento County Department of Parks and Recreation 2022). These parks have a variety of recreational facilities, including outdoor sports fields, tennis courts, basketball courts, volleyball courts, pickleball courts, walking paths, picnic tables, tot lots, drinking fountains, and restrooms (Mission Oaks Recreation and Parks District 2022). The Parks District also has two community centers, one of which is located at Gibbons Park (approximately 1.3 miles east of the project site).

The 624-acre Del Paso Regional Park is approximately 1,700 feet north of the project site. This regional park includes outdoor lighted sports fields (baseball and softball), a museum, equestrian trails, natural habitat areas with interpretive trails, picnic areas, and the Haggen Oaks Golf Complex (City of Sacramento 2022). Haggen Oaks includes two public 18-hole golf courses, a driving range, and instructional programs for children and adults.

The proposed project does not involve the construction of any new housing that would generate new residents who would increase the use of existing recreational facilities. Furthermore, the proposed new school on the existing campus would include all necessary recreational facilities for the student population at the project site, as required by the CDE. The school's recreational facilities are owned and operated solely by the District and are not designated for joint-use as a public park. Therefore, the project would have ***no impact***.

b) Does the project 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. The proposed new school on the existing campus would include all necessary recreational facilities for the student population at the project site, as required by the CDE. The on-site school-related recreational facilities are evaluated throughout this Initial Study as part of the proposed project. Where

necessary, mitigation measures are included as part of each topic area analysis to reduce all project impacts to a ***less-than-significant*** level.

3.17 TRANSPORTATION

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

3.17.1 DISCUSSION

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

The proposed project is intended to modernize the existing school campus. The proposed project would increase the maximum capacity of the Arcade Middle School by 92 additional students. Improvements will allow greater numbers of student drop-off and pick-up on the school site and will provide safer and more efficient school site access for students and SJUSD staff.

Transit Access

Sacramento Regional Transit provides the principal bus service in Sacramento County. It operates local and community buses. Buses operate daily from 5 a.m. to 11 p.m. every 12 to 60 minutes, depending on the route. It is also a service provider for paratransit. Sacramento Regional Transit also operates the light rail system. Light rail begin operation at 4 a.m. with service every 15 minutes during the day (Monday through Sunday) and every 30 minutes for some early morning and late evening trips. Blue Line trains operate until midnight on weekdays, and 10:30 p.m. on weekends.

Sacramento Regional Transit operates three (3) bus routes and one (1) light rail in the vicinity of the project site (Routes 1, 82, 84 and Blue Line). The closest bus stop is located 100 feet north of the intersection of Watt Avenue and Edison Avenue and is served by Route 84. The closest light rail station is the Watt/I-80 Station, located at the interchange of I-80 at Watt Avenue, which is about 0.8 miles from the project site. The proposed project does not conflict with or impede access to these transit routes, but increases student capacity in an area with existing transit access. There is ***no impact***.

Bicycle Access

There are existing Class II bicycle lanes on both sides of Edison Avenue, north of the school site. Sacramento County's Bicycle Master Plan shows Class II facilities for Watt Avenue, as well, adjacent to the project site

(Sacramento County 2011). The project includes a bike locker area. The project does not impede bicycle access or include any features that would lead to adverse physical environmental effects related to bicycle access. There is ***no impact.***

Impacts on Pedestrian Circulation

Figure 1 in the Sacramento County Pedestrian Master Plan, the County identifies High Priority Pedestrian Projects, including a Pedestrian District along Watt Avenue, adjacent to the project site (Sacramento County 2007, page 18 of 172).[1] In the vicinity of the project site, the pedestrian LOS is D along Edison Avenue east of Watt Avenue and C east of Watt Avenue. The County did not provide an assessment of pedestrian LOS along Watt Avenue (Sacramento County 2007, Figure 17).

Edison Avenue and Watt Avenue have sidewalks on both sides in the vicinity of the project site. The project proposes a new sidewalk along the south side of Edison Avenue with connections into the site west of the westernmost ingress point from Edison Avenue and east of the easternmost ingress/egress point on Edison Avenue to avoid vehicular conflicts. The project does not propose to impede pedestrian access in any way, and does not include any other features that would lead to adverse physical environmental effects related to pedestrian access. There is ***no impact***.

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

The referenced section provides guidance for the analysis of travel demand impacts. This section of the CEQA Guidelines suggests that vehicle miles traveled (VMT) is the most appropriate measure of travel demand impacts. The Guidelines also clarify that a project's effect on automobile delay shall not constitute a significant environmental impact. VMT can be an indicator of potential adverse physical environmental effects. The actual adverse physical environmental effects associated with VMT are analyzed in other sections of this document, including Air Quality, Greenhouse Gas Emissions, Noise and Vibration, and Energy.

The intent of SB 743, which directed the Governor's Office of Planning and Research (OPR) to develop guidance for assessing transportation effects is to [m]ore appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. The proposed project is on an infill site and includes bicycle, pedestrian, and transit facilities in the vicinity. Greenhouse gas emissions effects are evaluated in Section 3.8 of this IS/MND, which demonstrates that impacts would be less than cumulatively considerable. As explained in the County's Climate Action Plan Strategy and Framework, promoting infill development (such as the project) along the County's corridors (such as Edison Avenue and Watt Avenue) is a key strategy for reducing travel demand and associated greenhouse gas emissions (Sacramento County 2011).[2]

1 According to the County's Pedestrian Master Plan, the main purpose of Pedestrian Districts is to emphasize pedestrian needs along sections of road where pedestrian demand is or could be high, based on adjacent land uses and transit activity. Some of the treatments that could be used within Pedestrian Districts include: bicycle lanes; sidewalk enhancements and curb extensions; longer pedestrian intervals at signalized intersections; midblock crossings (new and improved); on-street parking; lower speed limits to 30 miles per hour or lower; pedestrian-scaled lighting; road diets; and street trees or bus shelters.

2 For more detail on the County's Climate Action Plan Framework, please see: http://www.per.saccounty.net/PlansandProjectsIn-Progress/Documents/Climate%20Action%20Plan/CAP%20Strategy%20and%20Framework%20Document.PDF.

The proposed Arcade Middle School modernization project is intended to serve existing and future needs in the vicinity of the site for educational services. As described in Sacramento County's Transportation Analysis Guidelines, Page 8 of 64, Section B, Screening Criteria, public K-12 schools are an example of "Local-Serving Public Facilities/Services" that "are expected to result in less-than-significant VMT impacts based on project description, characteristics, and/or location" (Sacramento County 2020b). In addition, the Sacramento Area Council of Governments (SACOG), pursuant to the Sustainable Communities and Climate Protection Act of 2008 (SB 375) incorporates State-developed GHG emissions targets for passenger vehicle emissions into a "sustainable communities strategy" as part of its regional transportation plan. SACOG has also developed analysis and mapping showing the location of low VMT areas within the region. The proposed Arcade Middle School project site is within a low-VMT area, as identified by SACOG – an area where the density, mix of land uses, access to non-vehicular transportation options, and other factors result in a reduced need for vehicular transportation compared to the balance of the region.[3]

With respect to construction traffic, any truck trips would be limited to the length of time required for the project's construction and the construction activities will not affect the long-term VMT of the proposed project.

There is no adverse physical environmental impact associated with VMT that is not addressed fully in other relevant technical sections. The impact is **less than significant**.

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

To support the District's evaluation of this project, traffic counts and video footage were obtained. Queues were assessed at the entrance of the school campus. Queue lengths were determined directly from the drone videos. Morning queues were slightly longer than afternoon queues at the entrance. Under existing conditions, there are some conflicts between pedestrians that walk to school and vehicles at the existing school entrance. The morning eastbound queue blocks the intersection of Edison Avenue and Watt Avenue. Peak traffic in the vicinity of the campus during drop-off and pick-up times lasts for approximately 20 minutes.

Presumably to avoid delays related to entering the school site for drop-off, many parents park at the curbsides of Edison Avenue or in front the on-street parking and let students walk to school. The queues at the drop-off/pick-up areas on campus do not extend beyond the available storage.

