INITIAL STUDY
for the
Madison Plaza Project
3530 Madison Street in the
City of Riverside

Prepared for:

City of Riverside Community & Economic Development Department
Planning Division

Prepared by:

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1500 Iowa Avenue, Suite 200
Riverside, California 92507

December 2016

INTRODUCTION

California Environmental Quality Act Compliance

This document serves as the Initial Study for the Madison Plaza (proposed project or project) in the City of Riverside (City), California. The City, through its Community & Economic Development Department, Planning Division (Department), is the lead agency responsible for the review and approval of the proposed project.

This Initial Study has been prepared by LSA Associates, Inc. (LSA) on behalf of the Department and is in conformance with Sections 15063 and 15064 of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et Seq.). The purpose of the Initial Study Checklist/Environmental Evaluation is to identify any potentially significant impacts associated with the proposed project and to determine if an EIR is required to provide additional analysis.

ENVIRONMENTAL CHECKLIST

1. **Case Numbers:** P15-0847 (CUP), P15-0848 (CUP), and P15-0850 (DR)

2. **Project Title:** Madison Plaza

3. **Lead Agency:** City of Riverside
   Community & Economic Development Department
   Planning Division
   3900 Main Street, 3rd Floor
   Riverside, California 92522

4. **Contact Person:** Gaby Adame, Assistant Planner
   Phone Number: 951-826-5933

5. **Project Location:** 3530 Madison Street, Riverside, California 92504. Assessor's Parcel Number (APN) 230-090-002, 230-090-003, 230-090-004, and 230-090-005 and U.S. Geological Survey (USGS) Map *Riverside West, California* Quadrangle, Township 3 South, Range 5 West, Section 4 of the San Bernardino Base Meridian. Refer to Figures 1 and 2.

6. **Project Applicant/Project Sponsor's Name and Address:** HFC/PRP Properties Madison, LLC
   Attn: Greg Lukosky
   417 29th Street
   Newport Beach, California 92663

7. **General Plan Designation:** Mixed Use-Urban (MU-U)

8. **Zoning:** Commercial Retail (CR) and Commercial Retail - Two Story Building - Building Setback Overlay Zones (CR S-2-X).

9. **Description of Project**:

The proposed project includes construction of an 84,859-square foot shopping center. The project site is located at 3530 Madison Street in the City of Riverside in western Riverside County. The project site consists of 8.21 acres and currently contains a fully operational 3,943-square foot Denny's restaurant (area included in the project total). The Denny's will be retained on site and incorporated into the future project. The development of the project will be constructed in two phases. Phase one (1) will be the development of the 24-hour fitness and drive-thru Starbucks and phase two (2) will consist of commercial retail spaces adjacent to the 24-hour fitness that can have an intensity as high as a supermarket. For purposes of CEQA, a supermarket is assumed for the commercial retail area as a worst case scenario. The western portion of the project site is not developed and is currently a dirt lot. The Mobil Station, car wash, and convenience store (located east of Madison Street and north of State Route 91 (SR-91) are not a part of the project and are on a separate parcel. The project would construct two attached structures on the west side of the site, with phase one being a 37,849-squarefoot health and fitness center and 41,117-square-foot supermarket. The project

also includes a 1,950-square foot drive-thru restaurant on the eastern portion of the site along the Madison Street frontage between the existing Denny's restaurant and Mobil Station. The proposed project would result in a building coverage of 23.6 percent. In addition to the commercial development, the project would also construct three retention basins and an infiltration basin for runoff, in addition to modifications to the existing California Department of Transportation (Caltrans) retention basin located near the SR-91 westbound on-ramp. The project will also include 432 parking stalls. The project site is further identified by Assessor's Parcel Number (APN) 230-090-002, 230-090-003, 230-090-004, and 230-090-005 and U.S. Geological Survey (USGS) Map *Riverside West, California* Quadrangle, Township 3 South, Range 5 West, Section 4 of the San Bernardino Base Meridian. Refer to Figures 1 and 2.

