INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

FOR THE

MANTECA SELF STORAGE PROJECT

MAY 28, 2021

Prepared for:

City of Manteca – City Hall
1001 West Center Street
Manteca, CA 95337
(209) 456-8000

Prepared by:

De Novo Planning Group
1020 Suncast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 580-9818

De Novo Planning Group

A Land Use Planning, Design, and Environmental Firm

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Proposed Manteca Self Storage Project

Lead Agency:
City of Manteca
1001 West Center Street
Manteca, CA 95337

Project Title: Manteca Self Storage Project

Project Location: The 5.64-acre Project site (Project site) is located at 2430 West Atherton Drive (APN: 241-320-57). This project is bordered to the north and east by West Atherton Drive, and to the south and east by existing residences. Additionally, Bella Terra Drive abuts a portion of the southern boundary of the Project site from the south, (perpendicular to the southern boundary of the Project site).

The Project site is currently vacant, containing ruderal grasses. The Project site is generally flat, with an elevation range for the entire Project site of approximately 23 to 28 feet above sea level. See Figures 1 and 2 for the regional location and the project vicinity. As shown in Figure 2, the Project site is surrounded by existing residential uses.

Project Description: At full buildout, the Manteca Self Storage project is proposing to build nine (9) approximately 20-foot tall storage buildings, containing approximately 844 total individual storage units, and one (1) office building (the office building would be located within Building D). Table PD-1, below, provides the approximate building areas associated with each Project building.

Findings:

In accordance with the California Environmental Quality Act, the City of Manteca has prepared an Initial Study to determine whether the proposed project may have a significant adverse effect on the environment. The Initial Study and Proposed Mitigated Negative Declaration reflect the independent judgment of City of Manteca staff. On the basis of the Initial Study, the City of Manteca hereby finds:

> *Although the proposed project could have a significant adverse effect on the environment, there will not be a significant adverse effect in this case because the project has incorporated specific provisions to reduce impacts to a less than significant level and/or the mitigation measures described herein have been added to the project. A Mitigated Negative Declaration has thus been prepared.*

The Initial Study, which provides the basis and reasons for this determination, is attached and/or referenced herein and is hereby made a part of this document.

_____ _____

Signature Date

Proposed Mitigation Measures:

The following Mitigation Measures are extracted from the Initial Study. These measures are designed to avoid or minimize potentially significant impacts, and thereby reduce them to an insignificant level. A Mitigation Monitoring and Reporting Program (MMRP) is an integral part of project implementation to ensure that mitigation is properly implemented by the City and the implementing agencies. The MMRP will describe actions required to implement the appropriate mitigation for each CEQA category including identifying the responsible agency, program timing, and program monitoring requirements. Based on the analysis and conclusions of the Initial Study, the impacts of proposed project would be mitigated to less-than-significant levels with the implementation of the mitigation measures presented below.

BIOLOGICAL RESOURCES

Mitigation Measure BIO-1: Prior to commencement of any grading activities, the Project applicant shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Mitigation Measure BIO-2: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for nesting raptors in accordance with SJMSCP requirements. If no nests are detected, then construction activities may commence. If occupied nests are discovered, then the Project applicant shall coordinate with SJCOG regarding the appropriate buffer needed to avoid the particular bird species. If burrowing owl is discovered during the non-breeding season (September 1 through January 31) they should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995). Implementation of this mitigation shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.

CULTURAL RESOURCES

Mitigation Measure CUL-1: If cultural resources (i.e., prehistoric sites, historic sites, isolated artifacts/features, and paleontological sites) are discovered during construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Manteca shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology (or a qualified paleontologist in the event paleontological resources are found) shall be retained to determine the significance of the discovery. The City of Manteca shall consider recommendations presented by the professional for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Specific measures are developed based on the significance of the find.

Mitigation Measure CUL-2: If any human remains are found during grading and construction activities, all work shall be halted immediately within 50 meters (165 feet) of the discovery and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Additionally, if the Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the applicant's expense.

GEOLOGY AND SOILS

Mitigation Measure GEO-1: Prior to issuance of building permits, the Project applicant shall submit a design-level geotechnical study and building plans to the City of Manteca for review and approval. The building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the most recent version of the California Building Standards Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. The approved plans shall be incorporated into the proposed Project. All onsite soil engineering activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.

Mitigation Measure GEO-2: The Project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Manteca and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: A Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health prior to the issuance of a grading permit for each phase of the project. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.

HYDROLOGY AND WATER QUALITY

Mitigation Measure HYDRO-1: Prior to the issuance of a building or grading permit, the Project applicant shall submit a drainage plan to the City of Manteca for review and approval. The plan shall include an engineered storm drainage plan that demonstrates attainment of pre-project runoff requirements prior to release at the outlet canal and describes the volume reduction measures and treatment controls used to reach attainment consistent with the Manteca Storm Drain Master Plan.

Mitigation Measure HYDRO-2: The Project applicant shall implement the following nonstructural BMPs that focus on preventing pollutants from entering stormwater:

- Pollution Prevention/Good Housekeeping
    - Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop a spill response and prevention plan as a component of (1) SWPPPs prepared for construction activities, (2) SWPPPs for facilities subject to the NPDES Stormwater Permit, and (3) spill prevention control and countermeasure plans for qualifying facilities. The spill response and prevention plan shall be implemented during all construction activities.
- Operation and Maintenance (O&M) of Treatment Controls
    - Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop an Operation and Maintenance (O&M) Plan for the storm drainage facilities to ensure long-term performance. The O&M plan shall incorporate the manufacturers' recommended maintenance procedures and include (1) provisions for debris removal, (2) guidance for addressing public health or safety issues, and (3) methods and criteria for assessing the efficacy of the storm drainage system. An annual report shall be submitted to the City certifying that maintenance of the facilities was conducted according to the O&M plan.

NOISE

Mitigation Measure NOI-1: During project construction activities, the applicant shall require its construction contractors to adhere to the following noise attenuation requirements:

- Construction activities shall be limited to the hours between 7 a.m. to 8 p.m. daily. The City of Manteca Director of Public Works shall have the discretion to permit construction activities to occur outside of allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions necessary to pour concrete).

- All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. If no noise-reduction features were installed by the manufacturer, then the contractor shall require that at least a muffler be installed on the equipment.
- Construction staging and heavy equipment maintenance activities shall be performed on the northernmost part of the Project site (along Atherton Road) to create the greatest separation from the nearest residence, unless safety or technical factors take precedence (e.g., an equipment breakdown). Alternatively, staging and maintenance could be performed on adjacent vacant parcels so long as the separation to the nearest residence is greater than what could be achieved on the Project site.

Mitigation Measure NOI-2: During project operations, the use of street sweepers and mechanical landscape maintenance equipment (lawnmowers, leaf blowers, etc.) shall be prohibited between the hours of 10 p.m. and 7 a.m.

PUBLIC SERVICES

Mitigation Measure PSU-1: Prior to issuance of building permits for any project uses, the Project applicant shall provide the City of Manteca with all applicable fire protection development fees in accordance with the latest adopted fee schedule.

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Manteca Self Storage Project

LEAD AGENCY NAME AND ADDRESS

City of Manteca – City Hall
1001 West Center Street
Manteca, CA 95337
(209) 456-8000

CONTACT PERSON AND PHONE NUMBER

Toben Barnum, Assistant Planner
Development Services Department,
1215 West Center Street, Suite 201
Manteca, California 95337
(209) 456-8517
tbarnum@ci.manteca.ca.us

PROJECT LOCATION AND SETTING

The 5.64-acre Project site (Project site) is located at 2430 West Atherton Drive (APN: 241-320-57). This project is bordered to the north and east by West Atherton Drive, and to the south and east by existing residences. Additionally, Bella Terra Drive abuts a portion of the southern boundary of the Project site from the south, (perpendicular to the southern boundary of the Project site).

The Project site is currently vacant, containing ruderal grasses. The Project site is generally flat, with an elevation range for the entire Project site of approximately 23 to 28 feet above sea level. See Figures 1 and 2 for the regional location and the project vicinity. As shown in Figure 2, the Project site is surrounded by existing residential uses.

PROJECT DESCRIPTION

At full buildout, the Manteca Self Storage project is proposing to build nine (9) approximately 20-foot-tall storage buildings, containing approximately 844 total individual storage units, and one (1) office building (the office building would be located within Building D). Table PD-1, below, provides the approximate building areas associated with each Project building.

Table PD-1: Proposed Project Building Area

Building	*Building Type*	*Building Area (square feet)*
Building A	Storage	10,175
Building B	Storage	16,750
Building C	Storage	13,275
Building D	Storage	8,900
Building E	Storage	14,550
Building F	Storage	13,300
Building G	Storage	31,332
Building H	Storage	4,500
Building I	Storage	10,525
Office Building	Office	2,524

Source: Laughlin and Spence, 2021 (see Appendix C)

The Project would contain a total of 123,357 square feet of storage capacity. Project development is anticipated to occur in three phases, with three storage buildings anticipated to be built per phase. At buildout, the Project would contain a total of 27 parking spaces, with three clean air vehicle parking spaces and two electric vehicle charging stations, as required per the City of Manteca Municipal Code. The Project site would also contain bicycle parking, as required. All required Project building entrances, exterior ground floor exists to buildings will be ADA-compliant. The Project buildings would be Figure 3 provides a site plan illustrating the Project site improvements.

This Project will be conditioned to install frontage improvements along West Atherton Drive, including the widening of the road, curb, gutter, sidewalk, and landscaping. Vehicular ingress and egress will be along West Atherton Drive. Gated emergency ingress and egress would be available at three locations: one from the south (from Bella Terra Drive) and two from the north (from West Atherton Drive). Stormwater would be directed from the internal Project roadways to the City's existing storm drainage system through new storm drain inlets. Drought-tolerant plant species would be planted along the perimeter of the Project site.

GENERAL PLAN AND ZONING DESIGNATIONS

Currently, the 5.64-acre Project site has a General Plan designation of GC (General Commercial), which allows for wholesale, warehousing, heavy commercial uses, highway oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The Project site zoning is CG (General Commercial). According to the City's Municipal Code, "Personal Storage Facility" uses are conditionally allowed under CG zoning. A Conditional Use Permit is required to be issued. The Project uses are consistent with the existing General Plan Designation and zoning. No General Plan Amendment or zoning change is anticipated. The existing and planned General Plan land uses and zoning designations are shown on Figure 4.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Manteca is the Lead Agency for the proposed Project, pursuant to the State CEQA Guidelines, Section 15050.

This document will be used by the City of Manteca to take the following actions:

- Approval of a Conditional Use Permit;
- Adoption of the Mitigated Negative Declaration (MND);
- Adoption of the Mitigation Monitoring and Reporting Program;
- City review and approval of the proposed Grading and Improvement Plans; and
- City Site Plan & Design Review (SPC).

The following agencies may be required to issue permits or approve certain aspects of the proposed Project:

- Regional Water Quality Control Board (RWQCB) – Construction activities would be required to be covered under the National Pollution Discharge Elimination System (NPDES);
- RWQCB – The Storm Water Pollution Prevention Plan (SWPPP) would be required to be approved prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Approval of construction-related air quality permits;
- San Joaquin Council of Governments (SJCOG) – Review of project application to determine consistency with the San Joaquin County Multi-Species Habitat, Conservation, and Open Space Plan (SJMSCP).

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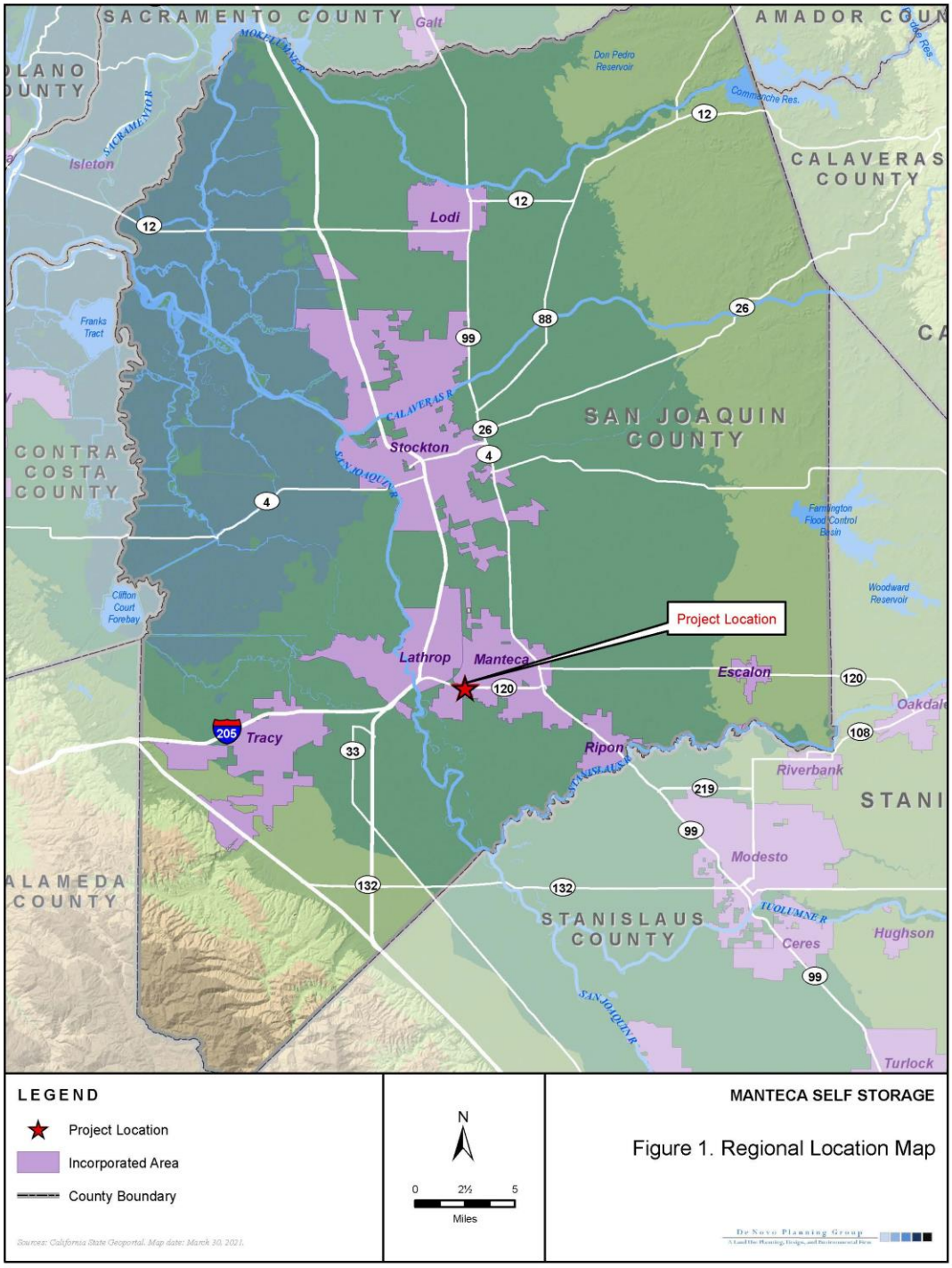
SACRAMENTO COUNTY
AMADOR COUN
CALAVERAS COUNTY
SAN JOAQUIN COUNTY
CONTRA COSTA COUNTY
ALAMEDA COUNTY
STANISLAUS COUNTY
STANI
Galt
Isleton
Lodi
Stockton
Lathrop
Manteca
Escalon
Tracy
Ripon
Riverbank
Modesto
Ceres
Hughson
Turlock
Oakdale
Project Location
Don Pedro Reservoir
Comanche Res.
Woodward Reservoir
Farmington Flood Control Basin
Clifton Court Forebay
Franks Tract
MOKELUMNE R
SACRAMENTO R
CALAVERAS R
SAN JOAQUIN R
STANISLAUS R
TUOLUMNE R
12
26
88
99
4
120
205
33
108
219
132
LEGEND
Project Location
Incorporated Area
County Boundary
Sources: California State Geoportal. Map date: March 30, 2021.
N
0
2½
5
Miles
MANTECA SELF STORAGE
Figure 1. Regional Location Map
De Novo Planning Group

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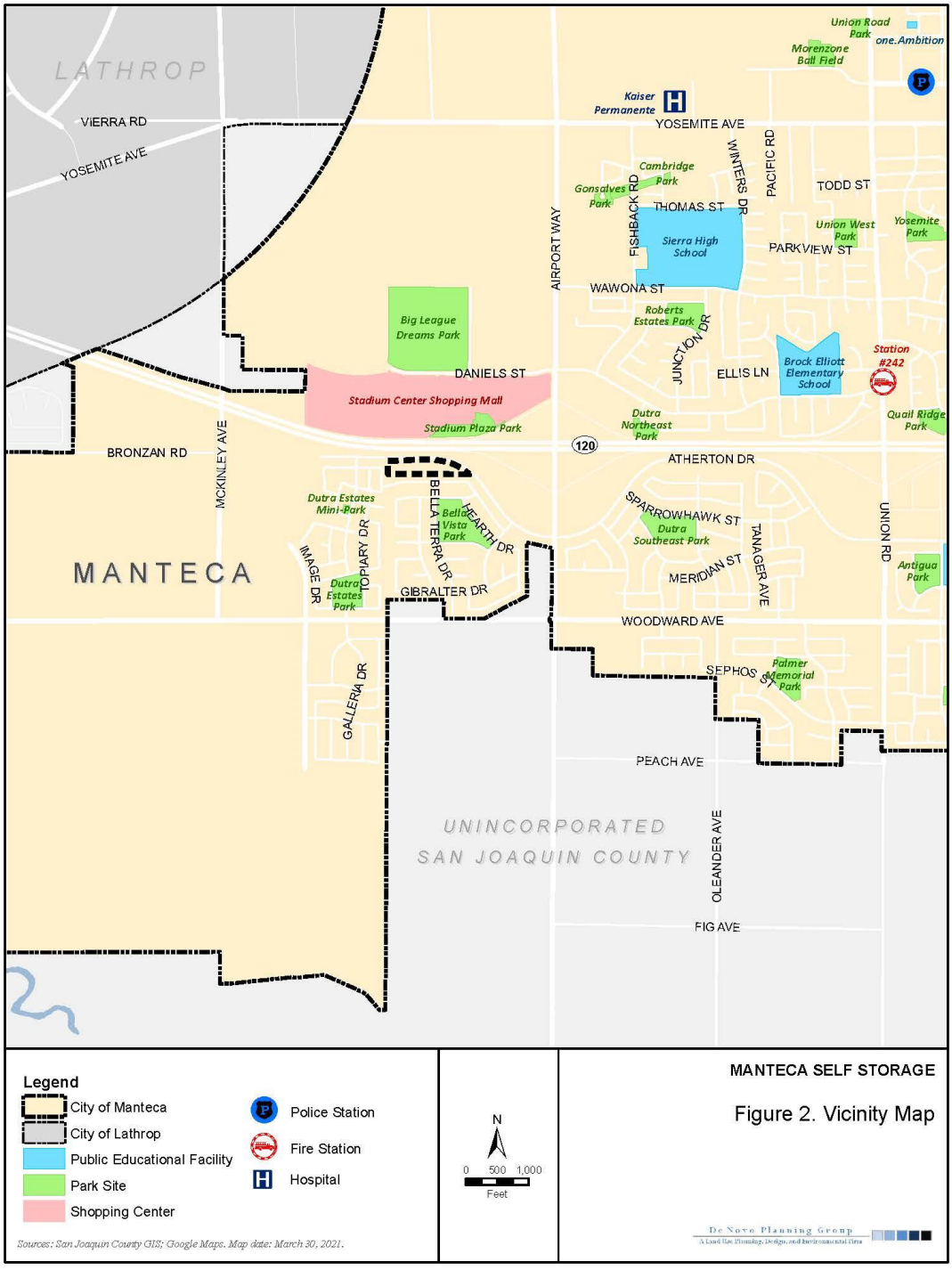
LATHROP
VIERRA RD
YOSEMITE AVE
Union Road Park
one.Ambition
Morenzone Ball Field
Kaiser Permanente
YOSEMITE AVE
WINTERS DR
PACIFIC RD
Cambridge Park
Gonsalves Park
FISHBACK RD
TODD ST
THOMAS ST
AIRPORT WAY
Sierra High School
Union West Park
Yosemite Park
PARKVIEW ST
WAWONA ST
Roberts Estates Park
JUNCTION DR
Big League Dreams Park
DANIELS ST
Stadium Center Shopping Mall
Stadium Plaza Park
ELLIS LN
Brock Elliott Elementary School
Station #242
Quail Ridge Park
Dutra Northeast Park
120
ATHERTON DR
BRONZAN RD
MCKINLEY AVE
Dutra Estates Mini-Park
BELLA TERRA DR
HEARTH DR
Bella Vista Park
SPARROWHAWK ST
Dutra Southeast Park
TANAGER AVE
UNION RD
MANTECA
IMAGE DR
TOPIARY DR
Dutra Estates Park
GIBRALTER DR
MERIDIAN ST
Antigua Park
WOODWARD AVE
SEPHOS ST
Palmer Memorial Park
GALLERIA DR
PEACH AVE
UNINCORPORATED
SAN JOAQUIN COUNTY
OLEANDER AVE
FIG AVE
Legend
City of Manteca
City of Lathrop
Public Educational Facility
Park Site
Shopping Center
Police Station
Fire Station
Hospital
N
0 500 1,000
Feet
Sources: San Joaquin County GIS; Google Maps. Map date: March 30, 2021.
MANTECA SELF STORAGE
Figure 2. Vicinity Map
De Novo Planning Group

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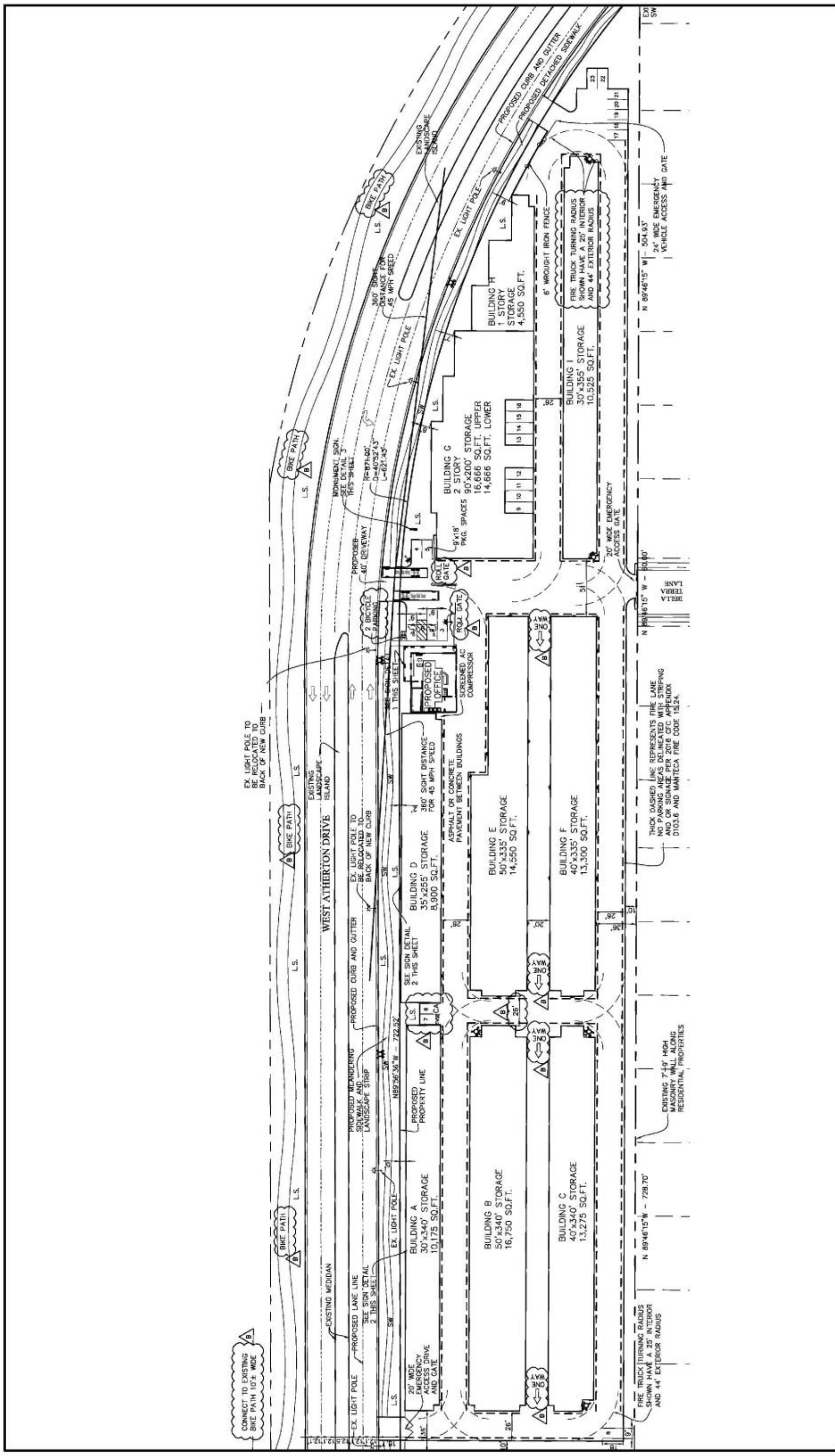

MANTECA SELF STORAGE

Figure 3. Site Plan

N
0 50 100
Feet

De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

Source: Lauglin and Spence, Civil Engineers & Surveyors, 6-20-2019.
Map date: March 29, 2021.

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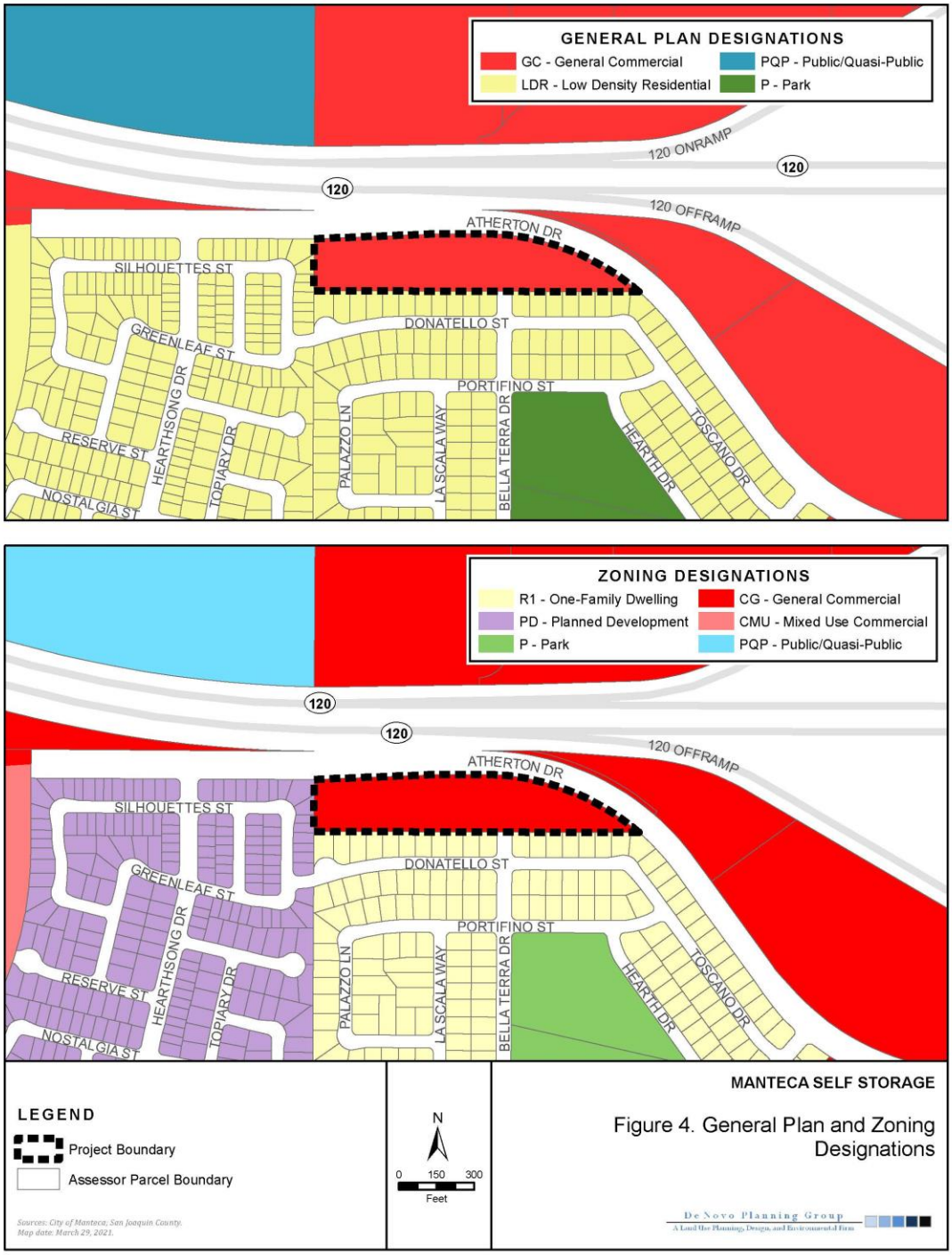
GENERAL PLAN DESIGNATIONS
GC - General Commercial
LDR - Low Density Residential
PQP - Public/Quasi-Public
P - Park
120 ONRAMP
120
120
120 OFFRAMP
ATHERTON DR
SILHOUETTES ST
DONATELLO ST
GREENLEAF ST
PORTIFINO ST
HEARTHSONG DR
RESERVE ST
TOPIARY DR
PALAZZO LN
LA SCALA WAY
BELLA TERRA DR
HEARTH DR
TOSCANO DR
NOSTALGIA ST
ZONING DESIGNATIONS
R1 - One-Family Dwelling
PD - Planned Development
P - Park
CG - General Commercial
CMU - Mixed Use Commercial
PQP - Public/Quasi-Public
LEGEND
Project Boundary
Assessor Parcel Boundary
Sources: City of Manteca; San Joaquin County.
Map date: March 29, 2021.
N
0 150 300
Feet
MANTECA SELF STORAGE
Figure 4. General Plan and Zoning Designations
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

None of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

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

DETERMINATION

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.
X	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

EVALUATION INSTRUCTIONS

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 Section XVII, "Earlier Analyses," 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 significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- Less than Significant With Mitigation Incorporated. This response applies when 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.
- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Responses to Checklist Questions

Responses a), c): The City of Manteca General Plan does not specifically designate any scenic viewsheds within the city. The existing Manteca General Plan does, however, note Manteca's scenic environmental resources including the San Joaquin River environment, and scenic vistas of the Coast Range and the Sierra.

For analysis purposes, a scenic vista can be discussed in terms of a foreground, middleground, and background viewshed. The middleground and background viewshed is often referred to as the broad viewshed. Examples of scenic vistas can include mountain ranges, valleys, ridgelines, or water bodies from a focal point of the forefront of the broad viewshed, such as visually important trees, rocks, or historic buildings. An impact would generally occur if a project would change the view to the middle ground or background elements of the broad viewshed, or remove the visually important trees, rocks, or historic buildings in the foreground.

The Project site itself does not provide any visual resources that would be considered a scenic vista because it is vacant and disturbed. Views of the Project site are not unique in the region.

The Project site is generally flat with views of some of the surrounding residential and commercial developments. Neither the Project site nor any of the surrounding land uses contains features typically associated with scenic vistas (e.g., ridgelines, peaks, overlooks). Therefore, little

opportunity exists for project activities to obscure views of scenic vistas that may be located within the immediate area of the Project site.

More distant views of the Coast Ranges (including Mt. Diablo) and the Sierra Nevada Mountains would largely be unaffected by the development of the Project site because of the distance and limited visibility of these features. Furthermore, the City of Manteca does not identify views of these features to be "protected" and, therefore, any obstruction that does occur would not be significant.

Upon build-out, the project would be of similar visual character to nearby and adjacent developments (such as existing commercial uses nearby). For motorists travelling along nearby roadways, the project would blend into existing and future development and would not present unexpected or otherwise unpleasant aesthetic values within the general project vicinity. Furthermore, the proposed Project would also be consistent with the applicable design standards and development standards. Therefore, implementation of the proposed Project would have a ***less than significant*** impact relative to these topics.

Response b): The Project site is not located within view of a state scenic highway. Only one highway section in San Joaquin County is listed as a Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of Interstate 580 from Interstate 5 to State Route 205. The City of Manteca is not visible from this roadway segment. Therefore, the proposed Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Implementation of the proposed Project would have ***no impact*** relative to this topic.

Response d): Chapter 17.50, Lighting, of the City Zoning Ordinance contains standards and provisions related to exterior lighting. The primary purpose of this chapter is to regulate lighting to balance the safety and security needs for lighting with the City's desire to preserve dark skies and to ensure that light trespass and glare have negligible impacts on surrounding property (especially residential) and roadways.

Section 17.50.060 of the Manteca Municipal Code identifies general lighting standards for light shielding, illumination levels, and nuisance prevention. Section 17.50.070 requires the preparation of an outdoor lighting plan as part of each Site Plan and Design Review application for commercial and industrial properties. At a minimum, the outdoor lighting plan shall include the following:

1. Manufacturer specifications sheets, cut sheets, and other manufacturer-provided information for all proposed outdoor light fixtures to show fixture diagrams and outdoor light output levels.
2. The proposed location, mounting height, and aiming point of all outdoor lighting fixtures.
3. If building elevations are proposed for illumination, drawings of all relevant building elevations showing the fixtures, the portions of the elevations to be illuminated, the illumination level of the elevations, and the aiming point for any remote light fixture.
4. Photometric data including a computer-generated photometric grid showing foot-candle readings every 10 feet within the property or site and 10 feet beyond the property lines.

The Manteca General Plan EIR determined the impact of new sources of light and glare can be minimized by incorporating design features and operating requirements into new developments that limit light and glare. Policy CD-P-44 requires the use of minimal street lighting to meet safety

standards and provide direction. Policy CD-P-45 requires the use of directionally shielded lighting for all exterior lighting. Policy CD-P-46 requires automatic shut-off or motion sensors for lighting features in newly developed areas.

The Project site does not contain existing sources of light and glare. Nearby land uses, such as the commercial uses located to the north of the Project site, and the residential uses located to the south and west of the Project site, include outdoor lighting. West Atherton Drive, located to the north of the Project site, also contains outdoor street lighting.

The proposed Project would include the installation of freestanding and building-mounted lighting associated with the project uses. Appendix C includes a Lighting Plan that illustrates the photometrics for the Project site. Such lighting would include lighting in parking areas, along pathways, and mounted on buildings for safety and security reasons. The photometrics illustrate that lighting will be maintained onsite, with the exception of a very minor amount of lighting spilling out onto West Atherton Drive. The photometrics show that the lighting would not affect the nearby residential land uses. Overall, the proposed Project is not anticipated to create a source of light that adversely affects residents or drivers in the vicinity of the Project site.

Contributors to light and glare impacts could also include construction lighting and street lighting that would create ongoing light impacts to the area. Nighttime construction activities are not anticipated to be required as part of project construction. Operational light sources from street lighting may be required to provide for safe travel. All street lighting would have to comply with the City of Manteca lighting standards. Section 17.50.060 of the Manteca Municipal Code identifies general lighting standards for light shielding, illumination levels, and nuisance prevention. These standards are designed to ensure that lighting does not intrude to areas not intended for illumination. The proposed Project lighting would be installed as per the City of Manteca standards and specifications, and would be required to incorporate design features to minimize the effects of light.

There would be screening with the landscaping that would be installed between the right-of-way and the screening fence. Appendix C includes a Landscape Plan that illustrates the location of landscaping along the perimeter of the Project site. Overall, the proposed Project is not anticipated to create a source of glare that adversely affects residents or drivers in the vicinity of the Project site.

In summary, existing City standards establish a comprehensive and robust set of standards to ensure that the proposed Project does not introduce substantial sources of light and glare to the project vicinity. Therefore, implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

Would the project:	***Potentially Significant Impact***	***Less Than Significant with Mitigation Incorporation***	***Less Than Significant Impact***	***No Impact***
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Responses to Checklist Questions

Response a): The Project site does not include land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency; rather, the proposed Project is located on Urban and Built-Up Land. (California Department of Conservation, 2015). Therefore, the proposed Project would have ***no impact*** relative to this issue.

Response b): The Project site does not include any land associated with a Williamson Act contract. As described in Response a), above, the proposed Project is located on Urban and Built-Up Land. In addition, the project does not contain any existing zoning for agricultural use, as the project currently has an 'CG (General Commercial)' zoning designation. The proposed Project does not conflict with existing zoning for agricultural use, or a Williamson Act contract. Therefore, implementation of the proposed Project would have ***no impact*** relative to this issue.

Response c): The Project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed Project would have ***no impact*** relative to this issue.

Response d): The Project site is not forest land. The proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed Project would have ***no impact*** relative to this issue.

Response e): The Project site is vacant. The Project site does not contain forest land, and there is no forest land in the vicinity of the Project site. The proposed Project does not involve any other changes in the existing environment not disclosed under the previous responses 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. Therefore, implementation of the proposed Project would have ***no impact*** relative to this issue.

III. AIR QUALITY

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

Existing Setting

The Project site is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

Responses to Checklist Questions

Responses a), b): Air quality emissions would be generated during operation and construction of the proposed Project. Because of the region's non-attainment status for ozone, $PM_{2.5}$, and PM_{10}, if project-generated emissions of either of the ozone precursor pollutants (i.e., ROG and NOx), PM_{10}, or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the proposed Project uses would be considered to conflict with the attainment plans. Discussion of construction and operational-related air quality impacts is provided below.

Construction

PM_{10} emitted during construction can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors, making quantification difficult. Despite this variability in emissions, experience has shown that there are a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction activities.

Construction would result in numerous activities that would generate dust. The fine, silty soils in the project area and often strong afternoon winds exacerbate the potential for dust, particularly in the summer months. Impacts would be localized and variable. Construction impacts would last for a period of approximately one year. The initial phase of project construction would involve grading, and site preparation activities, followed by paving, building construction, and architectural coatings. Construction activities that could generate dust and vehicle emissions are primarily related to grading, soil excavation, and other ground-preparation activities.

Control measures are required and enforced by the SJVAPCD under Regulation VIII. The SJVAPCD considers construction-related emissions from all projects in this region to be mitigated to a less than significant level if SJVAPCD-recommended PM_{10} fugitive dust rules and equipment exhaust emissions controls are implemented. The proposed Project would be required to comply with all

applicable measures from SJVAPCD Regulation VIII. In addition, Table AIR-1 (below) provides the results of the construction-related emissions modeling results from CalEEMod.

Table AIR-1: Project Maximum Construction Criteria Pollutant Emissions (tons/year)

Emissions Type	*Proposed Project Emissions*	*SJVAPCD Threshold*	*Above Threshold in proposed Project?*
ROG	1.1	10	N
NO_x	1.6	10	N
CO	1.6	100	N
PM_{10}	0.3	15	N
$PM_{2.5}$	0.2	15	N

Source: CalEEMod, v.2016.3.2

Operational

Operational-related criteria pollutant emissions would be generated primarily from passenger vehicle generated by the proposed Project, as well as electricity and other energy usage on-site. Table AIR-1, below, provides the unmitigated results of the operational-related emissions modeling results from CalEEMod.

Table AIR-2: Project Operational Criteria Pollutant Emissions (tons/year)

Emissions Type	*Proposed Project Emissions*	*SJVAPCD Threshold*	*Above Threshold in proposed Project?*
ROG	0.6	10	N
NO_x	0.2	10	N
CO	0.2	100	N
PM_{10}	0.1	15	N
$PM_{2.5}$	<0.1	15	N

Source: CalEEMod, v.2016.3.2

As shown above, the proposed Project would not exceed the applicable SJVAPCD thresholds associated with operational emissions. Therefore, the proposed Project would have a ***less than significant*** impact related to the potential to conflict with or obstruct implementation of the applicable air quality plan, or to 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.

Response c): Sensitive receptors are those individuals within the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptors include children, the elderly, and those with pre-existing serious health problems affected by air quality, and sensitive receptor locations include schools, parks and playgrounds, day care center, nursing homes, hospitals, and residences. The closest sensitive receptors are the residential properties located to the south and west of the Project site.

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. This contrasts

with the criteria pollutants for which acceptable levels of exposure can be determined and for which the state and federal governments have set ambient air quality standards.

Construction-Related Impacts on Sensitive Receptors: The construction phase of the project would be temporary and short-term, and the implementation of all State, Federal, and SJVAPCD requirements would greatly reduce pollution concentrations generated during construction activities. As shown in Table AIR-1, the project's construction-related criteria pollutant emissions would not exceed the applicable thresholds. Therefore, dust from construction of the proposed Project would be reduced and would be consistent with SJVAPCD guidance on this topic. Impacts to sensitive receptors during construction would be negligible and this is a ***less than significant*** impact.

Toxic Air Contaminant Impacts on Sensitive Receptors: The proposed Project does not include a land use that has the potential to significantly impact nearby sensitive receptors during the proposed Project's operational phase, since the proposed Project does generate trips by heavy-duty diesel trucks, which are an emitter of diesel particulate matter (DPM). Impacts to sensitive receptors from substantial pollutant concentrations would be a ***less than significant*** impact.

CO Hotspots: Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

Although the SJVAPCD has not established a specific numerical screening threshold for CO impacts, the Bay Area Air Quality Management District (BAAQMD) has established that, under existing and future vehicle emissions rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (i.e., bridges and tunnels)—in order to generate a substantial CO impact. As described in Section XVII: Transportation, the proposed Project would generate a maximum of approximately 7 AM peak hour trips and 13 PM peak hour trips, which would be significantly less than the volumes cited above (Fehr & Peers, 2021). Thus, the proposed Project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the Project site, and impacts would be ***less than significant***.

Conclusion

The construction phase of the project would be temporary and short-term. The proposed Project would not generate significant concentrations of air emissions during construction.

The proposed Project does not include a land use that has the potential to significantly impact nearby sensitive receptors during the proposed Project's operational phase.

Under existing and future vehicle emissions rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (i.e., bridges and tunnels)—in order to generate a substantial CO impact. The proposed Project would generate much fewer than such peak hour trips, which would be significantly lower than the thresholds for causing a significant CO impact.

Implementation of the proposed Project would not result in a significant increased exposure of sensitive receptors to localized concentrations of TACs, or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

Response d): The proposed Project would not generate objectionable odors that would adversely affect substantial numbers of people. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g., auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. The proposed Project would not contain any of these land uses. If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted.

The project does not include any of the aforementioned uses. Additionally, construction activities would be temporary and minor. Lastly, other emissions are evaluated in responses a-c), as provided above. As such, implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

IV. BIOLOGICAL RESOURCES

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

Regional Setting

The City of Manteca is located in the western portion of the Great Valley Geomorphic Province of California. The Great Valley Province is a broad structural trough bounded by the tilted block of the Sierra Nevada on the east and the complexly folded and faulted Coast Ranges on the west. The San Joaquin River is located just south and west of the City. This major river drains the Great Valley Province into the San Joaquin Delta to the north, ultimately discharging into the San Francisco Bay to the northwest.

The City of Manteca is located within the San Joaquin Valley Bioregion, which is comprised of Kings County, most of Fresno, Kern, Merced, and Stanislaus counties, and portions of Madera, San Luis Obispo, and Tulare counties. The San Joaquin Valley Bioregion is the third most populous out of ten bioregions in the state, with an estimated 2 million people. The largest cities are Fresno, Bakersfield, Modesto, and Stockton. Interstate 5 and State Route 99 are the major north-south roads that run the entire length of the bioregion. Habitat in the bioregion includes vernal pools, valley sink scrub and saltbush, freshwater marsh, grasslands, arid plains, orchards, and oak savannah. Historically, millions of acres of wetlands flourished in the bioregion, but stream diversions for irrigation dried all but about five percent. Remnants of the wetland habitats are

protected in this bioregion in publicly owned parks, reserves, and wildlife areas. The bioregion is considered the state's top agricultural producing region with the abundance of fertile soil.

The region has a Mediterranean climate that is subject to cool, wet winters (often blanketed with fog) and hot, dry summers. The average annual precipitation is approximately 13.81 inches. Precipitation occurs as rain most of which falls between the months of November through April, peaking in January at 2.85 inches. The average temperatures range from December lows of 37.5 F to July highs of 94.3 F.