Site access and queuing will be improved as a part of the project. The driveway length from the access point from Edison Avenue will be longer after the implementation of the project. Parking will be expanded on-site, reducing congestion and queueing, and the need for drop-off/pick-up at commercial properties north and west of the school site. The project does not add dangerous curves, does not introduce transportation facilities where there is inadequate site distance, or otherwise increases any hazards. Associated sidewalk, curb, and gutters would also be constructed. Sidewalk, curb, and gutter work would be conducted in accordance with *Sacramento County Improvement Standards* (Sacramento County 2018). These standards address access road length, dimensions, and related design features. There is **no impact**.

3 Please see SACOG's website for more details: https://sacog.maps.arcgis.com/apps/webappviewer/index.html?id=0eac172e44514776b2f30e4324652f88&extent=-13567338.6225%2C4599309.7898%2C-13330078.0867%2C4789485.1162%2C102100

d) Result in inadequate emergency access?

The project is the modernization and reuse of an existing school site. The project includes emergency access from two locations along Edison Avenue, extending south through the campus to allow access to all portions of the project site. Emergency access to the project site would meet design standards set forth by the California Fire Code and the *Sacramento County Improvement Standards (2018)*. These standards address access road length, dimensions, and finished surfaces for firefighting equipment; security gate design requirements; fire hydrant placement; and fire flow availability and requirements.

The proposed reconstruction of the school is anticipated to generate a variety of truck and construction employee trips. All construction equipment and vehicles would be staged on the existing school campus. To minimize construction impacts, it is recommended that the District develop and implement a construction traffic management plan in coordination with Sacramento County. The plan may include items such as: the estimated number and size of trucks per day, expected arrival/departure times, truck circulation patterns, location of truck staging areas, location/amount of employee parking, a driveway access plan (including provisions for safe vehicular, pedestrian, and bicycle travel, minimum distance from any open trench, special signage, and private vehicle access points), and the proposed use of traffic control/partial street closures on public streets. The construction traffic management plan will be to maintain a high level of safety for all roadway users.

Compliance with the California Fire Code, City of Sacramento, and Sacramento County design standards would ensure operation of the proposed project would provide adequate emergency access. However, ongoing construction activities could temporarily increase response times and impede emergency services. Construction-related impacts would be **potentially significant**.

Mitigation Measure 3.17-1: Prepare and Implement a Construction Traffic Control Plan.

The San Juan Unified School District and/or contractor/s, in collaboration with Sacramento County, shall prepare and implement a traffic control plan for construction activities that may affect road rights-of-way, in order to facilitate travel of emergency vehicles on affected roadways. The traffic control plan must illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show the proposed phases of traffic control; and identify any time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. Measures typically used in traffic control plans include advertising of planned lane closures, warning signage, and a flag person to direct traffic flows when needed. During construction, access to the existing surrounding land uses shall be maintained at all times, with detours used, as necessary, during road closures. The plan may be modified by to eliminate or avoid traffic conditions that are hazardous to the safety of the public.

Significance after Mitigation

Implementation of Mitigation Measure 3.17-1would reduce the potentially significant impacts associated with decreased emergency response times during construction and operation to a **less-than-significant** level by requiring preparation and implementation of a construction traffic control plan that would provide for adequate emergency access during construction activities.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 ENVIRONMENTAL SETTING

NATIVE AMERICAN CONSULTATION

On behalf of SJUSD, a Sacred Lands Files (SLF) search and request for Assembly Bill (AB) 52 Consultation List was requested by AECOM from the Native American Heritage Commission (NAHC) on May 9, 2022. The purpose of the search was to ascertain whether additional resources or locations that may be of importance to Native Americans who traditionally have resided in the project area are known to exist. On June 29, 2022, the NAHC responded, stating that review of their files yielded negative results. The NAHC also provided the contact information for local Native American tribes and individuals that may have information regarding tribal cultural resources that may be located within or in the vicinity of the project site, and that could be affected by project implementation.

AECOM, on behalf of SJUSD, made written contact with the Buena Vista Rancheria of Me-Wuk Indians, Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community of the Auburn Rancheria (UAIC), Wilton Rancheria, and the Colfax-Todds Valley Consolidated Tribe on June 30, 2022. These letters reported the negative archaeological resources results from the records search for the project area and a ¼-mile search radius at the North Central Information Center (NCIC) on June 6, 2022, the negative Sacred Lands Files search results, and formally invited tribal consultation on the project in accordance with AB 52.

UAIC Cultural Regulatory Specialist Anna Starkey responded on July 20, 2022. The UAIC is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project area. Ms. Starkey reported that UAIC conducted background search for the identification of Tribal Cultural Resources for this project, which included a review of pertinent literature, historic maps, and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the NAHC. The THRIS also includes previously recorded indigenous resources identified through the California Historic Resources Information System Center (CHRIS) as well as historic resources and survey data. Search of the tribes' records indicate that there are no known tribal cultural resources, areas of oral history, sacred lands, or historic waterways in or near the parcel. The tribe declined to consult, but requested that standard unanticipated discoveries mitigation measures and tribal cultural resources chapter recommendations are included in the CEQA document.

No other tribes responded or requested to participate in AB 52 tribal consultation during the 30-day formal notification period.

3.18.2 DISCUSSION

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

No Impact. There is no information suggesting that there are any tribal cultural resources in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. There is ***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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant Impact with Mitigation. There is no information suggesting that there are any tribal cultural resources in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. The following mitigation measure was added to limit the potential for a significant impact.

Mitigation Measure 3.18-1: Unanticipated Discoveries

The following mitigation measure is intended to address the evaluation and treatment of inadvertent/unanticipated discoveries of potential tribal cultural resources (TCRs), archaeological, or cultural resources during the project's ground-disturbing activities.

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the project area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

Significance after Mitigation

Mitigation Measure TCR-1 provides appropriate actions for inadvertant discovery of tribal cultural resources (TCRs), archaeological, or cultural resources.

Implementation of Mitigation Measure 3.18-1 would reduce potential impacts on tribal cultural resources to a less-than-significant level because compliance with the above-listed procedures would address concerns regarding loss of, or substantial adverse changes to, tribal cultural resources. The impact is **less than significant with mitigation**.

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3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 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 site is the existing Arcade Middle School campus. The existing school campus is served by a variety of utility providers; water supply, wastewater conveyance and treatment, and solid waste are discussed in more detail below. A variety of telecommunications providers have existing facilities in the project area and are currently providing services to the project site.

Section 3.6 of this IS/MND, "Energy," addresses energy demand and facilities. Potential environmental impacts associated with water quality and construction of new stormwater drainage facilities are addressed in this IS/MND in Section 3.10, "Hydrology and Water Quality."

POTABLE WATER

The existing Arcade Middle School campus is served with potable water by the Sacramento Suburban Water District (SSWD).

WASTEWATER CONVEYANCE AND TREATMENT

Sewer conveyance for development in the project area, including the existing Arcade Middle School campus, is provided at a local level by the Sacramento Area Sewer District (SASD). SASD owns and operates sewer collector pipelines (10 inches or smaller) in Watt Avenue and Edison Avenue adjacent to the project site. These collector pipelines connect to larger SASD trunk sewer pipelines further south on Watt Avenue and further east on Edison Avenue (SASD 2020). SASD has prepared a *System Capacity Plan* to evaluate existing sewer system service areas that require upgrades or improvements, propose projects to achieve the identified upgrade and improvement goals, and size facilities in new areas where wastewater conveyance will be needed in the future (SASD 2020). When designing conveyance pipelines, SASD considers three sources of inflow: domestic wastewater, groundwater infiltration through joints in pipes and manhole walls, and surface water infiltration from stormwater runoff. New sewer conveyance systems are designed to accommodate projected peak wet weather flows, without surcharging.[1] SASD's *System Capacity Plan* determined that the existing sewer collector pipelines in Edison Avenue and Watt Avenue in the project vicinity have sufficient capacity under both the existing and future projected development conditions (SASD 2020).

SASD's local conveyance lines tie in to larger regional conveyance interceptor lines that are owned and operated by the Sacramento Regional County Sanitation District (Regional San). Wastewater is conveyed to the Sacramento Regional Wastewater Treatment Plant (WWTP), located east of the Sacramento River near Elk Grove. Regional San's EchoWater Project, currently under construction, will enable the WWTP to produce about 120 million gallons per day of tertiary-treated water, which will contribute to increased recycled water use (thereby reducing water demand) throughout the region (Regional San 2022). The WWTP is permitted to discharge an average dry-weather flow of 181 million gallons per day (mgd) of treated wastewater to the Sacramento River (Central Valley Regional Water Quality Control Board 2021). Regional San expects per capita consumption to fall 25 percent in the future through the ongoing installation and use of water meters and compliance with conservation mandates such as the state Water Conservation Act of 2009 (SB X7-7). Therefore, Regional San expects that water conservation measures throughout its service area would allow the existing 181 mgd average dry-weather flow capacity to be adequate for at least 40 years (Ascent Environmental 2014:6-2).