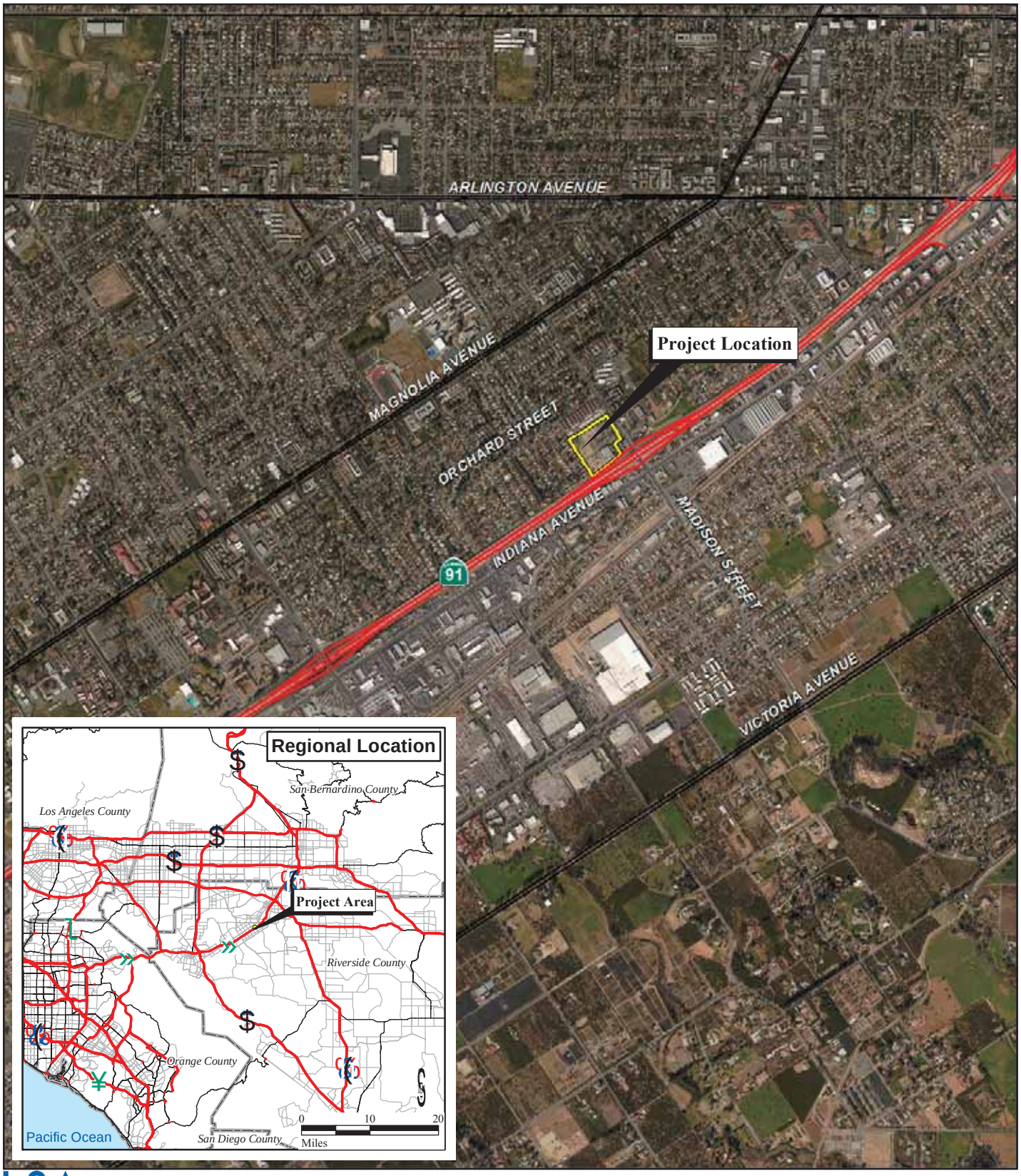

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FIGURE 1

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SOURCE: Bing Aerial, 2015; County of Riverside, 2015.