The Project site is relatively flat. The Project site is generally flat, with an elevation range for the entire Project site of approximately 23 to 28 feet above sea level. There are no rivers, streams, or other natural aquatic habitats on the Project site.

Vegetation on the Project site consists of ruderal and landscaping. The ruderal vegetation found on the Project site provides habitat for both common and a few special-status wildlife populations. For example, some commonly observed wildlife species in the region include: California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus),* American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), American killdeer (*Charadrius vociferus*), gopher snake (*Pituophis melanoleucus*), garter snake (*Thamnophis species*), and western fence lizard (*Sceloporus occidentalis*), as well as many native insect species. There are also several bat species in the region. Bats often feed on insects as they fly over agricultural and natural areas.

Locally common and abundant wildlife species are important components of the ecosystem. Due to habitat loss, many of these species must continually adapt to using agricultural, ruderal, and ornamental vegetation for cover, foraging, dispersal, and nesting.

Responses to Checklist Questions

Response a): The following discussion is based on a background search of special-status species that are documented in the California Natural Diversity Database (CNDDB). The background search was regional in scope and focused on the documented occurrences within a 9-quad area of the Project site. Table BIO-1 provides a list of special-status plants and Table BIO-2 provides a list of special-status animals.

Special Status Plant Species

There are twenty special status plants identified as having the potential to occur on the Project site based on known occurrences in the region. These include: Big tarplant (*Blepharizonia plumose*), Caper-fruited tropidocarpum *capparideum*, Slough thistle (*Cirsium crassicaule*), Recurved larkspur (*Delphinium recurvatum*), Round-leaved filaree (*Erodium macrophyllum*), Palmate-bracted bird's-beak *Chloropyron palmatum*), Delta button-celery (*Eryngium racemosum*), Wright's trichocoronis (*Trichocoronis wrightii var. wrightii*), and Greene's tuctoria *(Tuctoria greenei),* Lesser saltscale (*Atriplex minuscula),* California alkali grass (*Puccinellia simplex),* Heartscale *(Atriplex cordulata var. cordulata)*, Sanford's arrowhead *(Sagittaria sanfordii)*, and Alkali-sink goldfields *Lasthenia chrysantha.* Of the twenty species, there are two federal listed species, three state listed species (endangered), eighteen CNPS 1B listed species (including the state listed species), and two CNPS 2 listed species. The majority of state listed species and CNPS 1B listed species are covered species under the SJMCP. Only one of The CNPS 2 listed species are not covered under the SJMCP.

Table BIO-1: Special-Status Plant Species Which May Occur in Project Area

Species	*Status (Fed./CA/ CNPS/SJMSCP)*	*Geographic Distribution*	*Habitat and Blooming Period*
Big tarplant *Blepharizonia plumosa*	--/--/1B.1/No	San Francisco Bay area with occurrences in Alameda, Contra Costa, San Joaquin, Stanislaus, and Solano Counties	Valley and foothill grassland; 30-505 m. July-Oct.
Slough thistle *Cirsium crassicaule*	--/--/1B.1/Yes	San Joaquin Valley: Kings, Kern, and San Joaquin Counties	Freshwater sloughs and marshes; 3-100 m. May-August.
Recurved larkspur *Delphinium recurvatum*	--/--/1B.2/Yes	Central Valley from Colusa to Kern Counties	Alkaline soils in saltbush scrub, cismontane woodland, valley and foothill grassland; 3-750 m. March-May.
Palmate-bracted bird's-beak *Chloropyron palmatum*	E/E/1B.1/No	Scattered locations in Fresno and Madera counties in the San Joaquin Valley, San Joaquin, Yolo, and Colusa counties in the Sacramento Valley, and the Livermore Valley area of Alameda County.	Saline-alkaline soils in seasonally-flooded lowland plains and basins at elevations of less than 500 feet. May-October.
Delta button-celery *Eryngium racemosum*	--/E/1B.1/Yes	San Joaquin River delta floodplains and adjacent Sierra Nevada foothills: Calaveras, Merced, San Joaquin, and Stanislaus Counties	Riparian scrub, seasonally inundated depressions along floodplains on clay soils; below 75 m. June-August.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	--/--/2.1/Yes	Scattered locations in the Central Valley; southern coast of Texas	Floodplains, moist places, on alkaline soils; below 450 m. May-September.
Greene's tuctoria *Tuctoria greenei*	E/R/1B.1/Yes	Historic range is the Central Valley from Shasta to Tulare county, although it is extirpated from several of the southern counties.	Large, relatively deep vernal pools, which often are located on low-lying lands suitable for agriculture. May-July.
Lesser saltscale *Atriplex minuscula*	--/--/1B./No	Scattered locations in the Central Valley in Alameda, Butte, Fresno, Kings, Kern, Madera, Merced, Stanislaus, Tulare counties.	Alkaline, sandy soils. Chenopod scrub, playas, valley and foothill grassland. May-October.
California alkali grass *Puccinellia simplex*	--/--/1B.2/No	Scattered locations in the Central Valley to Utah.	Saline flats, mineral springs. March-May
Heartscale *Atriplex cordulata var. cordulata*	--/--/1B.2/Yes	Central Valley and interior valleys of the Coast Range from Butte to Kern counties.	Saline or alkaline sandy soils in grassland or saltbush scrub. March-October.
Sanford's arrowhead *Sagittaria sanfordii*	--/--/1B.2/Yes	Its historic range in California is the Central Valley from Butte County to Fresno County and along the coast from Del Norte County to Ventura County. It is mostly extirpated from the Central Valley due to channel and flow alteration of the major waterways.	Shallow, slow moving waters. Although its natural habitat is along streams and rivers, it also is sometimes found along man-made channels. May-October.

Species	*Status (Fed./CA/ CNPS/SJMSCP)*	*Geographic Distribution*	*Habitat and Blooming Period*
Saline clover *Trifolium hydrophilum*	--/--/1B.2/No	Eastern and Northern San Francisco Bay region, the Delta, western San Joaquin Valley, southern San Jose.	Marshes and swamps, Valley and foothill grassland (mesic, alkaline), and Vernal pools. April-June.
Caper-fruited tropidocarpum *Tropidocarpum capparideum*	--/--/1B.1/No	Northern California.	Valley and foothill grassland (alkaline hills)
San Joaquin spearscale *Extriplex joaquinana*	--/--/1B.2/No	Delta region, central valley and central coast.	Alkaline. Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland. April-October.
Delta tule pea *Lathyrus jepsonii var. jepsonii*	--/--/1B.2/Yes	Primarily from the water's edge in the brackish and fresh-water portions of the Delta region, there are also records of this species from Fresno, Marin, San Benito, and Santa Clara counties. Within San Joaquin County.	Closely associated with the waterways of the Delta. May-July.
Alkali milk-vetch *Astragalus tener var. tener*	--/--/1B.2/Yes	Eastern San Francisco Bay region, the Delta, and western San Joaquin Valley south to the lower Salinas and San Benito valleys.	Grassy alkaline flats and vernally moist meadows at elevations below 500 ft. March-June.
Suisun Marsh aster *Symphyotrichum lentum*	--/--/1B.2/Yes	Delta region. Primarily the Bouldin Island, Isleton, Holt, Terminous, and Woodward Island quad.	Water's edge, in places where water is brackish and there is some tidal influence. May-November.
Woolly rose-mallow *Hibiscus lasiocarpos var. occidentalis*	--/--/1B.2/Yes	Central Valley of California, as well as populations in eastern North America.	All along the waterways of the Delta. June-September.
Watershield *Brasenia schreberi*	--/--/2B.3/No	Central Valley of California and western North America.	Freshwater Marshes and swamps. June-September.
Alkali-sink goldfields *Lasthenia chrysantha*	--/--/1B.1/No	Central Valley of California	Vernal pools and alkali flats.

NOTES: CNPS = CALIFORNIA NATIVE PLANT SOCIETY
SJMSCP = SAN JOAQUIN MULTI-SPECIES HABITAT CONSERVATION AND OPEN SPACE PLAN

FEDERAL
E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.

STATE
E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL CALIFORNIA ENDANGERED SPECIES ACT.
R = RARE UNDER THE CALIFORNIA ENDANGERED SPECIES ACT

CALIFORNIA NATIVE PLANT SOCIETY
1B = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA AND ELSEWHERE.
2 = RARE, THREATENED, OR ENDANGERED IN CALIFORNIA, BUT MORE COMMON ELSEWHERE.
3 = A REVIEW LIST – PLANTS ABOUT WHICH MORE INFORMATION IS NEEDED.
4 = PLANTS OF LIMITED DISTRIBUTION – A WATCH LIST
.1 = SERIOUSLY ENDANGERED IN CALIFORNIA (OVER 80% OF OCCURRENCES THREATENED-HIGH DEGREE AND IMMEDIACY OF THREAT).
.2 = FAIRLY ENDANGERED IN CALIFORNIA (20-80% OCCURRENCES THREATENED).
.3 = NOT VERY ENDANGERED IN CALIFORNIA (<20% OF OCCURRENCES THREATENED).

Special Status Wildlife Species

There are twelve special-status invertebrates, two special-status amphibian, twelve special-status birds, four special status fish, three special status mammals, and two special status reptiles that are documented in the CNDDB within a 9-quad radius of the Project site.

Table BIO-2: Special-Status Wildlife and Fish Species Which May Occur in Project Area

Species	*Status (Fed/CA/ SJMSCP)*	*Geographic Distribution*	*Habitat Requirements*
Invertebrates			
Vernal pool fairy shrimp *Branchinecta lynchi*	T/--/Yes	Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County. Isolated populations also in Riverside County	Common in vernal pools; they are also found in sandstone rock outcrop pools.
Vernal pool tadpole shrimp *Lepidurus packardi*	E/--/Yes	Shasta County south to Merced County	Vernal pools and ephemeral stock ponds.
Molestan blister beetle *Lytta molesta*	--/--/Yes	Distribution of this species is poorly known.	Annual grasslands, foothill woodlands or saltbush scrub.
Sacramento anthicid beetle *Anthicus sacramento*	--/--/No	Found in several locations along the Sacramento and San Joaquin rivers, from Shasta to San Joaquin counties, and at one site along the Feather River.	Sand dune area, sand slipfaces among bamboo and willow, but may not depend on these plants.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	T/--/Yes	Stream side habitats below 3,000 feet throughout the Central Valley	Riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant.
Midvalley fairy shrimp *Branchinecta mesovallensis*	--/--/Yes	Extending from Stillwater Plain in Shasta County through most of the length of the Central Valley to Pixley in Tulare County and along the central Coast Range from northern Solano County to Pinnacles National Monument in San Benito County.	Vernal pools with tea-colored water, most commonly in grass or mud bottomed swales, or basalt flow depression pools in unplowed grasslands.
California linderiella *Linderiella occidentalis*	--/--/No	Ranges from near Redding in the north to as far south as Fresno County, mainly to the east of the Sacramento and San Joaquin Rivers.	Natural, and artificial, seasonally ponded habitat types including: vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities.
Conservancy fairy shrimp *Branchinecta conservatio*	E/--/Yes	Sacramento Valley and the northern San Joaquin Valley, and the eastern flank of the central coastal range.	Large to very large vernal pools and vernal lakes although they also have been found in alkaline pools.

Species	*Status (Fed/CA/ SJMSCP)*	*Geographic Distribution*	*Habitat Requirements*
Western bumble bee *Bombus occidentalis*	--/--/No	Western North America, ranging from the tundra region in Alaska and Yukon south along the west coast to southern British Columbia to central California, Arizona and New Mexico and east into southern Saskatchewan and northwestern Great Plains	Open coniferous, deciduous and mixed-wood forests, wet and dry meadows, montane meadows and prairie grasslands, meadows bordering riparian zones, and along roadsides in taiga adjacent to wooded areas, urban parks, gardens and agricultural areas, subalpine habitats and more isolated natural areas.
Obscure bumble bee *Bombus caliginosus*	--/--/No	Coast ranges from southern British Columbia and northern Washington to southern California, with scattered records from the east side of California's Central Valley.	Open grassy coastal prairies and coast range meadows.
Crotch bumble bee *Bombus crotchii*	--/--/No	Central California south to Baja California del Norte, Mexico, and includes coastal areas east to the edges of the deserts and the Central Valley.	Open grassland and scrub.
Western ridged mussel *Gonidea angulata*	--/--/No	Widely distributed from southern British Columbia to southern California, and can be found east to Idaho and Nevada.	Inhabits cold creeks and streams from low to mid-elevations
Amphibians			
California tiger salamander *Ambystoma californiense (A. tigrinum c.)*	T/SSC/Yes	Central Valley, including Sierra Nevada foothills, up to approximately 1,000 feet, and coastal region from Butte County south to northeastern San Luis Obispo County.	Small ponds, lakes, or vernal pools in grass-lands and oak woodlands for larvae; rodent burrows, rock crevices, or fallen logs for cover for adults and for summer dormancy.
Western Spadefoot *Spea hammondii*	T/SSC/Yes	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County	Permanent and semi-permanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation. May estivate in rodent burrows or cracks during dry periods.
Birds			
Aleutian goose *Branta canadensis leucopareia*	D/--/Yes	The entire population winters in Butte Sink, then moves to Los Banos, Modesto, the Delta, and East Bay reservoirs; stages near Crescent City during spring before migrating to breeding grounds.	Roosts in large marshes, flooded fields, stock ponds, and reservoirs; forages in pastures, meadows, and harvested grainfields; corn is especially preferred
Burrowing owl *Athene cunicularia*	BCC/SSC/Yes	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. Rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows

Species	*Status (Fed/CA/ SJMSCP)*	*Geographic Distribution*	*Habitat Requirements*
Loggerhead shrike *Lanius ludovicianus*	BCC/SSC/Yes	Resident and winter visitor in lowlands and foothills throughout California. Rare on coastal slope north of Mendocino County, occurring only in winter	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches
Song sparrow (Modesto Population) *Melospiza melodia*	BCC/SSC/Yes	Restricted to California, where it is locally numerous in the Sacramento Valley, Sacramento–San Joaquin River Delta, and northern San Joaquin Valley. Exact boundaries of range uncertain.	Found in emergent freshwater marshes dominated by tules (*Scirpus* spp.) and cattails (*Typha* spp.) as well as riparian willow (*Salix* spp.) thickets. They also nest in riparian forests of Valley Oak (*Quercus lobata*) with a sufficient understory of blackberry (*Rubus* spp.), along vegetated irrigation canals and levees, and in recently planted Valley Oak restoration sites.
Swainson's hawk *Buteo swainsoni*	BCC/T/Yes	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley. Highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields
Merlin *Falco columbarius*	--/--/Yes	Does not nest in California. Rare but widespread winter visitor to the Central Valley and coastal areas	Forages along coastline in open grasslands, savannas, and woodlands. Often forages near lakes and other wetlands
Tricolored blackbird *Agelaius tricolor*	BCC/C (SSC)/Yes	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields. Habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	T (BCC)/E/Yes	Nests along the upper Sacramento, lower Feather, south fork of the Kern, Amargosa, Santa Ana, and Colorado Rivers	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging; may avoid valley oak riparian habitats where scrub jays are abundant
Yellow-headed blackbird *Xanthocephalus*	--/SSC/Yes	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	Nests only where large insects such as odonatan are abundant, nesting timed with maximum emergence of aquatic insects.
California Horned Lark *Eremophila alpestris actia*	--/--/Yes	Central Valley and coastal valleys and foothills.	Forage in large groups in open grasslands, nesting in hollows on the ground, and are also regularly found breeding on the Valley floor in suitable habitat.

Species	*Status (Fed/CA/ SJMSCP)*	*Geographic Distribution*	*Habitat Requirements*
Least bell's vireo *Vireo bellii pusillus*	E/E/No	Central Valley of California and other low-elevation river valleys.	Dense brush, mesquite, willow-cottonwood forest, streamside thickets, and scrub oak.
White-tailed kite *Elanus leucurus*	--/--/Yes	Gulf Coast in Texas and Mexico and in the valley and coastal regions of central and southern California.	Grasslands, marshes, row crops and alfalfa, where they hover while foraging for rodents and insects.
Fish			
Delta smelt *Hypomesus transpacificus*	T/T/Yes	Primarily in the Sacramento–San Joaquin Estuary but has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay.	Occurs in estuary habitat in the Delta where fresh and brackish water mix in the salinity range of 2–7 parts per thousand.
Hardhead *Mylopharodon conocephalus*	--/SSC/No	Tributary streams in the San Joaquin drainage; large tributary streams in the Sacramento River and the main stem	Resides in low to mid-elevation streams and prefer clear, deep pools and runs with slow velocities. They also occur in reservoirs.
Central Valley steelhead *Oncorhynchus mykiss*	T/--/No	Sacramento River and tributary Central Valley rivers.	Occurs in well-oxygenated, cool, riverine habitat with water temperatures from 7.8°C to 18°C. Habitat types are riffles, runs, and pools.
Longfin smelt *Spirinchus thaleichthys*	--/SSC/Yes	Occurs in estuaries along the California coast. Adults concentrated in Suisun, San Pablo, and North San Francisco Bays.	Prior to spawning, these fish aggregate in deepwater habitats available in the northern Delta, including, primarily, the channel habitats of Suisun Bay and the Sacramento River. Spawning occurs in fresh water on the San Joaquin River below Medford Island and on the Sacramento River below Rio Vista.
Mammals			
Riparian (San Joaquin Valley) woodrat *Neotoma fuscipes riparia*	E/SSC, FP/Yes	Historical distribution along the San Joaquin, Stanislaus, and Tuolumne Rivers, and Caswell State Park in San Joaquin, Stanislaus, and Merced Counties; presently limited to San Joaquin County at Caswell State Park and a possible second population near Vernalis	Riparian habitats with dense shrub cover, willow thickets, and an oak overstory
Riparian brush rabbit *Sylvilagus bachmani riparius*	E/E/Yes	Limited to San Joaquin County at Caswell State Park near the confluence of the Stanislaus and San Joaquin Rivers and Paradise Cut area on Union Pacific right-of-way lands	Native valley riparian habitats with large clumps of dense shrubs, low-growing vines, and some tall shrubs and trees

Species	*Status (Fed/CA/ SJMSCP)*	*Geographic Distribution*	*Habitat Requirements*
Pallid bat *Antrozous pallidues*	--/SSC/No	Western North America from south-central British Columbia south through the western United States to southern Baja California, central Mexico, southern Kansas, and southern Texas.	Mountainous areas, intermontane basins, lowland desert scrub, arid deserts and grasslands.
Reptiles			
Giant garter snake *Thamnophis couchi gigas*	T/T/Yes	Central Valley from the vicinity of Burrel in Fresno County north to near Chico in Butte County; has been extirpated from areas south of Fresno	Sloughs, canals, low gradient streams and freshwater marsh habitats where there is a prey base of small fish and amphibians; they are also found in irrigation ditches and rice fields; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.
Northern california legless lizard *Anniella pulchra*	--/SSC/No	Spotty distribution in California, extending from near Antioch, California, south to the vicinity of Santa Barbara and the Antelope Valley at the western margin of the Mohave Desert	Loose soil, especially in semi-stabilized sand dunes and in other areas with sandy soil, including habitats vegetated with oak or pine-oak woodland, or chaparral.

STATUS EXPLANATIONS:
FEDERAL
E = ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PE = PROPOSED FOR ENDANGERED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
PT = PROPOSED FOR THREATENED UNDER THE FEDERAL ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE FEDERAL ENDANGERED SPECIES ACT.
D = DELISTED FROM FEDERAL LISTING STATUS.
BCC = BIRD OF CONSERVATION CONCERN

STATE
E = ENDANGERED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
T = THREATENED UNDER THE CALIFORNIA ENDANGERED SPECIES ACT.
C = CANDIDATE SPECIES FOR LISTING UNDER THE STATE ENDANGERED SPECIES ACT.
FP = FULLY PROTECTED UNDER THE CALIFORNIA FISH AND GAME CODE.
SSC = SPECIES OF SPECIAL CONCERN IN CALIFORNIA.

Invertebrates: There are twelve special-status invertebrates that are documented within a 9-quad radius of the Project site according to the CNDDB including: Molestan blister beetle (*Lytta molesta*), Sacramento anthicid beetle (*Anthicus sacramento*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Midvalley fairy shrimp (*branchinecta mesovallensis*), California linderiella (*linderiella occidentalis*), Conservancy fairy shrimp (*branchinecta conservation*), Western bumble bee (*bombus accidentalis*), Obscure bumble bee (*bombus caliginosus*), Crotch bumble bee (*bombus crotchii*), and Western ridged mussel (*Gonidea angulate)*. In addition, the Vernal pool fairy shrimp (*Branchinecta lynchi*) and Vernal pool tadpole shrimp (*Lepidurus packardi*) are documented in the USFWS IPAC database as potentially occurring within the region.

Vernal pool fairy shrimp (VPFS) is a federal threatened invertebrate found in the Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County. They are commonly found in vernal pools and in sandstone rock outcrop pools. VPFS is not anticipated to

be directly affected by any individual phase or component of the proposed Project because there in not appropriate vernal pool habitat on the Project site.

Vernal pool tadpole shrimp (VPTS) is a federal endangered invertebrate found in vernal pools and stock ponds from Shasta county south to Merced county. VPTS is not anticipated to be directly affected by any individual phase or component of the proposed Project because there in not appropriate vernal pool habitat on the Project site.

Valley elderberry longhorn beetle (VELB) is a federal threatened insect, proposed for delisting. Elderberry (*Sambucus* sp.), which is a primary host species for VELB. VELB is not anticipated to be directly affected by the proposed Project.

Essential habitat for Molestan blister beetle and Sacramento anthicid beetle is not present on the Project site.

No special-status invertebrates are expected to be affected by the proposed Project. Nevertheless, Mitigation Measure BIO-1 requires the Project applicant to seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Reptile and amphibian species: There are two special-status amphibian and two special-status reptile species that are documented within a 9-quad radius of the Project site according to the CNDDB including: California tiger salamander (*Ambystoma californiense*), Giant garter snake (*Thamnophis couchi gigas*), Northern California legless lizard *(Anniella pulchra),* and Western spadefoot *(Spea hammondii)*. In addition, the California red-legged frog (*Rana aurora draytoni*) is documented in the USFWS IPAC database as potentially occurring within the region. There is no essential habitat for any of these five species within the project.

No special-status reptiles or amphibians are expected to be affected by the proposed Project. Nevertheless, Mitigation Measure BIO-1 requires the Project applicant to seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Birds: Special-status birds that are documented in the CNDDB within a 9-quad radius of the Project site include: Aleutian goose (*Branta canadensis leucopareia*), Loggerhead shrike (*Lanius ludovicianus*), Yellow-headed blackbird (*Xanthocephalus xanthocephalus*), Swainson's hawk (*Buteo swainsoni*), song sparrow (Modesto population) (*Melospiza melodia*), Merlin (*Falco columbarius*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), burrowing owl (*Athene cunicularia*), Tricolored blackbird (*Agelaius tricolor*), California horned lark (*Eremophila*

alpestris actia), Least Bell's Vireo (*vireo belli pusillus*), White-tailed kite (*elanus leucurus*). In addition, the song sparrow (Melospiza melodia) is documented in the USFWS IPAC database as potentially occurring within the region. The Project site may provide suitable foraging habitat for a variety of potentially occurring special-status birds, including those listed above. Potential nesting habitat is present in a variety of trees located within the vicinity. There is also the potential for other special-status birds that do not nest in this region and represent migrants or winter visitants to forage on the Project site.

Year-round birds: Special-status birds that can be present in the region throughout the year include: burrowing owl (*Athene cunicularia*), loggerhead shrike *(Lanius ludovicianus*), Nuttalls woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), song sparrow (Modesto population) (*Melospiza melodia*), tricolored blackbird *(Agelaius tricolor*), yellow-billed magpie (*Pica nuttalli*), among others. Some of these species are migratory, but also reside year-round in California.

Summering Birds: Special-status birds that are only present in the region in the spring and summer months include: Aleutian goose (*Branta canadensis leucopareia*), least bittern (*Ixobrychus exilis*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), and yellow-billed magpie (*Pica nuttalli*).

Overwintering Birds: Special-status birds that are only present in the region in the fall and winter months include the merlin *(Falco columbarius*).

Nesting Raptors (Birds of Prey): All raptors (owls, hawks, eagles, falcons), including species and their nests, are protected from take pursuant to the Fish and Game Code of California Section 3503.5, and the federal Migratory Bird Treaty Act, among other federal and State regulations. Special-status raptors that are known to occur in the region include: bald eagle (*Haliaeetus leucocephalus*), burrowing owl (*Athene cunicularia*), Cooper's hawk *(Accipiter cooperii*), ferruginous hawk *(Buteo rega*), golden eagle *(Aquila chrysaetos*), great horned owl *(Bubo virginianus),* prairie falcon *(Falco mexicanus*), red-tailed hawk *(Buteo jamaicensis),* short-eared owl (*Asio flammeus*), Swainson's hawk *(Buteo swainsoni*), and white-tailed kite *(Elanus leucurus*), among others.

Analysis: While the Project site contains very limited nesting habitat, there are powerlines and trees located in the region that represent potentially suitable nesting habitat for a variety of special-status birds. In general, most nesting occurs from late February and early March through late July and early August, depending on various environmental conditions.

New sources of noise and light during the construction and operational phases of the project could adversely affect nesters if they located adjacent to the Project site in any given year. Mitigation Measure BIO-1 requires participation in the SJMSCP. As part of the SJMSCP, SJCOG requires preconstruction surveys for projects that occur during the avian breeding season (March 1 – August 31). When active nests are identified, the biologists develop buffer zones around the active nests as deemed appropriate until the young have fledged. SJCOG also uses the fees to purchase habitat as compensation for the loss of foraging habitat. Implementation of the proposed Project, with the Mitigation Measures BIO-1 would ensure that potential impacts to special status birds are reduced.

Mammals: Special-status mammals that are documented within a 9-quad radius of the Project site include: Riparian (San Joaquin Valley) woodrat (*Neotoma fuscipes riparia*), Riparian brush rabbit (*Sylvilagus bachmani riparius*), and Pallid bat (*Antrozous pallidues*).

Riparian (San Joaquin Valley) woodrat and riparian brush rabbit: The Project site does not contain appropriate habitat for riparian (San Joaquin Valley) woodrat and riparian brush rabbit.

Special-status bats: The Project site does not provide roosting habitat for Pallid bat (antrozous pallidues). This species is not federal or state listed; however, they are tracked by the CNDDB. These special status bat species are not covered by the SJMSCP.

Conclusion

No special-status species are expected to be affected by the proposed Project. Nevertheless, Mitigation Measure BIO-1 requires the Project applicant to seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species. Therefore, the proposed Project would have a ***less than significant*** impact relative to this topic.

Mitigation Measure(s)

Mitigation Measure BIO-1*: Prior to commencement of any grading activities, the Project applicant shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.*

Mitigation Measure BIO-2*: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for nesting raptors in accordance with SJMSCP requirements. If no nests are detected, then construction activities may commence. If occupied nests are discovered, then the Project applicant shall coordinate with SJCOG regarding the appropriate buffer needed to avoid the particular bird species. If burrowing owl is discovered during the non-breeding season (September 1 through January 31) they should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct., 1995). Implementation of this mitigation shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring and a qualified biologist shall conduct surveys and relocate owls as required.*

Responses b): There is no riparian habitat on the Project site. The CNDDB record search revealed documented occurrences of four sensitive habitats within a 9-quad radius of the Project site including: Elderberry Savanna, Great Valley Cottonwood Riparian Forest, Great Valley Mixed Riparian Forest, and Great Valley Oak Riparian. None of these sensitive natural communities occur within the Project site. Implementation of the proposed Project would have a ***less than significant*** impact on riparian habitats or natural communities.

Response c): The Project site does not contain protected wetlands or other jurisdictional areas and there is no need for permitting associated with the federal or state Clean Water Acts. Absent any wetlands or jurisdictional waters, implementation of the proposed Project would have ***less than significant*** impact relative to this topic.

Response d): The CNDDB record search did not reveal any documented wildlife corridors or wildlife nursery sites on or adjacent to the Project site. Special status fish species documented within the region include: Delta smelt (*Hypomesus transpacificus*), Hardhead (*Mylopharodon conocephalus*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley fall- /late fall-run Chinook salmon (*Oncorhynchus tshawytscha*), and Longfin smelt (*Spirinchus thaleichthys*). The closest major natural movement corridor for native fish that are documented in the region is the San Joaquin River, located to the west of the Project site. The land uses within the Project site would not have any direct disturbance to the San Joaquin River or its tributaries, and therefore, would not have any direct disturbance to the movement corridor or habitat. Therefore, this is a ***less than significant*** level.

Responses e): The proposed Project is subject to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The proposed Project does not conflict with the SJMSCP. Therefore, the proposed Project would have a ***less than significant*** impact relative to this topic. Mitigation Measure presented in this Initial Study requires participation in the SJMSCP.

Responses f): The Resource Conservation Element of the General Plan establishes numerous policies and implementation measures related to biological resources as listed below:

Conservation Element Policies

RC-P-31. Minimize impact of new development on native vegetation and wildlife.

- ***Consistent****: This Initial Study includes an in-depth analysis of impacts for sensitive plants and wildlife, as well as habitat. Where impacts are identified, mitigation measures are presented to minimize, avoid, or compensate to the extent practicable.*

RC-P-33. Discourage the premature removal of orchard trees in advance of development, and discourage the removal of other existing healthy mature trees, both native and introduced.

- ***Consistent****: The proposed Project will not require the removal of orchard trees.*

RC-P-34. Protect special status species and other species that are sensitive to human activities.

- ***Consistent****: This Initial Study includes an in-depth analysis of impacts for sensitive plants and wildlife, as well as habitat. Where impacts are identified, mitigation measures are presented to minimize, avoid, or compensate to the extent practicable.*

RC-P-35. Allow contiguous habitat areas.

- ***Consistent****: Habitat areas in the vicinity of the Project site include agricultural plant communities which provide habitat for a variety of biological resources in the region. Agricultural areas occur throughout the region and are generally flat and well drained, and as a result are well suited for many crops. Alfalfa fields, hay, row crops, orchards, dominate the agricultural areas in the vicinity. The proposed Project does not require contiguous habitat areas to change or convert to another use.*

RC-P-36. Consider the development of new drainage channels planted with native vegetation, which would provide habitat as well as drainage.

- ***Consistent****: The project does not include new drainage channels.*

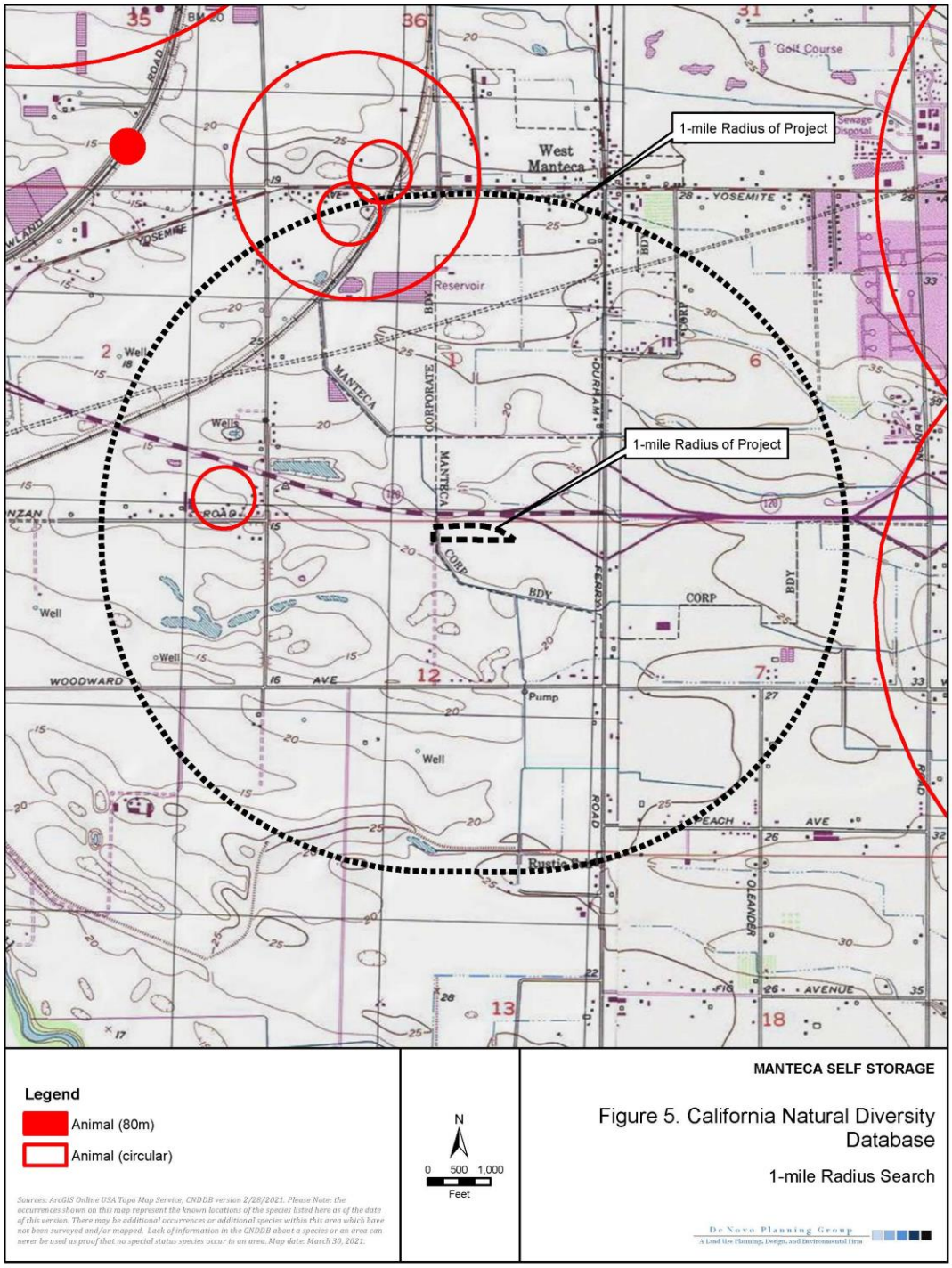
Municipal Code

The Manteca Municipal Code calls for the avoidance of heritage trees as defined under section 17.61.030. Heritage trees are any natural woody plant rooted in the ground and having a diameter of 30 inches or more when measured two feet above the ground. The Project site does not include any heritage trees on the Project site.

Section 17.19.060 calls for the protection of all existing trees having a diameter of six inches or more when measured 4½ feet above the ground. The City planning department must be notified of planned construction or grade changes within the proximity of existing mature trees. Existing trees must be protected from construction equipment, machinery, grade changes, and excavation for utilities, paving, and footers. Replacement of existing trees is subject to approval from the planning director and must be with a minimum 24-inch box tree of compatible species for the development site and be consistent with Section 17.19.030.

Section 12.08.070 of the municipal code prohibits cutting, pruning, removing, injuring, or interference with any tree, shrub, or plant upon or in any street tree area or other public place in the City without prior approval from the superintendent. The City is authorized to grant such permission at their discretion and where necessary. Except for utility companies, as provided in Section 12.08.080, no such permission shall be valid for a longer period than 30 days after its issuance.

With the implementation of the previous mitigation measures, the proposed Project would have a ***less than significant*** impact relative to this topic.


1-mile Radius of Project
1-mile Radius of Project
West Manteca
Reservoir
Golf Course
Sewage Disposal
Pump
Well
Wells
YOSEMITE
MANTECA
DURHAM
CORP
BDY
WOODWARD
16 AVE
ROAD
Legend
Animal (80m)
Animal (circular)
Sources: ArcGIS Online USA Topo Map Service; CNDDB version 2/28/2021. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Map date: March 30, 2021.
N
0 500 1,000
Feet
MANTECA SELF STORAGE
Figure 5. California Natural Diversity Database
1-mile Radius Search
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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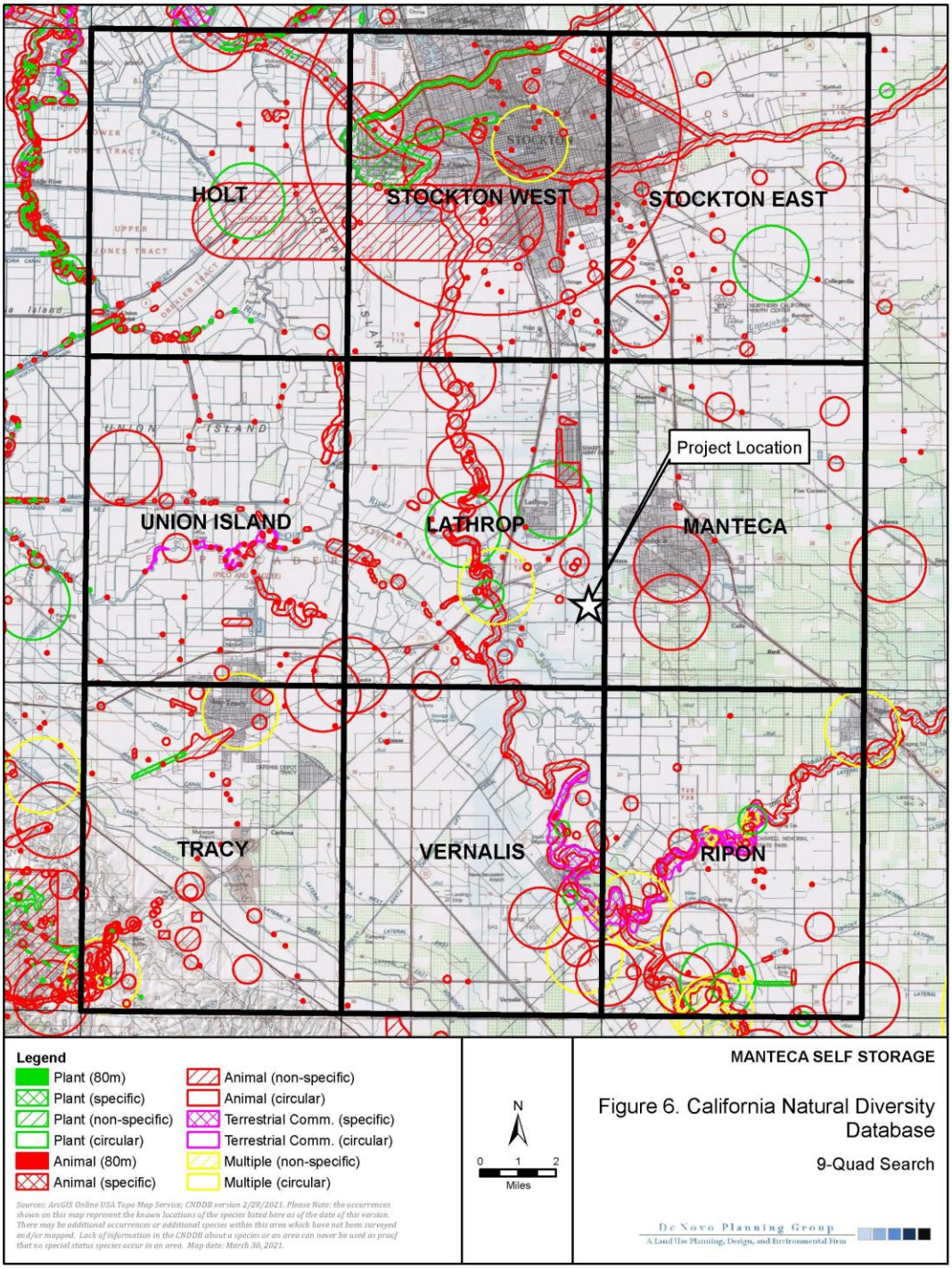
HOLT
STOCKTON WEST
STOCKTON EAST
Project Location
UNION ISLAND
LATHROP
MANTECA
TRACY
VERNALIS
RIPON
Legend
Plant (80m)
Plant (specific)
Plant (non-specific)
Plant (circular)
Animal (80m)
Animal (specific)
Animal (non-specific)
Animal (circular)
Terrestrial Comm. (specific)
Terrestrial Comm. (circular)
Multiple (non-specific)
Multiple (circular)
Sources: ArcGIS Online USA Topo Map Service; CNDDB version 2/28/2021. Please Note: the occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area. Map date: March 30, 2021.
N
0 1 2
Miles
MANTECA SELF STORAGE
Figure 6. California Natural Diversity Database
9-Quad Search
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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V. CULTURAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Responses to Checklist Questions

Responses a), b):

There are no known historic or prehistoric period sites present within the Project site. Although no prehistoric sites have been identified within the Project site, there is a slight possibility that a prehistoric site may exist and be totally obscured by vegetation, fill, or other historic activities, leaving no surface evidence. Should artifacts or unusual amounts of stone, bone, or shell be uncovered during construction activities, work in that part of the Project site shall be halted, and an archeologist should be consulted for on-the-spot evaluation of the finding.

Implementation of the following mitigation measure would require investigations and avoidance methods in the event that a previously undiscovered cultural resource is encountered during construction activities. With implementation of the following mitigation measure, development of the proposed Project would have a ***less than significant*** impact on historical and archaeological resources.

Mitigation Measure(s)

Mitigation Measure CUL-1: *If cultural resources (i.e., prehistoric sites, historic sites, isolated artifacts/features, and paleontological sites) are discovered during construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Manteca shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology (or a qualified paleontologist in the event paleontological resources are found) shall be retained to determine the significance of the discovery. The City of Manteca shall consider recommendations presented by the professional for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Specific measures are developed based on the significance of the find.*

Response c): Indications are that humans have occupied the Central Valley for at least 10,000 years and it is not always possible to predict where human remains may occur outside of formal burials. Therefore, excavation and construction activities, regardless of depth, may yield human remains that may not be interred in marked, formal burials. Under CEQA, human remains are protected under the definition of archaeological materials as being "any evidence of human activity." Additionally, Public Resources Code Section 5097 has specific stop-work and notification procedures to follow in the event that human remains are inadvertently discovered during construction. Implementation of the following mitigation measure would reduce this potential impact to a ***less than significant*** level.

Mitigation Measure(s)

Mitigation Measure CUL-2: *If any human remains are found during grading and construction activities, all work shall be halted immediately within 50 meters (165 feet) of the discovery and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Additionally, if the Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the applicant's expense.*

VI. ENERGY

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

Responses to Checklist Questions

Responses a), b): Appendix G of the State CEQA Guidelines requires consideration of the potentially significant energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (Public Resources Code Section 21100, subdivision [b][3]). According to Appendix G of the CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered "wasteful, inefficient, and unnecessary" if it were to violate state and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation, including the City of Manteca CAP.[1]

The proposed Project includes the construction of nine (9) approximately 20-foot-tall storage buildings, containing approximately 844 total individual storage units, and one (1) office building (the office building would be located within Building D), and a parking lot.

The following discussion provides calculated levels of energy use expected for the proposed Project, based on commonly used modelling software (i.e., CalEEMod v.2016.3.2 and the California Air Resource Board's EMFAC2017). It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the proposed Project. Therefore, this discussion provides a conservative estimate of proposed Project emissions.

Electricity and Natural Gas

Electricity and natural gas used by the proposed Project would be used primarily to power on-site buildings. Total annual unmitigated and mitigated electricity (kWh) and natural gas (kBTU) usage associated with the operation of the proposed Project are shown in Table ENERGY-1, below (as provided by CalEEMod).

According to Calico's *Appendix A: Calculation Details for CalEEMod*, CalEEMod uses the California Commercial End Use Survey (CEUS) database to develop energy intensity value for non-residential buildings.

[1] See Section VIII. Greenhouse Gas Emissions for a comparison of the project's consistency with relevant CAP reduction measures.

Table ENERGY-1: Project Operational Natural Gas and Electricity Usage (Unmitigated Scenario)

Emissions	*Natural Gas (kBTU/year)*	*Electricity (kWh/year)*
Total	**810,372**	**645,100**

SOURCE: CALEEMOD (V.2016.3.2.)