ANALYSIS

Arcade Middle School serves students in grades 6–8, and had a total enrollment of 547 students for the 2020–2021 school year (California Department of Education 2022). The existing capacity of Arcade Middle School is 558 students and this project would increase the school's capacity to 650 students.

The projected increase in the student population (92 students) at the redeveloped school on the existing campus would not be large enough to require capacity expansions for water, wastewater conveyance or treatment, storm water drainage, electric power, natural gas, or telecommunications facilities. Since more recent building code requirements increase both indoor and outdoor water conservation, the project could reduce total water and wastewater treatment demand compared to existing conditions. The project will not require off-site infrastructure improvements. The project would require relocation of on-site connections to infrastructure with the new building locations. The environmental effects of on-site utility modifications are evaluated in the individual topic areas

1 Surcharging occurs when the sanitary sewer lines become overloaded, either with wastewater or a combination of wastewater and infiltrated water (groundwater and/or surface water runoff).

throughout this Initial Study, and mitigation measures are recommended (where necessary) to reduce all environmental impacts to a less-than-significant level.

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. The existing Arcade Middle School campus is served with potable water by the Sacramento Suburban Water District (SSWD). Relevant information from SSWD's *Urban Water Management Plan* (UWMP) (Brown and Caldwell 2021) is summarized herein. SSWD provides a combination of groundwater pumped from a network of approximately 70 wells, and purchased surface water, as its supply sources. Groundwater is obtained from the southern portion of the North American Groundwater Subbasin (identified as the North Basin in the Water Forum Agreement). Groundwater in the North Basin portion of the North American Subbasin is managed by the Sacramento Groundwater Authority. The amount of groundwater that SSWD is allowed to pump on a yearly basis is regulated by the Sacramento Groundwater Authority. SSWD also purchases surface water from Placer County Water Agency (PCWA), U.S. Bureau of Reclamation (USBR), San Juan Water District (SJWD), and the City of Sacramento. The water demands for all types of land uses, as projected in the UWMP, are anticipated to remain relatively constant from 2025 through 2045, primarily because the SSWD service area is essentially built out. As discussed in the UWMP, the Sacramento Regional County Sanitation District (which collects and treats wastewater from the urbanized Sacramento area) previously completed a water reuse opportunity study, which did not identify opportunities for use of recycled water within SSWD's service area; therefore, SSWD does not use or plan to use recycled water.

The surface water supplies available to SSWD are subject to reductions, up to and including curtailment, during dry years (caused by seasonal and climatic shortages). PCWA, USBR, and City of Sacramento water supplies are assumed to not be available for SSWD in dry years. SSWD has agreed not to use any water from the Lower American River in years other than wet years per the Water Forum Agreement. SSWD determined that in normal water years, the combination of purchased surface water and pumped groundwater will be sufficient to meet demand. SSWD also determined that in single and multiple dry years during the 2025–2045 planning horizon, groundwater will be able to meet demands when surface water supplies are reduced or not available. Therefore, sufficient water supplies will be available to meet existing and projected future demand throughout the 20-year planning horizon (Brown and Caldwell 2021).

SSWD currently provides water to the existing Arcade Middle School, and would continue to supply water to the redeveloped school on the existing campus in the future. SSWD determined that in normal water years, the combination of purchased surface water and pumped groundwater will be sufficient to meet demand. SSWD also determined that in single and multiple dry years during the 2025–2045 planning horizon, groundwater will be able to meet demands when surface water supplies are reduced or not available (Brown and Caldwell 2021). Therefore, the limited projected increase in the student population would not substantially increase demand and adversely affect SSWD's ability to provide the necessary water supply to the redeveloped school in the future. Since more recent building code requirements increase both indoor and outdoor water conservation, the project could reduce total water demand compared to existing conditions. This impact is considered less than significant.

c) Result in a determination by the wastewater treatment provider that 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?

Less-than-Significant Impact. SASD currently conveys wastewater generated by the existing Arcade Middle School, in existing sewer collector lines adjacent to the project site, and would continue to do so in the future. The reconfigured and remodeled school on the existing campus would include minor on-site renovations or replacements, as necessary, of on-site conveyance pipelines that tie-in to SASD collectors off the project site. SASD has capacity in its existing collector lines adjacent to the project site, and Regional San has capacity at the Sacramento Regional WWTP, to accommodate future development projected in the Sacramento region (SASD 2020, Ascent Environmental 2014). Therefore, the limited projected increase in the student population would not substantially increase wastewater flows and would not adversely affect SASD's conveyance capacity or the ability of Regional San to provide the necessary wastewater conveyance and treatment at the Sacramento Regional WWTP for the redeveloped school in this future. This impact is considered less than significant.

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. Solid Waste and Recycling. The Sacramento County Department of Waste Management & Recycling (DWMR) manages the operations, maintenance, and development of the solid waste management system within unincorporated Sacramento County, including the project area. DWMR operates and manages the North Area Recovery Station, and the Kiefer Landfill. The North Area Recovery Station in North Highlands (approximately 1 mile northwest of the project site) accepts business and household waste (Sacramento County Waste Management and Recycling 2022). Waste from the North Area Recovery Station is ultimately transported to Kiefer Landfill, southeast of Sacramento near Sloughhouse. Standard refuse collection service in the project area is provided by Sacramento County Waste Management. Collection of recycling and organics recycling materials (which is mandatory for schools as required by Senate Bill 1383) is available from a variety of locally licensed franchise service providers.

The Florin Perkins Public Disposal Center (approximately 6 miles south of the project site) is a certified facility that handles recycling of construction and demolition debris (Florin Perkins Sacramento 2022). Any materials that Florin Perkins is not able to recycle are transported to the North Area Recovery Station. The L&D Landfill (approximately 7 miles south of the project site), accepts business, commercial, and household wastes and is also a certified facility that handles recycling of construction and demolition debris (L&D Landfill 2022).

The North Area Recovery Station is permitted to receive up to 2,400 tons per day (California Department of Resources Recycling and Recovery [CalRecycle] 2019a). Kiefer Landfill is permitted to accept a maximum of 10,815 tons per day, has a remaining capacity of 112,900,000 cubic yards, and an estimated closure date of 2064 (CalRecycle 2019b). The Florin Perkins Public Disposal Center is permitted to receive up to 1,000 tons per day (CalRecycle 2019c). The L&D Landfill is permitted to receive 4,125 tons per day, and the remaining maximum landfill capacity is 3,115,900 cubic yards, with an estimated landfill closure date of December 2030 (CalRecycle 2019d).

The proposed project includes demolition of the existing school buildings (approximately 51,123 square feet of floor space), and most of the existing pavement. Both the Florin Perkins Public Disposal Center and the L&D

Landfill (approximately 6 and 7 miles south of the project site, respectively) are permitted to receive and handle recycling of construction and demolition debris.

During the project's operational phase, the North Area Recovery Station in North Highlands (approximately 1 mile northwest of the project site) is the closest facility that accepts standard business and household wastes. The L&D Landfill also accepts standard business and household wastes.

Because all of these solid waste facilities have capacity to receive project waste (CalRecycle 2019a, 2019b, 2019c, 2019d) during the demolition, construction, and operational phases, and because the District would continue to implement a recycling program, the proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Thus, this impact is considered less than significant.

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

No Impact. The District already has and would continue to implement recycling programs during the project's operational phase. During the demolition phase, construction and demolition debris would be recycled at local facilities, which may include the Florin Perkins Public Disposal Center or the L&D Landfill, or other permitted facilities at the discretion of the contractor(s). The California Green Building Code requires that at least 65 percent of construction and demolition waste be diverted from landfills. A Waste Management Plan must be approved that identifies a waste hauler and a construction and demolition sorting facility and waste log must document the 65 percent diversion requirement. The proposed project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste, and thus there would be no impact.