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Madison Plaza

Regional and Project Location

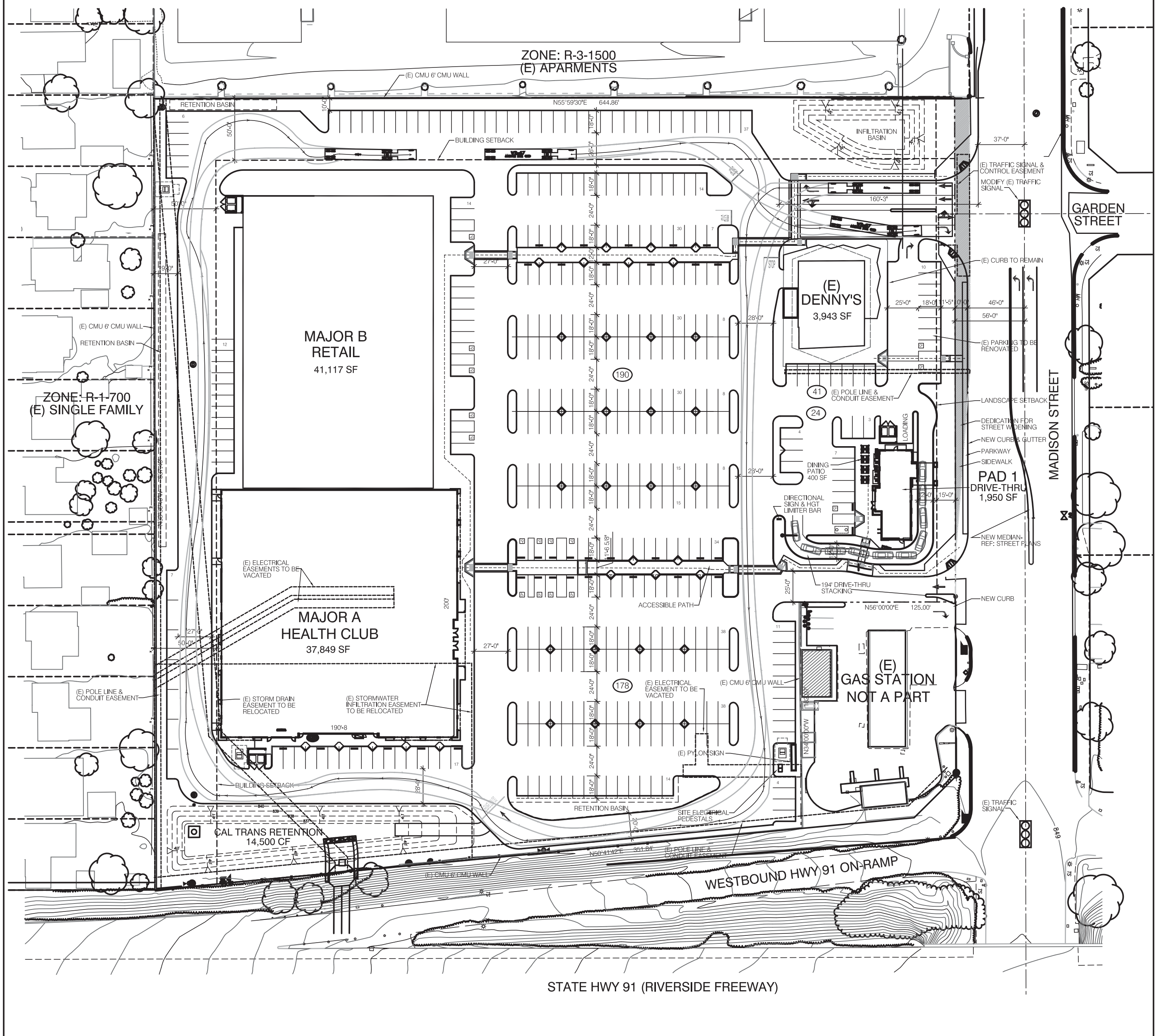

FIGURE 2

Madison Plaza

Conceptual Site Plan

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SOURCE: GK Pierce Architects, December 7, 2012

Exhibit 9 - Initial Study

10. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Denny's Restaurant, associated parking lot, and vacant land	MU-U-Mixed Use-Urban	CR-Commercial Retail and CR-S-2-X-Commercial Retail - Two Story Height of Buildings and Building Setback Overlay Zones
North	Apartments	HDR-High Density Residential	R-3-1500-Multi-Family Residential
East	Commercial Retail and Apartments	HDR-High Density Residential and C-Commercial	CR-S-2-X-Commercial Retail - Two Story Height of Buildings and Building Setback Overlay Zones; CR-S-1-X-Commercial Retail - Single Story Height of Buildings and Building Setback Overlay Zones; R-3-2000-S-2-Multi-Family Residential and Two Story Height of Buildings Overlay Zones; and R-3-2000-S-1- Multi-Family Residential and Single Story Height of Buildings Overlay Zones
South	Gas Station and State Route 91 followed by Commercial Retail	Public Right-of-Way; MU-U-Mixed Use Urban; and C-Commercial	General Commercial (CG); CR-S-2-X-Commercial Retail - Two Story Height of Buildings and Building Setback Overlay Zones; and Public Right-of-Way
West	Single-Family Residences	MDR-Medium Density Residential	R-1-7000-Single-Family Residential

11. **Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreement.):**

"Although land use authority is provided by the City of Riverside, the project may be subject to additional permits and/or fees by other public agencies. A summary of these additional requirements are as follows:

1. Consistency review with the Riverside Municipal Airport Land Use Compatibility Plan as administered by the County of Riverside Airport Land Use Commission.
2. A PM-10 Plan for compliance with Rule 401, Dust Control for the South Coast Air Basin will be required from the South Coast Air Quality Management District (SCAQMD).
3. Standard permits through the State Water Resource Control Board for compliance with National Pollutant Discharge Elimination System (NPDES) standards.

   These include the following: Construction Stormwater General Permit; Notice of Intent to Comply with Clean Water Act (CWA) Section 402.

12. **Other Environmental Reviews Incorporated by Reference in this Review:**
    a. General Plan 2025
    b. General Plan 2025 Final Program EIR
    c. Title 19, Zoning
    d. Title 20, Cultural Resources

13. **Acronyms**

AICUZ.....Air Installation Compatible Use Zone Study
AQMP .....Air Quality Management Plan
AUSD .....Alvord Unified School District
BAU.....Business As Usual
BMP.....Best Management Practice
CEQA .....California Environmental Quality Act
CMP.....Congestion Management Plan
CNEL.....Community Noise Equivalent Level
dBA .....A-weighted decibels

DPM ..... diesel particulate matter
EIR..... Environmental Impact Report
EMWD ..... Eastern Municipal Water District
EOP ..... Emergency Operations Plan
FAA ..... Federal Aviation Administration
FAR ..... Federal Air Regulations
FEMA ..... Federal Emergency Management Agency
FPEIR ..... GP 2025 Final Programmatic Environmental Impact Report
FTA ..... Federal Transit Administration
GIS..... Geographic Information System
GHG ..... Greenhouse Gas
GP 2025 ..... General Plan 2025
IS ..... Initial Study
LHMP..... Local Hazard Mitigation Plan
L_{max} ..... maximum noise level
MARB/MIP ..... March Air Reserve Base/March Inland Port
MBTA ..... Migratory Bird Treaty Act
MJPA-JLUS ..... March Joint Powers Authority-Joint Land Use Study
MSHCP ..... Western Riverside County Multiple Species Habitat Conservation Plan
MT CO_2e ..... metric tons of carbon dioxide-equivalent gases
MVUSD..... Moreno Valley Unified School District
NCCP..... Natural Communities Conservation Plan
NPDES ..... National Pollutant Discharge Elimination System
OEM ..... Office of Emergency Services
OPR ..... (California) Office of Planning & Research
PEIR ..... Program Environmental Impact Report
PW ..... Public Works, Riverside
RCALUC..... Riverside County Airport Land Use Commission
RCALUCP..... Riverside County Airport Land Use Compatibility Plan
RCP ..... Regional Comprehensive Plan
RCTC..... Riverside County Transportation Commission
RMC ..... Riverside Municipal Code
RPD ..... Riverside Police Department
RPU ..... Riverside Public Utilities
RRG..... Riverside Restorative Growthprint
RRG-CAP..... Riverside Restorative Growthprint Climate Action Plan
RRG-EPAP..... Riverside Restorative Growthprint Economic Prosperity Action Plan
RTIP ..... Regional Transportation Improvement Plan
RTP..... Regional Transportation Plan
RUSD ..... Riverside Unified School District
SCAG ..... Southern California Association of Governments
SCAQMD..... South Coast Air Quality Management District
SCH ..... State Clearinghouse
SKR-HCP ..... Stephens' Kangaroo Rat Habitat Conservation Plan
SWPPP ..... Storm Water Pollution Prevention Plan
USGS..... United States Geological Survey
WMWD ..... Western Municipal Water District
WQMP..... Water Quality Management Plan
WRCOG ..... Western Riverside Council of Governments