On-Road Vehicles (Operation)

The proposed Project would generate vehicle trips during its operational phase. According to the Transportation Impact Analysis Report prepared for the proposed Project (Fehr & Peers, 2021), the project would generate approximately 55 new daily vehicles trips. In order to calculate operational on-road vehicle energy usage and emissions, default trip lengths generated by CalEEMod were used, which are based on the project location and urbanization level parameters De Novo (the Initial Study consultant) selected within CalEEMod (i.e., "San Joaquin Valley Air Pollution Control District" project location and "Urban" setting, respectively). These values are provided by the individual districts or use a default average for the state, depending on the location of the proposed Project (CAPCOA, 2017). Based on default factors provided by CalEEMod, the proposed Project would generate at total of approximately 440 average daily vehicle miles travelled (Average Daily VMT). Using fleet mix data provide by CalEEMod (v2016.3.2), and Year 2021 gasoline and diesel MPG (miles per gallon) factors for individual vehicle classes as provided by EMFAC2017, De Novo derived weighted MPG factors for operational on-road vehicles of approximately 25.1 MPG for gasoline vehicles. With this information, De Novo calculated as a conservative estimate that the unmitigated proposed Project would generate vehicle trips that would use a total of approximately 18 gallons of gasoline fuel per day, on average, or 6,391 gallons of gasoline per year.

On-Road Vehicles (Construction)

The proposed Project would also generate on-road vehicle trips during project construction (from construction workers and vendors). Estimates of vehicle fuel consumed were derived based on the assumed construction schedule, vehicle trip lengths and number of workers per construction phase as provided by CalEEMod, and Year 2021 gasoline MPG factors provided by EMFAC2017. For the purposes of simplicity, it was assumed that all vehicles used gasoline as a fuel source (as opposed to diesel fuel or alternative sources). Table ENERGY-2, below, describes gasoline and diesel fuel used by on-road mobile sources during each phase of the construction schedule. As shown, the vast majority of on-road mobile vehicle fuel used during the construction of the proposed Project would occur during the building construction phase. See Appendix A for a detailed calculation.

Table ENERGY-2: On-Road Mobile Fuel Generated by Project Construction Activities – By Phase

Construction Phase	*# of Days*	*Total Daily Worker Trips[(a)]*	*Total Daily Vendor Trips[(a)]*	*Total Haul Trips[(a)]*	*Gallons of Gasoline Fuel[(b)]*	*Gallons of Diesel Fuel[(b)]*
Site Preparation	10	18	-	-	70	-
Grading	20	15	-	-	116	-
Building Construction	230	103	40	-	458	511
Paving	20	15	-	-	116	-
Architectural Coating	20	21	-	-	163	-
Total	**N/A**	**N/A**	**N/A**	**N/A**	**923**	**511**

NOTE: [(A)] PROVIDED BY CALEEMOD. [(B)]SEE APPENDIX A FOR FURTHER DETAIL

SOURCE: CALEEMOD (V.2016.3.2); EMFAC2017.

Off-Road Vehicles (Construction)

Off-road construction vehicles would use diesel fuel during the construction phase of the proposed Project. A non-exhaustive list of off-road constructive vehicles expected to be used during the construction phase of the proposed Project includes: cranes, forklifts, generator sets, tractors, excavators, and dozers. Based on the total amount of CO_2 emissions expected to be generated by the proposed Project (as provided by the CalEEMod output), and a CO_2 to diesel fuel conversion factor (provided by the U.S. Energy Information Administration), the proposed Project would use a total of approximately 4,247 gallons of diesel fuel for off-road construction vehicles (during the site preparation, and grading phases of the proposed Project). Detailed calculations are provided in Appendix A.

Other

The proposed Project could also use other sources of energy not identified here. Examples of other energy sources include alternative and/or renewable energy (such as solar PV) and/or on-site stationary sources (such as on-site diesel generators) for electricity generation. The proposed Project would be solar-ready, which could reduce the need for fossil fuel-based energy (for proposed Project buildings), including for electricity.

Conclusion

The proposed Project would use energy resources for the operation of project buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel) generated by the proposed Project, and from off-road construction activities associated with the proposed Project (e.g., diesel fuel). Each of these activities would require the use of energy resources. The proposed Project would be responsible for conserving energy, to the extent feasible, and relies heavily on reducing per capita energy consumption to achieve this goal, including through Statewide and local measures.

The proposed Project would be in compliance with all applicable Federal, State, and local regulations regulating energy usage. For example, PG&E is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g., solar and wind) within its energy portfolio. PG&E has already achieved greater than 33% mix of renewable energy resources by 2020, and is required to achieve a 50% mix of renewable energy sources by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed Project. Other Statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g., the Pavley Bill and the Low Carbon Fuel Standard), would improve vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time. Furthermore, as described previously, the incorporation of the mitigation measures described previously in this section would further reduce project energy consumption.

As a result, the proposed Project would not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal. PG&E, the electricity and natural gas provider to the Project site, maintains sufficient capacity to serve the proposed Project. The proposed Project would comply

with all existing energy standards, including those established by the City of Manteca, and would not result in significant adverse impacts on energy resources. For these reasons, the proposed Project would not be expected cause an inefficient, wasteful, or unnecessary use of energy resources. This is a ***less than significant*** impact.

VII. GEOLOGY AND SOILS

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

Responses to Checklist Questions

Responses a.i), a.ii), a.iv): Figure 7 shows the earthquake faults in the vicinity of the Project site. As shown in the figure, the Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, and known surface expression of active faults does not exist within the Project site. However, the Project site is located within a seismically active region. The U.S. Geological Survey identifies potential seismic sources within approximately 20 miles of the Project site. Two of the closest known faults classified as active by the U.S. Geological Survey are an unnamed fault east of the City of Tracy, located approximately 4 miles to the west, and the San Joaquin fault, located approximately 13 miles to the southwest. The Midway fault is located approximately 16 miles to the west. Other faults that could potentially affect the proposed Project

include the Corral Hollow-Carnegie fault, the Greenville fault, the Antioch fault, and the Los Positas fault.

Geologic Hazards: Potential seismic hazards resulting from a nearby moderate to major earthquake could generally be classified as primary and secondary. The primary seismic hazard is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching.

Ground Rupture: Because the Project site does not have known active faults crossing the Project site, and the Project site is not located within an Earthquake Fault Special Study Zone, ground rupture is unlikely at the subject property.

Ground Shaking: According to the California Geological Survey's Probabilistic Seismic Hazard Assessment Program, Manteca is considered to be within an area that is predicted to have a 10 percent probability that a seismic event would produce horizontal ground shaking of 10 to 20 percent within a 50-year period. This level of ground shaking correlates to a Modified Mercalli intensity of V to VII, light to strong. As a result of these factors the California Geological Survey has defined the entire county as a seismic hazard zone. There will always be a potential for ground shaking caused by seismic activity anywhere in California, including the Project site.

Landslides: The proposed Project site is not susceptible to landslides because the area is essentially flat. This is a less than significant impact.

Conclusion

In order to minimize potential damage to the proposed site improvements, all construction in California is required to be designed in accordance with the latest seismic design standards of the California Building Standards Code. Design in accordance with these standards would reduce any potential impact to a less than significant level. Because all development in the Project site must be designed in conformance with these State standards, any potential impact would be considered ***less than significant***.

Responses a.iii), c), d): Liquefaction normally occurs when sites underlain by saturated, loose to medium dense, granular soils are subjected to relatively high ground shaking. During an earthquake, ground shaking may cause certain types of soil deposits to lose shear strength, resulting in ground settlement, oscillation, loss of bearing capacity, landsliding, and the buoyant rise of buried structures. The majority of liquefaction hazards are associated with sandy soils, silty soils of low plasticity, and some gravelly soils. Cohesive soils are generally not considered to be susceptible to liquefaction. In general, liquefaction hazards are most severe within the upper 50 feet of the surface, except where slope faces or deep foundations are present.

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements. Expansion is a typical characteristic of clay-type soils. Expansive soils shrink and swell in volume during changes in moisture content, such as a result of seasonal rain events, and can cause damage to foundations, concrete slabs, roadway improvements, and pavement sections.

Soil expansion is dependent on many factors. The more clayey, critically expansive surface soil and fill materials will be subjected to volume changes during seasonal fluctuations in moisture content. Figure 8 shows the soils within the Project site. There are no expansive (i.e., shrink-

swell) soils within the Project site. The soils encountered at the Project site consist of Timor Loamy Sand, Veritas Fine Sandy Loam, and Bisgani loamy coarse sand.

Future development of the proposed Project could expose people or structures to adverse effects associated with liquefaction and/or soil expansion. Construction of the proposed Project would be required to comply with the City's General Plan policies related to geologic and seismic hazards. For example, Policy S-P-2 provides that the City will require new development to mitigate the potential impacts of geologic hazards through building review, and Policy S-P-3 provides that the City will require new development to mitigate the potential impacts of seismic-induced settlement of uncompacted fill and liquefaction due to the presence of a high-water table. To that end, General Plan Policy S-P-1 requires that all proposed development prepare geological reports and/or geological engineering reports for projects located in areas of potentially significant geological hazards, including potential subsidence (collapsible surface soils) due to groundwater extraction. Moreover, Mitigation Measure GEO-1 would ensure that the Project applicant will submit a design-level geotechnical study and buildings plans to the City of Manteca for review and approval.

Therefore, with implementation of Mitigation Measure GEO-1, this potential impact would be ***less than significant***.

Mitigation Measure(s)

Mitigation Measure GEO-1*: Prior to issuance of building permits, the Project applicant shall submit a design-level geotechnical study and building plans to the City of Manteca for review and approval. The building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the most recent version of the California Building Standards Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. The approved plans shall be incorporated into the proposed Project. All onsite soil engineering activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.*

Response b): According to the Project site plans, development of the proposed Project would result in the creation of new impervious surface areas throughout the Project site. The development of the Project site would also cause ground disturbance of top soil. The ground disturbance would be limited to the areas proposed for grading and excavation, including the proposed internal roadways and drain infrastructure improvements. After grading and excavation, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Without implementation of appropriate Best Management Practices (BMPs) related to prevention of soil erosion during construction, development of the proposed Project would result in a potentially significant impact with respect to soil erosion. Mitigation Measure GEO-2 requires the Project applicant to prepare and submit a Stormwater Pollution Prevention Plan identifying specific actions and BMPs to prevent stormwater pollution during construction activities. The SWPPP shall include, among other things, temporary erosion control measures to be employed for disturbed areas. Implementation of the following mitigation measure, therefore, would ensure the impact is ***less than significant***.

Mitigation Measure(s)

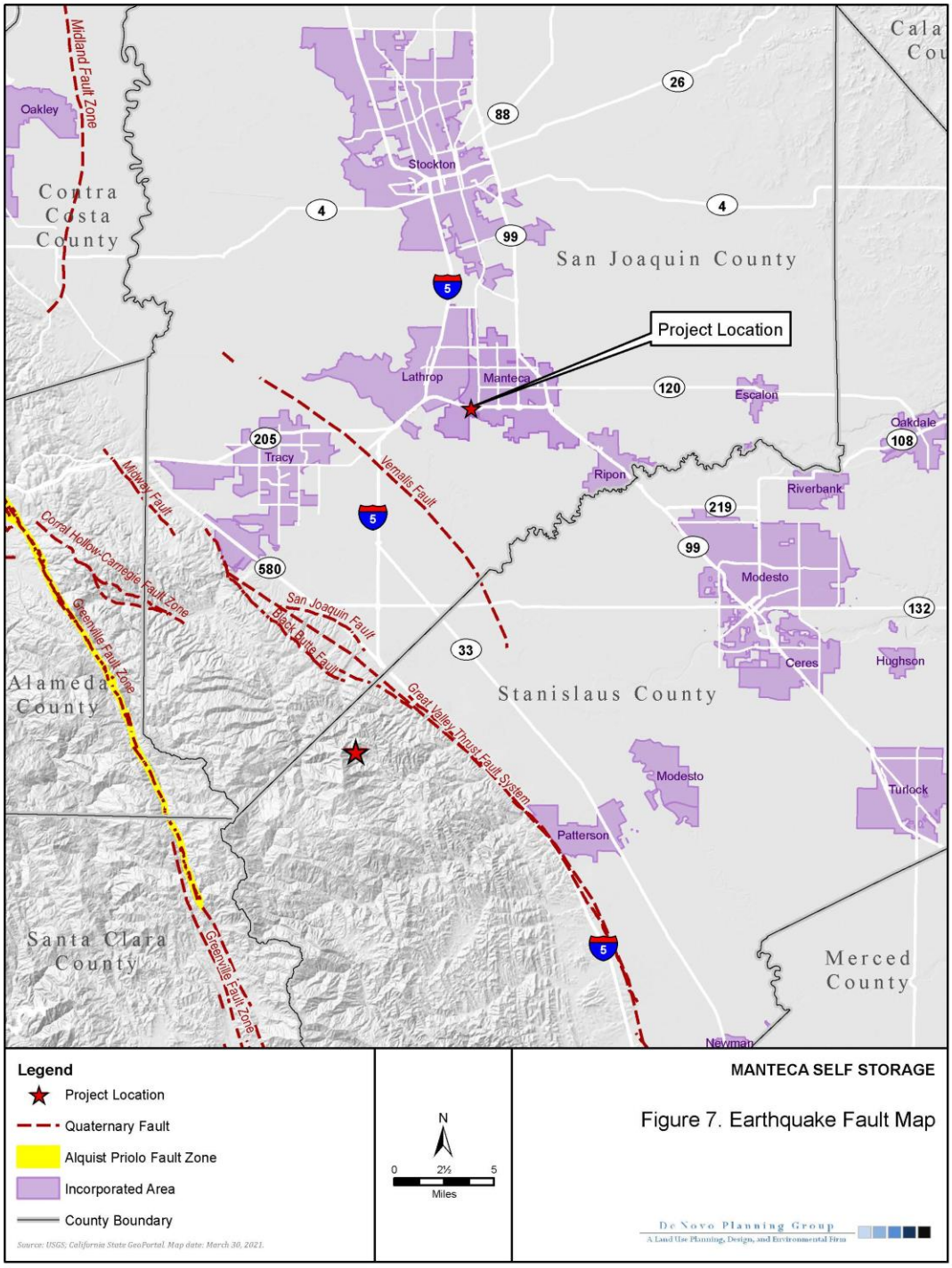
Mitigation Measure GEO-2*: The Project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Manteca and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*

Response e): No septic systems will be used or developed as part of the proposed Project. Therefore, ***no impact*** would occur related to soils incapable of adequately supporting the use of septic tanks.

Response f): Known paleontological resources or sites are not located on the Project site. Additionally, unique geologic features are not located on the Project site. The Project site is currently undeveloped and surrounded by existing or future urban development. Additionally, in the event that plant or animal fossils are discovered during subsurface excavation activities, Mitigation Measure CUL-1 would all excavation within 50 feet of the fossil to cease until a paleontologist has determined the significance of the find and provided recommendations in accordance with Society of Vertebrate Paleontology standards. If the find is determined to be significant and the City determines that avoidance is not feasible, the paleontologist would design and implement a data recovery plan consistent with the Society of Vertebrate Paleontology standards, to be submitted to the City for review and approval. With implementation of Mitigation Measure CUL-1, impacts to paleontological resources or unique geologic features are not expected. This is a ***less than significant*** impact.

Mitigation Measure(s)

Implement Mitigation Measure CUL-1.


Midland Fault Zone
Oakley
Contra Costa County
Stockton
San Joaquin County
Project Location
Lathrop
Manteca
Escalon
Tracy
Ripon
Oakdale
Riverbank
Modesto
Ceres
Hughson
Midway Fault
Vernalis Fault
Corral Hollow-Carnegie Fault Zone
Greenville Fault Zone
San Joaquin Fault
Black Butte Fault
Great Valley Thrust Fault System
Alameda County
Stanislaus County
Patterson
Turlock
Santa Clara County
Merced County
Newman
Legend
Project Location
Quaternary Fault
Alquist Priolo Fault Zone
Incorporated Area
County Boundary
Source: USGS; California State GeoPortal. Map date: March 30, 2021.
N
0 2½ 5
Miles
MANTECA SELF STORAGE
Figure 7. Earthquake Fault Map
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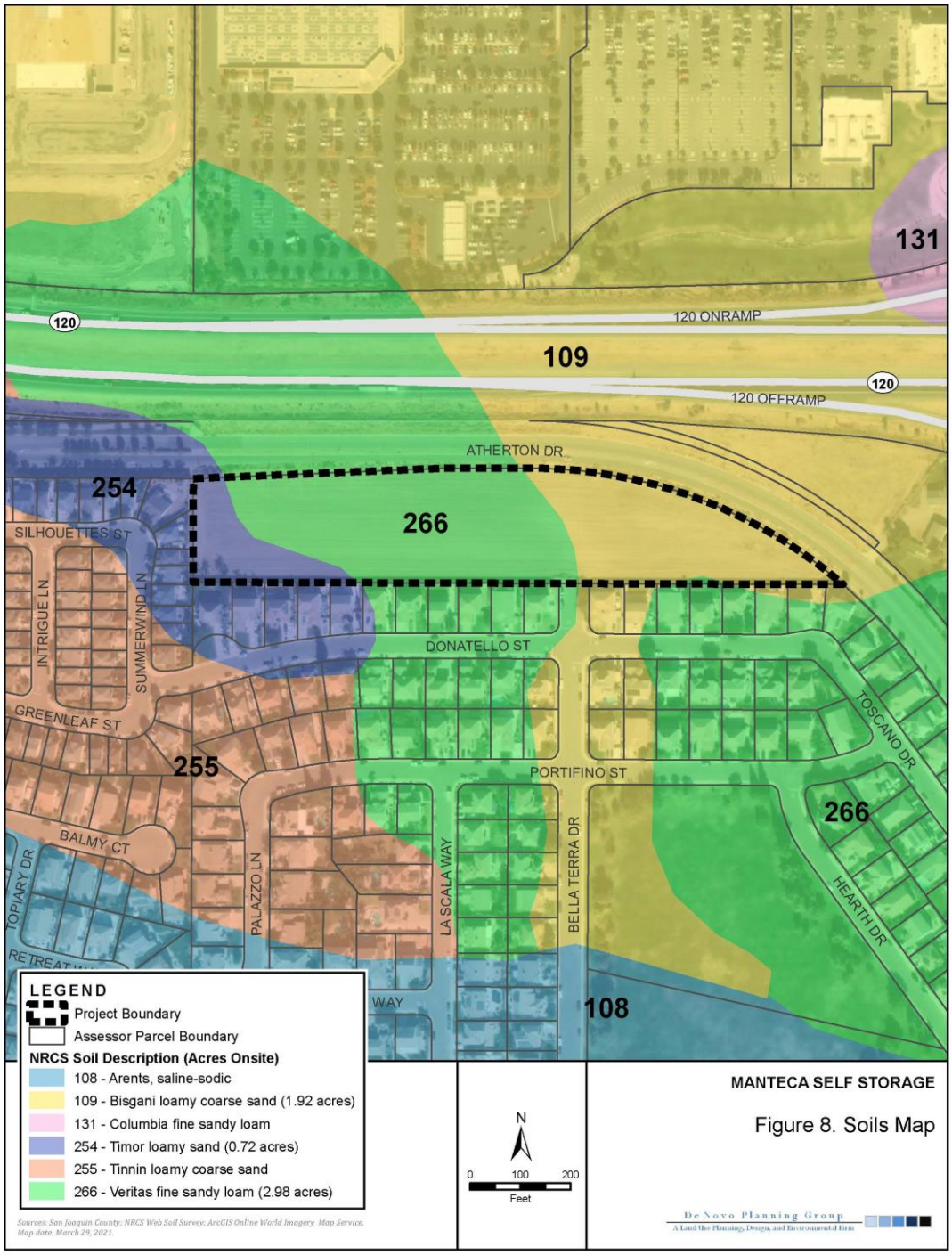
131
120
120 ONRAMP
109
120
120 OFFRAMP
ATHERTON DR
254
266
SILHOUETTES ST
INTRIGUE LN
SUMMERWIND LN
DONATELLO ST
GREENLEAF ST
TOSCANO DR
255
PORTIFINO ST
266
BALMY CT
TOPIARY DR
PALAZZO LN
LA SCALA WAY
BELLA TERRA DR
HEARTH DR
RETREAT
WAY
108
LEGEND
Project Boundary
Assessor Parcel Boundary
NRCS Soil Description (Acres Onsite)
108 - Arents, saline-sodic
109 - Bisgani loamy coarse sand (1.92 acres)
131 - Columbia fine sandy loam
254 - Timor loamy sand (0.72 acres)
255 - Tinnin loamy coarse sand
266 - Veritas fine sandy loam (2.98 acres)
Sources: San Joaquin County; NRCS Web Soil Survey; ArcGIS Online World Imagery Map Service.
Map date: March 29, 2021.
N
0 100 200
Feet
MANTECA SELF STORAGE
Figure 8. Soils Map
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VIII. GREENHOUSE GAS EMISSIONS

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

Existing Setting

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

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

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2018, accounting for 41% of total GHG emissions in the state. This category was followed by the industrial sector (24%), the electricity generation sector (including both in-state and out of-state sources) (15%) and the agriculture and forestry sector (8%) (California Energy Commission, 2016).

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced approximately 425 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2018 (California Energy Commission, 2021). Given that the U.S. EPA estimates that worldwide emissions from human activities totaled nearly 46 billion gross metric tons of carbon dioxide equivalents ($BMTCO_2e$) in 2010, California's incremental contribution to global GHGs is approximately 2% (U.S. EPA, 2014).

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Responses to Checklist Questions

Responses a), b): Existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change. This is readily understood when one considers that global climatic change is the result of the sum total of GHG emissions, both man-made and natural that occurred in the past; that is occurring now; and will occur in the future. The effects of project specific GHG emissions are cumulative, and unless reduced or mitigated, their incremental contribution to global climatic change could be considered significant.

The SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD, 2015) provides an approach to assessing a project's impacts on greenhouse gas emissions by evaluating the proposed Project's emissions to the "reduction targets" established in ARB's AB 32 Scoping Plan. For instance, the SJVACD's guidance recommends that projects should demonstrate that "*project specific GHG emissions would be reduced or mitigated by at least 29%, compared to Business as Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period, consistent with GHG emission reduction targets established in ARB's AB 32 Scoping Plan. Projects achieving at least a 29% GHG emission reduction compared to BAU would be determined to have a less than significant individual and cumulative impact for GHG*."

Subsequent to the SJVAPCD's approval of the *Final Draft Guidance for Assessing and Mitigating Air Quality Impacts* (SJVAPCD 2015), the California Supreme Court issued an opinion that affects the conclusions that should/should not be drawn from a GHG emissions analysis that is based on consistency with the AB 32 Scoping Plan. More specifically, in *Center for Biological Diversity v. California Department of Fish and Wildlife*, the Court ruled that showing a "project-level reduction" that meets or exceeds the Scoping Plan's overall statewide GHG reduction goal is not necessarily sufficient to show that the proposed Project's GHG impacts will be adequately mitigated: "*the Scoping Plan nowhere related that statewide level of reduction effort to the percentage of reduction that would or should be required from individual projects*..." According to the Court, the lead agency cannot simply assume that the overall level of effort required to achieve the statewide goal for emissions reductions will suffice for a specific project.

Given this Court decision, reliance on a 29 percent GHG emissions reduction from projected BAU levels compared to the proposed Project's estimated 2020 levels as recommended in the SJVAPCD's guidance documents is not an appropriate basis for an impact conclusion in the MND. Given that the SJVAPCD staff has concluded that "*existing science is inadequate to support quantification of impacts that project specific GHG emissions have on global climatic change,*" this MND instead relies on consistency with the local reduction strategies contained within the existing City of Manteca Climate Action Plan (CAP) (2013) for this analysis.

The City of Manteca adopted its CAP in October 2013. The purpose of the CAP is to: 1) outline a course of action for the City government and the community of Manteca to reduce per capita greenhouse gas emissions by amounts required to show consistency with AB 32 goals and adapt to effects of climate change, and 2) provide clear guidance to City staff regarding when and how to implement key provisions of the CAP, and 3) provide a streamlined mechanism for projects

that are consistent with the CAP to demonstrate that they would not contribute significant greenhouse gas impacts. The CAP is considered a "Qualified Plan," according to CEQA Guidelines Section 15183.5.2.

The approach still relies on the Appendix G of the CEQA Guidelines thresholds which indicate that climate change-related impacts are considered significant if implementation of the proposed Project would do any of the following:

1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

These two CEQA Appendix G threshold questions are provided within the Initial Study checklist and are the thresholds used for the subsequent analysis. The focus of the analysis is on the proposed Project's consistency with the CAP. The CAP contains an inventory of GHG emissions, reduction strategies, and a means to implement, monitor, and fund the Plan. The purpose of the CAP is to outline a course of action for the City government and the community of Manteca to reduce per capita greenhouse gas emissions by amounts required to show consistency with AB 32 goals and to adapt to effects of climate change in the future. The CAP also provides clear guidance to City staff regarding when and how to implement key provisions of the CAP. Lastly, the CAP provides a streamlined mechanism for projects that are consistent with the CAP to demonstrate that they would not contribute significant greenhouse gas impacts. The analysis provided herein includes quantitative modeling to show the construction and operational emissions of GHGs as a result of the proposed Project, however, the conclusions are based on the fact that the proposed Project is consistent with the reduction strategies contained within the CAP.

Project Greenhouse Gas Emissions

The proposed Project would generate GHGs during the construction and operational phases of the proposed Project. The primary source of construction-related GHGs from the proposed Project would result from emissions of CO_2 associated with the construction of the proposed Project, and worker vehicle trips. The proposed Project would require limited grading, and would also include site preparation, building construction, architectural coating, and paving phases. Sources of GHGs during project operation would include CO_2 associated with operational vehicle trips and on-site energy usage (e.g., electricity). Other sources of GHG emissions would be minimal.

Table GHG-1 provides the estimated GHG emissions that would be generated during project construction and operation.

Table GHG-1: Project Construction and Operational GHG Emissions (metric tons/year)

Year	*CO2e*
Construction	
2021	208.6
2022	329.8
Operation	
Annual	452.7

Source: CalEEMod, v.2016.3.2

Project Consistency with the Manteca CAP

Table GHG-2, below provides a consistency analysis of the relevant Manteca CAP policies in comparison to the proposed Project.

TABLE GHG-2: PROJECT CONSISTENCY WITH THE MANTECA CAP

No.	*Strategy*	*Consistency Determination*
CD-1	The City shall encourage projects consistent with the development densities allowed by the General Plan and are contiguous to existing development meet compact development criteria.	**Consistent**: The proposed Project is contiguous with existing development
TDM-1	Notify developers of large commercial and industrial developments of the requirements of SJVAPCD Rule 9410 to implement TDM programs that reduce commute trips.	**Consistent**: The City would notify the developer of the proposed Project regarding the requirements of SJVAPCD Rule 9410 to implement TDM programs that reduce commute trips.
ENB-1	The City shall require developers to exceed Title 24 energy efficiency standards by at least 10 percent. The City recognizes that it may not be feasible for all buildings and structures to exceed Title 24 by this amount because of the form or function of the building. Projects that cannot meet the reduction level may provide solar panels or other non-building-related energy efficiency measures such as exterior lighting or water savings.	**Consistent**: The proposed Project developer would be required to develop building plans consistent with this measure.

Conclusion

Overall, the proposed Project would be consistent with the strategies as described in the City of Manteca CAP and it functions as an implementation project toward achieving the City's Climate Action Plan. Since the proposed Project would not conflict with the Manteca CAP, the proposed Project would not generate a significant cumulative impact to GHGs.

The proposed Project would not generate GHG emissions that would have a significant impact on the environment or conflict with any applicable plans, policies, or regulations. Therefore, impacts related to greenhouse gases are ***less than significant***.

IX. HAZARDS AND HAZARDOUS MATERIALS

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

Responses to Checklist Questions

Responses a), b):

Construction Phase Impacts: Construction equipment and materials would likely require the use of petroleum-based products (oil, gasoline, diesel fuel), and a variety of chemicals including paints, cleaners, and solvents. The use of these materials at a construction site will pose a reasonable risk of release into the environment if not properly handled, stored, and transported. A release into the environment could pose significant impacts to the health and welfare of people and/or wildlife, and could result in contamination of water (groundwater or surface water), habitat, and countless important resources.

Like most agricultural and farming operations in the Central Valley, agricultural practices in the area have used agricultural chemicals including pesticides and herbicides as a standard practice. Although no contaminated soils have been identified on the Project site or the vicinity above applicable levels, residual concentrations of pesticides may be present in soil as a result of historic agricultural application and storage. Continuous spraying of crops over many years can

potentially result in a residual buildup of pesticides, in farm soils. Of highest concern relative to agrichemicals are chlorinated herbicides, organophosphate pesticides, and organochlorine pesticides, such as Mecoprop (MCPP), Dinoseb, chlordane, dichloro-diphenyltrichloroethane (DDT), and dichloro-diphenyl-dichloroethylene (DDE). There are no records of soil contamination on the Project site.

Mitigation measures presented below also require a Soils Management Plan (SMP) to be submitted and approved by the San Joaquin County Department of Environmental Health prior to the issuance of a grading permit. The SMP will establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. Compliance would ensure that human health and the environment are not exposed to hazardous materials.

Operational Phase Impacts: The operational phase of the proposed Project will occur after construction is completed. The proposed Project would place residential uses in an area of the City that currently contains residential, commercial, and industrial uses. The proposed storage facility would not routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common hazardous materials such as household cleaners, paint, motor oil, etc. The operational phase of the proposed Project does not pose a significant hazard to the public or the environment.

Mitigation Measure(s)

Mitigation Measure HAZ-1*: A Soils Management Plan (SMP) shall be submitted and approved by the San Joaquin County Department of Environmental Health prior to the issuance of a grading permit for each phase of the project. The SMP shall establish management practices for handling hazardous materials, including fuels, paints, cleaners, solvents, etc., during construction. The approved SMP shall be posted and maintained onsite during construction activities and all construction personnel shall acknowledge that they have reviewed and understand the plan.*

Response c): The Project site is not located within ¼ mile of an existing school. The closest school is Sierra High School, which is located approximately 0.90 miles or further southwest of the Project site. Therefore, implementation of the proposed Project would result in a ***less than significant*** impact relative to this topic.

Response d): According the California Department of Toxic Substances Control (DTSC) there are no Federal Superfund Sites, State Response Sites, or Voluntary Cleanup Sites on, or in the vicinity of the Project site. The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. The nearest investigation site (listed below) is located approximately 0.7 miles to the southwest of the Project site:

- Tara Park Elementary School Alternative Location (site 60001958): This site is a Cleanup Program Site which has a current status of No further Action as of 8/7/2014. The Project site had potential soil contamination.

Implementation of the proposed Project would result in a ***less than significant*** impact relative to this environmental topic.

Response e): The Federal Aviation Administration (FAA) establishes distances of ground clearance for take-off and landing safety based on such items as the type of aircraft using the airport. The Project site is not located within the vicinity of a private airstrip or public airport. The closest airport or airstrip is the Stockton Metropolitan Airport, located approximately 7 miles

north of the Project site. Implementation of the proposed Project would have a ***less than significant*** impact with regards to this environmental issue.

Response f): The Office of Emergency Services (OES) maintains an Emergency Operations Plan (EOP) that serves as the official Emergency Plan for San Joaquin County. It includes planned operational functions and overall responsibilities of County Departments during an emergency situation. The Emergency Plan also contains a threat summary for San Joaquin County, which addresses the potential for natural, technological and human-caused disasters (County Code, Title 4-3007).

The County OES also prepared a Hazardous Materials Area Plan (§2720 H&S, 2008) that describes the hazardous materials response system developed to protect public health, prevent environmental damage and ensure proper use and disposal of hazardous materials. The plan establishes effective response capabilities to contain and control releases, establishes oversight of long-term cleanup and mitigation of residual releases, and integrates multi-jurisdiction and agency coordination. This plan is now implemented by the San Joaquin County Environmental Health Department.

The San Joaquin County Environmental Health Department maintains a Hazardous Materials Management Plan/ Hazardous Materials Business Plan (HMMP/HMBP). The HMMP/HMBP describes agency roles, strategies and processes for responding to emergencies involving hazardous materials. The Environmental Health Department maintains a Hazardous Materials Database and Risk and Flood Maps available to the public on its website.

In San Joaquin County, all major roads are available for evacuation, depending on the location and type of emergency that arises. The proposed Project does not include any actions that would impair or physically interfere with any of San Joaquin County's emergency plans or evacuation routes. Future uses on the Project site will have access to the County resources that establish protocols for safe use, handling and transport of hazardous materials. Construction activities are not expected to result in any unknown significant road closures, traffic detours, or congestion that could hinder the emergency vehicle access or evacuation in the event of an emergency. Implementation of the proposed Project would have a ***less than significant*** impact with regards to this environmental issue.

Response g): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents), and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point, while fuels such as trees have a lower surface area to mass ratio and require more heat to reach the ignition point.

The City has areas with an abundance of flashy fuels (i.e., grassland) in the outlying residential parcels and open lands that, when combined with warm and dry summers with temperatures often exceeding 100 degrees Fahrenheit, create a situation that results in higher risk of wildland fires. Most wildland fires are human caused, so areas with easy human access to land with the appropriate fire parameters generally result in an increased risk of fire.

The City of Manteca contains areas with "moderate" and "non-wildland fuel" ranks. The areas warranting "moderate" fuel ranks possess combustible material in sufficient quantities combined with topographic characteristics that pose a wildfire risk. CalFire data for the areas immediately

surrounding the Planning Area also include "moderate" and "non-wildland fuel" ranks. Areas west of Interstate 5, approximately 15 miles or further southwest of the Planning Area, are designated as "moderate" and "high" fuel ranks.

The Project site is not located on a steep slope, and the Project site is essentially flat. The Project site is also located in an urban area, with existing or future urban development located on all sides. The proposed Project will comply with city standards for fire hydrants and fire sprinklers, and access to and from the Project site is sufficient. Therefore, this is a ***less than significant*** impact and no mitigation is required.

X. HYDROLOGY AND WATER QUALITY

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

Responses to Checklist Questions

Response a): Implementation of proposed Project would not violate any water quality or waste discharge requirements. Construction activities including grading could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of soil and could adversely affect water quality in nearby surface waters. The RWQCB requires a project specific SWPPP to be prepared for each project that disturbs an area one acre or larger. The SWPPP is required to include project specific best management measures that are designed to control drainage and erosion. Mitigation Measure GEO-2 would require the preparation of a SWPPP to ensure that the proposed Project prepares and implements a SWPPP throughout the construction phase of the proposed Project. Furthermore, the proposed Project includes a preliminary grading and drainage plan that has a specific drainage plan designed to control storm water runoff and erosion, both during and after construction. The SWPPP (Mitigation Measure GEO-2) and the project specific drainage plan would reduce the potential for the proposed Project to violate water quality standards during construction. Implementation of the proposed Project would result in a ***less than significant*** impact relative to this topic.

Response b): The proposed Project would connect to the City of Manteca water system. The City's municipal water supply includes deliveries from the South San Joaquin Irrigation District's (SSJID) South County Water Supply Program (SCWSP), and local groundwater pumped from the City's wells.

The proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

According to the City's 2015 Urban Water Management Plan (UWMP), Commercial land uses are estimated to generate approximately 1,200 gallons of water day per acre. This is likely a highly conservative estimate, given the limited demand for water use that would occur at a self-storage facility such as the proposed Project. Nevertheless, utilizing this water demand factor, water usage would be estimated at 6,768 gallons of water per day (gpd) for the 5.64-acre Project site.

Project construction would add additional impervious surfaces to the Project site; however, various areas of the Project site would remain largely pervious, which would allow infiltration to underlying groundwater. For example, the Project applicant proposes to include a large stormwater basin at the southeast corner of the Project site. Furthermore, the proposed Project is not anticipated to significantly affect groundwater quality because sufficient stormwater infrastructure would be constructed as part of project to detain and filter stormwater runoff and prevent long-term water quality degradation. Therefore, project construction and operation would not substantially deplete or interfere with groundwater supply or quality. This impact would be ***less than significant***.

Responses c), e): When land is in a natural or undeveloped condition, precipitation will infiltrate/percolate the soils and mulch. Much of the rainwater that falls on natural or undeveloped land slowly infiltrates the soil and is stored either temporarily or permanently in underground layers of soil. When the soil becomes completely soaked or saturated with water or the rate of rainfall exceeds the infiltration capacity of the soil, the rainwater begins to flow on the surface of land to low lying areas, ditches, channels, streams, and rivers. Rainwater that flows off of a site is defined as storm water runoff. When a site is in a natural condition or is undeveloped, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the Project site as storm water runoff.

The infiltration and runoff process are altered when a site is developed with urban uses. Houses, buildings, roads, and parking lots introduce asphalt, concrete, and roofing materials to the landscape. These materials are relatively impervious, which means that they absorb less rainwater. As impervious surfaces are added to the ground conditions, the natural infiltration process is reduced. As a result, the volume and rate of storm water runoff increases. The increased volumes and rates of storm water runoff can result in flooding in some areas if adequate storm drainage facilities are not provided.

There are no rivers, streams, or water courses located on or immediately adjacent to the Project site. As such, there is no potential for the proposed Project to alter a water course, which could lead to on or offsite flooding. Drainage improvements associated with the Project site would be located on the Project site.

The proposed Project would require the installation of storm drainage infrastructure to ensure that storm waters properly drain from the Project site. The proposed utility plan includes an engineered network of storm drain lines. The storm drain line would drain into the City's existing storm drain system.

The City of Manteca implements best management practices to the extent they are technologically achievable to prevent and reduce pollutants. Under the City's standard practices, the owner or operator shall provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses. Facilities to prevent accidental discharge of prohibited materials or other wastes shall be provided and maintained at the owner or operator's expense.

Mitigation Measure HYDRO-1 will require that the storm drainage plan be designed to ensure that post-project runoff is equal to or less than pre-project runoff. The storm drainage plan will require the construction of new storm water drainage facilities on the Project site; however, the construction of these facilities would not substantially alter the existing drainage pattern of the area, or alter the course of a stream or river. Implementation of the proposed Project with the following mitigation measures would have a ***less-than-significant*** impact relative to this environmental topic.

Mitigation Measure(s)

Mitigation Measure HYDRO-1*: Prior to the issuance of a building or grading permit, the Project applicant shall submit a drainage plan to the City of Manteca for review and approval. The plan shall include an engineered storm drainage plan that demonstrates attainment of pre-project runoff requirements and describe the volume reduction measures and treatment controls used to reach attainment consistent with the Manteca Storm Drain Master Plan.*

Mitigation Measure HYDRO-2*: The Project applicant shall implement the following nonstructural BMPs that focus on preventing pollutants from entering stormwater:*

- *Pollution Prevention/Good Housekeeping*
    - *Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop a spill response and prevention plan as a component of (1) SWPPPs prepared for construction activities, (2) SWPPPs for facilities subject to the NPDES Stormwater Permit, and (3) spill prevention control and countermeasure plans for qualifying facilities. The spill response and prevention plan shall be implemented during all construction activities.*
- *Operation and Maintenance (O&M) of Treatment Controls*
    - *Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop an Operation and Maintenance (O&M) Plan for the storm drainage facilities to ensure long-term performance. The O&M plan shall incorporate the manufacturers' recommended maintenance procedures and include (1) provisions for debris removal, (2) guidance for addressing public health or safety issues, and (3) methods and criteria for assessing the efficacy of the storm drainage system. An annual report shall be submitted to the City certifying that maintenance of the facilities was conducted according to the O&M plan.*

Response d): According to the FEMA FIRM maps, the Project is located in an 'Area with Reduced Flood Risk Due to Levee' (see Figure 9 for the Flood Hazard Map). In 2007, the State of California passed a series of laws referred to as Senate Bill (SB) 5 directing the Department of Water Resources (DWR) to prepare flood maps for the Central Valley flood system and the State Plan of Flood Control, which includes a system of levees and flood control facilities located in the Central Valley. This legislation also set specific locations within the area affected by the 200-year flood event as the urban level of flood protection (ULOP) for the Central Valley.

Separately, the entire Project site is located within a dam inundation area for the New Melones Dam and the San Luis Dam (see Figure 10 for the dam inundation areas located within and near to the Project site). Dam failure is generally a result of structural instability caused by improper design or construction, instability resulting from seismic shaking, or overtopping and erosion of the dam. Larger dams that are higher than 25 feet or with storage capacities over 50 acre-feet of water are regulated by the California Dam Safety Act, which is implemented by the California Department of Water Resources, Division of Safety of Dams (DSD). The DSD is responsible for inspecting and monitoring these dams. The Act also requires that dam owners submit to the California Office of Emergency Services inundation maps for dams that would cause significant loss of life or personal injury as a result of dam failure. The County Office of Emergency Services is responsible for developing and implementing a Dam Failure Plan that designates evacuation plans, the direction of floodwaters, and provides emergency information.

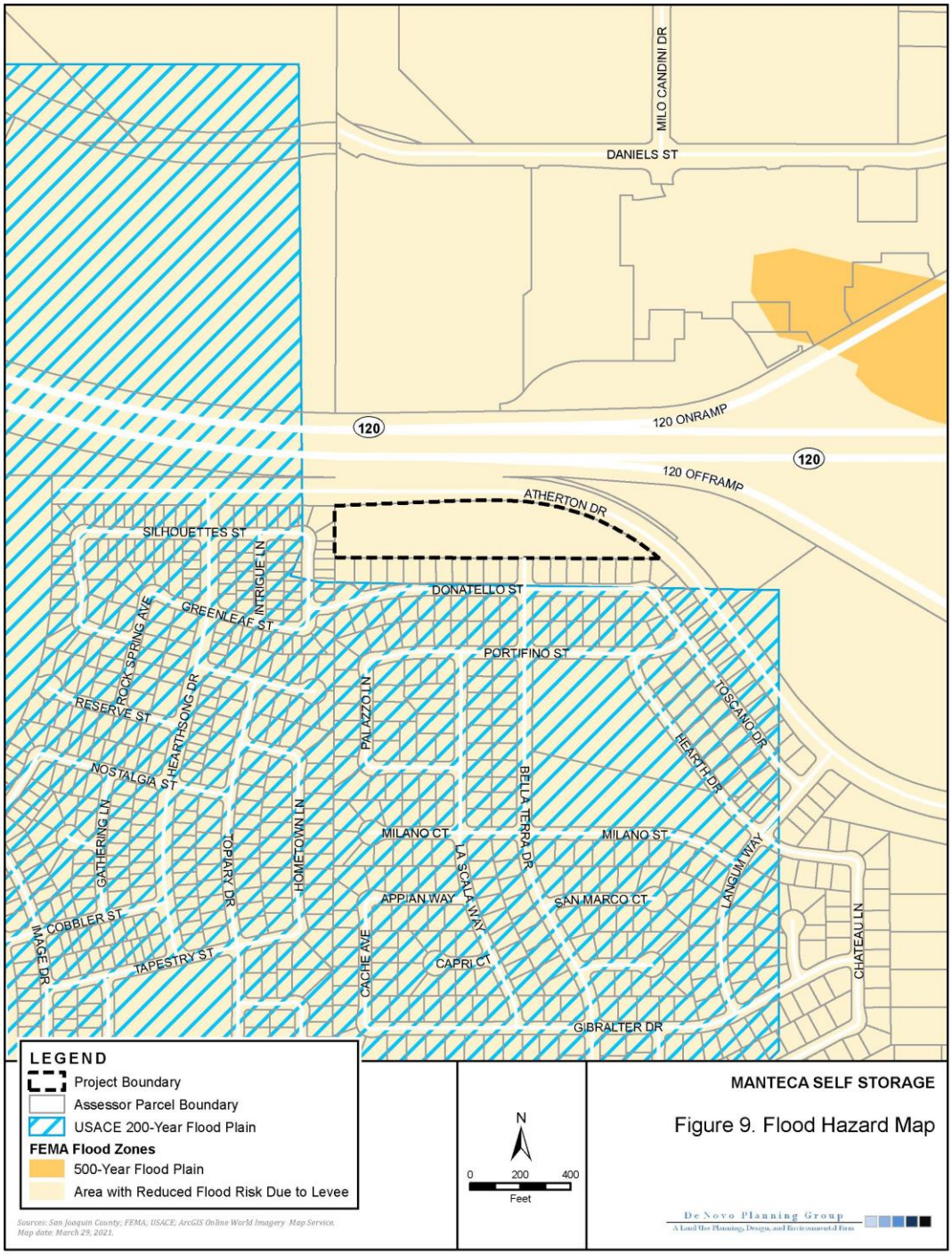
Regular inspection by DSD and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event.