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3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire. Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

3.20.1 DISCUSSION

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

No Impact. Public Resources Code Sections 4201-4204 and Government Code Sections 51175-51189 require identification of fire hazard severity zones within the State of California. The California Department of Forestry and Fire Protection (CAL FIRE) has established a fire hazard severity classification system. Fire prevention areas considered to be under state jurisdiction are referred to as "state responsibility areas" (SRAs). In SRAs, CAL FIRE is required to delineate three wildfire hazard ranges: moderate, high, and very high. "Local responsibility areas" (LRAs), which are under the jurisdiction of local entities (e.g., cities, counties), are required only to identify very high fire severity zones.

The project site is located in the urbanized Arden-Arcade area, which is not located in or near an SRA (CAL FIRE 2007). The project site and the surrounding area are in a LRA, and CAL FIRE has not designated any very high fire hazard severity zones at the project site or in the project area (CAL FIRE 2008). Vegetation at the project site consists of turf grass and a few urban street trees and ornamental shrubs around the perimeter.

In addition to the CAL FIRE mapping, local agencies may adopt ordinances that may affect communities' hazard mapping and building code requirements. Local agencies are not required to report such zoning actions to CAL FIRE, and therefore locally designated very high fire hazard severity zones may not be reflected on CAL FIRE maps. Based on a review of the Sacramento County General Plan Safety Element, the County has not designated any additional areas of very high fire hazard severity zones other than those already classified by CAL FIRE (Sacramento County 2017).

The project site is not located in an SRA or very high or high fire hazard severity zone. The new school, which would be constructed on the existing Arcade Fundamental Middle School campus, would include appropriate

emergency vehicle ingress and egress, as required by the CDE. All construction materials and equipment would be staged on the project site, and no roads or lanes would be closed during project-related construction activities. Therefore, the project would have no impact on emergency response or emergency evacuation plans as related to fire hazards.

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?

No Impact. The project site is not located in an SRA, and is not located in a very high or high fire hazard severity zone. Redevelopment of the existing school site would not increase the existing wildfire hazard, which is very low due to the developed nature of the surrounding area. The project site would continue to be served by existing Sacramento County fire stations. Thus, there would be ***no 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 site is not located in an SRA, and is not located in a very high or high fire hazard severity zone. Redevelopment of the existing school site would not increase the existing fire hazard, which is very low due to the developed nature of the project area. The redeveloped school would continue to be served by existing Sacramento County fire stations, and would not result in the need for additional fire personnel, equipment, or other infrastructure. Thus, there would be ***no impact***.

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?

No Impact. The project site is not located in an SRA, and is not located in a very high fire hazard severity zone. The project site is located in the urbanized Arden-Arcade area, which is nearly flat. Therefore, the project would not result in exposure of people or structures to significant risks from flooding or landslides following a wildfire. Thus, there would be ***no impact***.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.

Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21083, 21083.3, 21083.5, 21093, 21094, 21095, 21151; Sundstrom v. County of Mendocino (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

3.21.1 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The analysis conducted in this Initial Study concludes that the proposed project would not have a significant adverse effect on the physical environment and would not result in any of the impacts defined in a) above.

As evaluated in Section 3.4, "Biological Resources," the project site consists of school buildings and managed fields used for recreation by the students. Land uses surrounding the project site are primarily residential, with more commercial and industrial land uses located further north and south. Land cover for areas affected by the proposed project include urban (developed), managed recreational field, and disturbed (ruderal). Mitigation Measure 3.4-1 further reduces potential impacts to nesting birds. Mitigation Measure 3.4-2 reduces impacts to trees protected by the Sacramento County tree preservation ordinance.

As evaluated in Section 3.5, "Cultural Resources," Arcade Middle School is not a historical resource and therefore there would be no impact from project construction activities. Because the proposed project is located in a non-depositional environment, subsurface deposits are most likely not present. Moreover, previous development and associated sub-surface excavation at the project site would further limit the likelihood of encountering buried cultural resources. However, a possibility still exists that archaeological features could be discovered in the project site, including in areas where structures are not currently developed (e.g., grass playfields). The impact is reduced to a less-than-significant level through the implementation of Mitigation Measure 3.5-1.

As described in Section 3.18, "Tribal Cultural Resources," there is no information suggesting that there are any tribal cultural resources in the vicinity of the project site. Consultation with local Native American tribes and individuals did not identify tribal cultural resources in the vicinity of the project site and the NAHC Sacred Lands File search was negative. However, Mitigation Measure 3.18-1 is imposed to further limit the potential for any impact.

As evaluated in Section 3.7, "Geology and Soils," the proposed project could result in construction-related damage to or destruction of unique paleontological resources. However, with implementation of Mitigation Measure 3.7-1, this impact would be reduced to a less-than-significant level.

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.)

Construction of the proposed project would result in temporary and short-term impacts that would be limited to the project site and immediate vicinity. Although impacts related to resources such as air quality, greenhouse gas emissions, and traffic would contribute to regional impacts, these impacts would not make a cumulatively considerable incremental contribution to any significant cumulative impact resulting from other past, present, and reasonably foreseeable future projects in the project vicinity. This result stems from the small size of the proposed project, limited nature of construction-related impacts over a relatively short construction period, and mitigation measures that are proposed to avoid, minimize, rectify, reduce, eliminate, and/or compensate for any potentially significant impacts.

As discussed in this Initial Study the proposed project would result in less-than-significant impacts or no impacts on the following resource areas: aesthetics, agriculture and forestry resources, energy, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and wildfire. Furthermore, mitigation measures have been included in this Initial Study that would reduce impacts to a less-than-significant level in the following areas: air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise and vibration, transportation, and tribal cultural resources. Therefore, all impacts would be less than significant or would be reduced to a less-than-significant level through implementation of required mitigation measures, and the proposed project would not make a cumulatively considerable incremental contribution to significant cumulative adverse impacts on those resource areas. The incremental effects of the proposed project would not be cumulatively considerable when viewed in connection with the effects of past, present, and reasonably foreseeable future projects. This impact would be less than significant.

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

The analysis conducted in this Initial Study concludes that the proposed project with mitigation would not have a significant adverse effect on human beings.

As evaluated in Section 3.2, "Air Quality," project-related construction activities could conflict with or obstruct implementation of Sacramento Metropolitan Air Quality Management District (SMAQMD's) air quality plans for particulate matter. However, with implementation of Mitigation Measure AIR-1 (Implement the SMAQMD Basic Construction Emission Control Practices) included in Section 3.2, this impact would be reduced to a less-than-significant level.

As also evaluated in Section 3.2, "Air Quality," although modeled project construction and operational emissions would not exceed SMAQMD thresholds of significance, the Sacramento Valley Air Basin is currently in nonattainment status with respect to ozone and particulate matter. With implementation of Mitigation Measure AIR-2 (Implement Mitigation Measure AIR-1: Implement the SMAQMD Basic Construction Emission Control Practices) included in Section 3.2, this impact would be reduced to a less-than-significant level.

Demolition, excavation, and grading could expose workers to contaminated soil, but Mitigation Measure 3.9-1 would reduce the project's potentially significant impact on human health and the environment because soil and vapor testing would be performed, and in the event that contamination was discovered at concentrations that exceed the applicable environmental screening levels, soil contamination would be remediated prior to the start of earthmoving activities.

As evaluated in Section 3.13, "Noise and Vibration," Nevertheless, if construction activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) or construction equipment were not properly equipped with noise control devices, construction-generated source noise could result in annoyance and/or sleep disruption of occupants of the nearby existing noise-sensitive land uses (e.g., residences) and create a substantial temporary increase in ambient noise levels in the direct vicinity of the project site. Potential construction-related project impacts on existing noise-sensitive land uses are therefore considered potentially significant. Implementation of Mitigation Measure 3.13-1 would reduce the potentially significant impact resulting from construction activities to a less-than-significant level because it would ensure that construction activities would avoid noise-sensitive hours, reduce equipment noise levels, reduce other sources of noise on-site, and provide the opportunity to further reduce temporary noise exposure effects during the course of construction, if necessary.

As described in Section 3.17, "Transportation," to minimize construction impacts, it is recommended that the District develop and implement a construction traffic management plan in coordination with Sacramento County. Implementation of Mitigation Measure 3.17-1 would reduce the potentially significant impacts associated with decreased emergency response times during construction and operation to a less-than-significant level by requiring preparation and implementation of a construction traffic control plan that would provide for adequate emergency access during construction activities.