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, which reflects the independent judgment of the City of Riverside, it is recommended that:

The City of Riverside finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

The City of Riverside finds 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. ☒

The City of Riverside finds that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

The City of Riverside finds 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. ☐

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

Signature _____ Date _____

Printed Name & Title _____ For City of Riverside

Environmental Initial Study

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

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

   a. **Earlier Analysis Used.** Identify and state where they are available for review.

   b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures that 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) The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluate each question; and

   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

1a. Response: ***(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 Final Program EIR (FPEIR) Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways)***

No Impact. The most prominent scenic vistas that can be seen from western Riverside are the San Gabriel Mountains and Mount Rubidoux. Due to the topography, landscaping, and surrounding buildings, these scenic vistas cannot be seen from the project site. In addition, the proposed commercial center project is within an urbanized area completely surrounded by existing development. There are no nearby scenic vistas. Therefore, the project will have **no impact** directly, indirectly, or cumulatively to scenic vistas. No mitigation is required.

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

1b. Response: ***(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards, Parkways, Table 5.1-A – Scenic and Special Boulevards, Table 5.1-B – Scenic Parkways, the City's Urban Forest Tree Policy Manual, and Title 20 – Cultural Resources)***

Less Than Significant Impact. There are no state scenic highways within the City. The proposed project is not located along or within view of a scenic boulevard, parkway, or special boulevard as designated by the City's General Plan 2025. The nearest special boulevard to the proposed project is Magnolia Avenue, which is located approximately 0.33 mile north of the project site. Existing buildings immediately north of the project site block views of the site from Magnolia Avenue. The project site contains a historic-era commercial building (Denny's) proposed for preservation in place. The building to be preserved in place is a unique structure but is not located within a state scenic highway. The cultural relevance of the historic-era building is discussed in Response 5a of this initial study. Additionally, the proposed scope of work is commensurate with the existing mixed-use/urban setting surrounding the project site. Therefore, the proposed project will not have an effect on any scenic resources within a state scenic highway. Any potential adverse direct, indirect, or cumulative impacts from this project will result in **less than significant impacts**. No mitigation is required.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐

1c. Response: ***(Source: General Plan 2025, General Plan 2025 FPEIR, Zoning Code, Citywide Design and Sign Guidelines)***

Less Than Significant Impact. The proposed project is a commercial project located amidst a mixed-use/urban setting and was previously developed as a commercial center from 1966 to 2006. The proposed project comprises of uses similar to the surrounding area. In addition, the proposed commercial structures are similar in height to the adjacent multi-family apartments to the north and would be screened from the adjacent single-family homes to the west by a six-foot wall and a 10 to 19 foot landscape planter that includes large screening trees. Therefore, because the project does not include any change in the historic use of the site, and buildings of a similar scale will be constructed, the project will not directly, indirectly, or cumulatively degrade the existing visual character of the area, and a **less than significant impact** would occur. No mitigation is required.

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

1d. Response: ***(Source: General Plan 2025, General Plan 2025 FPEIR Figure 5.1-2 – Mount Palomar Lighting***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Area, Title 19 – Article VIII – Chapter 19.556 – Lighting, Citywide Design and Sign Guidelines, and Title 19 – Article VIII – Chapter 19.710 – Design Review.

Less Than Significant Impact. The project would not result in a new source of substantial light or glare that would adversely affect day or nighttime views. Any new lighting proposed or required for the project will be constructed in accordance with *Title 19 – Article VIII – Chapter 19.556 – Lighting, Citywide Design and Sign Guidelines* of the Riverside Municipal Code. Additionally, any exterior building materials would be constructed in accordance with *Title 19 – Article VIII – Chapter 19.710 – Design Review* of the Riverside Municipal Code. The proposed project will include a photometric study to comply with the requirements and policies for the City, to be reviewed by City staff as part of the entitlement process. As such, the project will have **less than significant impacts** directly, indirectly, or cumulatively that would adversely affect day or nighttime views due to glare and lighting. No mitigation is required.

2. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information complied by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

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

2a. Response: ***(Source: General Plan 2025 – Figure OS-2 – Agricultural Suitability & General Plan 2025 FPEIR – Appendix I – Designated Farmland Table)***

No Impact. The project is located within an urbanized area. A review of Figure OS-2 – Agricultural Suitability of the General Plan 2025 reveals that the project site is not designated as, and is not adjacent to or in proximity to any land classified 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. Therefore, the project will have **no impact** directly, indirectly, or cumulatively to Farmland. No mitigation is required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

2b. Response: ***(Source: General Plan 2025 – Figure OS-3 - Williamson Act Preserves, General Plan 2025 FPEIR – Figure 5.2-4 – Proposed Zones Permitting Agricultural Uses, and Title 19)***

No Impact. A review of Figure 5.2-2 – Williamson Act Preserves of the General Plan 2025 FPEIR reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act contract. Moreover, the project site is not zoned for agricultural use and is not next to land zoned for agricultural use; therefore, the project will have **no impact** directly, indirectly, or cumulatively to agricultural zoning or Williamson Act contract lands. No mitigation is required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

2c. Response: ***(Source: GIS Map – Forest Data)***

No Impact. The project site is zoned **CR-**Commercial Retail and CR-S-2-X-Commercial Retail - Two Story Height of Buildings and Building Setback Overlay Zones; thus, the site is not zoned for forest land or Timberland Production. Therefore, **no impacts** to forest land or timberland will occur from this project directly, indirectly, or cumulatively. No mitigation is required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

2d. Response: ***(Source: GIS Map – Forest Data)***

No Impact. The project site is currently vacant, with the exception of an existing Denny's restaurant and associated parking. Thus, the project site is not located on forest land. **No impacts** to forest land or timberland will occur from this project directly, indirectly, or cumulatively. No mitigation is required.

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?	☐	☐	☐	☒

2e. Response: (Source: General Plan – Figure OS-2 – ***Agricultural Suitability, Figure OS-3 – Williamson Act Preserves*****, General Plan 2025 FPEIR –** ***Appendix I – Designated Farmland Table, Title 19 – Article V – Chapter 19.100 – Residential Zones – RC Zone and RA-5 Zone)***

No Impact. The property is primarily undeveloped and currently contains a Denny's restaurant and associated parking, and ornamental landscape on the eastern portion of the site. Additionally, the site is identified as urban/built out land and therefore does not support agricultural resources or operations. The project site is zoned Commercial Retail (CR) and Commercial Retail - Two Story Building - Building Setback Overlay Zones (CR S-2-X). Thus, the project will not result in the conversion of designated farmland to non-agricultural uses or forest land to non-forest use. There are no agricultural resources or operations, including farmlands within proximity of the subject site. Therefore, **no impacts** will occur from this project directly, indirectly, or cumulatively related to conversion of Farmland to non-agricultural use or to the loss of forest land and timberland. No mitigation is required.

3. AIR QUALITY.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

3a. Response: ***(Source: Air Quality and Greenhouse Gas Analysis, LSA Associates, Inc., August 2016)***

Less Than Significant Impact. The project site is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD and the Southern California Association of Governments (SCAG) adopted an Air Quality Management Plan (AQMP), the main purpose of which is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area in order to bring the area into compliance with federal and state air quality standards. A nonattainment area is considered to have air quality worse than the National Ambient Air Quality Standards (NAAQS) as defined in the Federal Clean Air Act. The Basin is in nonattainment for the federal and state standards for ozone (O_3) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and in nonattainment for the state standards for particulate matter less than 10 microns in diameter (PM_{10}) and nitrogen dioxide (NO_2). The Basin is in attainment/maintenance/unclassified status for all other federal and state criteria pollutant standards.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Consistency with the 2012 AQMP for the Basin means that a project would be consistent with the goals, objectives, and assumptions in the respective plan to achieve the federal and state air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD *CEQA Air Quality Handbook*, consistency with the Basin 2012 AQMP is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation; and (2) is consistent with the growth assumptions in the AQMP. For the proposed project to be consistent with the AQMP adopted by the SCAQMD, the pollutants emitted from the project should not exceed the SCAQMD daily threshold or cause a significant impact on air quality, or the project must already have been included in the AQMP projections. Additionally, if feasible mitigation measures are implemented and shown to reduce the impact level from significant to less than significant, a project may be deemed consistent with the AQMP.

According to the *CEQA Air Quality Handbook*, consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. The proposed uses are consistent with the zoning designation for the project site and its surrounding area, which is consistent with the Specific Plan and General Plan of the City. The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD AQMP. In addition, the proposed project is not considered a significant project (e.g., airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities). As discussed in Response 3b, below, the proposed project's short-term construction and long-term pollutant emissions would be less than the emissions thresholds established in the SCAQMD's *CEQA Air Quality Handbook*; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation. For these reasons, the proposed project is consistent with the City's General Plan and the regional AQMP. Therefore, impacts related to implementation of the AQMP would be **less than significant** and no mitigation is required.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐

3b. Response: ***(Source: Air Quality and Greenhouse Gas Analysis, LSA Associates, Inc., August 2016; CEQA Air Quality Handbook, South Coast Air Quality Management District (SCAQMD), April 1993; Traffic Impact Analysis, Madison Plaza, LSA Associates, Inc., July 2016.)***

Less Than Significant Impact. The proposed project would generate pollutant emissions associated with construction activities, vehicle trip generation, power and gas consumption, and stationary activities. However, the discussion below demonstrates the proposed project will implement Standard Conditions AQ-1 through AQ-4 to ensure compliance with pertinent SCAQMD, applicable California Code of Regulations (CCR), and California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program regulations. With implementation of Standard Conditions AQ-1 through AQ-4, the project will not exceed SCAQMD significance thresholds. Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD's *CEQA Air Quality Handbook* (April 1993). The criteria include emission thresholds and compliance with State and national air quality standards. A summary of the specific criteria contained in the SCAQMD's CEQA *Air Quality Handbook* is presented below.