The proposed Project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.

The Project site is not anticipated to be inundated by a tsunami because it is located at an elevation of 23 to 28 feet above sea level and is approximately 60 miles away from the Pacific Ocean which is the closest ocean waterbody.

The Project site is not anticipated to be inundated by a seiche because it is not located in close proximity to a water body capable of creating a seiche.

Implementation of the proposed Project would have a ***less than significant*** impact relative to flood hazards, seiches, and tsunamis.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TOSCANO DR
HEARTH DR
NOSTALGIA ST
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HOMETOWN LN
TOPAZ DR
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LANGUM WAY
APPIAN WAY
SAN MARCO CT
COBBLER ST
MAGEE DR
TAPESTRY ST
CACHE AVE
CAPRI CT
CHATEAU LN
GIBRALTER DR
LEGEND
Project Boundary
Assessor Parcel Boundary
USACE 200-Year Flood Plain
FEMA Flood Zones
500-Year Flood Plain
Area with Reduced Flood Risk Due to Levee
Sources: San Joaquin County; FEMA; USACE; ArcGIS Online World Imagery Map Service.
Map date: March 29, 2021.
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MANTECA SELF STORAGE
Figure 9. Flood Hazard Map
De Novo Planning Group
A Land Use Planning, Design, and Environmental Firm

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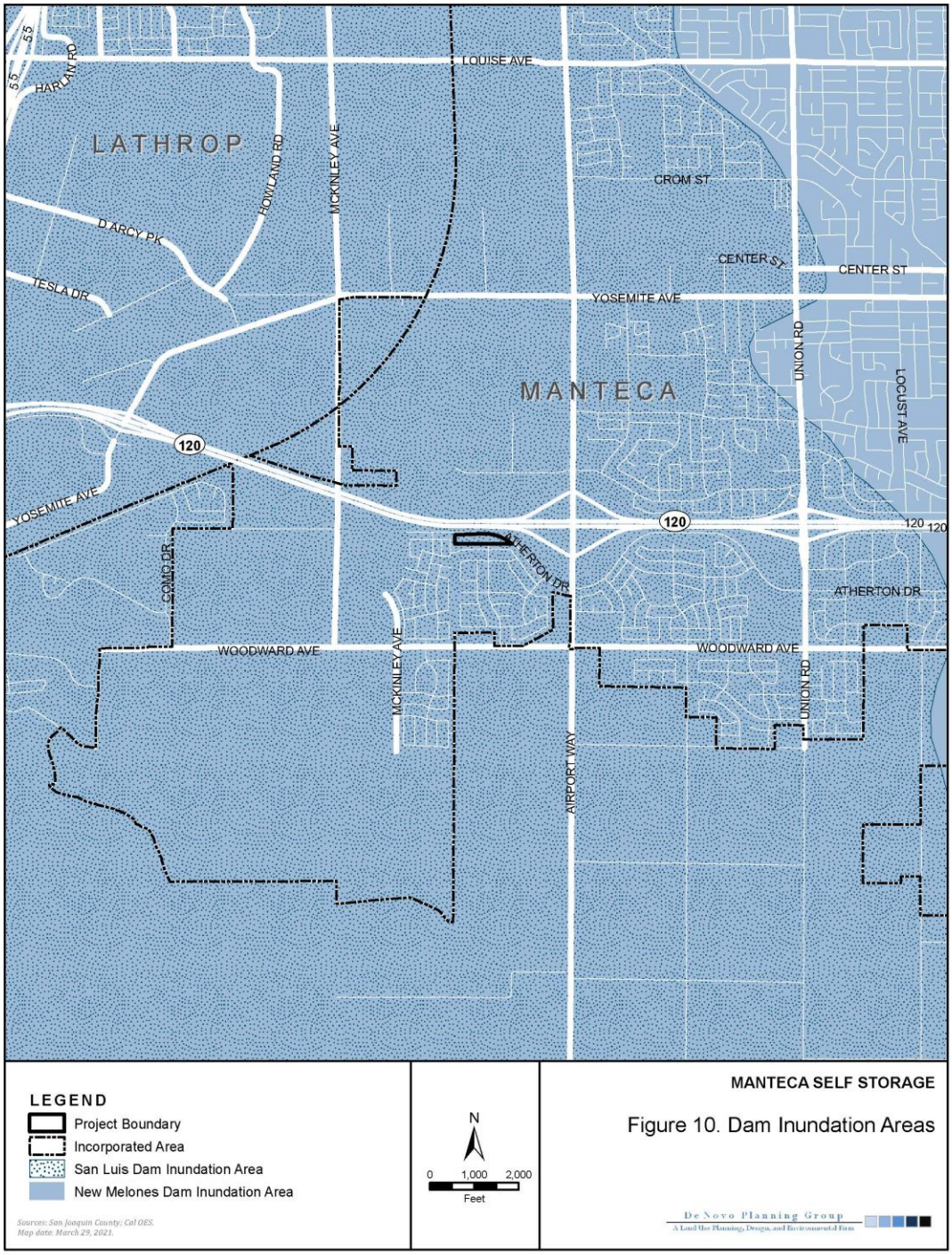
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YOSEMITE AVE
UNION RD
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ATHERTON DR
COMO DR
WOODWARD AVE
WOODWARD AVE
MCKINLEY AVE
AIRPORT WAY
UNION RD
LEGEND
Project Boundary
Incorporated Area
San Luis Dam Inundation Area
New Melones Dam Inundation Area
Sources: San Joaquin County; Cal OES.
Map date: March 29, 2021.
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MANTECA SELF STORAGE
Figure 10. Dam Inundation Areas
De Novo Planning Group
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XI. LAND USE AND PLANNING

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Physically divide an established community?			X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Responses to Checklist Questions

Response a): The Project site is located within the Manteca City limits and is adjacent primarily to existing urban uses. The proposed Project would not physically divide an established community. Implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

Response b): The key land use planning documents that are directly related to, or that establish a framework within which the proposed Project must be consistent, include:

- City of Manteca General Plan; and
- City of Manteca Zoning Ordinance.

Currently, the 5.64-acre Project site has a General Plan designation of GC (General Commercial), which allows for wholesale, warehousing, heavy commercial uses, highway oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The Project site zoning is CG (General Commercial). According to the City's Municipal Code, "Personal Storage Facility" uses are conditionally allowed under CG zoning.

The proposed Project would not conflict with any goals, policies, or implementing actions contained within the General Plan. Therefore, impacts to land use compatibility would be ***less than significant***.

XII. MINERAL RESOURCES

Would the project:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Existing Setting

The California Geological Survey identifies areas that contain or that could contain significant mineral resources so as to provide context for local agency land use decisions and to protect availability of known mineral resources. Classifications ranging from Mineral Resource Zone (MRZ) -1 to MRZ-4 are based on knowledge of a resource's presence and the quality of the resource. No mineral extraction operations are known to exist in or adjacent to the Project site. The Project site is within MRZ-1, as delineated by the Mineral Resources and Mineral Hazards Mapping Program (MRMHMP) (California Department of Conservation, 2015). MRZ-1 is defined by the MRMHMP as being in areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

Responses to Checklist Questions

Responses a), b): As noted above, the Project site is located within MRZ-1. The proposed Project activities would not result in substantial subsurface excavation and would not preclude future exploration for, and extraction of, mineral resources since the proposed use would be decommissioned in the long-term. Therefore, the proposed Project would not result in the loss of an available known mineral resources nor result in the loss of availability of locally-important mineral resource recovery sites delineated in a local general plan, specific plan, or other land use plan. Additionally, there are no oil and gas extraction wells within or near the Project site. Therefore, the impact is ***less than significant*** to this environmental topic.

XIII. NOISE

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

Fundamentals of Acoustics: Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large range of numbers. The decibel (dB) scale is used to facilitate graphical visualization of large ranges of numbers. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a graphically practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels and are expressed in units of dBA, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound power levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. CNEL is similar to L_{dn}, but includes a +5 dBA penalty for evening noise. Typically, CNEL and L_{dn} values are within 0.5 dBA of each other and are often considered to be synonymous. Table NOISE-1 lists several examples of the noise levels associated with common situations.

Table NOISE-1: Typical Noise Levels

Common Outdoor Activities	*Noise Level (dBA)*	*Common Indoor Activities*
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office
Quiet Urban Nighttime	--40--	Theater, Large Conference Room
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

SOURCE: CALTRANS, TECHNICAL NOISE SUPPLEMENT, TRAFFIC NOISE ANALYSIS PROTOCOL. NOVEMBER 2009.

Effects of Noise on People: The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dBA per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Regulatory Setting – Manteca General Plan: The City of Manteca General Plan Noise Element contains goals, policies, and implementation measures for assessing noise impacts within the City. Listed below are the noise goals, policies, and implementation measures that are applicable to the proposed Project:

Goals

N-1. Protect the residents of Manteca from the harmful and annoying effects of exposure to excessive noise.

N-3. Ensure that the downtown core noise levels remain acceptable and compatible with commercial and higher density residential land uses.

N-4. Protect public health and welfare by eliminating existing noise problems where feasible, by establishing standards for acceptable indoor and outdoor noise, and by preventing significant increases in noise levels.

N-5. Incorporate noise considerations into land use planning decisions, and guide the location and design of transportation facilities to minimize the effects of noise on adjacent land uses.

Policies

N-P-2. New development of residential or other noise-sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to satisfy the performance standards in Table 9-1 (Table 14 of this section).

N-P-3. The City may permit the development of new noise-sensitive uses only where the noise level due to fixed (non-transportation) noise sources satisfies the noise level standards of Table 9-2. Noise mitigation may be required to meet Table 9-2 performance standards (Table 15 of this section).

N-P-5. In accord with the Table 9-2 standards, the City shall regulate construction-related noise impacts on adjacent uses.

Implementation Measures

N-I-1. New development in residential areas with an actual or projected exterior noise level of greater than 60 dB L_{dn} will be conditioned to use mitigation measures to reduce exterior noise levels to less than or equal to 60 dB L_{dn}.

N-I-3. In making a determination of impact under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels are increased by 10 dB or more. An increase from 5-10 dB may be substantial. Factors to be considered in determining the significance of increases from 5-10 dB include:

- the resulting noise levels
- the duration and frequency of the noise
- the number of people affected
- the land use designation of the affected receptor sites
- public reactions or controversy as demonstrated at workshops or hearings, or by correspondence
- prior CEQA determinations by other agencies specific to the project

N-I-4. Control noise at the source through use of insulation, berms, building design and orientation, buffer space, staggered operating hours and other techniques. Use noise barriers to attenuate noise to acceptable levels.

Table NOISE-2: Maximum Allowable Noise Exposure Mobile Noise Sources

MAXIMUM ALLOWABLE NOISE EXPOSURE MOBILE NOISE SOURCES

Land Use[4]	Outdoor Activity Areas[1]	Interior Spaces	
		Ldn/CNEL, dB	Leq, dB[3]
Residential	60[2]	45	
Transient Lodging	60[2]	45	
Hospitals, Nursing Homes	60[2]	45	
Theaters, Auditoriums, Music Halls			35
Churches, Music Halls	60[2]		40
Office Buildings	65		45
Schools, Libraries, Museums			45
Playgrounds, Neighborhood Parks	70		

[1]Outdoor activity areas for residential development are considered to be backyard patios or decks of single family dwellings, and the common areas where people generally congregate for multi-family developments. Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

[2]In areas where it is not possible to reduce exterior noise levels to 60 dB L_{dn} or below using a practical application of the best noise-reduction technology, an exterior noise level of up to 65 L_{dn} will be allowed.

[3]Determined for a typical worst-case hour during periods of use.

[4]Where a proposed use is not specifically listed on the table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the City.

SOURCE: MANTECA GENERAL PLAN, TABLE 9-1.

Table NOISE-3: Performance Standards for Stationary Noise Sources or Projects Affected by Stationary Noise Sources

PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES OR PROJECTS AFFECTED BY STATIONARY NOISE SOURCES[1,2]

Noise Level Descriptor	Daytime	Nighttime
	7 a.m. to 10 p.m.	10 p.m. to 7 a.m.
Hourly Leq, dB	50	45
Maximum Level, dB	70	65

[1]Each of the noise levels specified above should be lowered by five (5) dB for simple noise tones, noises consisting primarily of speech or music, or recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints.

[2]No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.

SOURCE: MANTECA GENERAL PLAN, TABLE 9-2.

Regulatory Setting – Manteca Noise Ordinance: Section 9.52.030 of the City of Manteca Municipal Code prohibits excessive or annoying noise or vibration to residential and commercial properties in the City. The following general rules are outline in the ordinance:

9.52.030 Prohibited noises—General standard

No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any unnecessary and unreasonable noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons within the neighborhood from which said noises emanate or which interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or which may detrimentally or adversely affect such residences or places of business. (Ord. 1374 § 1(part), 2007)

17.58.050 D. Exempt Activities

8. Construction activities when conducted as part of an approved Building Permit, except as prohibited in Subsection 17.58.050(E)(1) (Prohibited Activities) below.

17.58.050 E. Prohibited Activities

1. Construction Noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work daily between the hours of 7:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities.

Responses to Checklist Questions

Response a): The proposed Project has the potential to generate an increase in temporary ambient noise from project construction activities, and an increase in permanent ambient noise during project operation.

Construction Noise: The proposed Project could result in temporary or periodic increases in ambient noise levels in the project vicinity above levels existing conditions. Table NOISE-4, below, provides a list of the types of equipment which may be associated with construction activities and the associated noise levels.

Table NOISE-4: Construction Equipment Noise

Type of Equipment	*Predicted Noise Levels, L_{max} dB*				*Distances to Noise Contours, feet*	
	Noise Level at 50'	*Noise Level at 100'*	*Noise Level at 200'*	*Noise Level at 400'*	*70 dB L_{max} contour*	*65 dB L_{max} contour*
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Concrete Saw	90	84	78	72	500	889
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315
Jackhammer	89	83	77	71	446	792
Pneumatic Tools	85	79	73	67	281	500

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

In order for noise impacts created by construction of the proposed Project to be considered potentially significant, the construction noise level would need to either increase noise levels by 10 dB or more where the without project noise level is less than the 60-dB Ldn residential standard, or increase noise levels by 5 dB or more where the without project noise level is greater than the 60-dB Ldn residential standard.

Activities involved in project construction would typically generate maximum noise levels ranging from 76 to 89 dB at a distance of 50 feet. Nevertheless, the proposed Project would be required to implement Mitigation Measure NOI-1, which requires the Project applicant to follow strict noise attenuation requirements. Specifically, Mitigation Measure NOI-1 requires the contractor to implement various sound control measures, including limitation of construction hours, and using noise attenuation devices on heavy equipment.

Ultimately, construction related noise is temporary and with implementation of Mitigation Measure NOI-1, impacts from construction noise are considered ***less than significant***.

Operational Noise: Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

The proposed Project would not directly generate increased noise beyond typical noise levels found at self-storage projects of the kind developed by the proposed Project. The proposed Project would generate noise from the generation of new passenger vehicle trips, as well as from

on-site activities such as landscaping. However, operational vehicle traffic generated by the proposed Project would be approximately 55 trips per day.

In order for noise impacts created by roadway noise to be considered potentially significant, noise generated by the proposed Project would need to either increase noise levels by 10 dB or more, where the noise level without the proposed Project is less than the 60-dB Ldn residential standard, or increase noise levels by 5 dB or more where the noise level without the proposed Project is greater than the 60-dB Ldn residential standard.

Moreover, the proposed Project would be required to implement Mitigation Measure NOI-2, which requires limitations on the use of street sweepers and mechanical landscape equipment, as applicable.

Therefore, operation traffic noise associated with the proposed Project would result in a **less than significant** impact generated from project-related traffic noise.

Conclusion

The proposed Project is not anticipated to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project site in excess of the applicable standards. Nevertheless, the proposed Project would be required to implement the following mitigation measures, which would provide for additional construction-related noise attenuation requirements. With implementation of Mitigation Measure NOI-1 and NOI-2, this is a ***less than significant*** impact.

Mitigation Measure(s)

Mitigation Measure NOI-1*: During project construction activities, the applicant shall require its construction contractors to adhere to the following noise attenuation requirements:*

- *Construction activities shall be limited to the hours between 7 a.m. to 8 p.m. daily. The City of Manteca Director of Public Works shall have the discretion to permit construction activities to occur outside of allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions necessary to pour concrete).*
- *All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. If no noise-reduction features were installed by the manufacturer, then the contractor shall require that at least a muffler be installed on the equipment.*
- *Construction staging and heavy equipment maintenance activities shall be performed on the northernmost part of the Project site (along Atherton Road) to create the greatest separation from the nearest residence, unless safety or technical factors take precedence (e.g., an equipment breakdown). Alternatively, staging and maintenance could be performed on adjacent vacant parcels so long as the separation to the nearest residence is greater than what could be achieved on the Project site.*

Mitigation Measure NOI-2*: During project operations, the use of street sweepers and mechanical landscape maintenance equipment (lawnmowers, leaf blowers, etc.) shall be prohibited between the hours of 10 p.m. and 7 a.m.*

Response b): Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table NOISE-5 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

The primary vibration-generating activities associated with the proposed Project would occur during construction when activities such as grading, utilities placement, and roadway construction occur. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located adjacent to the Project site. However, there is an existing sound wall that surrounds the Project site along its western and southern boundary, thereby blocking a large amount of noise and vibration on the nearby residences that would occur during construction activities. Moreover, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table NOISE-6 shows the typical vibration levels produced by construction equipment.

Table NOISE-5: Effects of Vibration on People and Buildings

Peak Particle Velocity		***Human Reaction***	***Effect on Buildings***
mm/sec.	***in./sec.***		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings

5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. TRANSPORTATION RELATED EARTHBORN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.

Table NOISE-6: Vibration Levels for Varying Construction Equipment

Type of Equipment	*Peak Particle Velocity @ 25 feet (inches/second)*	*Peak Particle Velocity @ 100 feet (inches/second)*
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006

The Tables NOISE-5 and NOISE-6 data indicate that construction vibration levels anticipated for the proposed Project are less than the 0.25 in/sec p.p.v. threshold of damage to buildings but more than the 0.1 in/sec threshold of annoyance criteria at distances over 25 feet (specifically for vibratory compactors/rollers). However, there is an existing sound wall that surrounds the Project site along its western and southern boundary, thereby blocking a large amount of noise and vibration on the nearby residences that would occur during construction activities. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

Separately, operational levels of vibration are expected to be minimal, as the on-site operations and on- and off-site use of vehicles generated by the proposed Project are not known to be major sources of vibration. Any vibration generated by these sources on sensitive receptors would be far less than those generated by project construction activities nearby sensitive receptors during project construction. Therefore, operational vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

Therefore, implementation of the proposed Project would have a ***less than significant*** impact relative to this environmental topic.

Response c): The Project site is not located within the vicinity of 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. The closest airport or airstrip is the Stockton Metropolitan Airport, located approximately 7 miles north of the Project site. Because of distance, the Project site is not adversely impacted by aviation

noise. The proposed Project would, therefore, not expose people residing or working in the vicinity of the Project site to excessive noise levels associated with such airport facilities. The Project site is not located within the vicinity of a private airstrip. Implementation of the proposed Project would have ***no impact*** relative to this topic.

XIV. POPULATION AND HOUSING

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

Responses to Checklist Questions

Response a): At full buildout, the proposed Project is proposing to build nine (9) approximately 20-foot-tall storage buildings, containing approximately 844 total individual storage units, and one (1) office building (the office building would be located within Building D). The facility is expected to accommodate approximately 55 vehicles daily. The installation of new infrastructure would be limited to the internal Project site. The sizing of the infrastructure would be specific to the size of the proposed Project building and the number and type of vehicles that would travel to and from the Project site. Implementation of the proposed Project would not induce substantial population growth in an area, either directly or indirectly. Although the proposed Project would create new jobs, which could create some population growth, it is anticipated that such new jobs would be for the existing labor force within Manteca and the surrounding communities. Therefore, implementation of the proposed Project would have ***no impact*** relative to this topic.

Response b): The Project site does not contain housing. The proposed Project would not displace housing or people. Implementation of the proposed Project would have ***no impact*** relative to this topic.

XV. PUBLIC SERVICES

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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?		X		
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?				X

Responses to Checklist Questions

Response a):

Fire Protection

The Project site is currently under the jurisdiction of the Manteca Fire Department. The Manteca Fire Department serves approximately 71,164 residents throughout approximately 17.2 square miles within the City limits. The Manteca Fire Department operates out of several facilities that are strategically located in the City of Manteca. The nearest fire station to the Project site is the Manteca Fire Station 242 located at 1154 Union Road, approximately 1.3 miles east of the Project site.

The Manteca Fire Department maintains a goal for the initial company of three (3) firefighters to arrive on scene for fire and emergency medical service (EMS) incidents within five (5) minutes 90% of the time (Response Effectiveness). In 2016, the Department averaged a response time for Code 3 emergencies such as fires, medical calls or auto accidents at 4:20 minutes City-wide. In 2017, the Department averaged a 4:22 response time City-wide. In 2017, the MFD on an average handled 7,579 emergency calls and 6,737 in 2016. The Department is currently meeting the Response Effectiveness goal.

With the recent construction of Fire Station 245, the City has achieved full alarm standard outlined by the National Fire Protection Association 1710 for the first time in the City's History; this directly affects the Insurance Services Office (ISO) Public Protection Classification (PPC) rating, enhances service to the citizens of Manteca, and improves the department's ability to obtain grants. For the first time in at least three decades, more than 90 percent of Manteca's residents are now within 5 minutes response time of where firefighters are based. Prior to the opening of the Manteca Fire Station 245 in June 2020, it took the closest stationed fire engine eight to 10 minutes to arrive at calls in southeast Manteca where there are more than 2,600 homes outside the targeted 5-minute response time.

The City of Manteca receives funds for the provision of public services through development fees, property taxes, and connection and usage fees. As land is developed within the City and annexed into the City of Manteca, these fees apply. The City of Manteca reviews these fee structures on an annual basis to ensure that they provide adequate financing to cover the provision of city

services. The City's Community Development, Public Works, and Finance Departments are responsible for continual oversight to ensure that the fee structures are adequate. The City reviews the referenced fees and user charges on an annual basis to determine the correct level of adjustment required to reverse any deficits and assure funding for needed infrastructure going forward. The City includes discussion of these fees and charges as part of the annual budget hearings.

The City of Manteca General Plan 2023 includes policies and implementation measures that would allow for the Department to continue providing adequate facilities and staffing levels. Below is a list of relevant policies:

- The City shall endeavor to maintain an overall fire insurance (ISO) rating of 4 or better (Policy PF-P-42).
- The City shall endeavor through adequate staffing and station locations to maintain the minimum feasible response time for fire and emergency calls (PF-P-43).
- The City shall provide fire services to serve the existing and projected population (PF-P-44).
- The City will establish the criteria for determining the circumstances under which fire service will be enhanced (PF-P-45).
- The Fire Department shall continuously monitor response times and report annually on the results of the monitoring (PF-I-24).
- The City shall encourage a pattern of development that promotes the efficient and timely development of public services and facilities (LU-P-3).

Impact fees from new development are collected based upon projected impacts from each development. The adequacy of impact fees is reviewed on an annual basis to ensure that the fee is commensurate with the service. Payment of applicable impact fees by new development, and ongoing revenues that would come from property taxes, sales taxes, and other revenues generated by the proposed Project, would fund capital and labor costs associated with fire protection services. Payment of such fees is adequate to ensure that the proposed Project would not result in any CEQA impacts related to this topic, including the potential for the proposed Project to cause substantial adverse physical impact associated with the provision of new or physically alternated governmental services, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Therefore, with implementation of Mitigation Measure PSU-1, the impact of the proposed Project on the need for additional fire services facilities is ***less than significant***.

Mitigation Measure(s)

Mitigation Measure PSU-1*: Prior to issuance of building permits for any project uses, the Project applicant shall provide the City of Manteca with all applicable fire protection development fees in accordance with the latest adopted fee schedule.*

Police Protection

The Project site is currently under the jurisdiction of the Manteca Police Department. In 2019, the MPD had 74 sworn officers. The Manteca Police Department operates out of its headquarters

located at 1001 W. Center Street. The Project site is located approximately 1.8 miles northeast of the headquarters.

The Manteca Police Department is organized into two divisions: Operations and Services. Additionally, the Police Department operates a Public Affairs Unit. For budgeting purposes, the Police Department is organized into the following programs: administration, patrol, investigations, support services, dispatch, code enforcement, jail services, and animal services.

Response times are an important benchmark of police service. Response times can vary greatly depending on the size of the city and department, geographical location, and levels of crime. Smaller cities usually have faster response times, due simply to the geography. Calls for service are prioritized into three general categories: Priority 1, Priority 2 or Priority 3. Priority 1 calls are calls where a threat is posed to life or a crime of violence. Priority 2 calls are calls for service where there is an urgency or suspicious behavior. Priority 3 calls are calls for service where no emergency or serious problem is involved. In 2016, there were 217 Priority 1 calls, 18,080 Priority 2 calls, and 8,551 Priority 3 calls, totaling 26,841 calls. Calls for service increased to 46,256 total calls in 2018. The averages for the department's response times in 2016 for the 3 priorities are listed below.

- Priority 1 calls: 2016, 4 minutes and 27 seconds.
- Priority 2 calls: 2016, 27 minutes and 2 seconds.
- Priority 3 calls: 2016, 50 minutes and 22 seconds.

The City of Manteca receives funds for the provision of public services through development fees, property taxes, and connection and usage fees. As land is developed within the City and annexed into the City of Manteca, these fees apply. The City of Manteca reviews these fee structures on an annual basis to ensure that they provide adequate financing to cover the provision of city services. The City's Community Development, Public Works, and Finance Departments are responsible for continual oversight to ensure that the fee structures are adequate. The City reviews the referenced fees and user charges on an annual basis to determine the correct level of adjustment required to reverse any deficits and assure funding for needed infrastructure going forward. The City includes discussion of these fees and charges as part of the annual budget hearings.

The City's General Plan includes policies and implementation measures that would allow for the Manteca Police Department to continue providing adequate staffing levels. Below is a list of relevant policies:

- The City shall endeavor through adequate staffing and patrol arrangements to maintain the minimum feasible police response times for police calls. As of 2019, the City had 74 sworn officers. With a population of 84,800 (as of 2020), that equates to a staffing level of 0.87 officers per 1000 residents.

- The City shall provide police services to serve the existing and projected population. The Police Department will continuously monitor response times and report annually on the results of the monitoring.

Impact fees from new development are collected based upon projected impacts from each applicable development. The adequacy of impact fees is reviewed on an annual basis to ensure that the fee is commensurate with the service. Payment of the applicable impact fees by the Project applicant, and ongoing revenues that would come from property taxes, sales taxes, and

other revenues generated by the proposed Project, would fund capital and labor costs associated with police services. Payment of such fees is adequate to ensure that the proposed Project would not result in any CEQA impacts related to this topic, including the potential for the proposed Project to cause substantial adverse physical impact associated with the provision of new or physically alternated governmental services, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts.

Based on the current adequacy of existing response times and the ability of the Manteca Police Department to serve the City, it is anticipated that the existing police department facilities are sufficient to serve the proposed Project. Consequently, any impacts would be ***less than significant***.

Schools

Most schools within the City of Manteca are part of the Manteca Unified School District (MUSD). The MUSD provides school services for grades kindergarten through 12 (K-12) within the communities of Manteca, Manteca, Stockton, and French Camp. The District is approximately 113 square miles and serves more than 23,000 students. Within the City of Manteca, there are three elementary schools (Manteca Elementary School, Joseph Widmer School, and Mossdale Elementary School) and one high school (Sierra High School). River Islands has two charter elementary schools, located within the Banta Unified School District (River Islands Technology Academy and the S.T.E.A.M. Academy).

MUSD provides school services for grades K through 12 within the communities of Manteca, Lathrop, Stockton, and French Camp. MUSD operates 14 elementary and middle schools (grades K-8), four high schools (grades 9-12), one community day school (grades 7-12), and one vocational academy (grades 11-12). The schools in the City had a total enrollment of approximately 14,279 students, of which 9,416 were enrolled in elementary and middle school (grades K – 8) and 4,863 were enrolled in high school (grades 9 – 12).

The proposed Project does not include any residential units, and therefore would not directly increase the student population in the area.

The MUSD collects impact fees from new developments under the provisions of The Leroy F. Greene School Facilities Act of 1998, enacted by Senate Bill 50 ("SB 50"). SB 50 restricts the ability of local agencies to deny or condition land use approvals on the basis that school facilities are inadequate and precludes local agencies from requiring anything other than payment of the prevailing developer fee adopted by the local school district. SB 50 sets forth the "exclusive methods of considering and mitigating impacts on school facilities" resulting from any planning and/or development project, regardless of whether its character is legislative, adjudicative, or both. Govt. Code § 65996(a) (emphasis added).

Section 65995(h) provides that "[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995 … is hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property … on the provision of adequate school facilities."

The reference in Section 65995(h) to fees "imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995" is to per-square-foot school fees that can be imposed by school districts on new residential and commercial and industrial construction. Pursuant to this authority, the District has adopted a Level 1 fee in the amount of $3.79 per

square foot of assessable space of new residential construction. Payment of this Level 1 fee by the applicant constitutes full and complete mitigation of all impacts of the proposed Project on the District's school facilities as a matter of law. (Gov't Code § 65995(h).)

Under SB 50, the City of Manteca is legally precluded from concluding, under CEQA or otherwise, that payment of the prevailing Level 1 fee will not completely mitigate the impacts of the proposed Project. Government Code § 65995(a) sets forth the "exclusive methods of considering and mitigating impacts on school facilities" when evaluating a development project. Because the methods of both "considering and mitigating" impacts on school facilities set forth in Government Code section 65996(a) are exclusive, SB 50 obviates the need for CEQA documents even to contain a description and analysis of a development project's impacts on school facilities. See *Chawanakee Unified Sch. Dist. v. Cty. of Madera*, 196 Cal. App. 4th 1016, 1027 (2011). Further, these statutes prohibit local agencies from concluding that payment of the authorized fees do not constitute full and complete mitigation of a project's school facilities impacts. Local agencies have no power to supersede the legislature's express and unambiguous directives on this subject.

Nor does the City possess the authority to deny or condition the proposed Project unless the applicant agrees to pay fees or provide other mitigation beyond the duly adopted Level 1 fee. Under Government Code § 65995(a), a "local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property . . . on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to [SB 50.]"

In short, payment of the Level 1 fee is "deemed to provide full and complete school facilities mitigation and, notwithstanding [Government Code] Section 65858, or [CEQA], or any other provision of state or local law, a state or local agency may not deny or refuse to approve [the] development of real property ... on the basis that school facilities are inadequate."

Payment of the applicable impact fees from new development, and ongoing revenues that would come from taxes, would fund capital and labor costs associated with school services. The adequacy of fees is reviewed on an annual basis to ensure that the fee is commensurate with the service. Payment of the applicable impact fees, and ongoing revenues that would come from property taxes and other revenues generated by the proposed Project, would fund improvements associated with school services.

The provisions of State law are considered full and complete mitigation for the purposes of analysis under CEQA for school construction needed to serve new development. In fact, State law expressly precludes the City from reaching a conclusion under CEQA that payment of the Leroy F. Greene School Facilities Act school impact fees would not completely mitigate new development impacts on school facilities. Consequently, the City of Manteca is without the legal authority under CEQA to impose any fee, condition, or other exaction on the proposed Project for the funding of new school construction other than the fees allowed by the Leroy F. Greene School Facilities Act. Additionally, local agencies are prohibited from using the inadequacy of school facilities as a basis for denying or conditioning approvals. Although MUSD may collect higher fees than those imposed by the Leroy F. Greene School Facilities Act, no such fees are required to mitigate the impact under CEQA. Because the proposed Project would pay fees as required by The Leroy F. Greene School Facilities Act, this impact would be ***less than significant***.

Parks

CEQA requires that the proposed Project is analyzed to determine whether any substantial adverse impacts would be associated with any new or physically altered governmental facilities that may be required to serve the proposed Project (in this case, for park and recreation facilities). The proposed Project directly increases the number of persons in the area as a result of an increase in employment potential. The proposed Project does not include any residential units.

The proposed Project does not include the construction of residential uses, does not directly increase the need for additional parks. Implementation of the proposed Project would have a **no impact** relative to this topic.

Other Public Facilities

The proposed Project would not result in a need for other public facilities that are not addressed above, or in Section XVIII, Utilities and Service Systems. Implementation of the proposed Project would have ***no impact*** relative to this issue.

XVI. RECREATION

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

Responses to Checklist Questions

Responses a): The proposed Project does not include the construction of residential uses, and therefore does not generate additional direct demand on park services. Thus, the potential impact would be reduced to a ***less than significant*** level.

Responses b): The proposed Project does not include the construction of recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Implementation of the proposed Project would have ***no impact*** relative to this topic.

XVII. TRANSPORTATION

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

Background

The *Transportation Impact Analysis Report* (May 2021) was prepared by Fehr & Peers for the proposed Project. The following is a summary of the report, which is contained in Appendix C.

Responses to Checklist Questions

Responses a-b):

Project Trip Generation

Table TR-1 presents the estimated trips generated by the proposed Project for weekday daily, AM and PM peak hour conditions. As shown below, the proposed Project would generate approximately 55 daily vehicle trips, 7 AM peak hour trips, and 13 PM peak hour trips. The trips generated by the residential land uses are based on trip rates from the *Trip Generation Manual 6th Edition*.

Table TR-1: Project Trip Generation

ITE Land Use (Code)	*Quantity (Storage units)*	*Vehicle Trips*						
		Daily	*AM*			*PM*		
		Total	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Self-Storage Facility	844	55	4	3	7	6	7	13

SOURCE: FEHR & PEERS, 2021.

Project Trip Distribution

Project trips were distributed throughout the study area based the location of the project site and existing development. Most trips are anticipated to be local serving trips and were distributed as described below:

- On Airport Way north of State Route 120: 60%
- On Airport Way south of Airport Way/W Atherton Drive: 35%
- On Atherton Drive east of Airport Way: 5%

VMT

Fehr & Peers evaluated the proposed project against the screening criteria in OPR's Technical Advisory. The following criteria, which can be used to determine if a project is expected to result in a less than significant impact, is applicable to proposed project.

- Small projects – projects consistent with a Sustainable Communities Strategy and local general plan that generate or attract fewer than 110 trips per day.

The project site's land use designation in the existing General Plan is GC (General Commercial), which allows for wholesale, warehousing, heavy commercial uses, highway oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The draft General Plan identifies the project site as Commercial, which allows for neighborhood, community, and regional-serving retail and service uses, offices, restaurants, service stations, highway-oriented visitor commercial and lodging, auto-serving and heavy commercial uses, wholesale; warehousing; and more. The San Joaquin Council of Governments 2018 Regional Transportation Plan/Sustainable Communities Strategy is based on the City of Manteca's General Plan land use assumptions.

Therefore, the proposed project is consistent with the General Plan and the San Joaquin Council of Governments 2018 Regional Transportation Plan/Sustainable Communities Strategy.

To evaluate whether the proposed project will attract fewer than 110 trips per day, Fehr & Peerscalculated the project's daily trip generation using information provided by the developer for an existing similar sized facility located in Dixon, CA. Daily trip generation for the month of January and peak hour trip generation for one week during the month of January was provided. Trips were broken down by trips to/from storage units, office and maintenance staff, and office visits. Using this information, Fehr & Peers calculated an average daily trip rate per storage unit. The calculated average daily trip rate is 0.065 trips per storage unit which equates to a total of approximately 55 daily trips for the proposed project.

Because the proposed project is consistent with the RTP and General Plan and will generate fewer than 110 trip per day, there would be a ***less than significant*** impact to this environmental topic.

Responses c): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay. The volumes on the internal roadways and drive aisles would be relatively low such that no significant conflicts would be expected with through traffic on the nearby roadways, including along Atherton Drive. Therefore, the proposed Project would have a ***less than significant*** impact related to this topic.

Responses d): All emergency vehicles arriving to and from the proposed Project would be able to enter via Atherton Drive. In addition, gated emergency vehicle access would be available from one full access intersection on West Atherton Drive and three emergency vehicle only access driveways, two on West Atherton Drive and one connecting to Bella Terra to the south.

Fehr & Peers completed a swept path analysis using AutoTURN software to evaluate the adequacy of site access and on-site circulation for passenger cars, trucks, and moving vans/trucks. The results of this analysis indicate that passenger cars, trucks, and moving vans/trucks up to a 30-foot truck can navigate the site adequately.

All accesses would be designed to City standards that accommodate turning requirements for fire trucks. These multiple entry/exit points provide flexibility for emergency vehicles to access or evacuate from multiple directions during an emergency.

At the proposed Project entrance on Atherton Drive, there are no safety, capacity, or sight distance issues identified with providing either an eastbound left-turn or an eastbound right-turn movement entering the Project site. Therefore, impacts associated with design features and emergency access would be considered ***less than significant***.

XVIII. TRIBAL CULTURAL RESOURCES

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

Responses to Checklist Questions

Responses a), b): AB 52 Tribal Consultation is a requirement by which public agencies are required to consult with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed Project that is subject to CEQA, if the tribes request formal notification and subsequently consultation.

In order to participate in AB 52 tribal consultation, a tribe must specifically request, in writing, to be notified by lead agencies through formal notification of proposed Projects in the geographic area with which the tribe is traditionally and culturally affiliated. However, there are no tribes that have requested such formal notification of proposed Projects in the City of Manteca. Therefore, according to AB 52, there is no requirement that a lead agency (i.e., City of Manteca) engage in AB 52 tribal consultation.

No Tribal Cultural Resources (TCRs) have been documented in the Project site. Nevertheless, the Project site is located in a region where significant cultural resources have been recorded and there remains a potential that undocumented archaeological resources that may meet the TCR definition could be unearthed or otherwise discovered during ground-disturbing and construction activities. Examples of significant archaeological discoveries that may meet the TCR definition would include villages and cemeteries. Due to the possible presence of undocumented TCRs within the Project site, construction-related impacts on tribal cultural resources would be potentially significant. With implementation of the following mitigation measure, the proposed Project would have a ***less than significant*** impact related to tribal cultural resources.

Mitigation Measures

Implement Mitigation Measures CUL-1, and CUL-2

XIX. UTILITIES AND SERVICE SYSTEMS

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

Responses to Checklist Questions

Responses a)-c):

Water

It is anticipated that water supply for the proposed Project would be local groundwater and treated surface water from SSJID's SCWSP. Water distribution will be by an underground distribution system to be installed as per the City of Manteca standards and specifications. The applicant for the proposed Project will provide their proportionate share of required funding to the City for the acquisition and delivery of treated potable water supplies to the proposed Project site through connection fees.

The City's 2015 Urban Water Management Plan (UWMP) indicates that there are adequate water supplies to support existing demand in the City in addition to the proposed Project under average daily and maximum daily demand conditions. According to the City's 2015 Urban Water Management Plan (UWMP), water demand for current and proposed uses in the City of Manteca is 21,894 acre-feet per year (AFY). The City has a projected total supply of 26,428 AFY in the year 2020, leaving 4,534 AFY available. The City's 2015 UWMP Planning Area corresponds with the City SOI established in the City's 2023 General Plan. The City's 2015 UWMP included existing and projected water demands for existing and projected future land uses to be developed within the City's Sphere of Influence through 2030. The water demand projections in the City's 2015 UWMP included existing City water demands, future water demands for developments within the

existing City limit, and future water demands for future service areas outside the existing City limit.

According to the City's 2015 Urban Water Management Plan (UWMP), Commercial land uses are estimated to generate approximately 1,200 gallons of water day per acre. This is likely a highly conservative estimate, given the limited demand for water use that would occur at a self-storage facility such as the proposed Project. Nevertheless, utilizing this water demand factor, water usage would be estimated at 6,768 gallons of water per day (gpd) for the 5.64-acre Project site. Given the 4,534 AFY available with the City of Manteca, the proposed Project would not result in insufficient water supplies available to serve it from existing entitlements and resources. Therefore, a ***less than significant*** impact would occur related to water supply and water infrastructure.

Wastewater

The City of Manteca owns and operates a wastewater collection, treatment, and disposal system, and provides sanitary sewerage service to the City of Manteca and a portion of the City of Lathrop. On April 17, 2015, the RWQCB adopted Waste Discharge Requirements Order No. R5-2015-0026 NPDES NO. CA0081558, prescribing waste discharge requirements for the City of Manteca Wastewater Quality Control Facility (WQCF) and allowing expansion of the plant up to 17.5 mgd.

The City's Wastewater Quality Control Facility Master Plan Update includes projected wastewater generation factors for various land uses. Based on these calculations it was determined that the City will have flows totaling 19.5 mgd as of the General Plan horizon of 2023 with a buildout capacity of 23.0 mgd. The study includes a reduction of industrial and general commercial wastewater generation factors to reflect historical water use data from local businesses.

The proposed Project would increase the amount of wastewater requiring treatment. The wastewater would be treated at the WQCF. Occupancy of the proposed Project would be prohibited without sewer allocation.

The City's available capacity would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments. Additionally, any planned expansion to the WQCF with a subsequent allocation of capacity to the proposed Project would ensure that there would not be a determination by the wastewater treatment and/or collection provider that there is inadequate capacity to serve the proposed Project's projected demand in addition to the provider's existing commitments.

According to the City's 2012 Wastewater Collection System Master Plan Update, General Commercial uses are estimated to generate 750 gallons of wastewater per acre per day. The Project site includes 5.64 acres of General Commercial. Using this rate, the proposed Project uses would generate approximately 4,230 gallons per day (gpd) of wastewater.

Because the Project applicant would pay City PFIP fees to develop the Project site, and adequate long-term wastewater treatment capacity is available to serve full build-out of the proposed Project, a ***less than significant*** impact would occur related to requiring or resulting in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Responses d), e): The City of Manteca Solid Waste Division (SWD) provides solid waste hauling service for the City of Manteca and would serve the proposed Project. Solid waste from Manteca is primarily landfilled at the Forward Sanitary Landfill, located northeast of Manteca. Other landfills used include Foothill Sanitary and North County.

The permitted maximum disposal at the Forward Landfill is 8,668 tons per day. The total permitted capacity of the landfill is 51.04 million cubic yards. The remaining capacity is 23,700,000 cubic yards. Solid waste generated by the proposed Project was estimated based on CalRecycle generation rate estimates by use.

The City's solid waste per capita generation has decreased since 2007 due to the waste diversion efforts of the City. The permitted maximum disposal at the Forward Landfill is 8,668 tons per day. Currently, the average daily disposal is 620 tons per day. The total permitted capacity of the landfill is 51.04 million cubic yards. The addition of solid waste associated with the proposed Project would not exceed the landfill's remaining capacity. The City will need to secure a new location of disposal of all solid waste generated in the City when the Forward landfill is ultimately closed. There are several options that the City will have to consider for solid waste disposal at that time. Because the proposed Project would increase the local waste stream, it would subject to the City's waste connection fee.

Assuming five full-time-equivalent (FTE) daily Project workers, with an annual disposal rate per person of 24.1 pounds per day, the Project would generate 120.5 pounds per day, or approximately 0.06 tons per day, which is well within the available capacity at the Forward Landfill. In addition, the 0.06 tons per day represents just 0.01% of the approximately 620 current tons per day of disposal at the Forward Landfill; this represents a negligible increase in overall daily disposal.

The proposed Project would not interfere with regulations related to solid waste, or generate waste in excess of the capacity of local infrastructure. The proposed Project would have a ***less than significant*** impact relative to this topic.

XX. WILDFIRE

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

Existing Setting

There are no State Responsibility Areas (SRAs) within the vicinity of the Manteca Planning Area. In addition, there are no areas within the City of Manteca that are categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire or a local agency. Although this CEQA topic only applies to areas within an SRA or Very High FHSZ, out of an abundance of caution, these checklist questions are analyzed below.