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4 SUMMARY OF MITIGATION MEASURES

Mitigation Measure 3.3-1: Implement the SMAQMD Basic Construction Emission Control Practices.

The San Juan Unified School District (SJUSD) shall require that the construction contractor's comply with Basic Construction Emission Control Practices identified by the SMAQMD and listed below or as they may be updated in the future:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible track out mud or dirt onto adjacent public roads at least once a day. Use of dry powered sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Mitigation Measure 3.3-2: Implement Mitigation Measure 3.3-1.

Mitigation Measure 3.3-3: Implement Construction DPM Emission Control Measures.

The SJUSD shall require that the construction contractor comply with the following additional construction DPM emission control measures:

- Use Tier 4 final certified engines for all on-site, diesel-powered construction equipment rated at equal to or greater than 50 horsepower (hp).
- Minimize the idling time of diesel powered construction equipment to 2 minutes.
- Use electrical equipment when available, such as welders, concrete/industrial saws, pumps, sweepers, and/or aerial lifts.

Mitigation Measures 3.4-1. Avoid Impacts on Common Nesting Migratory Birds

San Juan Unified School District (SJUSD) shall require contractor/s to implement the following measures during demolition and construction activities to avoid adverse effects to special-status nesting birds and common nesting birds.

- Wherever feasible, the contractor will conduct construction activities that could potentially affect common nesting birds during the nesting season. The nesting season for common nesting birds (raptors, passerines) is February 1 to August 31 If construction activities are completed outside of these nesting seasons, no additional measures are required to avoid adverse effects on nesting birds.

- If construction activities that could affect suitable habitat for nesting birds cannot be conducted outside of the nesting seasons listed above, a qualified biologist shall complete pre-construction surveys for nesting birds. Surveys will be conducted by a qualified biologist within suitable nesting habitat that could be affected by construction activities (e.g., staging areas, access routes) and will include a 500-foot buffer area. The qualified biologist will complete preconstruction surveys within 1 week of the start of construction activities, and will be repeated if construction activities lapse for more than 1 week. If no nesting birds are detected during preconstruction surveys, no additional measures are required.

- If nesting birds have been identified by a qualified biologist in or adjacent to a construction area, the qualified biologist will establish a non-disturbance avoidance buffer for construction activities that would potentially affect the nesting birds. The buffer is 100 feet for passerines, 300 feet for raptors, and 200 feet for heron or egret rookeries. Buffers will be marked on plans and specifications and in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers.

- Construction activities will not occur within the buffer unless the qualified biologist determines that such construction activities would not adversely affect nesting activities. Construction activities that may impact special-status nesting birds occurring within the avoidance buffer/s described above will be monitored by a qualified biologist either continuously or periodically during work, as determined by the qualified biologist. The qualified biologist will be empowered to stop construction activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on nesting birds (e.g., nest abandonment). Buffers will be maintained until there is no longer a threat of disturbance to the nesting bird (e.g., young have fledged, individuals have moved out of the area), as determined by a qualified biologist.

Mitigation Measure 3.4-2: Avoid Impacts on Protected Trees

Prior to project construction, the San Juan Unified School District (District) shall contact the County of Sacramento's tree administrator to discuss the proposed activity and if deemed necessary, the tree administrator will inspect the site of the proposed activity. After consultation between the District and the tree administrator, if the tree administrator determines that a permit is required, the District shall apply for a permit and comply with relevant permit conditions, including permit conditions that may be met

through on-site replanting and the landscaping plan. The application for a tree permit would contain the following information:

1. Location, size and species of the tree(s);
2. The type of activity for which the permit is sought;
3. A statement of the reasons for the activity; and
4. Funds for an arborist report, if applicable.

Mitigation Measure 3.5-1: Unanticipated Cultural Resources

In the event of an inadvertent discovery of cultural resources (excluding human remains) during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained by the District to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the District's expense.

1. Work cannot continue within the 100-foot radius of the discovery site until the archaeologist and/or tribal monitor conducts sufficient research and data collection to make a determination that the resource is either (1) not cultural in origin; or (2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

2. If a potentially eligible resource is encountered, then the archaeologist and District staff shall arrange for either (1) total avoidance of the resource, if possible; or (2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to the District for verification that the provisions of CEQA for managing unanticipated discoveries have been met.

Mitigation Measure 3.5-2: Unanticipated Human Remains

Pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the District shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

Mitigation Measure 3.7-1: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

To minimize the potential for destruction of, or damage to potentially unique, scientifically important paleontological resources during earth-moving activities, the San Juan Unified School District contractor/s shall implement the measures described below.

- Prior to the start of earthmoving activities at the project site, inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.

- If paleontological resources are discovered during earthmoving activities, immediately cease work in the vicinity of the find and notify the San Juan Unified School District. Retain a qualified paleontologist to evaluate the resource and prepare a recovery plan based on Society of Vertebrate Paleontology Guidelines (SVP 2010). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the District to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Mitigation Measure 3.9-1: Perform Soils and Vapor Testing, Prepare a Report of Findings, and Implement Remedial Actions as Necessary.

To minimize the potential for adverse human health and environmental effects associated with soil contamination at the project site, the District shall implement the measures listed below.

- Prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to conduct soil and soil vapor sampling in the area of the diesel UST that was filled-in-place in order to assess the potential for soil and soil vapor impacts to the subject property and to Conduct soil vapor sampling on-site to assess potential for vapor encroachment conditions (VECs) from off-site sources, i.e. the apparent historical USTs to the north across Edison Avenue. The results of which shall be tested by a qualified environmental laboratory. The remediation firm shall prepare a report of findings and recommendations, which shall be submitted to the California Department of Toxic Substances Control. If the laboratory testing results indicate that constituents of concern are not present in the soil at levels that exceed the applicable environmental screening levels, no further mitigation shall be required.

- Although not a recognized environmental concern, prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to collect and analyze soil sample(s) in the area of the Sacramento Municipal Utility District (SMUD) pad on the northwest corner side of the site for polychlorinated biphenyls (PCBs).

- Although not a recognized environmental concern, prior to the start of earthmoving activities at the project site, the San Juan Unified School District shall hire a qualified remediation firm to collect and analyze soil samples throughout the subject property for asbestos, lead-based paint, and pesticide (termiticide).

- If any constituents of concern exceed the applicable environmental screening levels, the report shall include recommendations for remediation, which may include excavation of contaminated soil and replacement with clean fill dirt. The report shall also make recommendations as to whether or not the existing closed-in-place UST (and any associated piping) may be left in place or shall be removed, based on the proposed project design. The San Juan Unified School District shall consult with the California Department of Toxic Substances Control, and shall implement the selected remedy for soil cleanup.

Mitigation Measure 3.13-1: Implement Measures to Reduce Short-Term, Construction-Related Noise.

San Juan Unified School District will require the selected contractor to implement the following noise-reduction and noise-control measures during construction activities:

- Provide written notification to the residents south of the project site and within 500 feet[1] from the southern project boundary at least three weeks prior to construction, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to contact regarding construction noise. Designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. Post contact information in conspicuous locations adjacent to the site with contact information regarding construction noise and activities. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) shall be included in the notification.

- Prohibit the start-up of machines or equipment between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday; Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday and on each Sunday after the hour of 8:00 p.m.

- Restrict the use of bells, whistles, alarms, and horns for safety-warning purposes.

- Equip all construction equipment with noise-reduction devices, such as mufflers to minimize construction noise and operate all internal combustion engines with exhaust and intake silencers.

- All impact tools will be shrouded or shielded, and all intake and exhaust ports on power equipment will be muffled or shielded.

[1] Building rows located within 500 feet of the construction site, would shield construction noise. Therefore, construction noise would be attenuated to ambient level beyond this distance.

- Locate fixed construction equipment (e.g., compressors and generators), construction staging and stockpiling areas, and construction vehicle routes as far as feasible from noise-sensitive receptors.

- Avoid the use of hand jackhammers within 200 feet of the outdoor activity areas of occupied noise-sensitive receptors during demolition activities.

Mitigation Measure 3.17-1: Prepare and Implement a Construction Traffic Control Plan.