Regional Thresholds for Construction Emissions. The following significance thresholds for construction emissions have been established by the SCAQMD:

75 pounds per day (lbs/day) of volatile organic compounds (VOC)
100 lbs/day of nitrogen oxides (NOx)
550 lbs/day of carbon monoxide (CO)
150 lbs/day of PM_{10}
55 lbs/day of $PM_{2.5}$
150 lbs/day of sulfur oxides (SOx)

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds above are considered to be significant by the SCAQMD.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Regional Thresholds for Operational Emissions. The following significance thresholds for operational emissions have been established by the SCAQMD:

55 lbs/day of VOC
55 lbs/day of NOx
550 lbs/day of CO
150 lbs/day of PM_{10}
55 lbs/day of $PM_{2.5}$
150 lbs/day of SOx

Projects in the Basin with operational emissions that exceed any of the emission thresholds above are considered significant under SCAQMD guidelines.

Local Microscale Concentration Standards. The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

California State 1-hour CO standard of 20.0 ppm
California State 8-hour CO standard of 9.0 ppm

Localized Significance Thresholds. Localized significance thresholds (LSTs) represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. Using the LST thresholds for receptors at 25 meters (82 feet) for NOx, CO, PM_{10}, and $PM_{2.5}$ for 5 acres of grading activity per day for this project, the following emissions thresholds would apply:

Construction LST Thresholds
270 lbs/day of NOx
1,577 lbs/day of CO
13 lbs/day of PM_{10}
8 lbs/day of $PM_{2.5}$

Operation LST Thresholds
270 lbs/day of NOx
1,577 lbs/day of CO
4 lbs/day of PM_{10}
2 lbs/day of $PM_{2.5}$

Projects in the Basin with emissions that exceed any of the LSTs above are considered significant by SCAQMD.

Short-Term (Construction) Emissions. Air quality impacts could occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during grading and site preparation include (1) exhaust emissions from construction vehicles, (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces, and (3) soil disturbances from grading and backfilling. The following summarizes construction emissions and associated impacts of the proposed project.

Equipment Exhaust and Related Construction Activities. Construction activities produce combustion emissions from various sources (e.g., grading, site preparation, utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions. As part of the

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Air Quality and Greenhouse Gas Analysis (LSA Associates, Inc., August 2016), construction emissions were calculated using the California Emissions Estimator Model (CalEEMod Version 2013.2.2) and are summarized in Table 3.A. As specified in Standard Conditions AQ-1 through AQ-3, proposed project construction is required to comply with SCAQMD Rules 402 and 403, applicable California Code of Regulations, and CalRecycle Sustainable (Green) Building Program regulations, which include implementation of standard control measures to control fugitive dust and construction equipment emissions. Table 3.A details that by complying with SCAQMD's standard control measures, construction equipment/ vehicle emissions during construction periods would not exceed any of the SCAQMD-established daily emissions thresholds. Therefore, with implementation of Standard Conditions AQ-1 through AQ-3, short-term (construction) air quality impacts would be **less than significant**, and no mitigation is required.

Table 3.A: Short-Term Regional Construction Emissions

	Total Regional Pollutant Emissions, lbs/day							
Construction Phase	**VOC**	**NOx**	**CO**	**SO_2**	**Fugitive PM_{10}**	**Exhaust PM_{10}**	**Fugitive $PM_{2.5}$**	**Exhaust $PM_{2.5}$**
Site Preparation	1.30	35	24	0.04	8.33	0.96	4.52	0.96
Utility Trenching	0.6	15	11	0.02	0.09	0.42	0.02	0.42
Grading	1.2	27	22	0.03	3.13	0.84	1.57	0.84
Building Construction	2.16	30	32	0.06	2.12	1.01	0.57	1.01
Architectural Coatings	37	2.49	3.41	0.01	0.35	0.10	0.09	0.10
Paving	1.75	16	14	0.02	0.15	0.54	0.04	0.54
Peak Daily	**39**	**35**	**35**	**0.07**	**9.29**		**5.48**	
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**		**55**	
Significant Emissions?	**No**	**No**	**No**	**No**	**No**		**No**	

Source: *Air Quality and Greenhouse Gas Analysis* (LSA Associates, Inc., August 2016)
CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide
VOC = volatile organic compounds

Fugitive Dust. Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. In accordance with Standard Condition AQ-1, the proposed project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust. Table 3.A, above, lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts). Since construction operations on site must comply with dust control and other measures prescribed by SCAQMD Rules 402 and 403 to ensure that short-term construction impacts are minimized, compliance with these rules is assumed in Table 3.A. Compliance with SCAQMD Rules 402 and 403, as specified in Standard Condition AQ-1, would ensure that fugitive dust (PM_{10} and $PM_{2.5}$) generation would be **less than significant.** No mitigation is required.

Architectural Coatings. Architectural coatings contain VOCs that are similar to reactive organic compounds (ROCs) and are part of the O_3 precursors. Based on the proposed project, application of the architectural coatings for the proposed peak construction day is estimated to result in a combined peak of 39 lbs/day of VOC. Therefore, this VOC emission would not exceed the SCAQMD VOC threshold of 75 lbs/day. Therefore, impacts due to application of architectural coating would be **less than significant,** and no mitigation is required.