Responses to Checklist Questions

Response a): The Project site will connect to the existing Atherton Drive. The proposed circulation improvements would allow for sufficient emergency access. The Project site would provide adequate emergency vehicular access via driveway connections with adjoining roadways and an internal circulation network. All driveways and internal roadways would be designed to accommodate large emergency vehicles such as fire engines. These improvements would contribute to effective emergency response and evacuation, and they would promote efficient circulation in the vicinity of the Project site. Furthermore, the proposed Project does not propose any permanent road closures, lane reductions, or other adverse circulation conditions that may adversely affect emergency response or evacuation in the vicinity of the Project site. Furthermore, the City of Manteca does not maintain an emergency response plan or emergency evacuation plan. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response b): The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. San

Joaquin County has areas with an abundance of flashy fuels (i.e., grassland) in the foothill areas of the eastern and western portion of the County. The Project site is located in an area that is predominately urban, which is not considered at a significant risk of wildfire. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response c): The proposed Project would develop build nine (9) approximately 20-foot-tall storage buildings, containing approximately 844 total individual storage units, and one (1) office building (the office building would be located within Building D). The facility is expected to accommodate approximately 55 vehicles daily, on average. The proposed Project would not exacerbate fire risks, nor would there be installation or maintenance of any other infrastructure associated with the proposed Project that would significantly exacerbate fire risk or result in temporary or ongoing impacts to the environment. Therefore, impacts from project implementation would be considered ***less than significant*** relative to this topic.

Response d): Landslides include rockfalls, deep slope failure, and shallow slope failure. Factors such as the geological conditions, drainage, slope, vegetation, and others directly affect the potential for landslides. One of the most common causes of landslides is construction activity that is associated with road building (i.e., cut and fill). The Project site is relatively flat; therefore, the potential for a landslide, as a result of runoff, post-fire slope instability, or drainage changes, in the Project site is essentially non-existent.

Therefore, impacts from proposed Project implementation would be considered ***less than significant*** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
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?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Responses to Checklist Questions

Response a): This Initial Study includes an analysis of the impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the proposed Project to have environmental impacts. This includes the potential for the proposed Project 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, 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. It was found that the proposed Project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. For the reasons presented throughout this Initial Study, the proposed Project would not 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, 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. With the implementation of mitigation measures presented in this Initial Study, the proposed Project would have a ***less than significant*** impact relative to this topic.

Response b): This Initial Study includes an analysis of the impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services,

recreation, transportation/traffic, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the proposed Project to have environmental impacts. It was found that the proposed Project would have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures. These mitigation measures would also function to reduce the proposed Project's contribution to cumulative impacts.

The proposed Project would not increase the population, but it would use of public services and systems. It was found that there is adequate public services available to accommodate the proposed Project.

There are no significant cumulative or cumulatively considerable effects that are identified associated with the proposed Project after the implementation of all mitigation measures presented in this Initial Study. With the implementation of all mitigation measures presented in this Initial Study, the proposed Project would have a ***less than significant*** impact relative to this topic.

Responses c): The construction phase could affect surrounding neighbors through increased air emissions, noise, and traffic; however, the construction effects are temporary and are not considered significant. The operational phase could also affect surrounding neighbors through increased air emissions, noise, and traffic; however, mitigation measures have been incorporated into the proposed Project that would reduce the impacts to a less than significant level. The proposed Project would not cause substantial adverse effects on human beings. Implementation of the proposed Project would have a ***less than significant*** impact relative to this topic.

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APPENDIX A: CALEEMOD RESULTS

Manteca Self Storage

San Joaquin County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.52	1000sqft	0.06	2,524.00	0
Parking Lot	2.69	Acre	2.69	117,176.40	0
Unrefrigerated Warehouse-No Rail	125.83	1000sqft	2.89	125,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total acreage 5.64 acres

Construction Phase -

Trips and VMT -

Demolition - No demolition.

Grading - Site is relatively flat.

Vehicle Trips - Operational trips as provided by the Fehr & Peers Traffic Study (55 daily trips).

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.44
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.44
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.44

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1398	1.3296	1.0749	2.3400e-003	0.2012	0.0609	0.2620	0.0956	0.0568	0.1524	0.0000	207.6401	207.6401	0.0395	0.0000	208.6266
2022	1.0983	1.6194	1.6421	3.7000e-003	0.0842	0.0684	0.1526	0.0229	0.0643	0.0871	0.0000	328.4638	328.4638	0.0540	0.0000	329.8141
Maximum	**1.0983**	**1.6194**	**1.6421**	**3.7000e-003**	**0.2012**	**0.0684**	**0.2620**	**0.0956**	**0.0643**	**0.1524**	**0.0000**	**328.4638**	**328.4638**	**0.0540**	**0.0000**	**329.8141**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1398	1.3296	1.0749	2.3400e-003	0.2012	0.0609	0.2620	0.0956	0.0568	0.1524	0.0000	207.6399	207.6399	0.0395	0.0000	208.6264
2022	1.0983	1.6194	1.6421	3.7000e-003	0.0842	0.0684	0.1526	0.0229	0.0643	0.0871	0.0000	328.4636	328.4636	0.0540	0.0000	329.8139
Maximum	**1.0983**	**1.6194**	**1.6421**	**3.7000e-003**	**0.2012**	**0.0684**	**0.2620**	**0.0956**	**0.0643**	**0.1524**	**0.0000**	**328.4636**	**328.4636**	**0.0540**	**0.0000**	**329.8139**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2021	10-31-2021	0.9224	0.9224
2	11-1-2021	1-31-2022	0.7775	0.7775
3	2-1-2022	4-30-2022	0.7027	0.7027
4	5-1-2022	7-31-2022	0.7181	0.7181
5	8-1-2022	9-30-2022	1.0518	1.0518
		Highest	1.0518	1.0518

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6007	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003
Energy	4.3700e-003	0.0397	0.0334	2.4000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	230.9114	230.9114	9.3100e-003	2.5500e-003	231.9037
Mobile	0.0171	0.1223	0.1929	7.9000e-004	0.0603	6.7000e-004	0.0610	0.0162	6.3000e-004	0.0168	0.0000	72.9030	72.9030	3.3600e-003	0.0000	72.9869
Waste						0.0000	0.0000		0.0000	0.0000	24.4848	0.0000	24.4848	1.4470	0.0000	60.6600
Water						0.0000	0.0000		0.0000	0.0000	9.3736	46.7886	56.1622	0.9649	0.0232	87.1889
Total	**0.6221**	**0.1620**	**0.2275**	**1.0300e-003**	**0.0603**	**3.6900e-003**	**0.0640**	**0.0162**	**3.6500e-003**	**0.0198**	**33.8584**	**350.6053**	**384.4637**	**2.4246**	**0.0257**	**452.7421**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6007	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003
Energy	4.3700e-003	0.0397	0.0334	2.4000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	230.9114	230.9114	9.3100e-003	2.5500e-003	231.9037
Mobile	0.0171	0.1223	0.1929	7.9000e-004	0.0603	6.7000e-004	0.0610	0.0162	6.3000e-004	0.0168	0.0000	72.9030	72.9030	3.3600e-003	0.0000	72.9869
Waste						0.0000	0.0000		0.0000	0.0000	24.4848	0.0000	24.4848	1.4470	0.0000	60.6600
Water						0.0000	0.0000		0.0000	0.0000	9.3736	46.7886	56.1622	0.9649	0.0232	87.1889
Total	**0.6221**	**0.1620**	**0.2275**	**1.0300e-003**	**0.0603**	**3.6900e-003**	**0.0640**	**0.0162**	**3.6500e-003**	**0.0198**	**33.8584**	**350.6053**	**384.4637**	**2.4246**	**0.0257**	**452.7421**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2021	8/13/2021	5	10	
2	Grading	Grading	8/14/2021	9/10/2021	5	20	
3	Building Construction	Building Construction	9/11/2021	7/29/2022	5	230	
4	Paving	Paving	7/30/2022	8/26/2022	5	20	
5	Architectural Coating	Architectural Coating	8/27/2022	9/23/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,533; Non-Residential Outdoor: 64,178; Striped Parking Area: 7,031 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	103.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.3200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6118	0.6118	2.0000e-005	0.0000	0.6122
Total	**3.3000e-004**	**2.3000e-004**	**2.3200e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6118**	**0.6118**	**2.0000e-005**	**0.0000**	**0.6122**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.3200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6118	0.6118	2.0000e-005	0.0000	0.6122
Total	**3.3000e-004**	**2.3000e-004**	**2.3200e-003**	**1.0000e-005**	**7.2000e-004**	**0.0000**	**7.2000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6118**	**0.6118**	**2.0000e-005**	**0.0000**	**0.6122**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0655**	**0.0116**	**0.0771**	**0.0337**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	3.8600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0196	1.0196	3.0000e-005	0.0000	1.0203
Total	**5.5000e-004**	**3.8000e-004**	**3.8600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0196**	**1.0196**	**3.0000e-005**	**0.0000**	**1.0203**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0655**	**0.0116**	**0.0771**	**0.0337**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	3.8600e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0196	1.0196	3.0000e-005	0.0000	1.0203
Total	**5.5000e-004**	**3.8000e-004**	**3.8600e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0196**	**1.0196**	**3.0000e-005**	**0.0000**	**1.0203**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0760	0.6973	0.6630	1.0800e-003		0.0383	0.0383		0.0361	0.0361	0.0000	92.6549	92.6549	0.0224	0.0000	93.2138
Total	**0.0760**	**0.6973**	**0.6630**	**1.0800e-003**		**0.0383**	**0.0383**		**0.0361**	**0.0361**	**0.0000**	**92.6549**	**92.6549**	**0.0224**	**0.0000**	**93.2138**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3100e-003	0.1714	0.0353	4.5000e-004	0.0106	4.9000e-004	0.0111	3.0500e-003	4.7000e-004	3.5200e-003	0.0000	42.5763	42.5763	2.5200e-003	0.0000	42.6392
Worker	0.0152	0.0105	0.1061	3.1000e-004	0.0328	2.2000e-004	0.0330	8.7300e-003	2.0000e-004	8.9200e-003	0.0000	28.0059	28.0059	7.2000e-004	0.0000	28.0238
Total	**0.0205**	**0.1819**	**0.1414**	**7.6000e-004**	**0.0434**	**7.1000e-004**	**0.0441**	**0.0118**	**6.7000e-004**	**0.0124**	**0.0000**	**70.5822**	**70.5822**	**3.2400e-003**	**0.0000**	**70.6630**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0760	0.6973	0.6630	1.0800e-003		0.0383	0.0383		0.0361	0.0361	0.0000	92.6548	92.6548	0.0224	0.0000	93.2136
Total	**0.0760**	**0.6973**	**0.6630**	**1.0800e-003**		**0.0383**	**0.0383**		**0.0361**	**0.0361**	**0.0000**	**92.6548**	**92.6548**	**0.0224**	**0.0000**	**93.2136**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3100e-003	0.1714	0.0353	4.5000e-004	0.0106	4.9000e-004	0.0111	3.0500e-003	4.7000e-004	3.5200e-003	0.0000	42.5763	42.5763	2.5200e-003	0.0000	42.6392
Worker	0.0152	0.0105	0.1061	3.1000e-004	0.0328	2.2000e-004	0.0330	8.7300e-003	2.0000e-004	8.9200e-003	0.0000	28.0059	28.0059	7.2000e-004	0.0000	28.0238
Total	**0.0205**	**0.1819**	**0.1414**	**7.6000e-004**	**0.0434**	**7.1000e-004**	**0.0441**	**0.0118**	**6.7000e-004**	**0.0124**	**0.0000**	**70.5822**	**70.5822**	**3.2400e-003**	**0.0000**	**70.6630**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1280	1.1712	1.2273	2.0200e-003		0.0607	0.0607		0.0571	0.0571	0.0000	173.7939	173.7939	0.0416	0.0000	174.8348
Total	**0.1280**	**1.1712**	**1.2273**	**2.0200e-003**		**0.0607**	**0.0607**		**0.0571**	**0.0571**	**0.0000**	**173.7939**	**173.7939**	**0.0416**	**0.0000**	**174.8348**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2300e-003	0.3044	0.0611	8.3000e-004	0.0198	7.9000e-004	0.0206	5.7300e-003	7.6000e-004	6.4800e-003	0.0000	79.0848	79.0848	4.4800e-003	0.0000	79.1967
Worker	0.0264	0.0176	0.1814	5.6000e-004	0.0615	3.9000e-004	0.0619	0.0164	3.6000e-004	0.0167	0.0000	50.6442	50.6442	1.2000e-003	0.0000	50.6742
Total	**0.0356**	**0.3221**	**0.2425**	**1.3900e-003**	**0.0814**	**1.1800e-003**	**0.0825**	**0.0221**	**1.1200e-003**	**0.0232**	**0.0000**	**129.7290**	**129.7290**	**5.6800e-003**	**0.0000**	**129.8709**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1280	1.1712	1.2273	2.0200e-003		0.0607	0.0607		0.0571	0.0571	0.0000	173.7937	173.7937	0.0416	0.0000	174.8346
Total	**0.1280**	**1.1712**	**1.2273**	**2.0200e-003**		**0.0607**	**0.0607**		**0.0571**	**0.0571**	**0.0000**	**173.7937**	**173.7937**	**0.0416**	**0.0000**	**174.8346**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2300e-003	0.3044	0.0611	8.3000e-004	0.0198	7.9000e-004	0.0206	5.7300e-003	7.6000e-004	6.4800e-003	0.0000	79.0848	79.0848	4.4800e-003	0.0000	79.1967
Worker	0.0264	0.0176	0.1814	5.6000e-004	0.0615	3.9000e-004	0.0619	0.0164	3.6000e-004	0.0167	0.0000	50.6442	50.6442	1.2000e-003	0.0000	50.6742
Total	**0.0356**	**0.3221**	**0.2425**	**1.3900e-003**	**0.0814**	**1.1800e-003**	**0.0825**	**0.0221**	**1.1200e-003**	**0.0232**	**0.0000**	**129.7290**	**129.7290**	**5.6800e-003**	**0.0000**	**129.8709**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	3.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0146**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.4000e-004	3.5200e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9834	0.9834	2.0000e-005	0.0000	0.9840
Total	**5.1000e-004**	**3.4000e-004**	**3.5200e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9834**	**0.9834**	**2.0000e-005**	**0.0000**	**0.9840**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	3.5200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0146**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.4000e-004	3.5200e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9834	0.9834	2.0000e-005	0.0000	0.9840
Total	**5.1000e-004**	**3.4000e-004**	**3.5200e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.2000e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**0.9834**	**0.9834**	**2.0000e-005**	**0.0000**	**0.9840**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.9189**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.8000e-004	4.9300e-003	2.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3767	1.3767	3.0000e-005	0.0000	1.3776
Total	**7.2000e-004**	**4.8000e-004**	**4.9300e-003**	**2.0000e-005**	**1.6700e-003**	**1.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3767**	**1.3767**	**3.0000e-005**	**0.0000**	**1.3776**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9168					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.9189**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.8000e-004	4.9300e-003	2.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3767	1.3767	3.0000e-005	0.0000	1.3776
Total	**7.2000e-004**	**4.8000e-004**	**4.9300e-003**	**2.0000e-005**	**1.6700e-003**	**1.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3767**	**1.3767**	**3.0000e-005**	**0.0000**	**1.3776**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0171	0.1223	0.1929	7.9000e-004	0.0603	6.7000e-004	0.0610	0.0162	6.3000e-004	0.0168	0.0000	72.9030	72.9030	3.3600e-003	0.0000	72.9869
Unmitigated	0.0171	0.1223	0.1929	7.9000e-004	0.0603	6.7000e-004	0.0610	0.0162	6.3000e-004	0.0168	0.0000	72.9030	72.9030	3.3600e-003	0.0000	72.9869

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	55.00	55.00	55.00	160,573	160,573
Total	55.00	55.00	55.00	160,573	160,573

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Parking Lot	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Unrefrigerated Warehouse-No Rail	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.6669	187.6669	8.4900e-003	1.7600e-003	188.4022
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	187.6669	187.6669	8.4900e-003	1.7600e-003	188.4022
NaturalGas Mitigated	4.3700e-003	0.0397	0.0334	2.4000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	43.2446	43.2446	8.3000e-004	7.9000e-004	43.5015
NaturalGas Unmitigated	4.3700e-003	0.0397	0.0334	2.4000e-004		3.0200e-003	3.0200e-003		3.0200e-003	3.0200e-003	0.0000	43.2446	43.2446	8.3000e-004	7.9000e-004	43.5015

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	41545	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2170	2.2170	4.0000e-005	4.0000e-005	2.2302
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	768827	4.1500e-003	0.0377	0.0317	2.3000e-004		2.8600e-003	2.8600e-003		2.8600e-003	2.8600e-003	0.0000	41.0276	41.0276	7.9000e-004	7.5000e-004	41.2714
Total		**4.3700e-003**	**0.0397**	**0.0334**	**2.4000e-004**		**3.0100e-003**	**3.0100e-003**		**3.0100e-003**	**3.0100e-003**	**0.0000**	**43.2446**	**43.2446**	**8.3000e-004**	**7.9000e-004**	**43.5015**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	41545	2.2000e-004	2.0400e-003	1.7100e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	2.2170	2.2170	4.0000e-005	4.0000e-005	2.2302
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	768827	4.1500e-003	0.0377	0.0317	2.3000e-004		2.8600e-003	2.8600e-003		2.8600e-003	2.8600e-003	0.0000	41.0276	41.0276	7.9000e-004	7.5000e-004	41.2714
Total		**4.3700e-003**	**0.0397**	**0.0334**	**2.4000e-004**		**3.0100e-003**	**3.0100e-003**		**3.0100e-003**	**3.0100e-003**	**0.0000**	**43.2446**	**43.2446**	**8.3000e-004**	**7.9000e-004**	**43.5015**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	25265.2	7.3500	3.3000e-004	7.0000e-005	7.3788
Parking Lot	41011.7	11.9308	5.4000e-004	1.1000e-004	11.9775
Unrefrigerated Warehouse-No Rail	578823	168.3861	7.6100e-003	1.5800e-003	169.0459
Total		**187.6669**	**8.4800e-003**	**1.7600e-003**	**188.4022**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	25265.2	7.3500	3.3000e-004	7.0000e-005	7.3788
Parking Lot	41011.7	11.9308	5.4000e-004	1.1000e-004	11.9775
Unrefrigerated Warehouse-No Rail	578823	168.3861	7.6100e-003	1.5800e-003	169.0459
Total		**187.6669**	**8.4800e-003**	**1.7600e-003**	**188.4022**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6007	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003
Unmitigated	0.6007	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0917					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003
Total	**0.6007**	**1.0000e-005**	**1.2100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3400e-003**	**2.3400e-003**	**1.0000e-005**	**0.0000**	**2.5000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0917					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e-003	2.3400e-003	1.0000e-005	0.0000	2.5000e-003
Total	**0.6007**	**1.0000e-005**	**1.2100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.3400e-003**	**2.3400e-003**	**1.0000e-005**	**0.0000**	**2.5000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	56.1622	0.9649	0.0232	87.1889
Unmitigated	56.1622	0.9649	0.0232	87.1889

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.447889 / 0.274513	1.1266	0.0146	3.5000e-004	1.5980
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.0982 / 0	55.0356	0.9502	0.0228	85.5909
Total		**56.1622**	**0.9649**	**0.0232**	**87.1889**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.447889 / 0.274513	1.1266	0.0146	3.5000e-004	1.5980
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	29.0982 / 0	55.0356	0.9502	0.0228	85.5909
Total		**56.1622**	**0.9649**	**0.0232**	**87.1889**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.4848	1.4470	0.0000	60.6600
Unmitigated	24.4848	1.4470	0.0000	60.6600

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	2.34	0.4750	0.0281	0.0000	1.1768
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.28	24.0098	1.4189	0.0000	59.4832
Total		**24.4848**	**1.4470**	**0.0000**	**60.6600**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	2.34	0.4750	0.0281	0.0000	1.1768
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	118.28	24.0098	1.4189	0.0000	59.4832
Total		**24.4848**	**1.4470**	**0.0000**	**60.6600**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Manteca Self Storage

San Joaquin County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.52	1000sqft	0.06	2,524.00	0
Parking Lot	2.69	Acre	2.69	117,176.40	0
Unrefrigerated Warehouse-No Rail	125.83	1000sqft	2.89	125,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total acreage 5.64 acres

Construction Phase -

Trips and VMT -

Demolition - No demolition.

Grading - Site is relatively flat.

Vehicle Trips - Operational trips as provided by the Fehr & Peers Traffic Study (55 daily trips).

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.44
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.44
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9617	40.5386	21.6779	0.0467	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,581.3884	4,581.3884	1.1958	0.0000	4,598.9735
2022	91.9673	19.8412	19.8569	0.0463	1.1171	0.8246	1.9417	0.3025	0.7759	1.0783	0.0000	4,541.4692	4,541.4692	0.7168	0.0000	4,558.8108
Maximum	**91.9673**	**40.5386**	**21.6779**	**0.0467**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**4,581.3884**	**4,581.3884**	**1.1958**	**0.0000**	**4,598.9735**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9617	40.5386	21.6779	0.0467	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,581.3884	4,581.3884	1.1958	0.0000	4,598.9735
2022	91.9673	19.8412	19.8569	0.0463	1.1171	0.8246	1.9417	0.3025	0.7759	1.0783	0.0000	4,541.4692	4,541.4692	0.7168	0.0000	4,558.8108
Maximum	**91.9673**	**40.5386**	**21.6779**	**0.0467**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**4,581.3884**	**4,581.3884**	**1.1958**	**0.0000**	**4,598.9735**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
Mobile	0.1114	0.6561	1.1470	4.6100e-003	0.3418	3.6600e-003	0.3454	0.0914	3.4400e-003	0.0948		468.4843	468.4843	0.0203		468.9916
Total	**3.4272**	**0.8739**	**1.3433**	**5.9200e-003**	**0.3418**	**0.0203**	**0.3620**	**0.0914**	**0.0200**	**0.1114**		**729.7128**	**729.7128**	**0.0254**	**4.7900e-003**	**731.7742**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
Mobile	0.1114	0.6561	1.1470	4.6100e-003	0.3418	3.6600e-003	0.3454	0.0914	3.4400e-003	0.0948		468.4843	468.4843	0.0203		468.9916
Total	**3.4272**	**0.8739**	**1.3433**	**5.9200e-003**	**0.3418**	**0.0203**	**0.3620**	**0.0914**	**0.0200**	**0.1114**		**729.7128**	**729.7128**	**0.0254**	**4.7900e-003**	**731.7742**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2021	8/13/2021	5	10	
2	Grading	Grading	8/14/2021	9/10/2021	5	20	
3	Building Construction	Building Construction	9/11/2021	7/29/2022	5	230	
4	Paving	Paving	7/30/2022	8/26/2022	5	20	
5	Architectural Coating	Architectural Coating	8/27/2022	9/23/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,533; Non-Residential Outdoor: 64,178; Striped Parking Area: 7,031 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	103.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0415	0.5237	1.4700e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		146.7092	146.7092	3.7600e-003		146.8033
Total	**0.0735**	**0.0415**	**0.5237**	**1.4700e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**146.7092**	**146.7092**	**3.7600e-003**		**146.8033**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0735	0.0415	0.5237	1.4700e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		146.7092	146.7092	3.7600e-003		146.8033
Total	**0.0735**	**0.0415**	**0.5237**	**1.4700e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**146.7092**	**146.7092**	**3.7600e-003**		**146.8033**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0346	0.4364	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.2577	122.2577	3.1400e-003		122.3361
Total	**0.0612**	**0.0346**	**0.4364**	**1.2300e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**122.2577**	**122.2577**	**3.1400e-003**		**122.3361**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0612	0.0346	0.4364	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.2577	122.2577	3.1400e-003		122.3361
Total	**0.0612**	**0.0346**	**0.4364**	**1.2300e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**122.2577**	**122.2577**	**3.1400e-003**		**122.3361**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1301	4.2316	0.8183	0.0114	0.2710	0.0120	0.2830	0.0780	0.0115	0.0895		1,188.5220	1,188.5220	0.0659		1,190.1683
Worker	0.4204	0.2377	2.9964	8.4300e-003	0.8461	5.3800e-003	0.8515	0.2244	4.9600e-003	0.2294		839.5025	839.5025	0.0215		840.0410
Total	**0.5505**	**4.4693**	**3.8147**	**0.0198**	**1.1171**	**0.0174**	**1.1345**	**0.3025**	**0.0164**	**0.3189**		**2,028.0245**	**2,028.0245**	**0.0874**		**2,030.2093**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1301	4.2316	0.8183	0.0114	0.2710	0.0120	0.2830	0.0780	0.0115	0.0895		1,188.5220	1,188.5220	0.0659		1,190.1683
Worker	0.4204	0.2377	2.9964	8.4300e-003	0.8461	5.3800e-003	0.8515	0.2244	4.9600e-003	0.2294		839.5025	839.5025	0.0215		840.0410
Total	**0.5505**	**4.4693**	**3.8147**	**0.0198**	**1.1171**	**0.0174**	**1.1345**	**0.3025**	**0.0164**	**0.3189**		**2,028.0245**	**2,028.0245**	**0.0874**		**2,030.2093**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1207	4.0128	0.7542	0.0112	0.2710	0.0104	0.2814	0.0780	9.9100e-003	0.0879		1,177.5108	1,177.5108	0.0624		1,179.0717
Worker	0.3898	0.2127	2.7393	8.1300e-003	0.8461	5.2200e-003	0.8513	0.2244	4.8000e-003	0.2292		809.6248	809.6248	0.0193		810.1068
Total	**0.5105**	**4.2256**	**3.4935**	**0.0194**	**1.1171**	**0.0156**	**1.1327**	**0.3025**	**0.0147**	**0.3172**		**1,987.1357**	**1,987.1357**	**0.0817**		**1,989.1785**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1207	4.0128	0.7542	0.0112	0.2710	0.0104	0.2814	0.0780	9.9100e-003	0.0879		1,177.5108	1,177.5108	0.0624		1,179.0717
Worker	0.3898	0.2127	2.7393	8.1300e-003	0.8461	5.2200e-003	0.8513	0.2244	4.8000e-003	0.2292		809.6248	809.6248	0.0193		810.1068
Total	**0.5105**	**4.2256**	**3.4935**	**0.0194**	**1.1171**	**0.0156**	**1.1327**	**0.3025**	**0.0147**	**0.3172**		**1,987.1357**	**1,987.1357**	**0.0817**		**1,989.1785**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4552**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0568	0.0310	0.3989	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		117.9065	117.9065	2.8100e-003		117.9767
Total	**0.0568**	**0.0310**	**0.3989**	**1.1800e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**117.9065**	**117.9065**	**2.8100e-003**		**117.9767**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4552**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0568	0.0310	0.3989	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		117.9065	117.9065	2.8100e-003		117.9767
Total	**0.0568**	**0.0310**	**0.3989**	**1.1800e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**117.9065**	**117.9065**	**2.8100e-003**		**117.9767**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**91.8879**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0434	0.5585	1.6600e-003	0.1725	1.0600e-003	0.1736	0.0458	9.8000e-004	0.0467		165.0691	165.0691	3.9300e-003		165.1674
Total	**0.0795**	**0.0434**	**0.5585**	**1.6600e-003**	**0.1725**	**1.0600e-003**	**0.1736**	**0.0458**	**9.8000e-004**	**0.0467**		**165.0691**	**165.0691**	**3.9300e-003**		**165.1674**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**91.8879**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0434	0.5585	1.6600e-003	0.1725	1.0600e-003	0.1736	0.0458	9.8000e-004	0.0467		165.0691	165.0691	3.9300e-003		165.1674
Total	**0.0795**	**0.0434**	**0.5585**	**1.6600e-003**	**0.1725**	**1.0600e-003**	**0.1736**	**0.0458**	**9.8000e-004**	**0.0467**		**165.0691**	**165.0691**	**3.9300e-003**		**165.1674**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1114	0.6561	1.1470	4.6100e-003	0.3418	3.6600e-003	0.3454	0.0914	3.4400e-003	0.0948		468.4843	468.4843	0.0203		468.9916
Unmitigated	0.1114	0.6561	1.1470	4.6100e-003	0.3418	3.6600e-003	0.3454	0.0914	3.4400e-003	0.0948		468.4843	468.4843	0.0203		468.9916

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	55.00	55.00	55.00	160,573	160,573
Total	55.00	55.00	55.00	160,573	160,573

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Parking Lot	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Unrefrigerated Warehouse-No Rail	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
NaturalGas Unmitigated	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	113.822	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3908	13.3908	2.6000e-004	2.5000e-004	13.4704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2106.38	0.0227	0.2065	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157		247.8090	247.8090	4.7500e-003	4.5400e-003	249.2816
Total		**0.0240**	**0.2177**	**0.1828**	**1.3100e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**261.1998**	**261.1998**	**5.0100e-003**	**4.7900e-003**	**262.7520**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.113822	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3908	13.3908	2.6000e-004	2.5000e-004	13.4704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.10638	0.0227	0.2065	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157		247.8090	247.8090	4.7500e-003	4.5400e-003	249.2816
Total		**0.0240**	**0.2177**	**0.1828**	**1.3100e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**261.1998**	**261.1998**	**5.0100e-003**	**4.7900e-003**	**262.7520**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Unmitigated	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5024					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7883					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	**3.2919**	**1.2000e-004**	**0.0134**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0287**	**0.0287**	**8.0000e-005**		**0.0306**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5024					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7883					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	**3.2919**	**1.2000e-004**	**0.0134**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0287**	**0.0287**	**8.0000e-005**		**0.0306**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Manteca Self Storage

San Joaquin County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.52	1000sqft	0.06	2,524.00	0
Parking Lot	2.69	Acre	2.69	117,176.40	0
Unrefrigerated Warehouse-No Rail	125.83	1000sqft	2.89	125,831.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	51
Climate Zone	2			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total acreage 5.64 acres

Construction Phase -

Trips and VMT -

Demolition - No demolition.

Grading - Site is relatively flat.

Vehicle Trips - Operational trips as provided by the Fehr & Peers Traffic Study (55 daily trips).

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.44
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.44
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9598	40.5476	21.6176	0.0455	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,456.1163	4,456.1163	1.1954	0.0000	4,473.8532
2022	91.9654	19.9205	19.6690	0.0451	1.1171	0.8250	1.9422	0.3025	0.7763	1.0787	0.0000	4,419.5232	4,419.5232	0.7165	0.0000	4,437.0139
Maximum	**91.9654**	**40.5476**	**21.6176**	**0.0455**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**4,456.1163**	**4,456.1163**	**1.1954**	**0.0000**	**4,473.8532**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9598	40.5476	21.6176	0.0455	18.2141	2.0454	20.2595	9.9699	1.8818	11.8517	0.0000	4,456.1163	4,456.1163	1.1954	0.0000	4,473.8532
2022	91.9654	19.9205	19.6690	0.0451	1.1171	0.8250	1.9422	0.3025	0.7763	1.0787	0.0000	4,419.5232	4,419.5232	0.7165	0.0000	4,437.0139
Maximum	**91.9654**	**40.5476**	**21.6176**	**0.0455**	**18.2141**	**2.0454**	**20.2595**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**4,456.1163**	**4,456.1163**	**1.1954**	**0.0000**	**4,473.8532**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
Mobile	0.0904	0.6796	1.0883	4.2400e-003	0.3418	3.7100e-003	0.3455	0.0914	3.4900e-003	0.0949		431.3034	431.3034	0.0211		431.8304
Total	**3.4063**	**0.8974**	**1.2845**	**5.5500e-003**	**0.3418**	**0.0203**	**0.3621**	**0.0914**	**0.0201**	**0.1115**		**692.5319**	**692.5319**	**0.0262**	**4.7900e-003**	**694.6130**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Energy	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
Mobile	0.0904	0.6796	1.0883	4.2400e-003	0.3418	3.7100e-003	0.3455	0.0914	3.4900e-003	0.0949		431.3034	431.3034	0.0211		431.8304
Total	**3.4063**	**0.8974**	**1.2845**	**5.5500e-003**	**0.3418**	**0.0203**	**0.3621**	**0.0914**	**0.0201**	**0.1115**		**692.5319**	**692.5319**	**0.0262**	**4.7900e-003**	**694.6130**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/1/2021	8/13/2021	5	10	
2	Grading	Grading	8/14/2021	9/10/2021	5	20	
3	Building Construction	Building Construction	9/11/2021	7/29/2022	5	230	
4	Paving	Paving	7/30/2022	8/26/2022	5	20	
5	Architectural Coating	Architectural Coating	8/27/2022	9/23/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 2.69

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,533; Non-Residential Outdoor: 64,178; Striped Parking Area: 7,031 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	103.00	40.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	21.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0716	0.0505	0.4633	1.3200e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		131.1448	131.1448	3.3900e-003		131.2296
Total	**0.0716**	**0.0505**	**0.4633**	**1.3200e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**131.1448**	**131.1448**	**3.3900e-003**		**131.2296**

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0716	0.0505	0.4633	1.3200e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		131.1448	131.1448	3.3900e-003		131.2296
Total	**0.0716**	**0.0505**	**0.4633**	**1.3200e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**131.1448**	**131.1448**	**3.3900e-003**		**131.2296**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0421	0.3861	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.2873	109.2873	2.8300e-003		109.3580
Total	**0.0596**	**0.0421**	**0.3861**	**1.1000e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**109.2873**	**109.2873**	**2.8300e-003**		**109.3580**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0596	0.0421	0.3861	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.2873	109.2873	2.8300e-003		109.3580
Total	**0.0596**	**0.0421**	**0.3861**	**1.1000e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**109.2873**	**109.2873**	**2.8300e-003**		**109.3580**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1375	4.2729	0.9655	0.0110	0.2710	0.0124	0.2835	0.0780	0.0119	0.0899		1,152.3129	1,152.3129	0.0741		1,154.1641
Worker	0.4095	0.2889	2.6512	7.5300e-003	0.8461	5.3800e-003	0.8515	0.2244	4.9600e-003	0.2294		750.4395	750.4395	0.0194		750.9249
Total	**0.5470**	**4.5617**	**3.6167**	**0.0185**	**1.1171**	**0.0178**	**1.1350**	**0.3025**	**0.0169**	**0.3193**		**1,902.7524**	**1,902.7524**	**0.0935**		**1,905.0889**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1375	4.2729	0.9655	0.0110	0.2710	0.0124	0.2835	0.0780	0.0119	0.0899		1,152.3129	1,152.3129	0.0741		1,154.1641
Worker	0.4095	0.2889	2.6512	7.5300e-003	0.8461	5.3800e-003	0.8515	0.2244	4.9600e-003	0.2294		750.4395	750.4395	0.0194		750.9249
Total	**0.5470**	**4.5617**	**3.6167**	**0.0185**	**1.1171**	**0.0178**	**1.1350**	**0.3025**	**0.0169**	**0.3193**		**1,902.7524**	**1,902.7524**	**0.0935**		**1,905.0889**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1276	4.0465	0.8917	0.0109	0.2710	0.0108	0.2818	0.0780	0.0103	0.0884		1,141.4189	1,141.4189	0.0703		1,143.1775
Worker	0.3802	0.2584	2.4140	7.2600e-003	0.8461	5.2200e-003	0.8513	0.2244	4.8000e-003	0.2292		723.7708	723.7708	0.0173		724.2042
Total	**0.5077**	**4.3049**	**3.3056**	**0.0182**	**1.1171**	**0.0160**	**1.1331**	**0.3025**	**0.0151**	**0.3176**		**1,865.1897**	**1,865.1897**	**0.0877**		**1,867.3817**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1276	4.0465	0.8917	0.0109	0.2710	0.0108	0.2818	0.0780	0.0103	0.0884		1,141.4189	1,141.4189	0.0703		1,143.1775
Worker	0.3802	0.2584	2.4140	7.2600e-003	0.8461	5.2200e-003	0.8513	0.2244	4.8000e-003	0.2292		723.7708	723.7708	0.0173		724.2042
Total	**0.5077**	**4.3049**	**3.3056**	**0.0182**	**1.1171**	**0.0160**	**1.1331**	**0.3025**	**0.0151**	**0.3176**		**1,865.1897**	**1,865.1897**	**0.0877**		**1,867.3817**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4552**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0376	0.3516	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4035	105.4035	2.5200e-003		105.4666
Total	**0.0554**	**0.0376**	**0.3516**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4035**	**105.4035**	**2.5200e-003**		**105.4666**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.3524					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4552**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0376	0.3516	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4035	105.4035	2.5200e-003		105.4666
Total	**0.0554**	**0.0376**	**0.3516**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4035**	**105.4035**	**2.5200e-003**		**105.4666**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**91.8879**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0775	0.0527	0.4922	1.4800e-003	0.1725	1.0600e-003	0.1736	0.0458	9.8000e-004	0.0467		147.5649	147.5649	3.5300e-003		147.6533
Total	**0.0775**	**0.0527**	**0.4922**	**1.4800e-003**	**0.1725**	**1.0600e-003**	**0.1736**	**0.0458**	**9.8000e-004**	**0.0467**		**147.5649**	**147.5649**	**3.5300e-003**		**147.6533**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	91.6833					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**91.8879**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0775	0.0527	0.4922	1.4800e-003	0.1725	1.0600e-003	0.1736	0.0458	9.8000e-004	0.0467		147.5649	147.5649	3.5300e-003		147.6533
Total	**0.0775**	**0.0527**	**0.4922**	**1.4800e-003**	**0.1725**	**1.0600e-003**	**0.1736**	**0.0458**	**9.8000e-004**	**0.0467**		**147.5649**	**147.5649**	**3.5300e-003**		**147.6533**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0904	0.6796	1.0883	4.2400e-003	0.3418	3.7100e-003	0.3455	0.0914	3.4900e-003	0.0949		431.3034	431.3034	0.0211		431.8304
Unmitigated	0.0904	0.6796	1.0883	4.2400e-003	0.3418	3.7100e-003	0.3455	0.0914	3.4900e-003	0.0949		431.3034	431.3034	0.0211		431.8304

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	55.00	55.00	55.00	160,573	160,573
Total	55.00	55.00	55.00	160,573	160,573

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Parking Lot	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818
Unrefrigerated Warehouse-No Rail	0.556917	0.035296	0.183646	0.120139	0.017882	0.004687	0.016156	0.056151	0.001190	0.001453	0.005055	0.000610	0.000818

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520
NaturalGas Unmitigated	0.0239	0.2177	0.1828	1.3100e-003		0.0165	0.0165		0.0165	0.0165		261.1998	261.1998	5.0100e-003	4.7900e-003	262.7520

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	113.822	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3908	13.3908	2.6000e-004	2.5000e-004	13.4704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2106.38	0.0227	0.2065	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157		247.8090	247.8090	4.7500e-003	4.5400e-003	249.2816
Total		**0.0240**	**0.2177**	**0.1828**	**1.3100e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**261.1998**	**261.1998**	**5.0100e-003**	**4.7900e-003**	**262.7520**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0.113822	1.2300e-003	0.0112	9.3700e-003	7.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004		13.3908	13.3908	2.6000e-004	2.5000e-004	13.4704
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	2.10638	0.0227	0.2065	0.1735	1.2400e-003		0.0157	0.0157		0.0157	0.0157		247.8090	247.8090	4.7500e-003	4.5400e-003	249.2816
Total		**0.0240**	**0.2177**	**0.1828**	**1.3100e-003**		**0.0165**	**0.0165**		**0.0165**	**0.0165**		**261.1998**	**261.1998**	**5.0100e-003**	**4.7900e-003**	**262.7520**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Unmitigated	3.2919	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5024					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7883					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	**3.2919**	**1.2000e-004**	**0.0134**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0287**	**0.0287**	**8.0000e-005**		**0.0306**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5024					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7883					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2500e-003	1.2000e-004	0.0134	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0287	0.0287	8.0000e-005		0.0306
Total	**3.2919**	**1.2000e-004**	**0.0134**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**		**0.0287**	**0.0287**	**8.0000e-005**		**0.0306**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B: TRAFFIC IMPACT ANALYSIS

Manteca Self-Storage Facility – Draft

Transportation Analysis

Prepared for:
De Novo Planning Group
City of Manteca

May 24, 2021

RS21-4029

FEHR PEERS

Table of Contents

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1. Introduction

This study addresses the potential transportation impacts associated with the proposed Self Storage Facility project located in the City of Manteca. Vehicle miles traveled, intersection operations, and site access and internal circulation are analyzed. This report documents the methodologies, inputs, and results of the analysis.

1.1 Project Description

The proposed project includes an approximately 123,500 square foot self-storage facility with approximately 1,500 square feet of office space and 844 storage units. The project site is located at 2430 West Atherton Drive in the City of Manteca and encompasses approximately 5.6-acres. A total of 23 parking spaces are proposed. **Figure 1** displays the location of the proposed project.

Primary access is provided by one full access driveway proposed on West Atherton Drive. Three emergency vehicle driveways are proposed, two on West Atherton Drive and one connecting to Bella Terra Lane to the south. **Figure 2** displays the project site plan and proposed access locations.

1.2 Study Area

The study area was selected based on the proposed project's location, site access, and expected trip distribution and assignment. The analysis considers traffic operations at the following intersections, which are displayed on Figure 1.