The San Juan Unified School District and/or contractor/s, in collaboration with Sacramento County, shall prepare and implement a traffic control plan for construction activities that may affect road rights-of-way, in order to facilitate travel of emergency vehicles on affected roadways. The traffic control plan must illustrate the location of the proposed work area; provide a diagram showing the location of areas where the public right-of-way would be closed or obstructed and the placement of traffic control devices necessary to perform the work; show the proposed phases of traffic control; and identify any time periods when traffic control would be in effect and the time periods when work would prohibit access to private property from a public right-of-way. Measures typically used in traffic control plans include advertising of planned lane closures, warning signage, and a flag person to direct traffic flows when needed. During construction, access to the existing surrounding land uses shall be maintained at all times, with detours used, as necessary, during road closures. The plan may be modified by to eliminate or avoid traffic conditions that are hazardous to the safety of the public.

Mitigation Measure 3.18-1: Unanticipated Discoveries

The following mitigation measure is intended to address the evaluation and treatment of inadvertent/unanticipated discoveries of potential tribal cultural resources (TCRs), archaeological, or cultural resources during the project's ground-disturbing activities.

If any suspected TCRs are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a TCR (PRC §21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of TCRs under CEQA and UAIC protocols, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of TCRs will not take place unless approved in writing by UAIC or by the California Native American Tribe that is traditionally and culturally affiliated with the project area.

The contractor shall implement any measures deemed by the CEQA lead agency to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a TCR may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

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5 REFERENCES

1. Introduction

None.

2 Project Description

California Department of Education. 2022. DataQuest. 2020-21 Enrollment by Ethnicity and Grade, Arcade Fundamental Middle School, San Juan Unified School District. Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=34674476034342&agglevel=school&year=2020-21. Accessed May 4, 2022.

Sacramento County. 1980. *Arden-Arcade Community Plan*. Available: http://www.per.saccounty.net/LandUseRegulationDocuments/Documents/Community%20Plans/Arden%20Arcade%20comm-plan-text.pdf. Accessed May 4, 2022.

———. 2021. *Sacramento County Zoning Code, Chapter 3: Use Regulations*. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Pages/Sacramento%20County%20Zoning%20Code.aspx. Accessed May 5, 2022.

———. 2022. Sacramento County Zoning and Land Use Online Map. Available: https://generalmap.gis.saccounty.gov/JSViewer/county_portal.html. Accessed May 5, 2022.

3 Environmental Impact Checklist

None.

3.1 Aesthetics

California Department of Transportation. 2019. Eligible and Officially Designated Scenic Highways. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed May 4, 2022.

Sacramento County. 1980. *Arden-Arcade Community Plan*. Available: http://www.per.saccounty.net/LandUseRegulationDocuments/Documents/Community%20Plans/Arden%20Arcade%20comm-plan-text.pdf. Accessed May 4, 2022.

———. 2018. *Sacramento County, Countywide Design Guidelines and Case Studies.* Available: https://planning.saccounty.net/applicants/Documents/DesignReview/Countywide%20Design%20Guidelines%205.8.18.pdf. Accessed May 5, 2022.

_____. 2019. Sacramento County Open Data, Traffic Count Data. Available: https://data.saccounty.gov/datasets/traffic-count-data/explore. Accessed August 24, 2022.

———. 2020. *Sacramento County General Plan of 2005–2030.* Sacramento County Planning and Development Department. Adopted 2011, amended 2020. Available: https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed May 4, 2022.

———. 2021. *Sacramento County Zoning Code, Chapter 3: Use Regulations*. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Pages/Sacramento%20County%20Zoning%20Code.aspx. Accessed May 5, 2022.

———. 2022. Sacramento County Zoning and Land Use Online Map. Available: http://generalmap.gis.saccounty.net/JSViewer/county_portal.html. Accessed May 2, 2022.

San Juan Unified School District. 2013. *Facilities Master Plan—Arcade Middle School*. Available: https://www.sanjuan.edu/fmp. Accessed May 2, 2022.

SJUSD. *See* San Juan Unified School District.

3.2 Agriculture and Forestry Resources

California Department of Conservation (DOC). 2018. *Sacramento County Important Farmland 2018*. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 5, 2022.

Sacramento County. 1980. *Arden-Arcade Community Plan*. Available: http://www.per.saccounty.net/LandUseRegulationDocuments/Documents/Community%20Plans/Arden%20Arcade%20comm-plan-text.pdf. Accessed May 4, 2022.

———. 2022a. Sacramento County Zoning and Land Use Online Map. Available: http://generalmap.gis.saccounty.net/JSViewer/county_portal.html. Accessed May 2, 2022.

———. 2022b. Williamson Act Parcels. Available: https://data-sacramentocounty.opendata.arcgis.com/datasets/williamson-act-parcels/explore?location=38.626412%2C-121.426349%2C11.00. Accessed May 10, 2022.

3.3 Air Quality

California Air Resources Board (CARB). 2005 (April). Air Quality and Land Use Handbook: A Community Health Perspective. Available: https://www.arb.ca.gov/ch/handbook.pdf. Accessed August 5, 2022.

Office of Environmental Health Hazard Assessment (OEHHA). 2015 (February). Air Toxics Hot Spots Program: Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed August 5, 2022.

EPA. *See* U.S. Environmental Protection Agency.

South Coast Air Qquality Management District (SCAQMD). 2015. Application of the South Coast Air Quality Management District for leave to file brief of amicus curiae in support of neither party and (proposed) brief of amicus curie. Filed April 13.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2010. PM_{10} Implementation/Maintenance Plan and Redesignation Request for Sacramento County. October 2010. Available: http://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf. Accessed August 8, 2022.

_____. 2013. $PM_{2.5}$ Implementation/Maintenance Plan and Redesignation Request for Sacramento $PM_{2.5}$ Nonattainment Area. Available online at: http://www.airquality.org/ProgramCoordination/Documents/9)%20%20PM2.5%20Imp%20and%20MP%202013.pdf. Accessed July 2022.

_____. 2015. California Environmental Air Quality Act Guidelines Update. Available online at: http://www.airquality.org/LandUseTransportation/Documents/ParticulateMatterThresholdsUpdateMay2015AgendaItemAttachment.pdf. Accessed July 2022.

_____. 2017. Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan. July 2017. Available: http://www.airquality.org/ProgramCoordination/Documents/Sac%20Regional%202008%20NAAQS%20Attainment%20and%20RFP%20Plan.pdf. Accessed August 8, 2022.

_____. 2019. Basic Construction Emission Control Practices. Available: http://www.airquality.org/LandUseTransportation/Documents/Ch3BasicEmissionControlPracticesBMPSFinal7-2019.pdf. Accessed August 5, 2022.

_____. 2020a. Thresholds of Significance Table. Available: https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf. Accessed August 5, 2022.

_____. 2020b. Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District. October 2020. Available: https://www.airquality.org/LandUseTransportation/Documents/SMAQMDFriantRanchFinalOct2020.pdf. Accessed August 8, 2022.

_____. 2021. Guide to Air Quality Assessment in Sacramento County (CEQA Guide). November 2021. Available: https://www.airquality.org/residents/ceqa-land-use-planning/ceqa-guidance-tools. Accessed August 8, 2022.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

U.S. Environmental Protection Agency. 2022. Ozone Pollution and Your Patients' Health: Patient Exposure and the Air Quality Index. Available: https://www.epa.gov/ozone-pollution-and-your-patients-health/patient-exposure-and-air-quality-index. Accessed August 8, 2022.

WHO. *See* World Health Organization.

World Health Organization. 2013. Heath Effects of Particulate Matter. Available: https://www.euro.who.int/__data/assets/pdf_file/0006/189051/Health-effects-of-particulate-matter-final-Eng.pdf. Accessed August 8, 2022.

Zhu, Yifang; William C. Hinds, Seongheon Kim & Constantinos Sioutas. 2002. Concentration and Size Distribution of Ultrafine Particles Near a Major Highway, Journal of the Air & Waste Management Association, 52:9, 1032-1042, DOI: 10.1080/10473289.2002.10470842. Available: http://dx.doi.org/10.1080/10473289.2002.10470842. Accessed August 5, 2022.

3.4 Biological Resources

Griffith, G.E., Omernik, J.M., Smith, D.W., Cook, T.D., Tallyn, E., Moseley, K., and Johnson, C.B. 2016. Ecoregions of California (poster): U.S. Geological Survey Open-File Report 2016–1021, with map, scale 1:1,100,000.