Localized Impacts Analysis. Table 3.B shows the on-site construction emissions of CO, NOx, PM_{10}, and $PM_{2.5}$ and demonstrates that the construction emission rates would not exceed the PM_{10} and $PM_{2.5}$ LSTs, and the NO_X and CO for existing sensitive receptors within 25 meters (82 feet) from the project site for LST analyses. Therefore, short-term LST significant air quality impacts would be **less than significant** and no mitigation is required.

Table 3.B: Construction Localized Significance Threshold Impacts

Emissions Sources	NOx	CO	PM_{10}	$PM_{2.5}$
On-site Emissions (lbs/day)	34	23	9.09	5.43
LST Thresholds	**270**	**1,577**	**13.00**	**8.00**

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Significant Emissions?	**No**	**No**	**No**	**No**

Source: *Air Quality and Greenhouse Gas Analysis* (LSA Associates, Inc. August 2016)
Source Receptor Area: Metropolitan Riverside County Area, 5 acres, 25 meter (82 feet) distance.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Naturally Occurring Asbestos. The proposed project is located in Riverside County, which is among the counties that are found to have serpentine and ultramafic rock in their soils. However, no such rock materials have been found in the project area in the past 25 years. Therefore, the potential risk for naturally occurring asbestos during project construction is small and **less than significant**. No mitigation is required

Long-Term Project Operational Emissions. Long-term air pollutant emission impacts are those associated with stationary sources and mobile sources involving any project-related changes. The proposed project would result in net increases in both stationary- and mobile-source emissions. The stationary-source emissions would come from many sources, including the use of consumer products, landscape equipment, general energy, and solid waste.

As part of the *Air Quality and Greenhouse Gas Analysis*, long-term operational emissions associated with the existing site and the proposed project were calculated using CalEEMod Version 2013.2.2 and are shown in Table 3.C. Area sources include architectural coatings, consumer products, hearths, and landscaping. Energy sources include natural gas consumption for heating and cooking. Mobile-source emissions usually result from vehicle trips associated with a project. Table 3.C shows that the increase of all criteria pollutants as a result of the proposed project would not exceed the corresponding SCAQMD daily emission thresholds for any criteria pollutants.

In addition, the project design will incorporate Standard Condition AQ-4 to ensure compliance with Title 24 of the California Code of Regulations established by the California Energy Commission (CEC) regarding energy conservation and green building standards. The project will include low-emission water heaters, and exterior windows will have window treatments for efficient energy conservation to reduce operational air pollutant emissions. Therefore, with implementation of Standard Condition AQ-4, project-related long-term air quality impacts would be **less than significant** and no mitigation is required.

Table 3.C: Opening Year Regional Operational Emissions

Source	Pollutant Emissions, lbs/day					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Existing Scenario						
Area	0.10	<0.01	<0.01	0	0	0
Energy	0.03	0.29	0.25	<0.01	0.02	0.02
Mobile	1.5	1.5	10	0.02	1.80	0.49
Total Existing Emissions	**1.63**	**1.80**	**10.26**	**0.03**	**1.82**	**0.51**
Proposed Scenario						
Area	8.9	<0.01	0.05	0	<0.01	<0.01
Energy	0.11	1.0	0.84	<0.01	0.08	0.08
Mobile	17	23	127	0.28	21	5.78
Total Project Emissions	**26.01**	**24.01**	**127.89**	**0.29**	**21.09**	**5.87**
Existing Emissions	**1.63**	**1.80**	**10.26**	**0.03**	**1.82**	**0.51**
Net New Emissions	**24.38**	**22.21**	**117.63**	**0.26**	**19.27**	**5.36**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: *Air Quality and Greenhouse Gas Analysis* (LSA Associates, Inc., August 2016).
CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

Localized Impacts Analysis. Table 3.D details the calculated emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, CalEEMod

outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 3.D include all on-site project-related stationary sources and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that would occur on site. A total of 5 percent is considered conservative because the average trip lengths assumed are 14.7 miles for home to work, 5.9 miles for home to shopping, and 8.7 miles for other types of trips. It is unlikely that the average on-site distance driven would be even 1,000 feet, which is approximately 2.2 percent of the total miles traveled. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative. Table 3.D reveals the operational emission rates would not exceed the NOx, CO, PM_{10}, and $PM_{2.5}$ LSTs for the existing sensitive receptors located within the 82-foot minimum distance for LST analyses. Therefore, locally significant air quality impacts would be **less than significant,** and no mitigation is required.

Table 3.D: Long-Term Operational Localized Significance Thresholds

Emissions Sources	NOx	CO	PM_{10}	$PM_{2.5}$
On-site emissions (lbs/day)	1.14	6.40	1.05	0.29
LST Thresholds	**270**	**1,577**	**4.0**	**2.0**
Significant Emissions?	**No**	**No**	**No**	**No**

Source: *Air Quality and Greenhouse Gas Analysis* (LSA Associates, Inc., August 2016)
Source Receptor Area: Metropolitan Riverside County Area, 5 acres, 25 meter (82 feet) distance, on-site traffic 5 percent of total.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance thresholds
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Long-Term Microscale (CO Hotspot) Analysis. Local ambient air quality is most affected by CO emissions from motor vehicles. CO is typically the contaminant of greatest concern because it is the pollutant created in greatest abundance by motor vehicles and does not readily disperse into the air. Because CO does not readily disperse into the atmosphere, areas of vehicle congestion create pockets of high CO concentrations called "hotspots." These pockets have the potential to exceed the state 1-hour standard of 20 parts per million (ppm) of CO and/or the 8-hour standard of 9.0 ppm.