Study Intersections

1. Airport Way/SR 120 WB Ramps
2. Airport Way/SR 120 EB Ramps
3. Airport Way/Atherton Drive
4. West Atherton Drive/Project Driveway

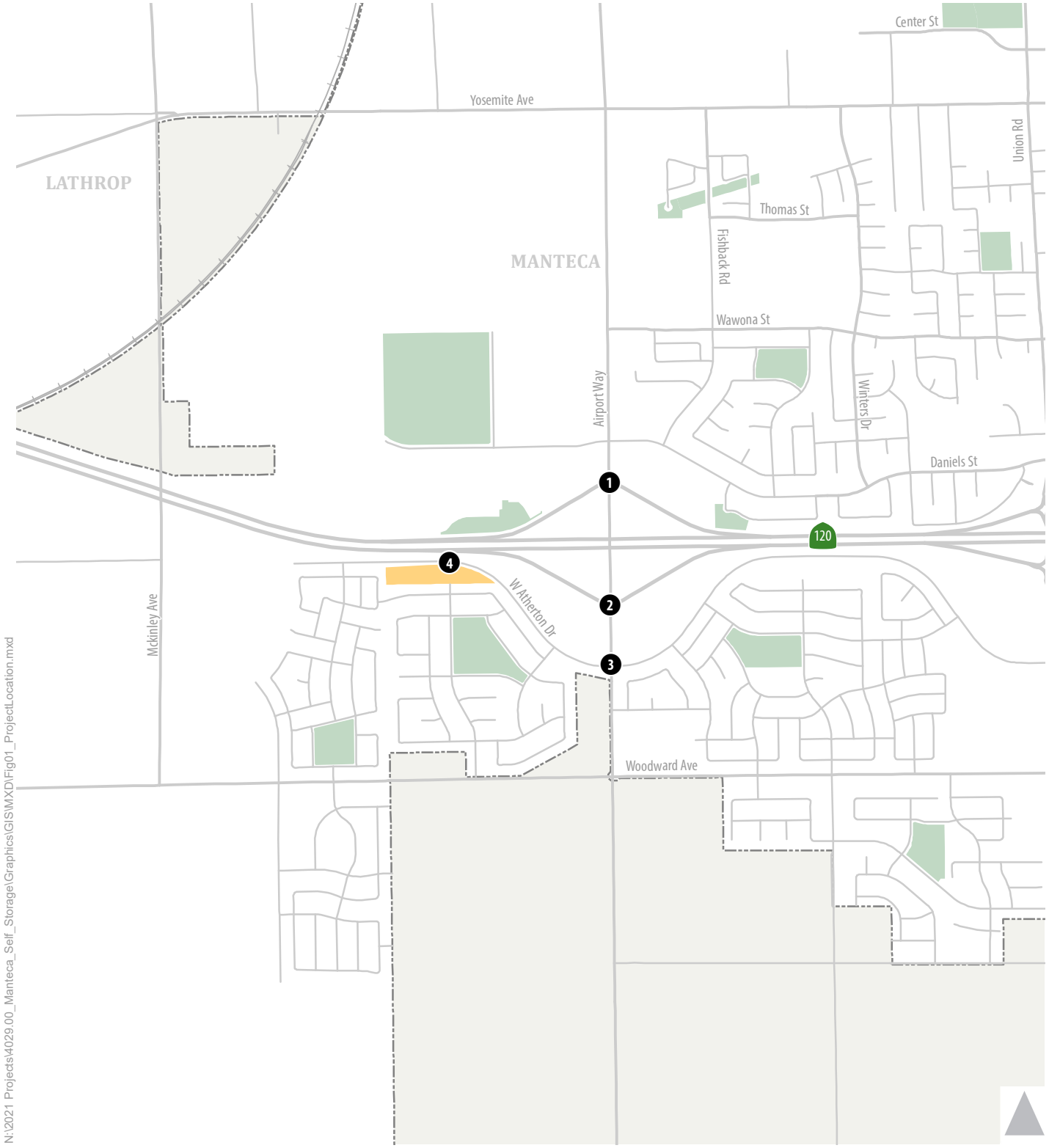


Figure 1

Project Location

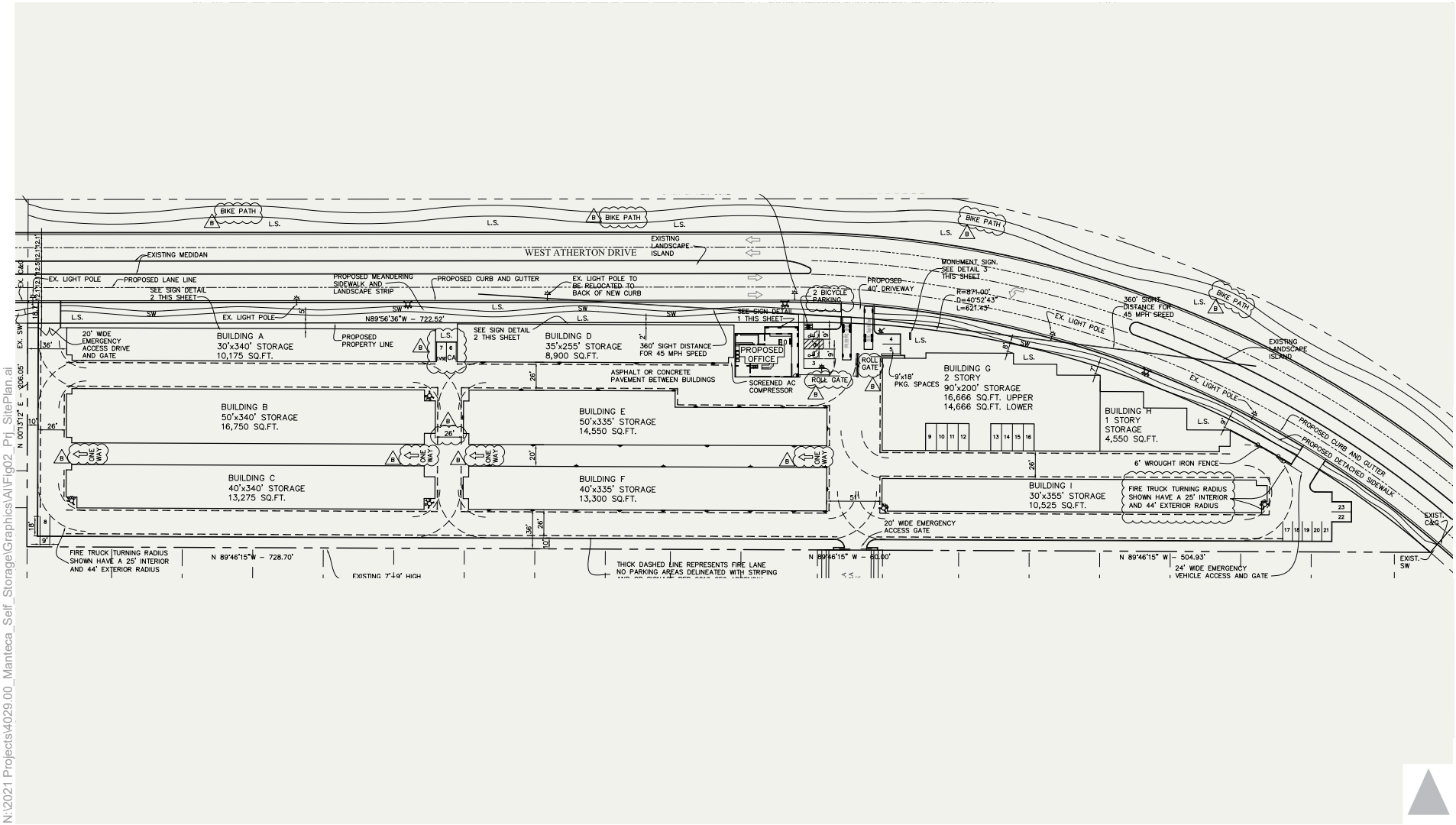


Figure 2

Project Site Plan

1.4 Study Scenarios

The study intersections are evaluated for the following four scenarios:

- **Existing Conditions** – Analyzes operations as they exist today.

- **Existing Plus Project Conditions** – Analyzes existing operations with the addition of trips generated from the proposed project.

- **Cumulative No Project Conditions** - Analyzes cumulative year (2042) volumes based on the City of Manteca / San Joaquin Council of Governments Travel Demand Forecasting (TDF) Model, assuming the project site remains in its current undeveloped state.

- **Cumulative Plus Project Conditions** – Analyzes cumulative year volumes with the addition of trips generated from the Proposed Project.

2. Significance Criteria and Analysis Methodology

This chapter describes the significance criteria used to evaluate project impacts and the methodology used to analyze the study intersections described above, to develop traffic forecasts for study intersections, and to complete the vehicle miles traveled analysis.

2.1 Applicable Policies and Significance Criteria

Senate Bill (SB) 743

Senate Bill (SB) 743 was signed into law in 2013 and is leading to substantial changes in the way transportation impact analyses are being prepared. Notably, it precludes the use of level of service (LOS) to identify significant transportation impacts in CEQA documents for land use projects, recommending instead that VMT be used as the preferred metric. On December 28, 2018, the CEQA Guidelines were amended to add Section 15064.3, Determining the Significance of Transportation Impacts, which states that generally, VMT is the most appropriate measure of transportation impacts. According to 15064.3(a), "Except as provided in subdivision (b)(2) (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact." Beginning on July 1, 2020, the provisions of 15064.3 applied statewide.

To aid in SB 743 implementation, in December 2018 OPR released a Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory). The Technical Advisory provides advice and recommendations to CEQA lead agencies on how to implement the SB 743 changes. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures, and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion and with the provision of substantial evidence to support alternative approaches.

The Technical Advisory identifies "screening thresholds" to identify when a project should be expected to cause a less-than-significant impact without conducting a detailed study. The following screening thresholds are applicable to the proposed project.

- Small projects – projects consistent with a Sustainable Communities Strategy and local general plan that generate or attract fewer than 110 trips per day.

Level of Service

As previously noted, level of service (LOS) may no longer be used to identify significant transportation impacts in CEQA documents for land use projects. However, this analysis includes a LOS analysis to determine if the proposed project would result in unacceptable intersection operations per the City of

Manteca standards. Policy C-P-2 of the 2023 General Plan strives for LOS D or better while LOS E or worse is considered unacceptable.

2.2 Data Collection

Figure 3 displays the existing intersection turning movement counts at the study intersections. Traffic count data collected in 2019 was used for the Airport Way/SR 120 WB Ramps and Airport Way/SR 120 EB Ramps. Traffic count data collected in February 2020 (pre-COVID-19) was used for the Airport Way/Atherton Drive intersection.

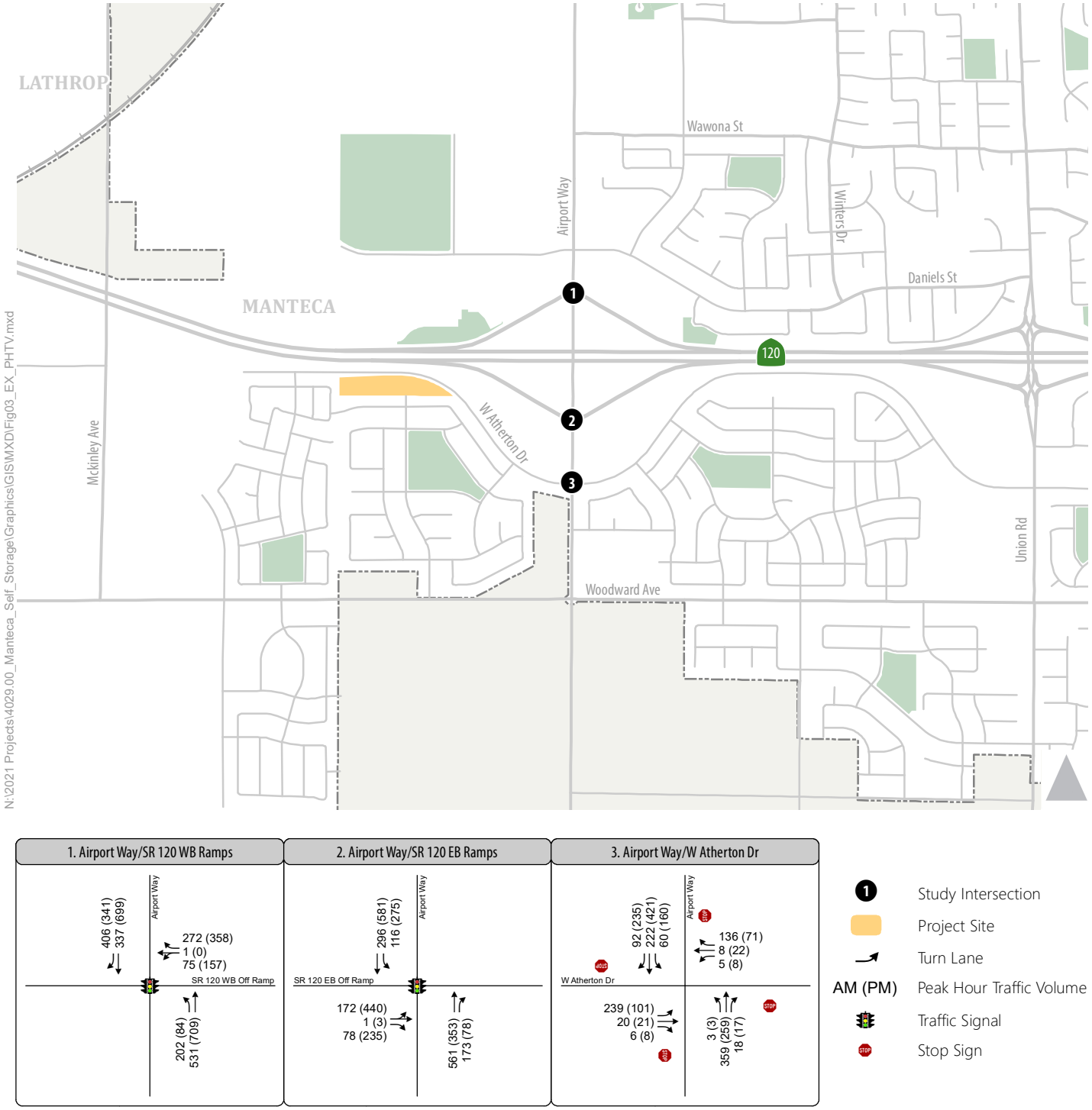


Figure 3

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

2.3 Travel Demand Forecasting

The City of Manteca is currently in the process of updating their General Plan, which included development of a new City of Manteca Travel Demand Model. However, the General Plan has not been adopted and the cumulative year model has not yet been finalized. Therefore, the original City of Manteca model is used to develop cumulative (2042) intersection turning movement forecasts.

The travel demand model is a modified version of the SJCOG sub-area Travel Demand Forecasting (TDF) Model and incorporates the current RTP / Air Quality Model, build-out of the current City of Manteca General Plan, and General Plans for the surrounding communities of Lathrop, Ripon, San Joaquin County, and Stockton. The TDF Model also includes projects identified in the City's Public Facilities Implementation Plan (PFIP) and the Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) Project List for:

- Mainline Highway Improvements (Table 6-1 from SJCOG RTP);
- Interchange Improvements (Table 6-1 from SJCOG RTP); and
- Regional Roadway Improvements (Table 6-3 from SJCOG RTP).

The Cumulative TDF model was updated with the proposed Lumina Ranch development to incorporate the proposed General Plan land use designations on the west side of Airport Way between Atherton Drive and Woodward Avenue for consistency with the General Plan Update. Additionally, the model was updated to reflect anticipated land uses for the commercial development located northwest and southwest of the Airport Way/Atherton Drive intersection, based on direction from the City of Manteca, as well as nearby proposed development projects including Lumina Ranch and Hat Ranch.

The traffic forecasting adjustment procedure known as the "difference method" is used to develop Cumulative Year (2042) AM and PM Peak Hour traffic forecasts. For a given intersection, this forecasting procedure is calculated as follows for every movement at the study intersections:

Cumulative Year Forecast = Existing Volume + (Cumulative Year TDF Model – Base Year TDF Model)

2.4 Intersection Analysis

Study intersections are analyzed using procedures and methodologies contained in the *Highway Capacity Manual – 6th Edition* (Transportation Research Board, 2016). These methodologies are applied using Synchro 10 software which considers traffic volumes, lane configurations, signal timings, signal coordination, and other pertinent parameters of intersection operations.

Level of Service Definition

Study intersections are analyzed using the concept of Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These

grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions. For signalized intersections, and all way stop control intersections, LOS is based on the average delay experienced by all vehicles passing through the intersection. For side-street stop-controlled intersections, the delay and LOS for the overall intersection is reported along with the delay for the worst-case movement. **Table 1** displays the delay range associated with each LOS category for signalized and unsignalized intersections.

Table 1: Intersection Level of Service (LOS) Criteria

LOS	Description (for Signalized Intersections)	Average Delay (Seconds/Vehicle) at Signalized Intersections	Average Delay (Seconds/Vehicle) at Unsignalized Intersections
A	Operations with very low delay occurring with favorable traffic signal progression and/or short cycle lengths.	< 10.0	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0	> 10.0 to 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0	> 15.0 to 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0	> 25.0 to 35.0
E	Operations with high delay values indicating poor progression, and long cycle lengths. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to 80.0	> 35.0 to 50.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0	> 50.0

Note: LOS = level of service; V/C ratio = volume-to-capacity ratio
Source: Transportation Research Board, 2016

3. Vehicle Miles Traveled Analysis

We evaluated the proposed project against the screening criteria in OPR's Technical Advisory. The following criteria, which can be used to determine if a project is expected to result in a less than significant impact, is applicable to proposed project.

- Small projects – projects consistent with a Sustainable Communities Strategy and local general plan that generate or attract fewer than 110 trips per day.

The project site's land use designation in the existing General Plan is General Commercial, which allows for wholesale, warehousing, heavy commercial uses, highway oriented commercial retail, public and quasi-public uses, and similar and compatible uses. The draft General Plan identifies the project site as Commercial, which allows for neighborhood, community, and regional-serving retail and service uses, offices, restaurants, service stations, highway-oriented visitor commercial and lodging, auto-serving and heavy commercial uses, wholesale; warehousing; and more. The San Joaquin Council of Governments 2018 Regional Transportation Plan/Sustainable Communities Strategy is based on the City of Manteca's General Plan land use assumptions.

Therefore, the proposed project is consistent with the General Plan and the San Joaquin Council of Governments 2018 Regional Transportation Plan/Sustainable Communities Strategy.

To evaluate whether the proposed project will attract fewer than 110 trips per day, we calculated the project's daily trip generation using information provided by the developer for an existing similar sized facility located in Dixon, CA. Daily trip generation for the month of January and peak hour trip generation for one week during the month of January was provided. Trips were broken down by trips to/from storage units, office and maintenance staff, and office visits. Using this information, we calculated an average daily trip rate per storage unit. The calculated average daily trip rate is 0.065 trips per storage unit which equates to a total of approximately 55 daily trips for the proposed project.

Because the proposed project is consistent with the RTP and General Plan and will generate fewer than 110 trip per day, this is a **less than significant** transportation impact.

4. Existing and Existing Plus Project Conditions

This chapter presents the intersection operations under existing conditions and existing plus project conditions.

4.1 Existing Intersection Operations

Table 2 displays the existing AM and PM peak hour operations at the study intersections. Technical calculations are displayed in **Appendix A**.

Table 2: Intersection Operations – Existing Conditions				
Intersection	**Control Type**	**Peak Hour**	**Delay[1]**	**LOS**
1. Airport Way/ SR 120 WB Ramps	Signal	AM PM	8.1 14.0	A B
2. Airport Way/ SR 120 EB Ramps	Signal	AM PM	13.2 16.7	B B
3. Airport Way/ W Atherton Dr	AWSC	AM PM	26.0 16.7	D C
Notes: AWSC = All-Way Stop Control; LOS = Level of Service [1] For signalized intersections and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches. Source: Fehr & Peers, 2021				

As displayed, all intersections operate acceptably during both the AM and PM peak hour. Intersections 1 and 2 operate at LOS A or B during the peak hours; Airport Way/Atherton Drive operates at LOS D during the AM peak hour and LOS C during the PM peak hour.

4.2 Project Trip Generation

Project trips were estimated using data collected by the developer at an existing similar sized storage facility located in Dixon, CA and provided to the City of Manteca. Daily trip generation for the month of January and peak hour trip generation for one week during the month of January was provided. Trips were broken down by trips to/from storage units, office and maintenance staff, and office visits and then consolidated to calculate an average daily, AM peak hour, and PM peak hour trip rate per storage unit.

Table 3 displays the estimated number of daily, AM peak hour, and PM peak hour vehicle trips for the proposed project.

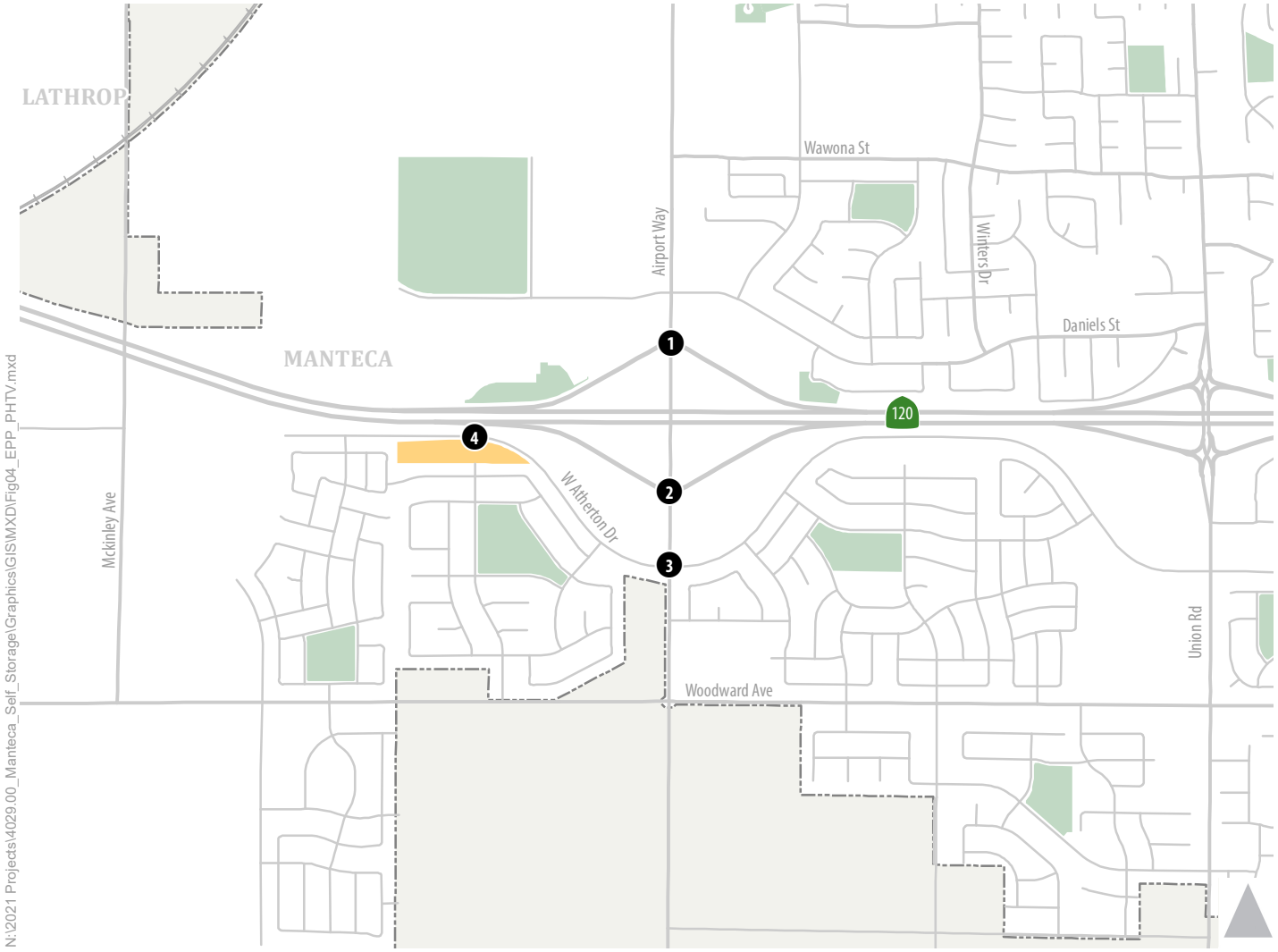
Table 3: Project Trip Generation								
Land Use	Quantity (Storage Units)	Daily	AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
Self-Storage Facility	844	55	4	3	7	6	7	13
Notes: Trip Generation is based on data provided by the developer and reviewed by the City of Manteca for an existing comparable self-storage facility. Source: Fehr & Peers, 2021								

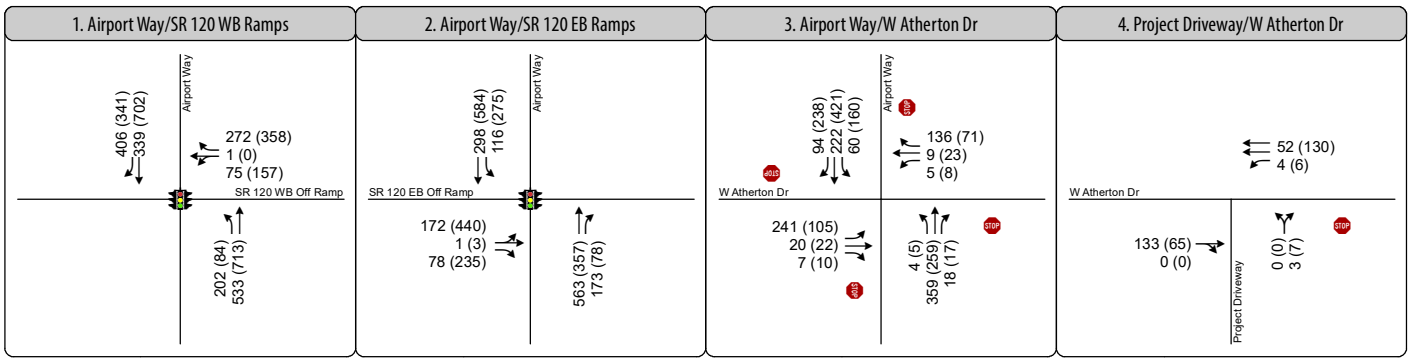
4.3 Project Trip Distribution

Project trips were distributed throughout the study area based the location of the project site and existing development. Most trips are anticipated to be local serving trips and were distributed as described below:

- On Airport Way north of State Route 120: 60%
- On Airport Way south of Airport Way/W Atherton Drive: 35%
- On Atherton Drive east of Airport Way: 5%

Figure 4 displays the traffic volumes under Existing Plus Project conditions.





1 Study Intersection

Project Site

Turn Lane

AM (PM) Peak Hour Traffic Volume

Traffic Signal

Stop Sign

Figure 4

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project Conditions

4.4 Existing Plus Project Intersection Operations

Access to the proposed development project would be provided by one full access intersection located on West Atherton Drive. Three emergency access driveways are proposed; however, these will be gated and will not be accessible by the public. Therefore, no trips were assigned to these driveways.

Table 4 displays the AM and PM peak hour intersection operations under Existing Plus Project conditions. Technical calculations are displayed in **Appendix A**.

Table 4: Intersection Operations – Existing Plus Project Conditions

Intersection	Control Type	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
			Delay[1]	LOS	Delay[1]	LOS
1. Airport Way/ SR 120 WB Ramps	Signal	AM PM	8.1 14.0	A B	8.1 14.1	A B
2. Airport Way/ SR 120 EB Ramps	Signal	AM PM	13.2 16.7	B B	13.2 16.8	B B
3. Airport Way/ W Atherton Dr	AWSC	AM PM	26.0 16.7	D C	26.2 16.9	D C
4. W Atherton Dr/ Project Driveway	SSSC	AM PM	N/A	N/A	1 (9.0) 1 (9.0)	A (A) A (A)

Notes:
AWSC = All-Way Stop Control; SSSC = Side-Street Stop Control; LOS = Level of Service
[1] For signalized intersections and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side street stop-controlled intersections, intersection delay is reported in seconds per vehicle for the overall intersection and (worst-case) movement. Intersection delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).
Source: Fehr & Peers, 2021

As displayed, all intersections would operate acceptably during the AM and PM peak hours under existing plus project conditions. Due to the low number of trips anticipated during the AM and PM peak hours, intersection delay either remains the same or increases by no more than 0.2 seconds at existing intersections.

5. Cumulative Conditions Analysis

This chapter analyzes the impacts of the project under Cumulative Conditions. The analysis reflects long-term development in the City of Manteca and other nearby jurisdictions using the original Manteca TDF model previously described.

The Cumulative Year analysis assumes the following improvements:

- Construction of the McKinley Interchange
- Intersection lane configurations and traffic controls identified in the City of Manteca PFIP at the Airport Way/W Atherton Drive intersection
- SR 120 / Airport Way Interchange: Appendix F of the SJCOG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) indicates reconstruction of the SR 120/Airport Way Interchange. The design has not been formalized; therefore, we assumed the reconstruction would result in a configuration similar to the McKinley Interchange, which will be constructed as a partial cloverleaf interchange.

5.1 Cumulative No Project Intersection Operations

The original Manteca model was used to develop cumulative year forecasts. As previously noted, the Cumulative TDF model was recently updated for the Lumina Ranch development project to incorporate the proposed General Plan land use designations on the west side of Airport Way between Atherton Drive and Woodward Avenue for consistency with the General Plan Update. Additionally, the model was updated to reflect anticipated land uses for the commercial development located northwest and southwest of the Airport Way/Atherton Drive intersection, based on direction from the City of Manteca, as well as nearby proposed development projects including Lumina Ranch and Hat Ranch. Traffic forecasts developed for the Lumina Ranch development included land use assumptions for the proposed storage facility. Therefore, project trips were removed from the Lumina Ranch forecasts to develop Cumulative No Project forecasts for the proposed project.

Figure 5 displays AM and PM peak hour turning movements and lane configurations at the study intersections. **Table 5** displays the AM and PM peak hour intersection operations. Technical calculations are displayed in **Appendix A**.

Table 5: Intersection Operations –Cumulative No Project Conditions						
Intersection	Control Type	Peak Hour	Existing Conditions		Cumulative No Project Conditions	
			Delay[1]	LOS	Delay[1]	LOS
1. Airport Way/ SR 120 WB Ramps	Signal	AM PM	8.1 14.0	A B	10.1 14.9	B B
2. Airport Way/ SR 120 EB Ramps	Signal	AM PM	13.2 16.7	B B	8.6 13.5	A B
3. Airport Way/ W Atherton Dr	AWSC/Signal[2]	AM PM	26.0 16.7	D C	**104.6** **72.6**	**F** **E**

Notes:
Bold indicates unacceptable operations.
AWSC = All-Way Stop Control; LOS = Level of Service
[1] For signalized intersections and all-way stop controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches. Intersection delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).
[2] Intersection was analyzed as AWSC under Existing Conditions and with a traffic signal under Cumulative No Project Conditions.
Source: Fehr & Peers, 2021

As displayed, the Airport Way/SR 120 eastbound and westbound ramps would operate acceptably under Cumulative No Project conditions. However, Airport Way/W Atherton Drive would operate unacceptably at LOS F with approximately 105 seconds of delay during the AM peak hour and LOS E with approximately 73 seconds of delay during the PM peak hour.

5.2 Cumulative Plus Project Intersection Operations

Due to the increase in development south of State Route 120 in the cumulative year, trip distribution is anticipated to change under cumulative conditions. Project trips were distributed as described below:

- On Airport Way north of State Route 120: 40%
- On Airport Way south of Airport Way/W Atherton Drive: 55%
- On Atherton Drive east of Airport Way: 5%

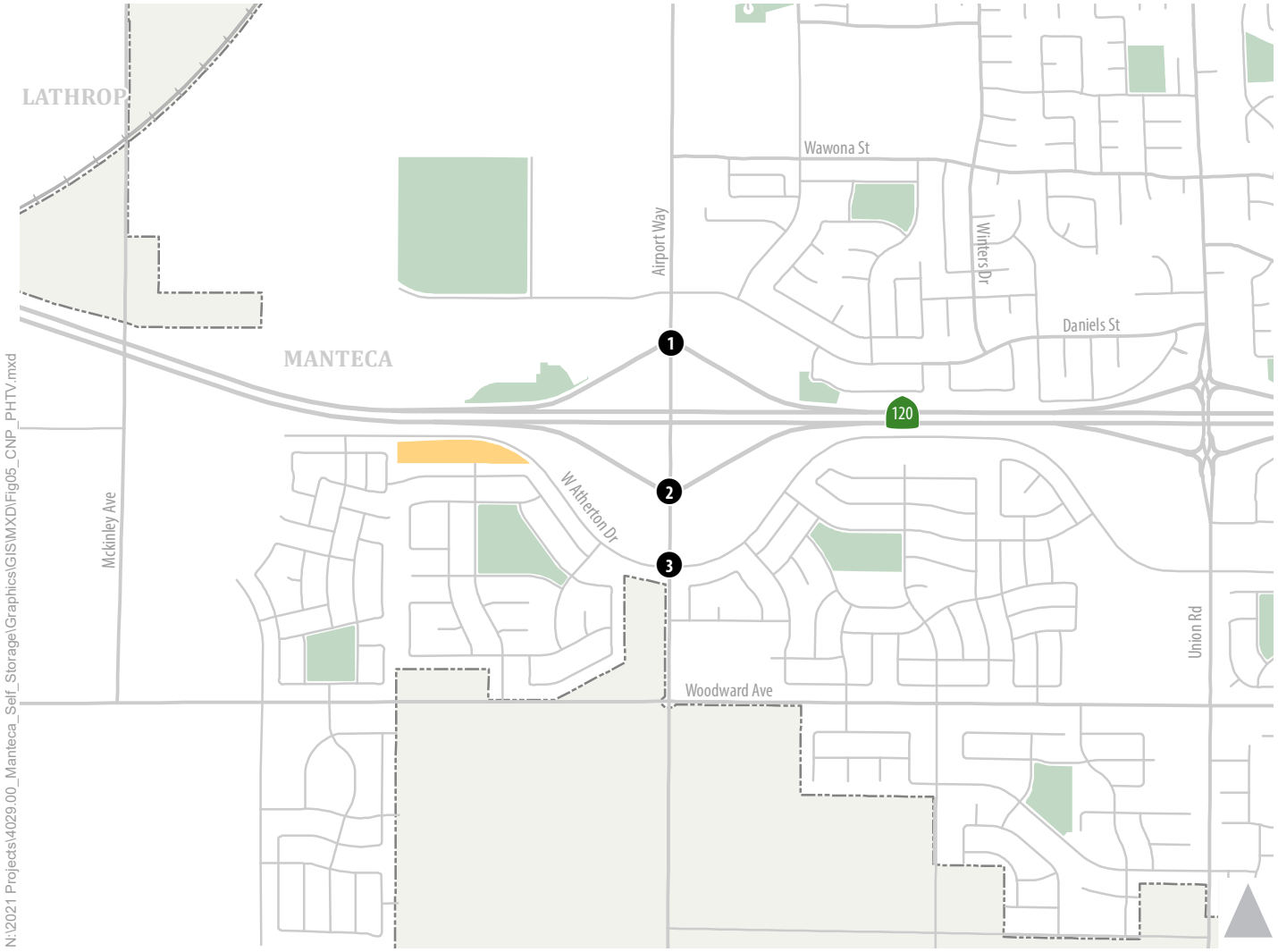
Project trips were added to Cumulative No Project volumes to develop Cumulative Plus Project turning movements. **Figure 6** displays the intersection turning movements under Cumulative Plus Project conditions. **Table 6** presents the results of the Cumulative Plus Project intersection operations analysis.

Table 6: Intersection Operations –Cumulative Plus Project Conditions

Intersection	Control Type	Peak Hour	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
			Delay[1]	LOS	Delay[1]	LOS
1. Airport Way/ SR 120 WB Ramps	Signal	AM PM	10.1 14.9	B B	10.1 14.9	B B
2. Airport Way/ SR 120 EB Ramps	Signal	AM PM	8.6 13.5	A B	8.6 13.5	A B
3. Airport Way/ W Atherton Dr	Signal	AM PM	**104.6** **72.6**	**F** **E**	**104.8** **73.1**	**F** **E**
4. W Atherton Dr/ Project Driveway	SSSC	AM PM	N/A	N/A	1 (10.0) 1 (9.7)	A (B) A (A)

Notes:
Bold indicates unacceptable operations; SSSC = Side-Street Stop Control; LOS = Level of Service
[1] For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side street stop-controlled intersections, intersection delay is reported in seconds per vehicle for the overall intersection and (worst-case) movement. Intersection delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).
Source: Fehr & Peers, 2021

As displayed, most intersections would operate acceptably under cumulative plus project conditions. However, Airport Way/West Atherton Drive would continue to operate unacceptably. Under cumulative plus project conditions, delay would increase by 0.2 seconds during the AM peak hour and 0.5 seconds during the PM peak hour. Project trips represent less than one percent of total trips at the intersection.



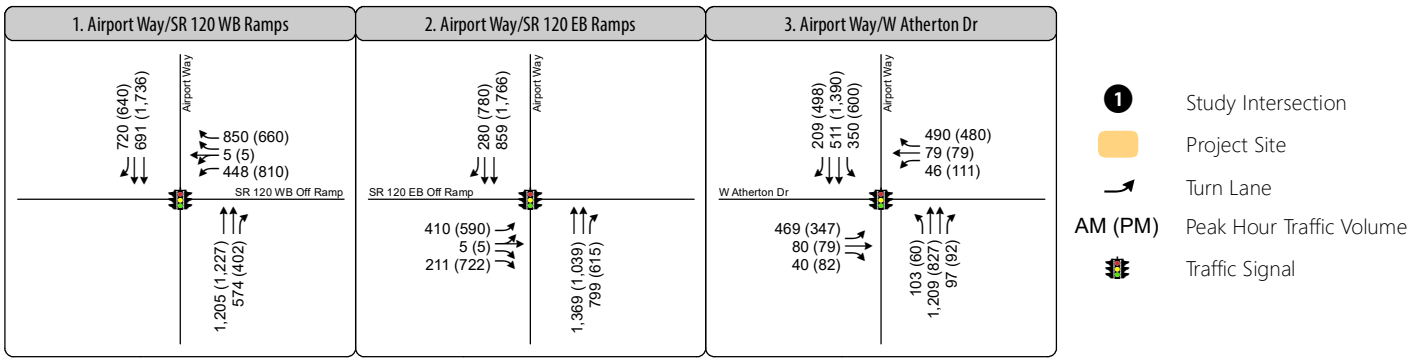
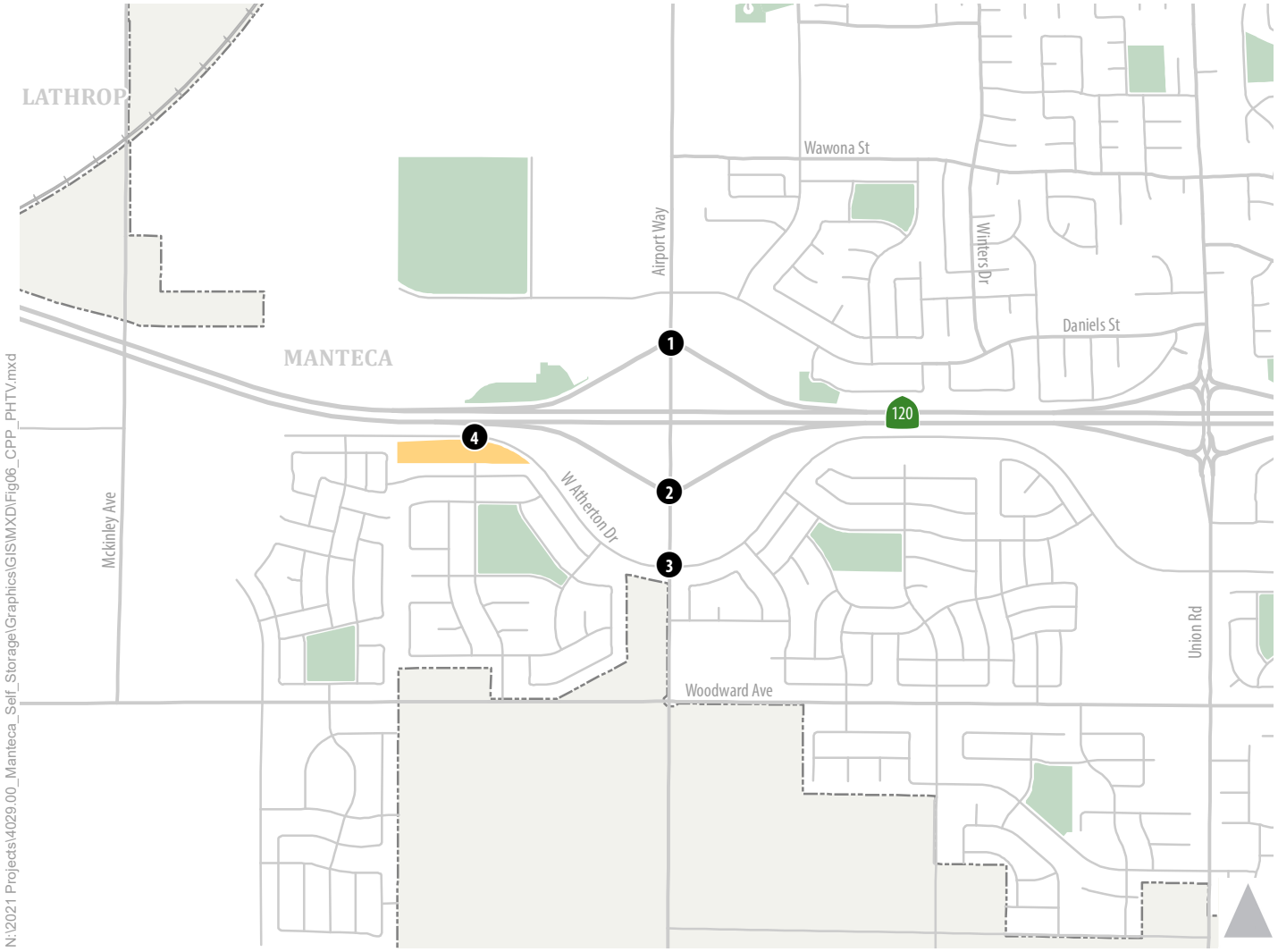


Figure 5

Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions



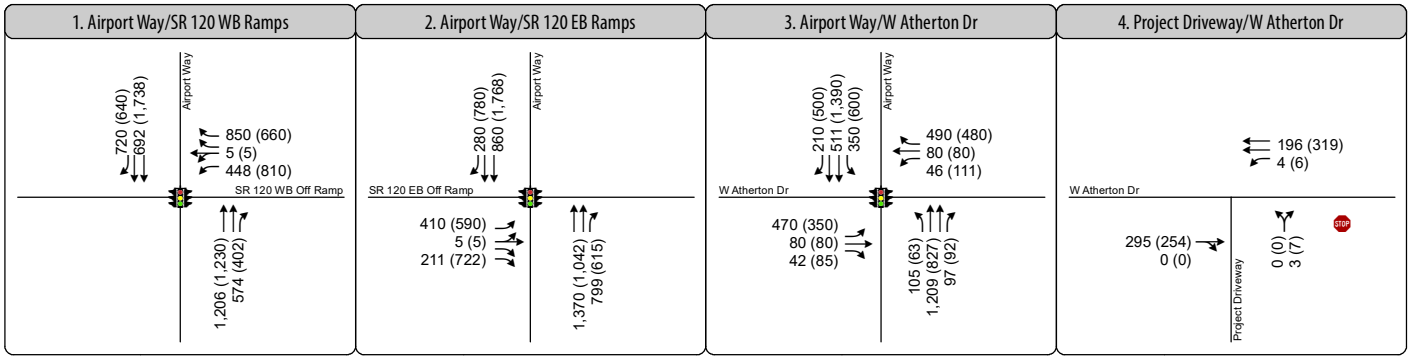


Figure 6

Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions

Due to the low trip generation and minimal increase in delay, it can be concluded that the project has little effect on intersection operations at Airport Way/W Atherton Drive in the cumulative year and there are no recommended improvements that should be required with the proposed project.

However, it should be noted that the Lumina Ranch development project, which will be conditioned to install the traffic signal at Airport Way/W Atherton Drive, analyzed and recommends additional improvements at this intersection, which differ slightly from what is noted in the PFIP. These improvements will be required when development occurs on the northwest, southwest, or northeast parcels adjacent to the intersection. These improvements are noted in this analysis for reference only and should not be required as a condition of approval for the proposed project. The only condition of approval for the proposed project should be payment of the applicable PFIP fee prior to building permit issuance.

- **Cumulative Year Improvements at Airport Way/W Atherton Drive –** The eastbound approach should be modified to include dual lefts and a shared through/right turn lane. The signal phasing for the westbound approach should be modified to include an overlap phase for the westbound right turn. With this phasing plan, southbound U-turns would be prohibited.

These improvements were studied under cumulative no project and cumulative plus project conditions for the proposed project. **Table 7** presents the results of this analysis. As displayed, the intersection would operate acceptably at LOS D or better with the improvements during both peak hours.

Table 7: Intersection Operations –Cumulative Plus Project Conditions with Improvements

Intersection	Control Type	Peak Hour	Cumulative No Project With Improvements		Cumulative Plus Project With Improvements	
			Delay[1]	LOS	Delay[1]	LOS
3. Airport Way/ W Atherton Dr	Signal	AM PM	54.7 40.6	D D	54.7 40.9	D D

Notes:
LOS = Level of Service
[1] For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. Intersection delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual 6th Edition (Transportation Research Board, 2016).
Source: Fehr & Peers, 2021

6. Site Access and On-Site Circulation Evaluation

As previously described, proposed access to the project site includes one full access intersection on West Atherton Drive and three emergency vehicle only access driveways, two on West Atherton Drive and one connecting to Bella Terra to the south. **Figure 2** displays the project site plan.

We completed a swept path analysis using AutoTURN software to evaluate the adequacy of site access and on-site circulation for passenger cars, trucks, and moving vans/trucks. The site plan indicated a single unit 40 foot truck; therefore, a single unit 40 foot truck was the longest truck used in our analysis. The results of this analysis indicate that passenger cars, trucks, and moving vans/trucks up to a 30 foot truck can navigate the site adequately. However, in certain circumstances, a 40 foot truck may have difficulty. If 40 foot trucks are anticipated to frequently access the storage units, the following site plan modifications are recommended for consideration:

- Widen/flare the main entrance on West Atherton Drive. Large trucks will be required to use multiple lanes to make a right turn in and right turn out onto West Atherton Drive. Additionally, if there is a vehicle waiting to exit the project site, a truck will not be able to enter the site as the driveway width is insufficient to accommodate both vehicles.
- Single unit 40 foot trucks are unable to use the turnaround on the southeast side of the site. Install signage saying no large vehicles in the east-side middle aisle.
- Consider one-way travel throughout the entire site.

Additionally, the project site plan analyzed adequacy of on-site circulation for a fire truck to navigate the site. This evaluation assumed a 25 foot inner and 44 foot exterior radius. It is recommended that a 25 foot inner and 44 foot exterior radius be confirmed with the Fire Department to ensure there is adequate room for City fire trucks to navigate the site.

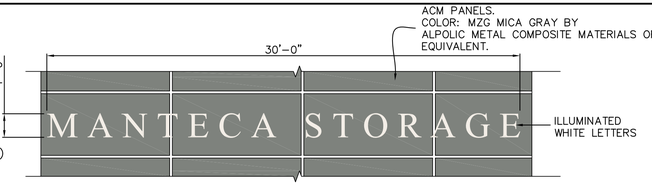
Appendix A – Technical Calculations

APPENDIX C: SITE PLAN, LANDSCAPE PLAN, LIGHTING PLAN, ETC.