National Cooperative Soil Survey (NCSS). 1999. *Official Series Description – San Joaquin Series.* Soil Data Explorer, California Soil Resource Lab. September 1999.

Natural Resources Conservation Service (NRCS). 2022. Custom Soil Resource Report for Sacramento County, California. United States Department of Agriculture. Available at websoilsurvey.sc.egov.usda.gov. Accessed June 9, 2022.

U.S. Climate Data. 2022. Monthly Climate Sacramento – California. Your Weather Service, US Climate Data 2022, version 3.0. Available at: www.usclimatedata.com. Accessed June 9, 2022.

3.5 Cultural Resources

AECOM. 2022. Department of Parks and Recreation (DPR) 523 series form for 3500 Edison Avenue, Sacramento, California. Prepared for SJUSD.

Billat, Lorna. 2008. *Watt & Del Paso.* Report No. 009580. On file at NCIC.

Cowan, James. 1990. *History of Arcade School District with information on the Growth and Development of the North Area of Sacramento County, California, 1885-1960.* Sacramento, CA: California Retired Teachers Association.

Peak & Associates. 1989. *Cultural Resources Assessment of the Proposed 51 Commuter Bikeay.* Rpeiort No. 003374. On file at NCIC.

3.6 Energy Resources

None.

3.7 Geology and Paleontological Resources

Branum, D., R. Chen, M. Petersen, and C. Wills. 2016. *Earthquake Shaking Potential for California*. California Geological Survey and U.S. Geological Survey. Map Sheet 48. Sacramento, CA.

California Department of Conservation. 2018. DOC Maps Data Viewer—Earthquake Shaking Potential for California. Map Sheet 48. Available: https://maps.conservation.ca.gov/cgs/DataViewer/. Accessed May 9, 2022.

California Department of Water Resources. 2021. SGMA Data Viewer, Groundwater Levels. Available: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels. Accessed May 9, 2022.

California Geological Survey. 2022. CGS Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones. Available: https://www.arcgis.com/apps/mapviewer/index.html?layers=ee92a5f9f4ee4ec5aa731d3245ed9f53. Accessed May 9, 2022.

Gutierrez, C.I. 2011. *Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California.* California Geological Survey. Sacramento, CA.

Helley, E. J. and D. S. Harwood. 1985. *Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California*. U.S. Geological Survey. Map MF-1790. Reston, VA.

Hilton, R. P., D. C. Dailey, and H. G. McDonald. 2000 (April). A Late Pleistocene Biota from the Arco Arena Site, Sacramento, California. *PaleoBios Abstracts* 20(1).

Jefferson, G. T. 1991a. *Technical Report No. 5: A Catalogue of Late Quaternary Vertebrates from California—Part One, Nonmarine Lower Vertebrate and Avian Taxa*. Natural History Museum of Los Angeles County, CA.

———. 1991b. *Technical Report No. 7: A Catalogue of Late Quaternary Vertebrates from California—Part Two: Mammals*. Natural History Museum of Los Angeles County, CA.

Jennings, C.W. and W.A. Bryant. 2010. *2010 Fault Activity Map of California*. Available: http://maps.conservation.ca.gov/cgs/fam/. Accessed May 9, 2022.

Kolber, M. 2004 (July 27). Mammoth Coup: Discovery of Huge Fossil Near Elk Grove Is a Big Deal for Northern California. *Sacramento Bee*.

Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey. Available: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed May 9, 2022.

Society of Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources Society of Vertebrate Paleontology*. Impact Mitigation Guidelines Revision Committee.

University of California Museum of Paleontology (UCMP). 2022. Paleontological Collections Database. Available: https://ucmpdb.berkeley.edu/about.shtml. Accessed May 9, 2022.

3.8 Greenhouse Gas Emissions

Houlton, Benjamin and Lund, Jay. (University of California, Davis). 2018. Sacramento Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-002. Available: https://www.energy.ca.gov/sites/default/files/2019-11/Reg_Report-SUM-CCCA4-2018-002_SacramentoValley_ADA.pdf. Accessed August 15, 2022.

Intergovernmental Panel on Climate Change (IPCC). 2021. AR6 Climate Change 2021: The Physical Science Basis. Available: https://www.ipcc.ch/report/ar6/wg1/. Accessed August 15, 2022.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2020a. Thresholds of Significance Table. Available: https://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf. Accessed August 5, 2022.

_____. 2020b. Greenhouse Gas Thresholds for Sacramento County. Available: http://www.airquality.org/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf. Accessed August 16, 2022.

_____. 2021. Guide to Air Quality Assessment in Sacramento County (CEQA Guide). November 2021. Available: https://www.airquality.org/residents/ceqa-land-use-planning/ceqa-guidance-tools. Accessed August 8, 2022.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.

3.9 Hazards and Hazardous Materials

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer. Available: https://egis.fire.ca.gov/FHSZ/. Accessed May 9, 2022.

California Department of Toxic Substances Control (DTSC). 2022. EnviroStor. Available: https://www.envirostor.dtsc.ca.gov/public/. Accessed May 9, 2022.

California Department of Water Resources. 2021. SGMA Data Viewer, Groundwater Levels. Available: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels. Accessed May 9, 2022.

Sacramento Airport Land Use Commission. 1992. *McClellan Air Force Base Comprehensive Land Use Plan*. Adopted 1987, Amended 1992. Available: https://www.sacog.org/post/sacramento-county. Accessed May 9, 2022.

Sacramento County Environmental Management Department (SCEMD). 2021. Case Closure Summary: 3500 Edison Avenue – Evaluation Against LTCP. Available: https://geotracker.waterboards.ca.gov/. Accessed May 9, 2022.

State Water Resources Control Board (SWRCB). 2022. GeoTracker. Available: https://geotracker.waterboards.ca.gov/. Accessed May 9, 2022.

SWRCB. *See* State Water Resources Control Board.

U.S. Environmental Protection Agency (USEPA). 2021. Search for Superfund Sites Where You Live. Available: https://www.epa.gov/superfund/search-superfund-sites-where-you-live. Accessed May 9, 2022.

3.10 Hydrology and Water Quality

Branum, D., R. Chen, M. Petersen, and C. Wills. 2016. *Earthquake Shaking Potential for California*. California Geological Survey and U.S. Geological Survey. Map Sheet 48. Sacramento, CA.

Brown and Caldwell. 2021. *Sacramento Suburban Water District Urban Water Management Plan.* Available: https://www.sswd.org/departments/engineering/reports/urban-water-management-plan. Accessed May 10, 2022.

California Department of Water Resources. 2022. Best Available Maps. Available: https://gis.bam.water.ca.gov/bam/. Accessed May 12, 2022.

Central Valley RWQCB. *See* Central Valley Regional Water Quality Control Board.

Central Valley Regional Water Quality Control Board. 2016. *National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Discharges from Municipal Separate Storm Sewer Systems: City of Folsom, City of Rancho Cordova, County of Sacramento*. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/. Accessed May 23, 2022.

———. 2018. *The Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins*. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/#basinplans. Accessed May 13, 2022.

DWR. *See* California Department of Water Resources.

Federal Emergency Management Agency (FEMA). 2012. Flood Map Service Center. Available: https://msc.fema.gov/portal/home. Accessed May 12, 2022.

GEI Consultants. 2021. *North American Subbasin Groundwater Sustainability Plan.* Available: https://nasbgroundwater.org/. Accessed May 23, 2022.

Sacramento County Department of Water Resources. 2022. Stormwater Utility (Drainage). Available: https://waterresources.saccounty.gov/Pages/StormwaterUtility%28Drainage%29.aspx. Accessed May 23, 2022.

Sacramento County Department of Water Resources and City of Sacramento Utilities Engineering Department. 1996. *Sacramento City/County Drainage Manual, Volume 2.* Available: https://waterresources.saccounty.gov/Pages/DrainageManualVolume2.aspx. Accessed May 23, 2022.

State Water Resources Control Board (SWRCB). 2012. *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002)*. Available:

https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed May 23, 2022.

———. 2021. *2018 California Integrated Report*. Available online: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html. Accessed May 13, 2022.

3.11 Land Use and Planning

Sacramento County. 1980. *Arden-Arcade Community Plan*. Available: http://www.per.saccounty.net/LandUseRegulationDocuments/Documents/Community%20Plans/Arden%20Arcade%20comm-plan-text.pdf. Accessed May 4, 2022.

———. 2020. *Sacramento County General Plan of 2005–2030.* Sacramento County Planning and Development Department. Adopted 2011, amended 2020. Available: https://planning.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed May 4, 2022.

———. 2021. *Sacramento County Zoning Code, Chapter 3: Use Regulations*. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Pages/Sacramento%20County%20Zoning%20Code.aspx. Accessed May 5, 2022.

———. 2022. Sacramento County Zoning and Land Use Online Map. Available: https://generalmap.gis.saccounty.gov/JSViewer/county_portal.html. Accessed May 5, 2022.

3.12 Minerals

O'Neal, M.D. and F.W. Gius. 2018. *Mineral Land Classification: Concrete Aggregate in the Greater Sacramento Area Production-Consumption Region*. Special Report 245. California Geological Survey. Sacramento, CA.

Sacramento County. 2020. *Sacramento County General Plan of 2005-2030, Conservation Element*. Sacramento, CA. Available: http://www.per.saccounty.net/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed May 6, 2022.

3.13 Noise and Vibration

AECOM. 2022. Arcade Middle School – Traffic Analysis.

_____. 2018. CasaRoble_InteriorNoise_Memo_12-21-2018, AECOM. Sacramento, CA.

California Department of Transportation. 2013. *Technical Noise Supplement*. Sacramento, CA. Prepared by IFC Jones & Stokes, Sacramento, CA.

———. 2020 (April). *Transportation and Construction Vibration Guidance Manual*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office, Sacramento, CA.

Caltrans. *See* California Department of Transportation.

County of Sacramento. 2017. General Plan Noise Element. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Documents/General-Plan/Noise%20Element%20-%20Amended%2012-13-17.pdf. Accessed September 20, 2022.

Federal Transit Administration (FTA). 2018 (September). *Transit Noise and Vibration Impact Assessment*. FTA Report No. 0123.

SACOG Open Data Portal. 2021. McClellan Air Force Base Comprehensive Land Use Plan. Available: https://www.sacog.org/sites/main/files/file-attachments/mcclellan_afb_clup_amend_dec_1992_-_93-014.pdf. Accessed September 20, 2022.

Sacramento County 2017. General Plan Noise Element. Available: https://planning.saccounty.net/LandUseRegulationDocuments/Documents/General-Plan/Noise%20Element%20-%20Amended%2012-13-17.pdf. Accessed September 20, 2022.

U.S. Environmental Protection Agency. 1971 (December 31st). Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.

3.14 Population and Housing

Lopez, Noe, Senior Project Manager, Vanir Construction Management, Inc. 2022 (May 10th). Email to Matthew Gerken, Associate Vice President, AECOM, Sacramento, CA.

U.S. Census Bureau. 2016-2020. QuickFacts, Arden-Arcade CDP, California. Available: https://www.census.gov/quickfacts/fact/table/ardenarcadecdpcalifornia/PST045221. Accessed July 2022.

3.15 Public Services

Lopez, Noe, Senior Project Manager, Vanir Construction Management, Inc. 2022 (May 10th). Email to Matthew Gerken, Associate Vice President, AECOM, Sacramento, CA.

Metro Fire Sacramento (Metro Fire). 2022. Operations. Available: https://metrofire.ca.gov/departments/Operations. Accessed July 2022.

Sacramento County Sheriff's Office, North Division. 2022. Available: https://www.sacsheriff.com/pages/north_division.php. Accessed August 25, 2022.

3.16 Recreation

City of Sacramento. 2022. Del Paso Regional Park. Available: http://www.cityofsacramento.org/parksandrec/parks/park-directory/arden-arcade/del-paso-regional-park. Accessed May 10, 2022.

Mission Oaks Recreation and Park District. 2022. Parks and Projects. Available: https://www.morpd.com/parks-projects. Accessed May 10, 2022.

Sacramento County Department of Parks and Recreation. 2022. Your Sacramento Area Parks. Available: https://sacramentocounty.maps.arcgis.com/apps/webappviewer/index.html?id=473d8a66b49243e1aa3732a4bdbd6936. Accessed May 10, 2022.

3.17 Transportation

ARB. See California Air Resources Board.

California Air Resources Board (ARB). 2018. California Greenhouse Gas Emissions for 2000 to 2016, available: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf.

Sacramento County. 2011 (April). Sacramento County Bicycle Master Plan.

_____. 2007. Sacramento County Pedestrian Master Plan.

———. 2018 (April). Sacramento County Improvement Standards. Available: https://engineering.saccounty.gov/Documents/Section%204%20Street%20Design.pdf. Accessed August 21, 2022.

_____. 2019. Sacramento County General Plan Environmental Justice Element.

3.18 Tribal Cultural Resources

None.

3.19 Utilities and Service Systems

Ascent Environmental. 2014. *Draft Environmental Impact Report for the Sacramento Regional County Sanitation District EchoWater Project*. Available: http://www.regionalsan.com/post/echowater-draft-environmental-impact-report-deir. Accessed May 11, 2022.

Brown and Caldwell. 2021. *Sacramento Suburban Water District Urban Water Management Plan.* Available: https://www.sswd.org/departments/engineering/reports/urban-water-management-plan. Accessed May 10, 2022.

California Department of Education. 2022. DataQuest. 2020-21 Enrollment by Ethnicity and Grade, Arcade Fundamental Middle School, San Juan Unified School District. Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrEthGrd.aspx?cds=34674476034342&agglevel=school&year=2020-21. Accessed May 4, 2022.

California Department of Resources Recycling and Recovery (CalRecycle). 2019a. SWIS Facility/Site Activity Details: North Area Transfer Station. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2071?siteID=2508. Accessed May 11, 2022.

———. 2019b. SWIS Facility/Site Activity Details: Sacramento County Landfill (Kiefer). Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed May 12, 2022.

———. 2019c. SWIS Facility/Site Activity Details: Florin Perkins Public Disposal Site. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/242?siteID=4721. Accessed May 11, 2022.

———. 2019d. SWIS Facility/Site Activity Details: L&D Landfill. Available: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2524. Accessed May 11, 2022.

Central Valley Regional Water Quality Control Board. 2021. *Waste Discharge Requirements for the Sacramento Regional County Sanitation District Sacramento Regional Wastewater Treatment Plant, Sacramento County. NPDES Permit No. CA0077682, Order R5-2021-0019.* Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/sacramento/r5-2021-0019_npdes.pdf. Accessed May 10, 2022.

Florin Perkins Sacramento. 2022. Florin Perkins Public Disposal Center. Available: https://www.zankerrecycling.com/florin-perkins/. Accessed May 10, 2022.

L&D Landfill. 2022. Recycling Program. Available: https://www.landdlandfill.com/recycling-programs. Accessed May 10, 2022.

Sacramento Area Sewer District (SASD). 2020. *System Capacity Plan.* Available: https://www.sacsewer.com/sewer-system-capacity-plan. Accessed May 10, 2022.

Sacramento County Regional Sanitation District (Regional San). 2022. EchoWater Project. Available: https://www.regionalsan.com/echowater-project. Accessed May 10, 2022.

Sacramento County Waste Management and Recycling. 2022. North Area Recovery Station. Available: https://wmr.saccounty.gov/Pages/NARS.aspx. Accessed May 10, 2022.

3.20 Wildfire

California Department of Forestry and Fire Protection (CAL FIRE). 2007 (November). *Sacramento County – Fire Hazard Severity Zones in SRA.* Available: https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/#panel-eeb73190-f22c-4a95-9a98-b6481f00b7cd. Accessed July 2022.

_____. 2008 (October). *Sacramento County – Very High Fire Hazard Severity Zones in LRA.* Available: https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/#panel-eeb73190-f22c-4a95-9a98-b6481f00b7cd. Accessed July 2022.

Sacramento County. 2017 (as amended). *General Plan of 2005-2030, Safety Element and Safety Element Background.* Available: https://planning.saccounty.gov/PlansandProjectsIn-Progress/Pages/GeneralPlan.aspx. Accessed July 2022.

Society of Vertebrate Paleontology Guidelines. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources.

SVP. *See* Society of Vertebrate Paleontology Guidelines.