MONUMENT SIGN MAXIMUM AREA SHALL BE 50 S.F. PER FACE PER CITY OF MANTECA MUNICIPAL CODE TABLE 17.54.080–1.

ACTUAL SIGN AREA = 50 S.F.

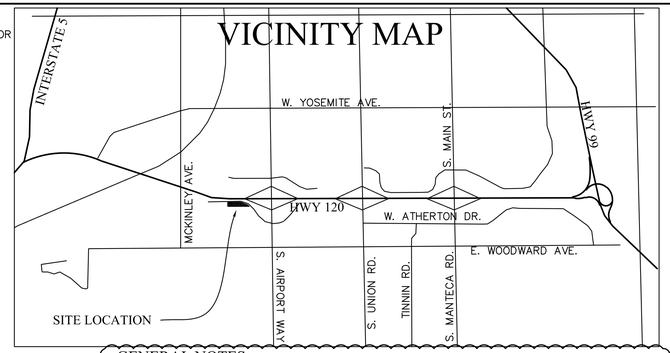
3 MONUMENT SIGN DETAIL
N.T.S.

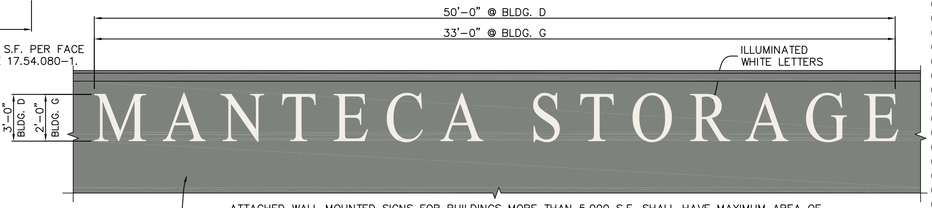


ATTACHED WALL MOUNTED SIGNS FOR BUILDINGS LESS THAN 5,000 S.F. SHALL HAVE MAXIMUM AREA OF 1.5 S.F. PER 1 LINEAR FOOT OF BUILDING FRONTAGE.

FRONTAGE OF OFFICE: 58 L.F.
58 L.F. X 1.5 = 87 S.F. MAXIMUM SIGN AREA AT OFFICE
ACTUAL SIGN AREA = 45 S.F.

1 OFFICE WALL MOUNTED SIGN DETAIL
N.T.S.





ATTACHED WALL MOUNTED SIGNS FOR BUILDINGS MORE THAN 5,000 S.F. SHALL HAVE MAXIMUM AREA OF 2.5 S.F. PER 1 LINEAR FOOT OF BUILDING FRONTAGE.

FRONTAGE OF BLDG. "D": 255 L.F.
255 L.F. X 2.5 = 637 S.F.
200 S.F. MAXIMUM SIGN AREA ALLOWED PER CITY OF MANTECA MUNICIPAL CODE TABLE 17.54.080–1.

ACTUAL SIGN AREA = 150 S.F.

FRONTAGE OF BLDG. "G": 200 L.F.
200 L.F. X 2.5 = 500 S.F.
200 S.F. MAXIMUM SIGN AREA ALLOWED PER CITY OF MANTECA MUNICIPAL CODE TABLE 17.54.080–1.

ACTUAL SIGN AREA = 66 S.F.

2 STORAGE BLDG. WALL MOUNTED SIGN DETAIL
N.T.S.

NOTE:
BUILDING "A" WILL HAVE ACM PANELS.
COLOR: MZG MICA GRAY BY
ALPOLIC METAL COMPOSITE MATERIALS OR EQUIVALENT.

GENERAL NOTES

1. PROJECT WILL BE PHASED BASED ON MARKET ANALYSIS BUT IS ANTICIPATED TO INCLUDE PHASE 1 AS THE OFFICE, BUILDINGS D, E, & F; PHASE 2 BUILDINGS A, B, & C; PHASE 3 BUILDINGS G, H & I.
2. VEHICULAR GATES SHALL BE 6' HIGH CONSTRUCTED OF WROUGHT IRON. FENCE SEGMENTS BETWEEN GATES AND ADJACENT TO BUILDINGS SHALL MATCH GATE HEIGHTS AND CONSTRUCTION MATERIAL.
3. BUILDING DIMENSIONS NOTED REPRESENT THE OVERALL DISTANCES.
4. FIRE HYDRANTS TO BE AS REQUIRED BY CODE AND CITY FIRE DEPARTMENT.
5. STREET LIGHTS EXISTING ALONG CITY ROAD FRONTAGE SHOWN.
6. REFUSE COLLECTION IS NOT PROVIDED FOR SELF STORAGE CUSTOMERS. INDIVIDUAL COLLECTION (SMALL TOTERS) WILL BE PROVIDED FOR THE MANAGER AND OFFICE STAFF LOCATED ADJACENT THE OFFICE.
7. BUILDING DIMENSIONS LISTED REPRESENT OVERALL LENGTH AND WIDTH OF BLDG.
8. THE DEVELOPER SHALL SUBMIT A PAD ELEVATION CERTIFICATION PREPARED BY A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER TO THE CHIEF BUILDING OFFICIAL, CERTIFYING THAT THE PAD ELEVATIONS AND BUILDING LOCATION (SETBACKS) ARE PURSUANT TO THE APPROVED PLANS PRIOR TO RECEIVING A FOUNDATION INSPECTION.
9. AT TIME OF BUILDING PERMIT SUBMITTAL THE DEVELOPER SHALL INCORPORATE ALL CONDITIONS OF APPROVALS FROM ALL DEPARTMENTS AND IMPRINT INTO THE SUBMITTAL SET OF CONSTRUCTION DOCUMENTS/PLANS.
10. ANY GEOTECHNICAL DRILLING SHALL BE CONDUCTED UNDER PERMIT AND INSPECTION BY THE ENVIRONMENTAL HEALTH DEPARTMENT (SAN JOAQUIN COUNTY DEVELOPMENT TITLE, SECTION 9– 1115.3 AND 9–1115.6).
11. ENCROACHMENTS WITHIN SOUTH SAN JOAQUIN IRRIGATION DISTRICT EASEMENT AND CONNECTIONS TO THEIR SYSTEM SHALL BE PERFORMED WITH AN APPROVED ENCROACHMENT PERMIT FROM THE DISTRICT. IMPROVEMENT PLANS SHALL BE APPROVED BY SSJID PRIOR TO CONSTRUCTION.

PROJECT DATA

SITE ADDRESS: 2430 WEST ATHERTON DRIVE, MANTECA, CA 95337
A.P.N.: 241–320–57
SITE AREA: 5.64 AC. (245,731 S.F.) (NET)

ZONING: CG (GENERAL COMMERCIAL)

BUILDING AREA ANALYSIS

PHASE 1:

OFFICE UNIT:
OFFICE AREA: 1,477 S.F.
CART & UTILITY STORAGE: 623 S.F.
PORCH AREA: 423 S.F.

TOTAL BUILDING FOOT PRINT = 2,524 S.F.

BUILDING "D" SELF STORAGE: 8,900 S.F.
BUILDING "E" SELF STORAGE: 14,550 S.F.
BUILDING "F" SELF STORAGE: 13,300 S.F.

PHASE 2:

BUILDING "A" SELF STORAGE: 10,175 S.F.
BUILDING "B" SELF STORAGE: 16,750 S.F.
BUILDING "C" SELF STORAGE: 13,275 S.F.

PHASE 3:

BUILDING "G" SELF STORAGE: 31,332 S.F.
BUILDING "H" SELF STORAGE: 4,550 S.F.
BUILDING "I" SELF STORAGE: 10,525 S.F.

TOTAL SELF STORAGE UNITS: 123,357 SQ.FT. (ALL PHASES)

FLOOR AREA RATIO (FAR) 0.50

B PHASE 1 PARKING REQUIRED

ESTIMATED 844 UNITS TOTAL PHASES 1–3
123,357 S.F. TOTAL STORAGE BUILDING AREA PHASES 1–3
123,357 S.F. / 844 = 146 S.F. PER UNIT APPROXIMATELY

PHASE 1 CONTAINS 36,750 S.F. STORAGE
36,750 S.F. / 146 = 252 UNITS APPROXIMATELY
STORAGE UNITS: 1 SPACE PER 50 UNITS
253 UNITS / 50 = 5 SPACES REQUIRED

MANAGERS UNIT: 4 SPACES/1000 S.F. OF GROSS FLOOR AREA = 6 SPACES REQUIRED

PHASE 1 TOTAL PARKING REQUIRED: 11 SPACES (9 STD. SPACES, 1 CLEAN AIR, 1 EVSE)
SEE TABLES 5.106.5.2. & 5.106.5.3.3 THIS SHEET

PHASE 2 PARKING REQUIRED
PHASE 2 CONTAINS 40,200 S.F. STORAGE
40,200 S.F. / 146 = 275 UNITS APPROXIMATELY
STORAGE UNITS: 1 SPACE PER 50 UNITS
275 UNITS / 50 = 6 SPACES REQUIRED

PHASE 1 & 2 TOTAL PARKING REQUIRED: 17 SPACES

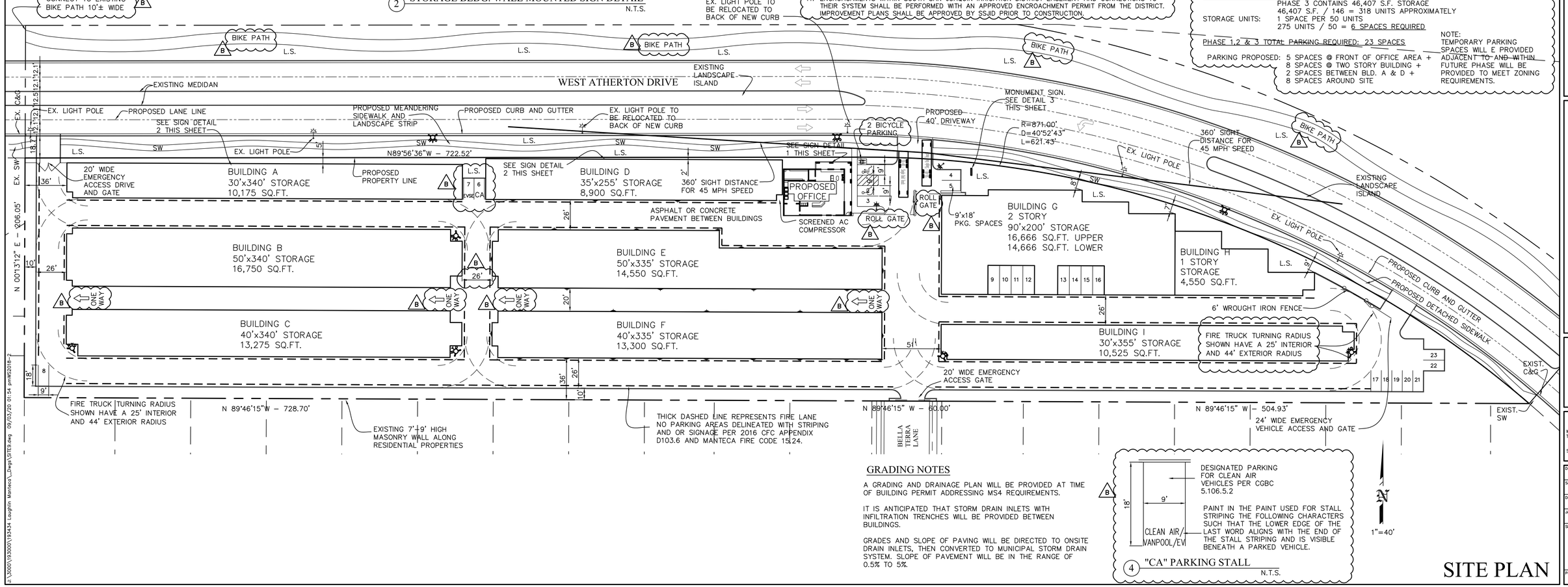
PHASE 3 PARKING REQUIRED
PHASE 3 CONTAINS 46,407 S.F. STORAGE
46,407 S.F. / 146 = 318 UNITS APPROXIMATELY
STORAGE UNITS: 1 SPACE PER 50 UNITS
275 UNITS / 50 = 6 SPACES REQUIRED

PHASE 1,2 & 3 TOTAL PARKING REQUIRED: 23 SPACES

PARKING PROPOSED: 5 SPACES @ FRONT OF OFFICE AREA +
8 SPACES @ TWO STORY BUILDING +
2 SPACES BETWEEN BLD. A & D +
8 SPACES AROUND SITE

NOTE:
TEMPORARY PARKING SPACES WILL E PROVIDED ADJACENT TO AND WITHIN FUTURE PHASE WILL BE PROVIDED TO MEET ZONING REQUIREMENTS.

SHEET LEGEND



GRADING NOTES

A GRADING AND DRAINAGE PLAN WILL BE PROVIDED AT TIME OF BUILDING PERMIT ADDRESSING MS4 REQUIREMENTS.

IT IS ANTICIPATED THAT STORM DRAIN INLETS WITH INFILTRATION TRENCHES WILL BE PROVIDED BETWEEN BUILDINGS.

GRADES AND SLOPE OF PAVING WILL BE DIRECTED TO ONSITE DRAIN INLETS, THEN CONVERTED TO MUNICIPAL STORM DRAIN SYSTEM. SLOPE OF PAVEMENT WILL BE IN THE RANGE OF 0.5% TO 5%.

4 "CA" PARKING STALL
N.T.S.

N
1"=40'

SITE PLAN

REVISIONS			
A		2–4–20	MM
B		5–8–20	MM
C		.	.
D		.	.
E		.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE(S) ACCORDINGLY

PROPOSED USE PERMIT DEVELOPMENT PLAN FOR:

MANTECA STORAGE

2430 WEST ATHERTON DRIVE, MANTECA, CA
APN: 241-320-57

LAUGHLIN and SPENCE
CIVIL ENGINEERS & SURVEYORS
1008 Live Oak Boulevard (530) 671 1008
Yuba City, California 95991 fax (530) 671 0822

THESE PLANS ARE CONSIDERED "PRELIMINARY" OR "FOR REVIEW" UNLESS WET SIGNED AND SEALED BY THE ENGINEER. THEY SHALL NOT BE USED FOR CONSTRUCTION UNLESS STAMPED APPROVED BY THE LOCAL AGENCY.

Date	6–20–19
Scale	1"=40'
Drawn	FA/MM
Job	193434
Sheet	C1
Page	

LINE LEGEND

- EXISTING PROJECT PROPERTY LINE TO REMAIN
- PROPOSED PROJECT PROPERTY LINE
- EXISTING PROJECT PROPERTY LINE TO BE REMOVED
- ADJACENT PARCEL PROPERTY LINE
- ROAD CENTER LINE
- EXISTING EDGE OF PAVEMENT
- ACCESS ROAD EASMENT
- RIGHT OF WAY LINE PER DEEDS

PORTION PROJECT PARCEL TO BE DEDICATED TO CITY SHOWN CROSS HATCHED

EXISTING PROPERTY LINE

N89°56'36"W – 852.04'

EXISTING CURB AND GUTTER

WEST ATHERTON DRIVE

EXISTING LANDSCAPE MEDIAN

EXISTING SOUTH R/W LINE PER DOC. #2005–057435

EXISTING EDGE OF PAVEMENT

N 00°13'12" E – 114.00'

N89°56'36"W – 722.52'

PROPOSED NORTH PROPERTY LINE

EXISTING PROPERTY LINE

EXISTING NORTH & NORTHEASTERLY R/W LINE PER DOC. #2005–057435

EX. SOUTH & SOUTHWESTERLY R/W LINE PER DOC. #2005–057435

R=1063.00'
D=30°55'50"
L=573.85'

LANDS NOT A PART OF THIS PROJECT; BEING A PORTION OF ORIGINAL PARCEL 3 ADJUSTED TO PARCEL 2 BY LLA PER 2007–170432

EXISTING NORTHEASTERLY PROPERTY LINE OF PROJECT PARCEL

R=871.00'
D=40°52'43"
L=621.43'

EXISTING LANDSCAPE MEDIAN

EXISTING EDGE OF PAVEMENT

PROPOSED NORTH PROPERTY LINE

N 00°13'12" E – 206.05'

PROPOSED PROJECT PARCEL

EXISTING PROPERTY LINES

N 89°46'15"W – 728.70'

N 89°46'15" W – 60.00'

N 89°46'15" W – 504.93'

DONATELLO STREET

BELLA TERRA LN.

N

1"=40'

ROAD R/W AND GRANTING EXHIBIT

REVISIONS		
A	.	.
B	.	.
C	.	.
D	.	.
E	.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

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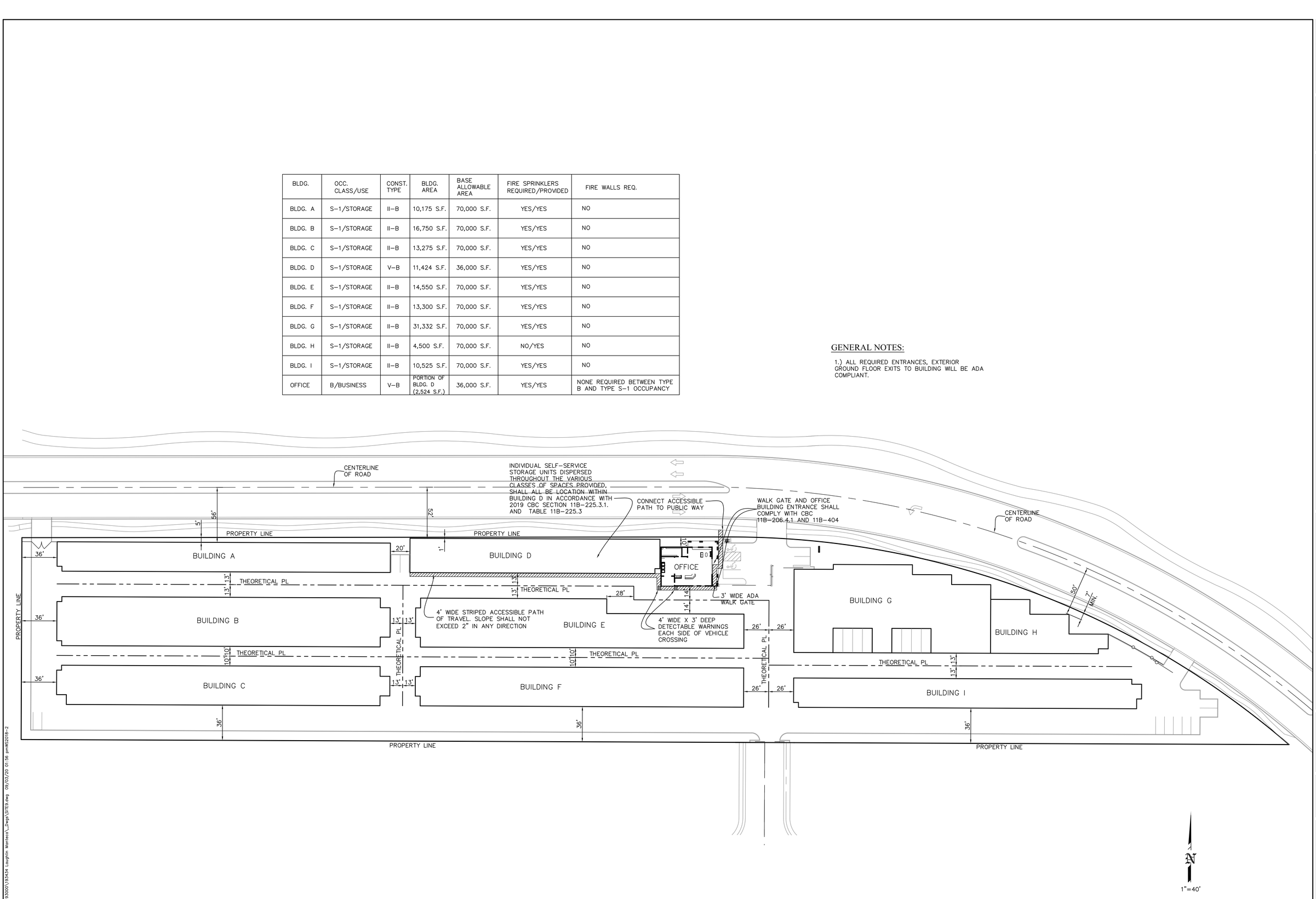
BLDG.	OCC. CLASS/USE	CONST. TYPE	BLDG. AREA	BASE ALLOWABLE AREA	FIRE SPRINKLERS REQUIRED/PROVIDED	FIRE WALLS REQ.
BLDG. A	S-1/STORAGE	II-B	10,175 S.F.	70,000 S.F.	YES/YES	NO
BLDG. B	S-1/STORAGE	II-B	16,750 S.F.	70,000 S.F.	YES/YES	NO
BLDG. C	S-1/STORAGE	II-B	13,275 S.F.	70,000 S.F.	YES/YES	NO
BLDG. D	S-1/STORAGE	V-B	11,424 S.F.	36,000 S.F.	YES/YES	NO
BLDG. E	S-1/STORAGE	II-B	14,550 S.F.	70,000 S.F.	YES/YES	NO
BLDG. F	S-1/STORAGE	II-B	13,300 S.F.	70,000 S.F.	YES/YES	NO
BLDG. G	S-1/STORAGE	II-B	31,332 S.F.	70,000 S.F.	YES/YES	NO
BLDG. H	S-1/STORAGE	II-B	4,500 S.F.	70,000 S.F.	NO/YES	NO
BLDG. I	S-1/STORAGE	II-B	10,525 S.F.	70,000 S.F.	YES/YES	NO
OFFICE	B/BUSINESS	V-B	PORTION OF BLDG. D (2,524 S.F.)	36,000 S.F.	YES/YES	NONE REQUIRED BETWEEN TYPE B AND TYPE S-1 OCCUPANCY

GENERAL NOTES:

1.) ALL REQUIRED ENTRANCES, EXTERIOR GROUND FLOOR EXITS TO BUILDING WILL BE ADA COMPLIANT.



BUILDING CODE STUDY & ADA ACCESSIBLE SITE PLAN

REVISIONS

A	.	.
B	.	.
C	.	.
D	.	.
E	.	

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE(S) ACCORDINGLY

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Job	193434
Sheet	C3
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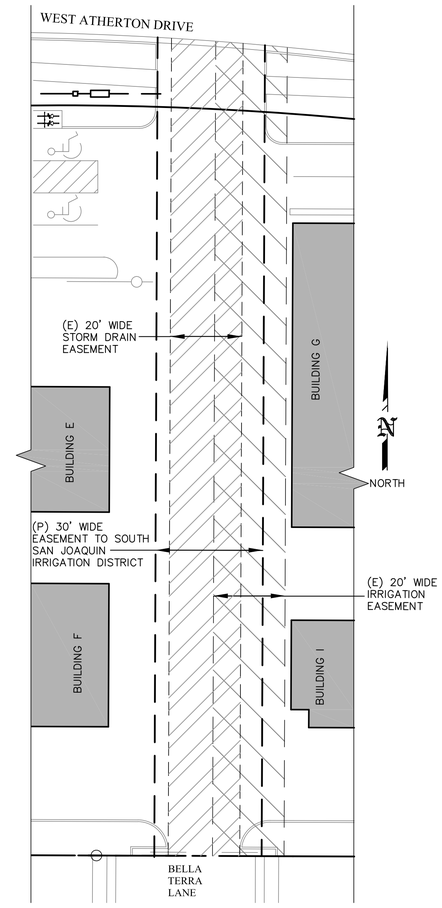
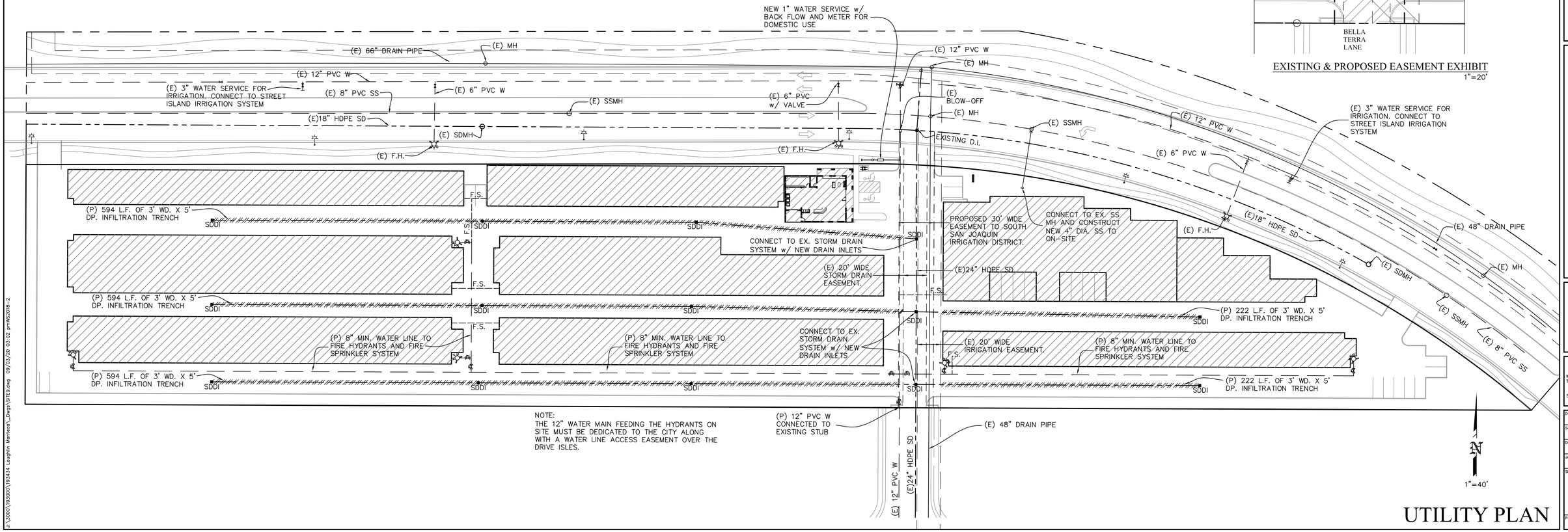


EXISTING & PROPOSED EASEMENT EXHIBIT
1"=20'



NOTE:
THE 12" WATER MAIN FEEDING THE HYDRANTS ON SITE MUST BE DEDICATED TO THE CITY ALONG WITH A WATER LINE ACCESS EASEMENT OVER THE DRIVE ISLES.

UTILITY PLAN

REVISIONS		
A	.	.
B	.	.
C	.	.
D	.	.
E	.	

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0 1"
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Scale	1"=40'
Drawn	FA/MM
Job	193434
Sheet	C4
Page	

J:\3000\193000\193434 Laughlin Manteca_Dwgs\STE9.dwg 09/03/20 03:02 pmMS2016-2

NOTE:
THIS LANDSCAPE DESIGN IS PRELIMINARY. FINAL LANDSCAPING AND IRRIGATION DESIGN AND SYSTEM SHALL MEET ALL WATER EFFICIENT CRITERIA AS REQUIRED BY THE CITY OF MANTECA.

A

Laughlin and Spence Job: 193434 Date:5-11-20

WATER EFFICIENT LANDSCAPE WORKSHEET - NON-RESIDENTIAL

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package

Reference Evapotranspiration (ETo) 46.7 (Appx. A)

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
LOW WATER USE PLANTINGS	0.3	DRIP	0.81	0.37	54,635	20,235.19	585,889.55
LOW WATER USE PLANTINGS	0.3	DRIP	0.81	0.37	0	0.00	0.00
LAWN		OVERHEAD SPRAY	0.75	0.00	0	0.00	0.00
				Totals	54635	20235.19	
					(A)	(B)	
Special Landscape Areas							
				1			0
				1			0
				1			0
				Totals	0	0	
					(C)	(D)	
						ETWU Total	585,889.55
					Maximum Allowed Water Allowance (MAWA)[e]		711,855.81

[a] *Hydrozone #/Planting Description e.g. 1) Front Lawn 2) Low water use plantings 3) medium water use plantings*

[b] *Irrigation Method overhead spray or drip*

[c] *Irrigation Efficiency 0.75 for spray head 0.81 for drip*

[d] *ETWU (Annual Gallons Required) ETo*0.62*ETAF*Area* where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year

[e] *MAWA (Annual Gallon Allowed) (ETo) (0.62) [(ETAF*LA) + ((1-ETAF)*SLA)]* where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in sq. ft., SLA is the total special landscape area in sq. ft., and ETAF is 0.55 for residential areas and 0.45 for non-residential areas

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	20235.19	(B)	Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas
Total Area	54635	(A)	
Average ETAF	0.37	B/A	

All Landscape areas

Total ETAF x Area	20235.19	(B+D)
Total Area	54635	(A+C)
Sitewide ETAF	0.37	(B+D)/(A+C)

LANDSCAPING NOTES

1. LANDSCAPE PLANTING SHALL EMPHASIZE DROUGHT-TOLERANT SPECIES (ESPECIALLY ALONG NATURAL, OPEN SPACE AREAS), SHALL COMPLEMENT THE ARCHITECTURAL DESIGN OF STRUCTURES ON THE SITE, AND SHALL BE SUITABLE FOR THE SOIL AND CLIMATIC CONDITIONS SPECIFIC TO THE SITE.

2. STREET AND PARKING LOT TREES SHALL BE SELECTED FROM THE CITY'S ADOPTED MASTER LIST OF STREET TREES AND PARKING LOT TREES. A MINIMUM OF 30 PERCENT OF THE STREET TREES AND PARKING LOT TREES, RESPECTIVELY, SHALL BE AN EVERGREEN SPECIES.

3. TREE PLANTED WITHIN 10 FEET OF ANY HARDSCAPE (E.G. STREET, SIDEWALK, PAVED TRAIL, WALKWAY) SHALL BE A DEEP-ROOTED SPECIES OR SHALL BE SEPARATED FROM HARDSCAPES BY A ROOT BARRIER TO PREVENT PHYSICAL DAMAGE TO PUBLIC IMPROVEMENTS.

4. NO INVASIVE PLANT SPECIES SHALL BE INTRODUCED INTO THE LANDSCAPE.

5. THE MINIMUM PLANT SIZE FOR THE TREES SHALL BE 15 GALLON, WITH 25 PERCENT OF ALL TREES ON A PROJECT SITE PLANTED AT A MINIMUM 234-INCH BOX SIZE. FOR COMMERCIAL, OFFICE, COMMUNITY/CIVIC, AND INDUSTRIAL DEVELOPMENT, TREE SPACING WITHIN PERIMETER PLANTERS ALONG STREETS AND ABUTTING RESIDENTIAL PROPERTY SHALL BE PLANTED NO FARTHER APART ON CENTER THAN THE MATURE DIAMETER OF THE PROPOSED SPECIES.

6. PLANTER FOR TREES SHALL BE A MINIMUM OF 5 FEET WIDE BY 5 FEET LONG, CONSISTENT WITH THE CITY'S ADOPTED MASTER LIST OF STREET TREES AND PARKING LOT TREES.

7. SHRUB PLANTING SHALL BE A MINIMUM 5-GALLON SIZE, WITH 15-GALLON MINIMUM SIZE REQUIRED WHERE AN IMMEDIATE LANDSCAPE SCREEN IS REQUIRED (E.G. SCREENING OF HEADLIGHTS FROM DRIVE-THROUGH AISLES.) VEGETATIVE SHRUBS AND PERENNIALS SHALL BE A MINIMUM 1-GALLON SIZE. THE MINIMUM PLANTER WIDTH FOR SHRUBS IS 5 FEET.

8. GROUNDCOVER AND TURF. ROOTED CUTTING FROM FLOATS SHALL BE PLANTED NO FARTHER APART THAN 12 INCHES ON CENTER, AND CONTAINERIZED WOODY, SHRUB GROUND COVER PLANTINGS SHALL BE PLANTED NO FARTHER APART THAN 3 FEET ON CENTER IN ORDER TO ACHIEVE FULL COVERAGE WITHIN ONE YEAR. SOD REQUIRES A MINIMUM PLANTER WIDTH OF 6 FEET.

A

9. DEVELOPER/OWNER SHALL PROVIDE AND INDEPENDENT IRRIGATION SYSTEM AND IMPROVEMENTS WITH ITS OWN INDEPENDENT WATER SOURCE AND IRRIGATION CONTROLLER WITHIN MEDIAN AND BACK OF CURB TO FACE OF SIDEWALK.

10. ALL ONSITE LANDSCAPE IMPROVEMENTS UP TO THE BACK OF SIDEWALK, SHALL BE DESIGNED, INSTALLED, MAINTAINED AND CONTROLLED BY THE PROPERTY OWNER.

11. CURRENT CITY OF MANTECA STANDARDS AND SPECIFICATIONS FOR LANDSCAPE DEVELOPMENT SHALL BE FOLLOWED.

12. DEVELOPER/OWNER SHALL PREPARE SEPARATE CONSTRUCTION PLANS AND SPECIFICATIONS FOR ANY STREETSCAPE IMPROVEMENTS FOR PARKS AND RECREATION DEPARTMENTS APPROVAL, AT DELVELOPER'S/OWNER'S EXPENSE.

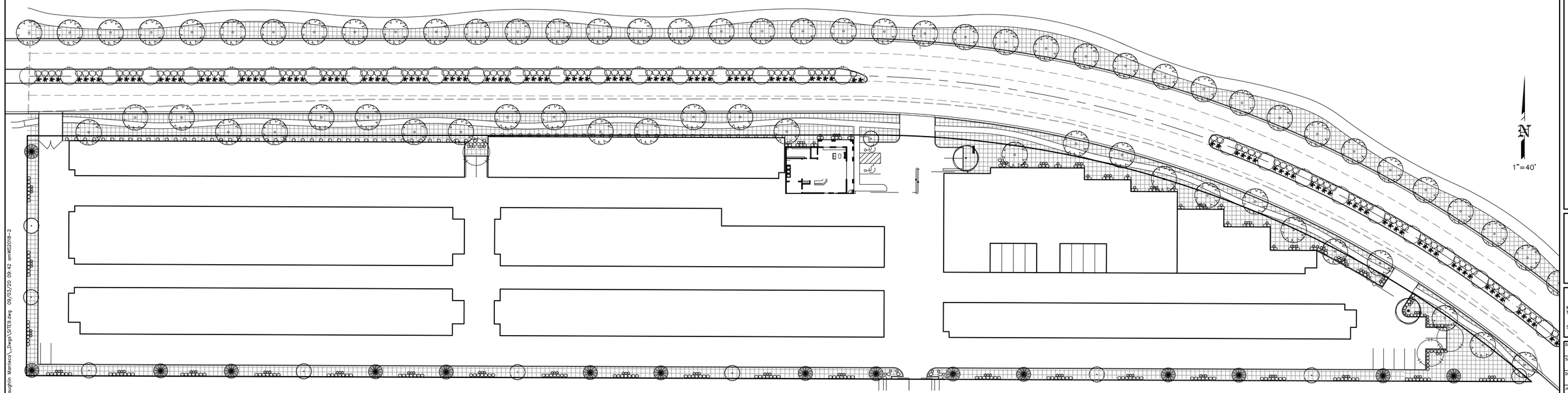
13. STREETSCAPE/MEDIAN LANDSCAPE IMPROVEMENTS SHALL BE INCLUDED IN THE COMMUNITY FACILITIES DISTRICT, OR OTHER FUNDING MECHANISM, TO PROVIDE RESOURCES FOR LANDSCAPE AND PARK MAINTENANCE COSTS AS PER THE REQUIREMENTS LISTED UNDER THE FORMATION REQUIREMENTS. DEVELOPER SHALL BE RESPONSIBLE FOR MAINTENANCE OF IMPROVEMENTS UNTIL SUFFICIENT FUNDING IS AVAILABLE/COLLECTED FOR CITY TO MAINTAIN.

PLANT SCHEDULE

TREES	BOTANICAL	COMMON	CONT
	PISTACIA CHINENSIS 'KEITH DAVEY'	CHINESE PISTACHE (MALE)	24" BOX
	ARBUTUS 'MARINA'	STRAWBERRY TREE	24" BOX
	ZELKOVA SERRATA "WIRELESSS"	WIRELESS ZEKOVA	24" BOX
A	LAGERSTROEMIA INDICA	DWARFE CRAPE MYRTLE	15 GAL.
	CERCIS CANADENSIS ALBA	WHITE REDBUD	15 GAL.

SHRUBS	BOTANICAL	COMMON	CONT
	CISTUS SUNSET	SUNSET ROCKROSE	5 GAL.
	DODONAEA VISCOSA PURPUREA	PURPLE LEAFED HOPSEED BUSH	5 GAL.
	PHOTINA FRASERI	PHOTINA	5 GAL.
	RHAPHIOLEPIS INDICA PINKIE	PINKIE INDOAN HAWTHORNE	5 GAL.
	NANDINA DOMESTICA COMPACTA	DWARF HEAVENLY BAMBOO	5 GAL.
	RHAPHIOLEPIS INDICA SPRINGTIME	SPRINGTIME INDIAN HAWTHORNE	5 GAL.
	HEMEROCALLIS HYBRID	DAYLILY	5 GAL.
A	PENNISETUM A. "HAMELN"	DWAF FOUNTAIN GRASS	

GROUND COVER	BOTANICAL	COMMON	CONT
	ACACIA REDOLENS	PROSTRATE ACACIA PLAN	1 GAL.



LANDSCAPE PLAN

REVISIONS

A	5-8-20	MM
B	.	.
C	.	.
D	.	.
E	.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE(S) ACCORDINGLY

PROPOSED USE PERMIT DEVELOPMENT PLAN FOR:

MANTECA STORAGE

2430 WEST ATHERTON DRIVE, MANTECA, CA
APN: 241-320-57

LAUGHLIN and SPENCE
CIVIL ENGINEERS & SURVEYORS
1008 Live Oak Boulevard
Yuba City, California 95991
(530) 671 1008
fax (530) 671 0822

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Date 6-20-19
Scale 1"=40'
Drawn FA/MM
Job 193434
Sheet L1
Page

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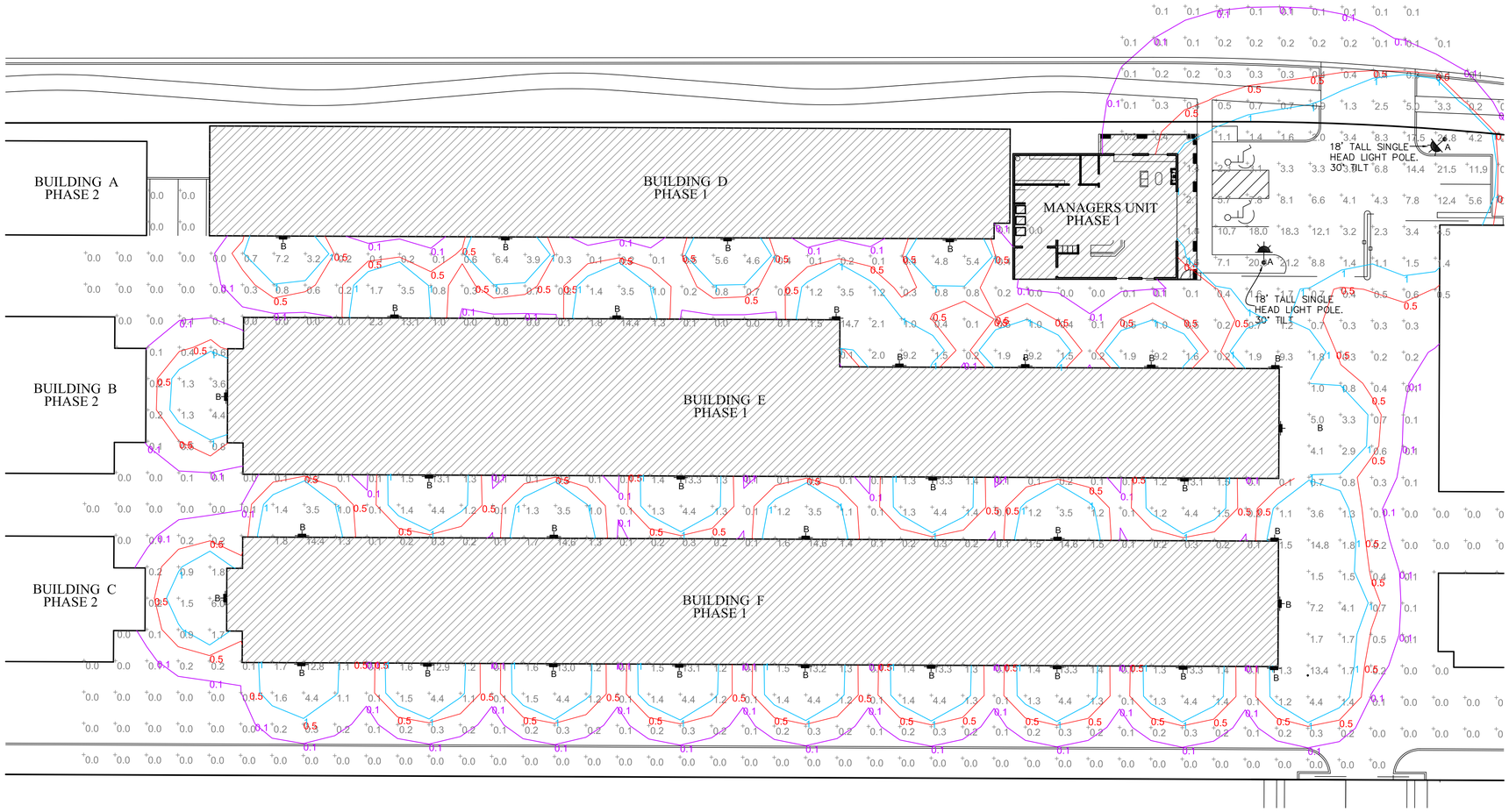

LUMINAIRE SCHEDULE

Symbol	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
A	2	FXLED150SF - FXLED150T (SF=SLIPFITTER MOUNT & T=TRUNNION MOUNT)	CAST FINNED METAL HOUSING, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH AND 1 APERTURE PER 3 LEDS, 6 CIRCUIT BOARDS EACH WITH 1 LED, CLEAR GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME WITH VISOR.	SIX WHITE MULTI-CHIP LIGHT EMITTING DIODES (LEDS), 6 LEDS AIMED AT THE HORIZON, 4 LEDS CANTED 21-DEGREES FROM STRAIGHT AHEAD. FXLED150SFY - FXLED150TY, ACTUAL PERFORMANCE MAY VARY. Canopy, Dock, Gas Station, Industrial, Institutional, Manufacturing, Recreation, Damp Location, Wet Location, Dock, Facade, Industrial, Landscape, Parking, Recreation, Sidewalk Sign, Site, Sports, Statue, Utility, Walkway, Flood, Security, Uplight, Wallwash, Wet Location	rab02292mod50-c.ies	Absolute	1.00	154.2
B	33	SLIM12	CAST BROWN PAINTED FINNED METAL HOUSING, 1 CIRCUIT BOARD WITH 1 LED, MOLDED PLASTIC REFLECTOR WITH SPECULAR FINISH, CLEAR FLAT GLASS LENS IN CAST BROWN PAINTED METAL LENS FRAME.	ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), AIMED 20-DEGREES FROM VERTICAL BASE-UP POSITION. SLIM12Y. ACTUAL PERFORMANCE MAY VARY. Area, Canopy, Dock, Educational, Facade, Government, Healthcare, Hospitality, Hotel, Industrial, Institutional, Library, Manufacturing, Marine, Medical, Office, Parking, Parks, Pathway Pedestrian, Pool, Recreation, Residential, Retail, Site, Tunnel, Underpass, Utility, Walkway Warehouse, Water Treatment, Direct, Emergency, Security	rab04264mod50.ies	Absolute	1.00	15.7

LUMINAIRE LOCATIONS

No.	Label	Location X	Location Y	Location Z	MH	Orientation	Tilt	Aim X	Aim Y	Aim Z
1	A	796.2	-499.4	18.0	18.0	0.5	30.0	796.3	-489.0	0.0
2	A	853.7	-459.9	18.0	18.0	230.5	30.0	845.7	-466.5	0.0
3	B	660.9	-518.1	8.0	8.0	-0.2	0.0	660.9	-518.1	0.0
4	B	800.6	-533.1	8.0	8.0	-0.2	0.0	800.6	-533.1	0.0
5	B	466.1	-543.5	11.0	11.0	269.4	0.0	466.1	-543.5	0.0
6	B	771.2	-568.3	8.0	8.0	179.8	0.0	771.2	-568.3	0.0
7	B	466.1	-607.7	11.0	11.0	269.4	0.0	466.1	-607.7	0.0
8	B	730.8	-588.1	8.0	8.0	-0.2	0.0	730.8	-588.1	0.0
9	B	811.1	-588.1	8.0	8.0	-0.2	0.0	811.1	-588.1	0.0
10	B	811.1	-628.3	8.0	8.0	179.8	0.0	811.1	-628.3	0.0
11	B	771.0	-628.3	8.0	8.0	179.8	0.0	771.0	-628.3	0.0
12	B	730.8	-628.3	8.0	8.0	179.8	0.0	730.8	-628.3	0.0
13	B	690.7	-628.3	8.0	8.0	179.8	0.0	690.7	-628.3	0.0
14	B	650.6	-628.3	8.0	8.0	179.8	0.0	650.6	-628.3	0.0
15	B	610.5	-628.3	8.0	8.0	179.8	0.0	610.5	-628.3	0.0
16	B	570.3	-628.3	8.0	8.0	179.8	0.0	570.3	-628.3	0.0
17	B	530.2	-628.3	8.0	8.0	179.8	0.0	530.2	-628.3	0.0
18	B	490.1	-628.3	8.0	8.0	179.8	0.0	490.1	-628.3	0.0
19	B	760.5	-533.1	8.0	8.0	-0.2	0.0	760.5	-533.1	0.0
20	B	720.3	-533.1	8.0	8.0	-0.2	0.0	720.3	-533.1	0.0
21	B	680.2	-533.1	8.0	8.0	-0.2	0.0	680.2	-533.1	0.0
22	B	811.3	-552.2	11.0	11.0	90.4	0.0	811.3	-552.2	0.0
23	B	811.3	-608.2	11.0	11.0	90.4	0.0	811.3	-608.2	0.0
24	B	650.6	-588.1	8.0	8.0	-0.2	0.0	650.6	-588.1	0.0
25	B	570.4	-588.1	8.0	8.0	-0.2	0.0	570.4	-588.1	0.0
26	B	490.1	-588.1	8.0	8.0	-0.2	0.0	490.1	-588.1	0.0
27	B	691.0	-568.3	8.0	8.0	179.8	0.0	691.0	-568.3	0.0
28	B	610.7	-568.3	8.0	8.0	179.8	0.0	610.7	-568.3	0.0
29	B	530.5	-568.3	8.0	8.0	179.8	0.0	530.5	-568.3	0.0
30	B	625.3	-492.3	8.0	8.0	179.8	0.0	625.3	-492.3	0.0
31	B	590.1	-518.1	8.0	8.0	-0.2	0.0	590.1	-518.1	0.0
32	B	519.3	-518.1	8.0	8.0	-0.2	0.0	519.3	-518.1	0.0
33	B	554.5	-492.3	8.0	8.0	179.8	0.0	554.5	-492.3	0.0
34	B	483.7	-492.3	8.0	8.0	179.8	0.0	483.7	-492.3	0.0
35	B	696.1	-492.3	8.0	8.0	179.8	0.0	696.1	-492.3	0.0

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.8 fc	21.8 fc	0.0 fc	N / A	N / A

NOTE:
DURING OFFSITE IMPROVEMENT PLAN REVIEW, A FOOT CANDLE LAYOUT WILL BE REQUIRED SHOWING THE EXISTING STREET LIGHTS MEET THE CITY'S LIGHTING CRITERIA OF 0.4 AVERAGE AND 0.07 MINIMUM AS REQUIRED BY THE CITY OF MANTECA ENGINEERING DIVISION.

PHOTOMETRIC PLAN

REVISIONS

A	5-8-20	MM
B	.	.
C	.	.
D	.	.
E	.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
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Date 6-20-19
Scale 1"=20'
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Job 193434
Sheet P1
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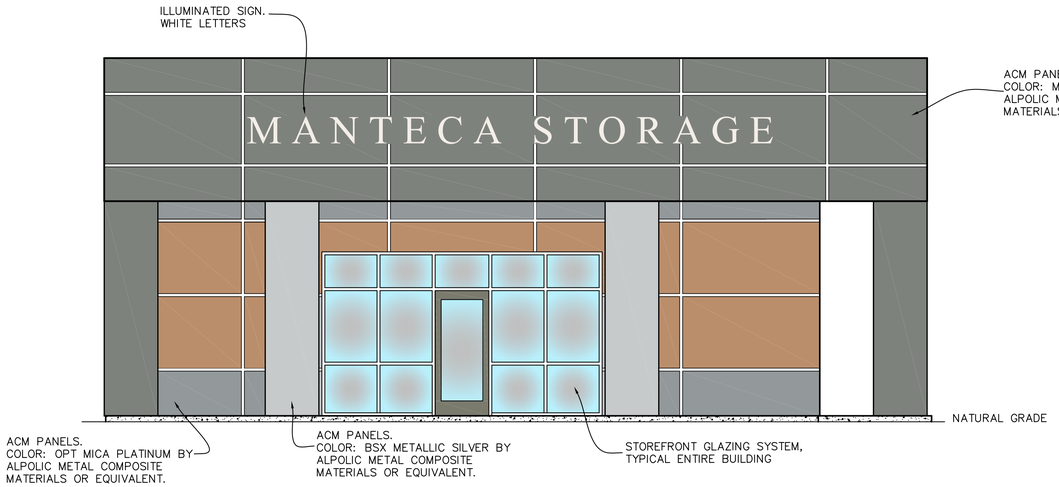
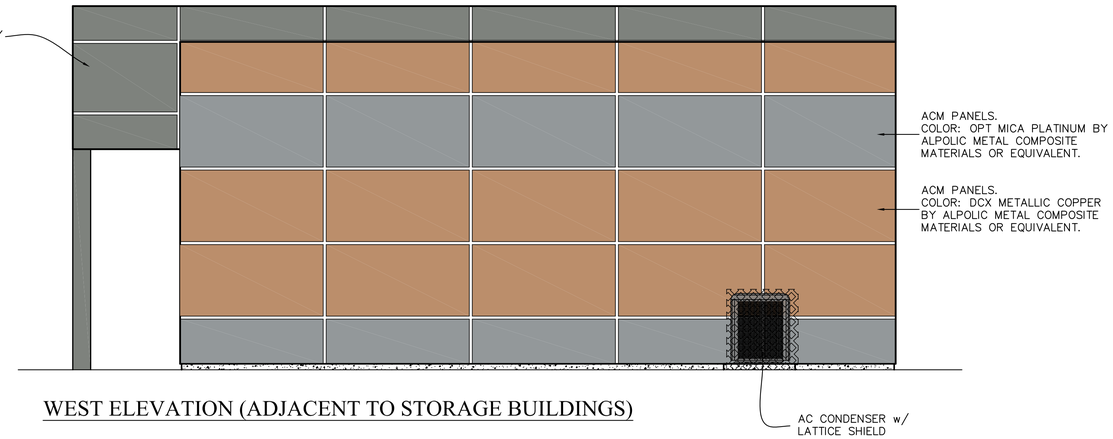
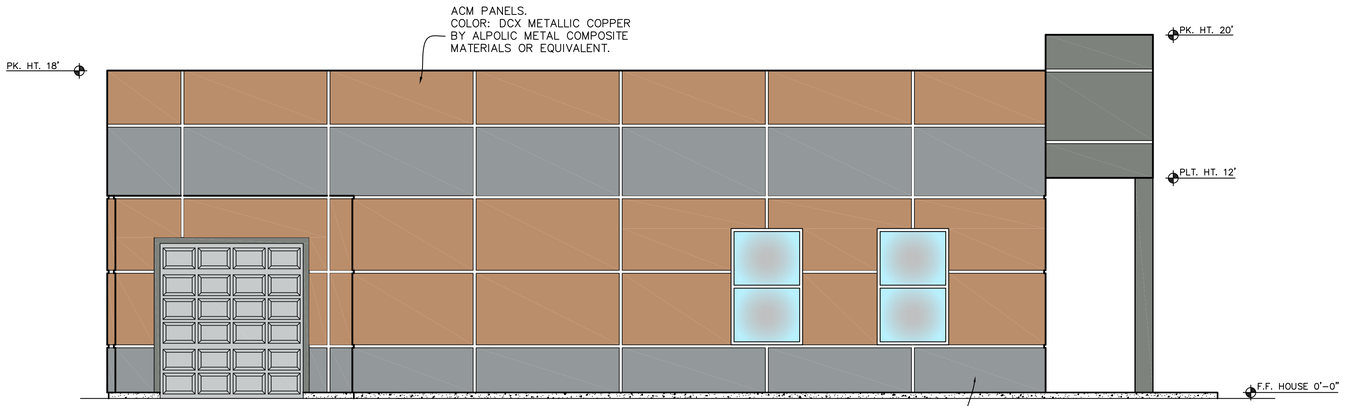


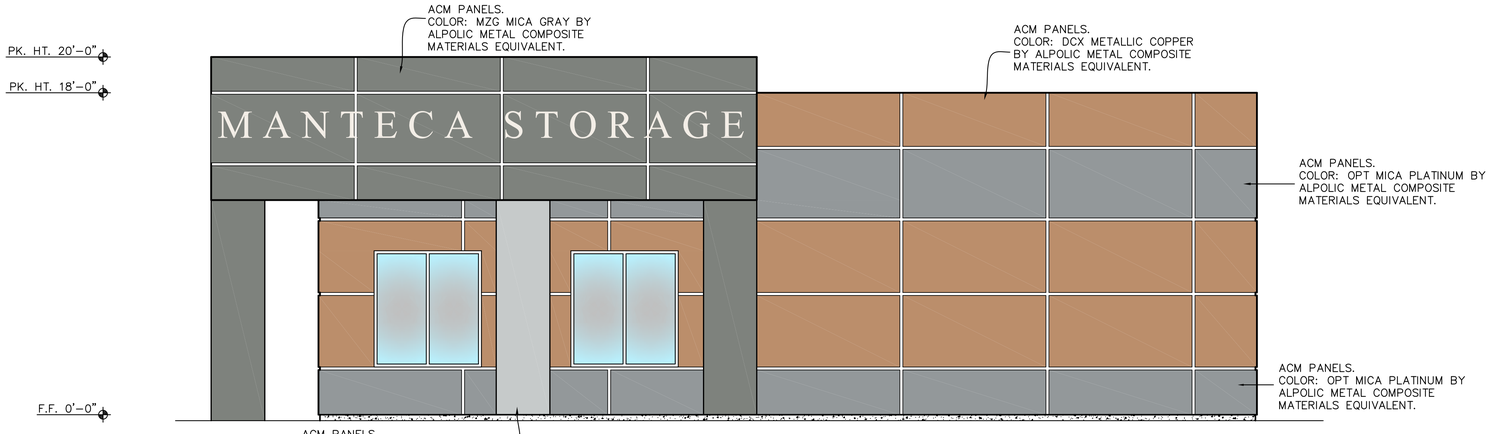
EAST ELEVATION (ADJACENT TO PARKING LOT)



WEST ELEVATION (ADJACENT TO STORAGE BUILDINGS)



SOUTH ELEVATION (ADJACENT TO STORAGE BUILDINGS)



NORTH ELEVATION (ADJACENT TO WEST ATHERTON DRIVE)

OFFICE EXTERIOR ELEVATIONS

REVISIONS

A	2-4-20	MM
B	.	.
C	.	.
D	.	.
E	.	.

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0 1"

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Date 08/26/2019
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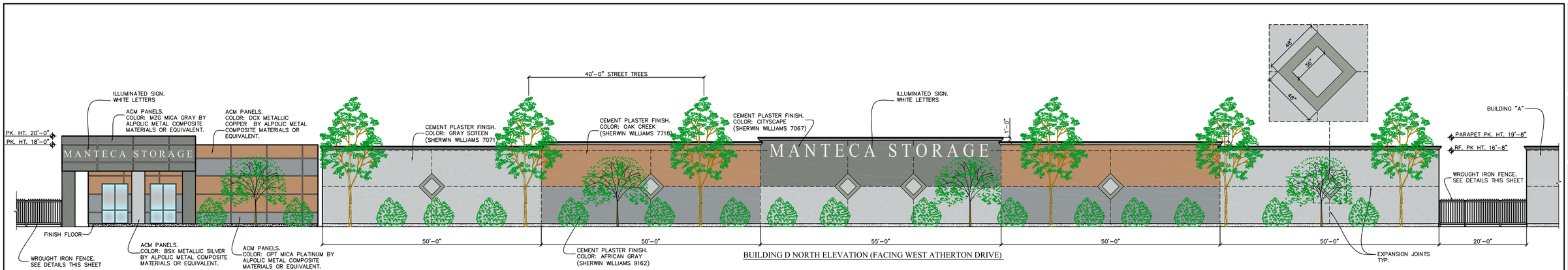
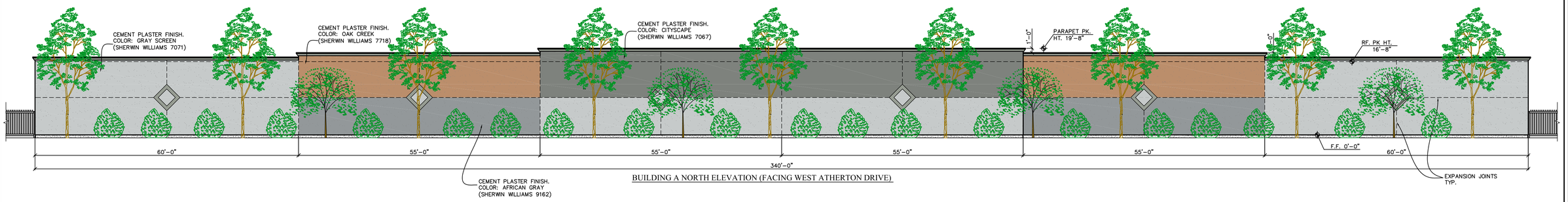
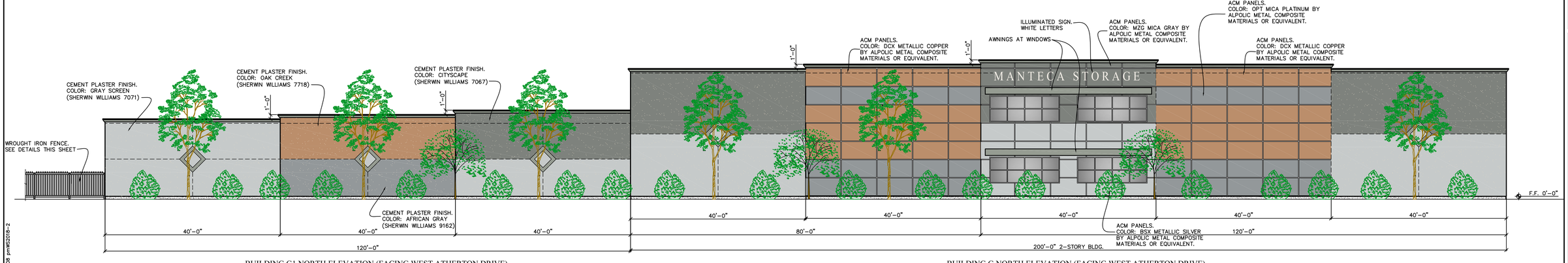
Job 193434
Sheet A1
Page



BUILDING D NORTH ELEVATION (FACING WEST ATHERTON DRIVE)

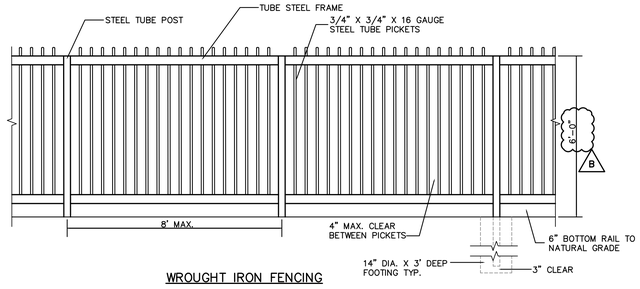


BUILDING A NORTH ELEVATION (FACING WEST ATHERTON DRIVE)



BUILDING G1 NORTH ELEVATION (FACING WEST ATHERTON DRIVE)

BUILDING G NORTH ELEVATION (FACING WEST ATHERTON DRIVE)



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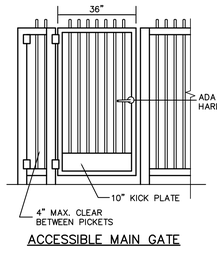
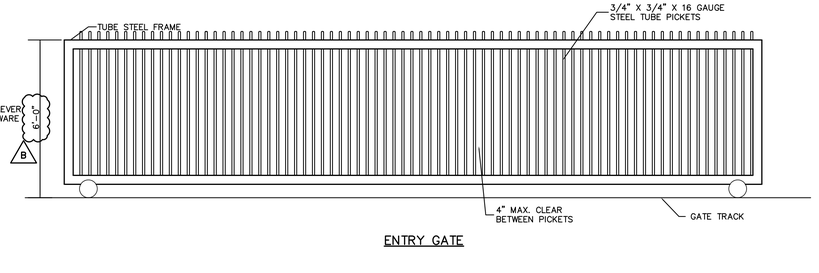


ACCESSIBLE MAIN GATE



ENTRY GATE

EXTERIOR ELEVATIONS

REVISIONS			
A		2-4-20	MM
B		5-8-20	MM
C		.	.
D		.	.
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VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

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Date	10-15-19
Scale	3/32"=1'-0"
Drawn	MM
Job	193434
Sheet	A2
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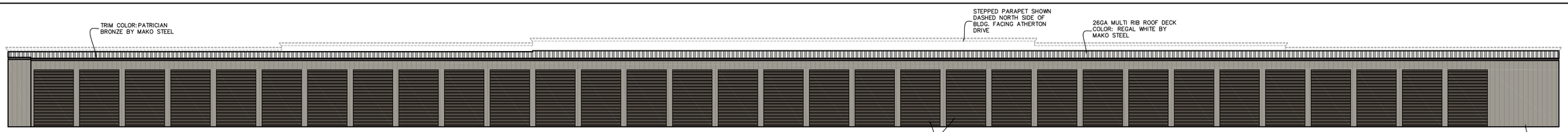
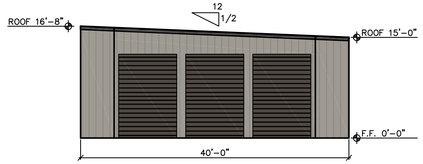
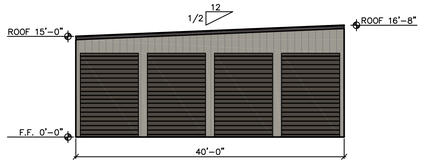


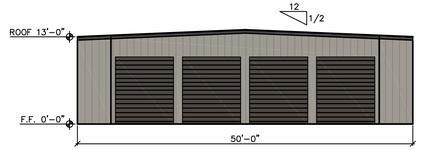
BUILDING "A" SOUTH ELEVATION



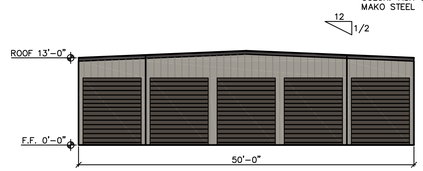
BUILDING "A" WEST ELEVATION



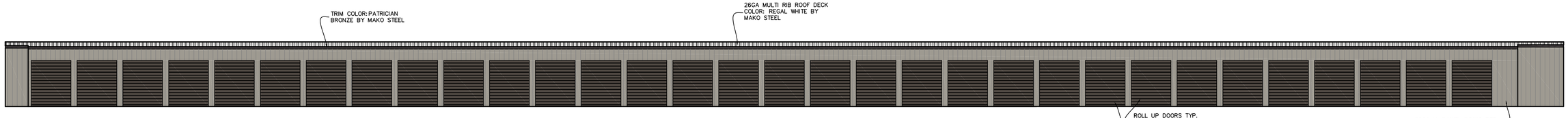
BUILDING "A" EAST ELEVATION



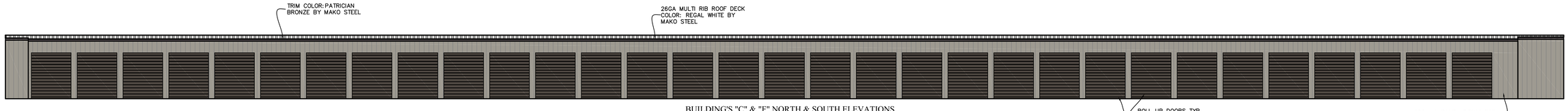
BUILDING'S "B" & "E" EAST AND WEST END ELEVATIONS



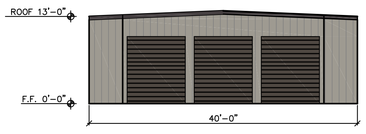
BUILDING'S "B" & "E" EAST AND WEST END ELEVATIONS



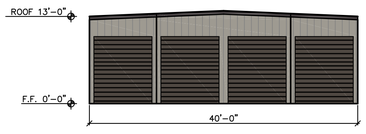
BUILDING'S "B" & "E" NORTH AND SOUTH ELEVATIONS



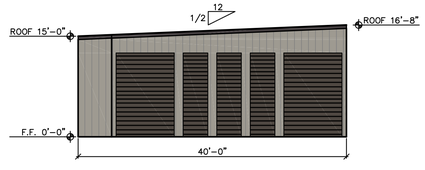
BUILDING'S "C" & "F" NORTH & SOUTH ELEVATIONS



BUILDING'S "C" & "F" EAST & WEST ELEVATIONS



BUILDING'S "C" & "F" EAST & WEST ELEVATIONS



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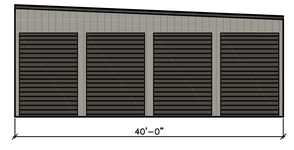

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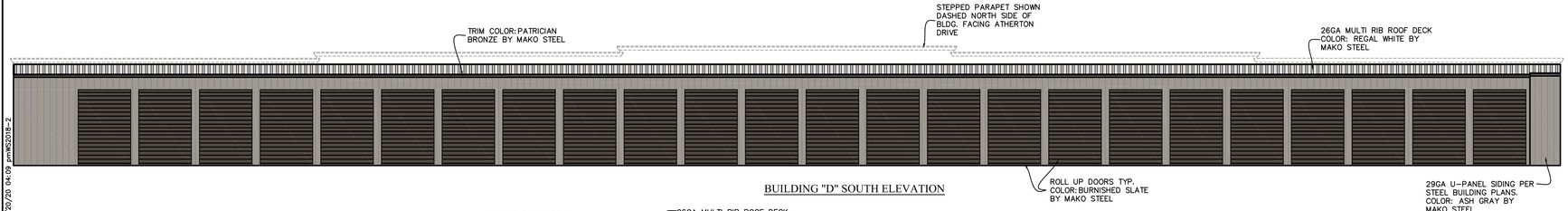
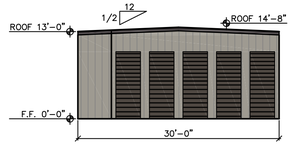
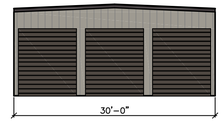


BUILDING "D" SOUTH ELEVATION



BUILDING "I" EAST ELEVATION



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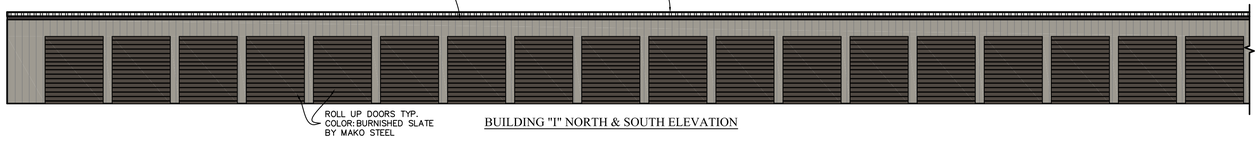
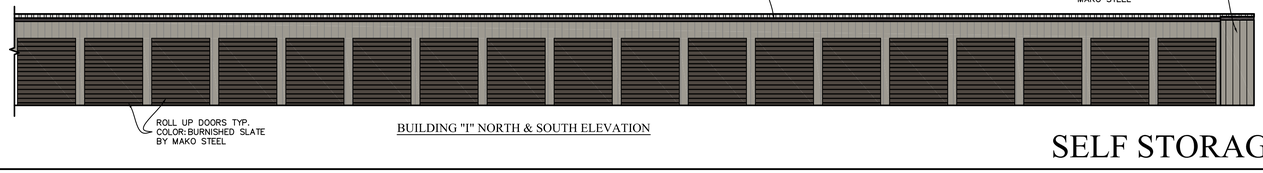


BUILDING "I" NORTH & SOUTH ELEVATION



BUILDING "I" NORTH & SOUTH ELEVATION

SELF STORAGE EXTERIOR ELEVATIONS

REVISIONS			
A	2-4-20	MM
B	.	.
C	.	.
D	.	.
E	.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALE(S) ACCORDINGLY

PROPOSED USE PERMIT PLANS FOR:

MANTECA STORAGE

2430 WEST ATHERTON DRIVE, MANTECA, CA

APN: 241-320-57

LAUGHLIN and SPENCE
CIVIL ENGINEERS & SURVEYORS
(530) 671 1008
(ax (530) 671 0822

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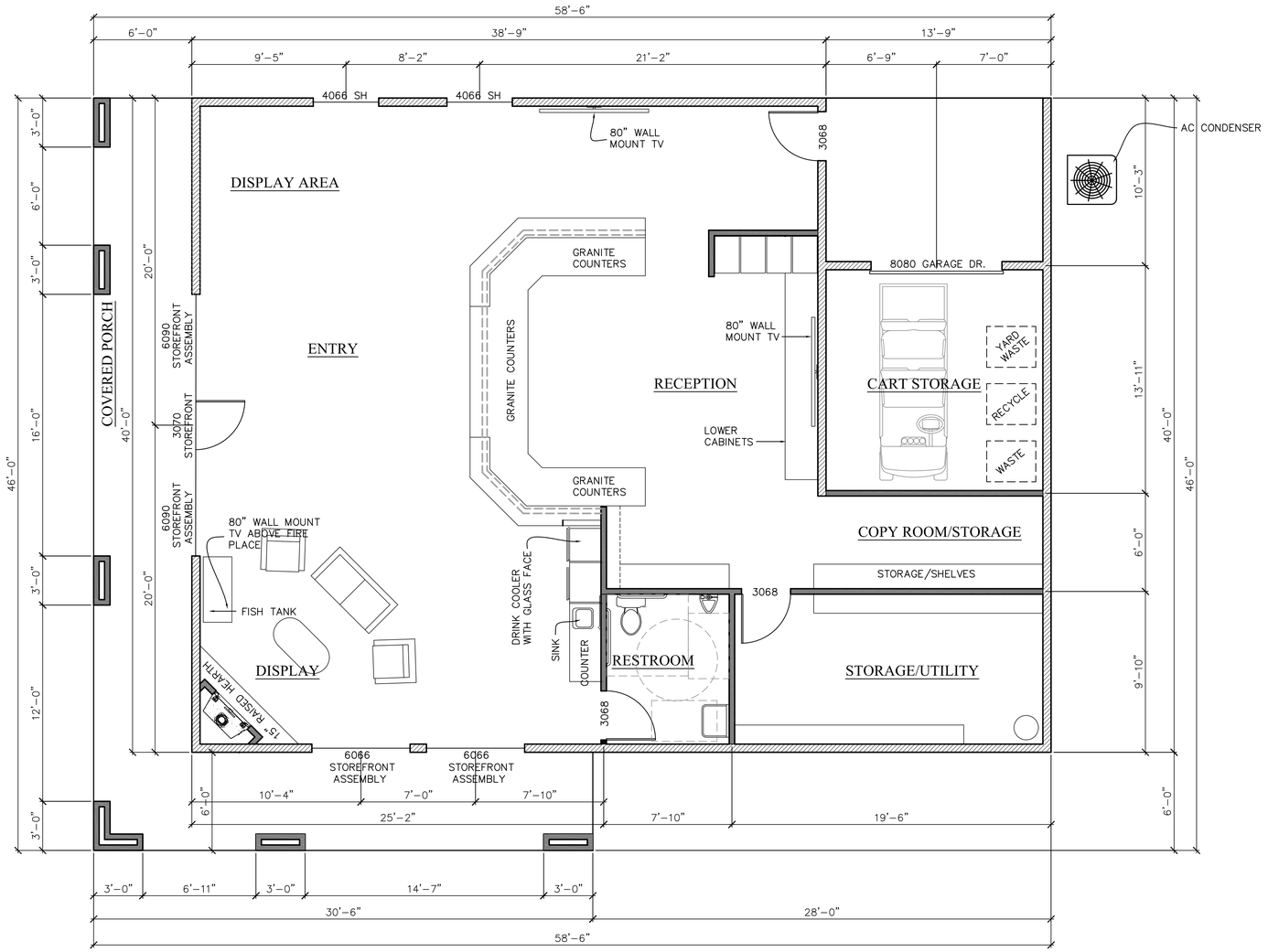
Date	10-15-19
Scale	3/32"=1'-0"
Drawn	MM
Job	193434
Sheet	A3
Page	



OFFICE FLOOR PLAN

REVISIONS			
A		2-4-20	MM
B		5-8-20	MM
C		.	.
D		.	.
E		.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

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APN: 241-320-57

LAUGHLIN and SPENCE
CIVIL ENGINEERS & SURVEYORS
1008 Live Oak Boulevard (530) 671 1008
Yuba City, California 95991 fax (530) 671 0822

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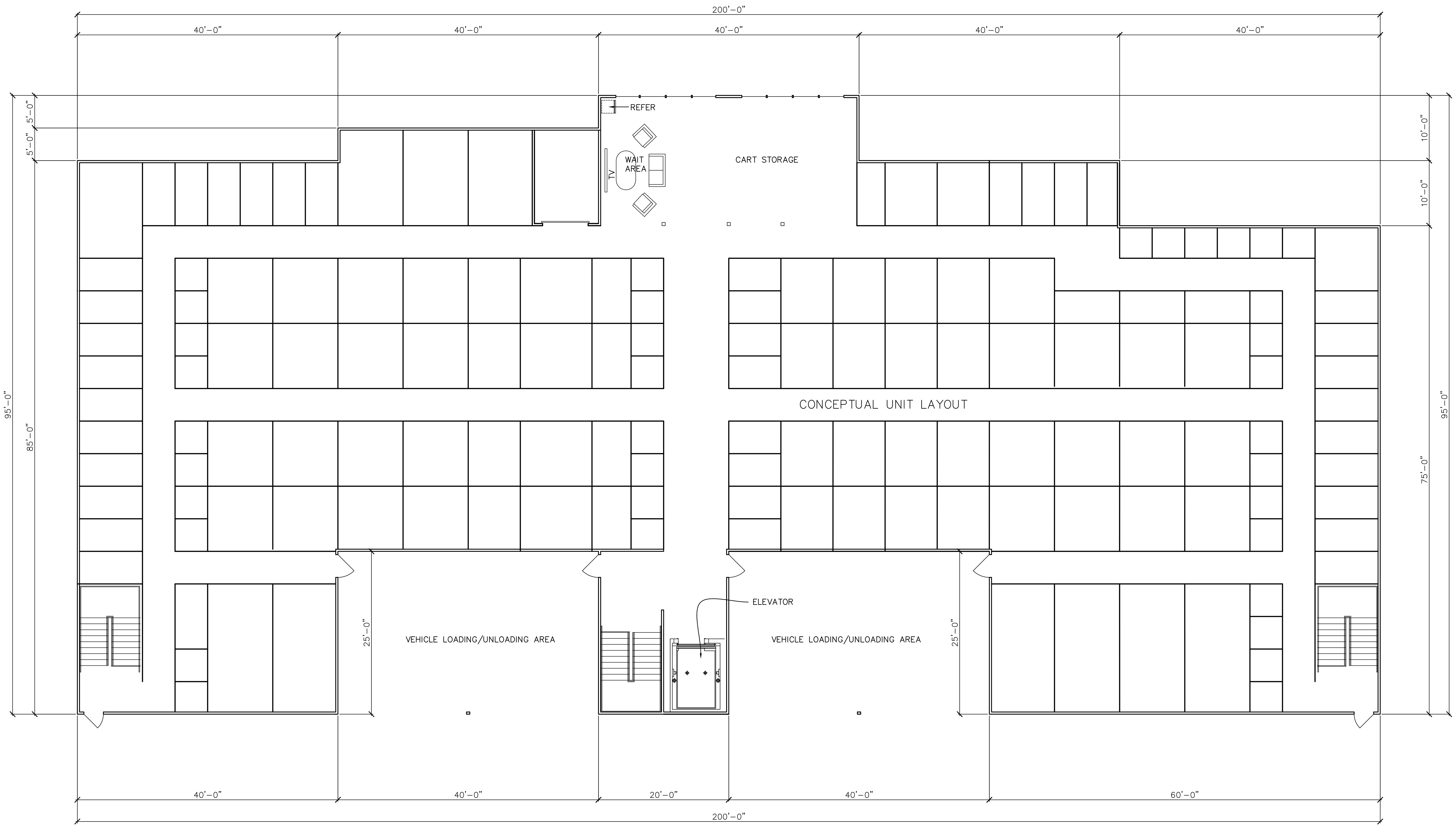
Date	08/26/2019
Scale	1/4"=1'-0"
Drawn	FA
Job	193434
Sheet	A4
Page	



2 STORY BUILDING - 1ST FLOOR PLAN

REVISIONS

A	-	-
B	-	-
C	-	-
D	-	-
E	-	-

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
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2430 WEST ATHERTON DRIVE, MANTECA, CA
APN: 241-320-57

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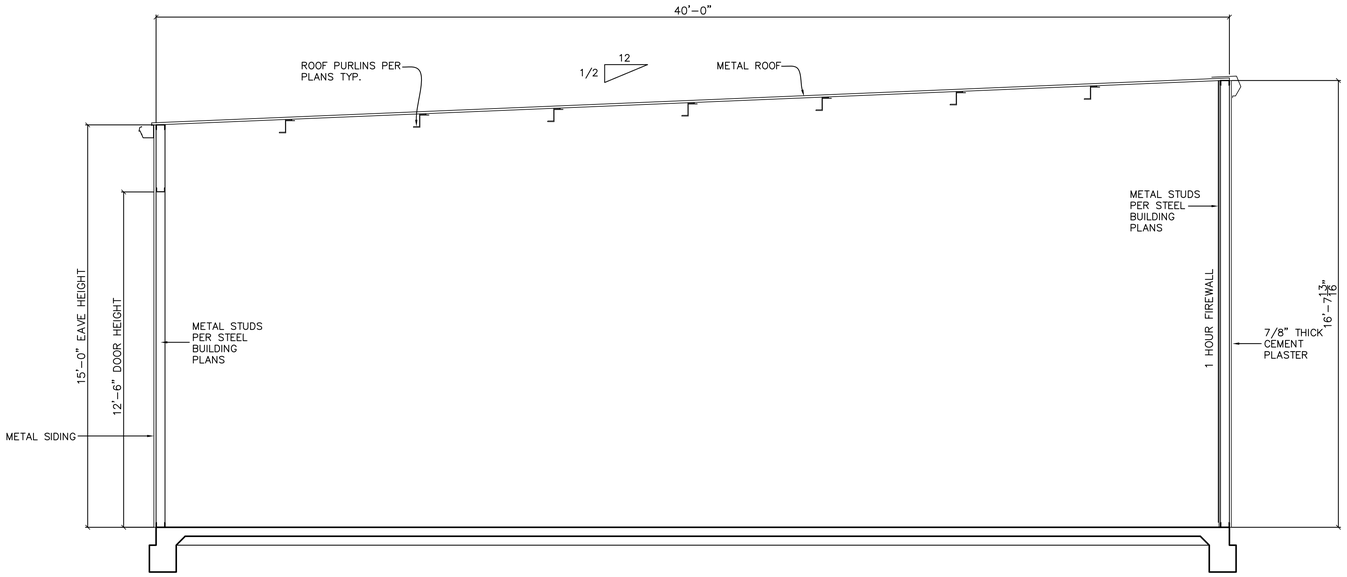
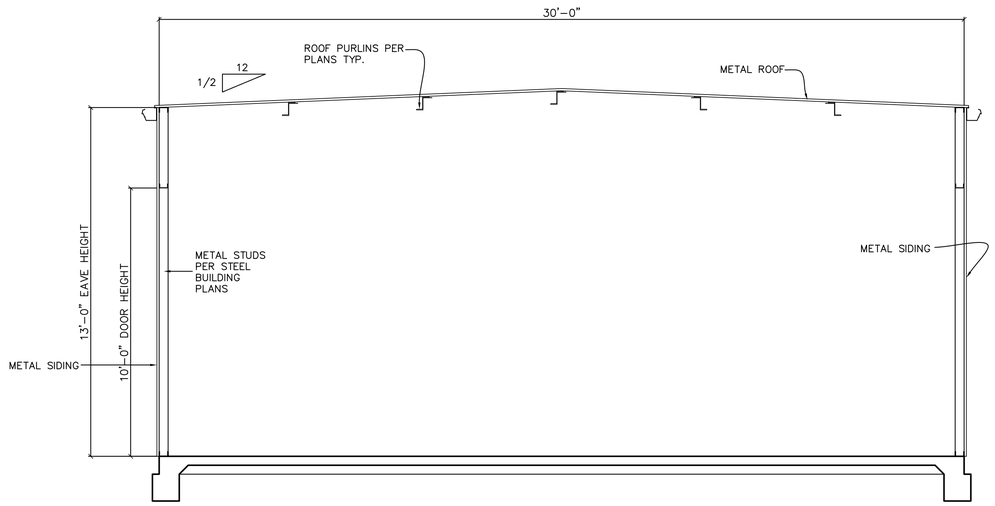
CIVIL ENGINEERS & SURVEYORS
1008 Live Oak Boulevard
Yuba City, California 95991
(530) 671 1008
fax (530) 671 0822

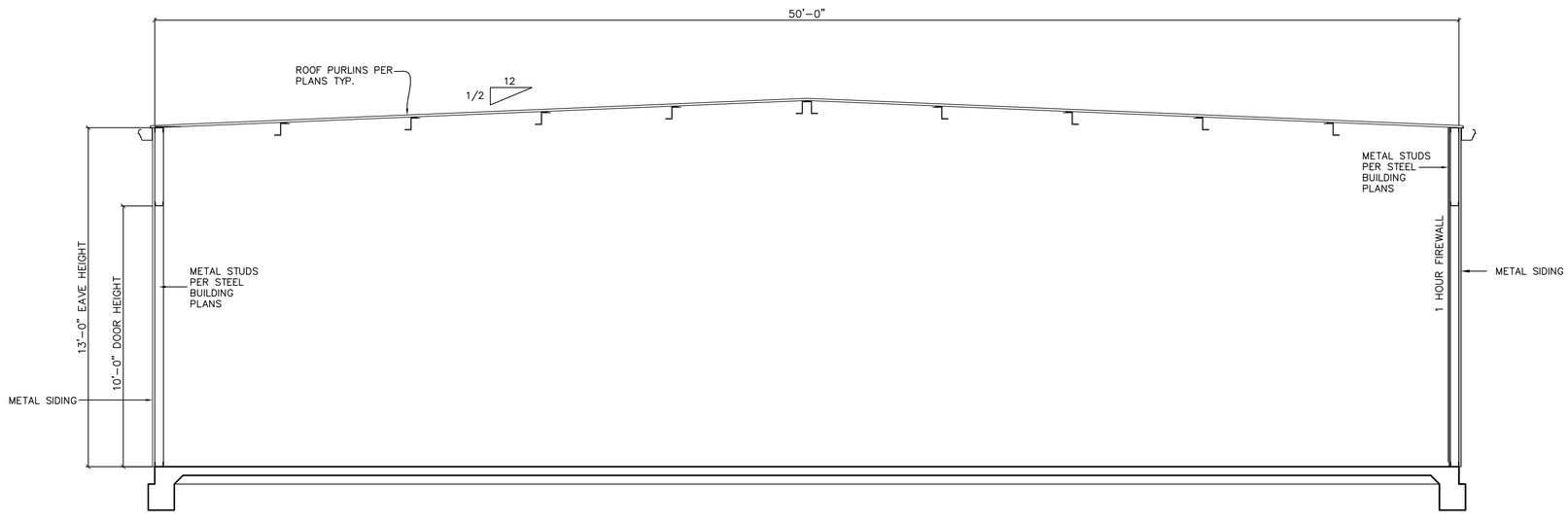
Date 3-21-19
Scale 1/8"=1'-0"
Drawn JWS
JOB# 193434
Sheet A5
Page



A BUILDING A & D SECTION



D BUILDING C & F SECTION



A BUILDING B & E SECTION

BUILDING SECTION

REVISIONS			
A		.	.
B		.	.
C		.	.
D		.	.
E		.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

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MANTECA STORAGE

2430 WEST ATHERTON DRIVE, MANTECA, CA

APN: 241-320-57

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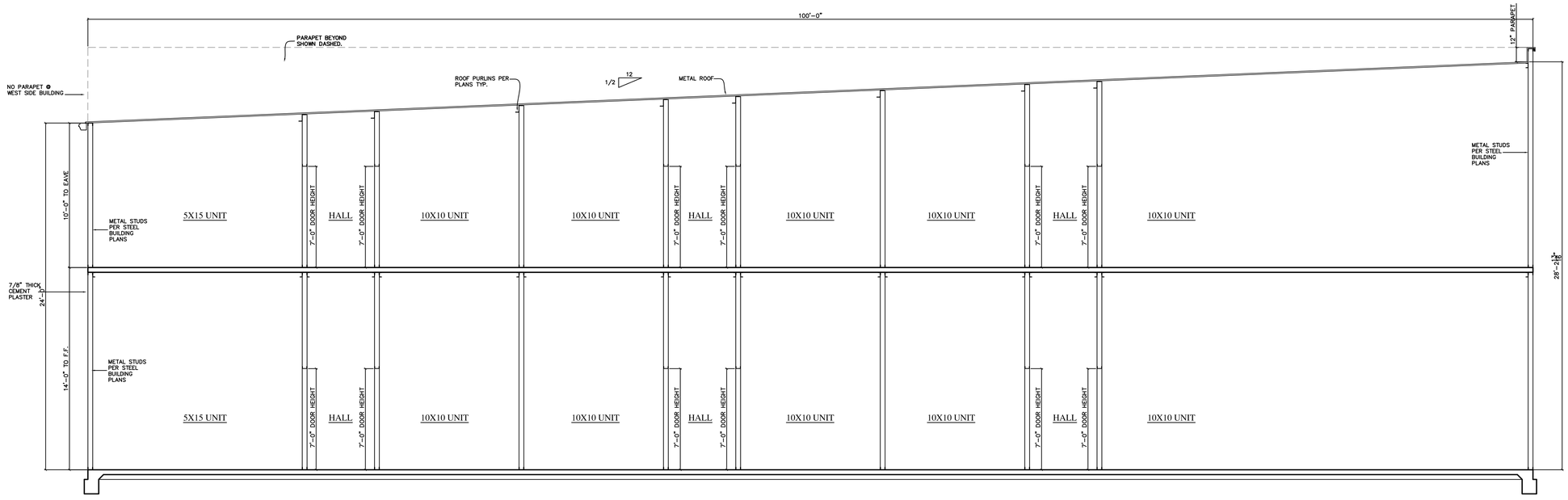
Date	9-10-19
Scale	3/8"=1'-0"
Drawn	FA
Job#	193434
Sheet	A6
Page	

J:\ 3000\193000\193434 Laughlin Manteca_Dwgs\STEEL BUILDING SECTIONS_193434.dwg 12/18/19 09:48 ami.52018-1



A BUILDING 2 SECTION

BUILDING SECTION

REVISIONS		
A	.	.
B	.	.
C	.	.
D	.	.
E	.	.

VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

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Date	9-10-19
Scale	1/4"=1'-0"
Drawn	FA
Job#	193434
Sheet	A7
Page	