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Riverside-Rubidoux Air Monitoring Station, the closest station with complete monitored CO data approximately 4.3 miles north of the project site, showed a highest recorded 1-hour concentration of 2.5 ppm (the state standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the state standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

As described in the *Traffic Impact Analysis for Madison Plaza* (LSA Associates, Inc. November 2016), all study area intersections currently operate at a satisfactory level of service (LOS) with the exception of Madison Street/Evans Street during the p.m. peak hour. With addition of the project in the existing setting, all study area intersections would continue to operate at satisfactory LOS except for Madison Street/Evans Street during the p.m. peak hour and Madison Street/Driveway 2 during the a.m. and p.m. peak hours. However, with implementation of recommended improvements to the aforementioned intersections (refer to Section 16-Traffic), the proposed project can be implemented with no significant peak-hour intersection impacts.

CO levels have dropped dramatically throughout the basin over the last several decades. Baseline levels can accommodate

substantial local emission increases without the creation of any CO "hotspots." According to the CO attainment demonstration in the 2003 AQMP, Wilshire Boulevard and Veteran Avenue is the most congested intersection in SCAQMD air basin with daily traffic volumes of about 100,000 per day. It has been demonstrated in the regional CO attainment/ maintenance plan that even the most congested intersection with the highest traffic volumes anywhere in the Basin no longer poses any risk of a CO "hotspot." Given the extremely low level of CO concentrations in the project area and the mitigation of traffic impacts at all study area intersections, project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the state or federal CO standards. Because no CO hotspot would occur, air quality impacts related to CO concentrations would be **less than significant** and no mitigation is required.

Standard Conditions: No mitigation is required; however, the following Standard Conditions are regulatory requirements that would be implemented to reduce air quality impacts during construction.

Standard Condition AQ-1: **Compliance with SCAQMD Rules 402 and 403.** During construction, the construction contractor shall comply with the South Coast Air Quality Management District (SCAQMD) Rules 402 and 403 for controlling fugitive dust emissions and construction equipment emissions. In compliance with Rule 403, fugitive dust shall be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, dust suppression techniques shall be implemented to prevent fugitive dust from creating a nuisance off site. The following applicable dust suppression techniques from Rule 403 shall be implemented during project construction:

- Nontoxic chemical soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Active sites shall be watered at least twice daily. (Locations where grading is to occur shall be thoroughly watered prior to earthmoving.)
- All trucks hauling dirt, sand, soil, or other loose materials shall be covered, or at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) shall be maintained in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
- Construction access roads shall be paved at least 100 feet (30 meters) onto the site from the main road.
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour (mph) or less.

Additionally, the following construction emissions control measures from the SCAQMD CEQA Handbook are required to further minimize fugitive dust emissions:

- Disturbed areas shall be revegetated as quickly as possible.
- All excavating and grading operations shall be suspended when wind speeds (as instantaneous gusts) exceed 25 mph.
- All streets shall be swept once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Wheel washer devices shall be installed at locations where vehicles enter and exit unpaved roads onto paved roads, or vehicles and any equipment leaving the site shall be washed each trip.
- All on-site roads shall be paved as soon as feasible, watered periodically, or chemically stabilized.
- The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

- The construction contractor shall select the construction equipment used on site based on low-emission factors and high-energy efficiency. The construction contractor shall ensure that construction-grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturers' specifications.
- The construction contractor shall utilize electric or diesel-powered equipment in lieu of gasoline-powered engines where feasible.
- The construction contractor shall ensure that construction-grading plans include a statement that work crews will shut off equipment when not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.
- The construction contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.
- The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

Standard Condition AQ-2: Compliance with Title 13, California Code of Regulations, Section 2449(d)(d). Operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) must limit idling to no more than five (5) minutes:

- All construction vehicles shall be prohibited from idling in excess of five (5) minutes, both on and off site.

Standard Condition AQ-3: Compliance with applicable California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program Measures.

- At least 50 percent of construction materials (including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) shall be recycle/reused.
- "Green building materials" (e.g., those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way) shall be used for at least 10 percent of the project, as specified on the California Department of Resources Recycling and Recovery website.

Standard Condition AQ-4: Compliance with Title 24, Energy Conservation and Green Building Standards. Project design shall comply with Title 24 of the California Code of Regulations established by the California Energy Commission (CEC) regarding energy conservation and green building standards. The project applicant shall incorporate the following into the final project building plans:

- Low-emission water heaters shall be used. Solar water heaters are encouraged.
- Exterior windows shall utilize window treatments for efficient energy conservation.

As previously stated, the proposed project must comply with dust control and other measures prescribed by SCAQMD Rules 402 and 403, applicable California Code of Regulations (e.g., Title 13 and Title 24), and CalRecycle (Green) Building Program outlined as Standard Conditions AQ-1 through AQ-4, so compliance with these rules is assumed in the air quality analysis for the proposed project (*Air Quality and Greenhouse Gas Analysis,* LSA Associates, Inc., August 2016). With compliance with Standard Conditions AQ-1 through AQ-4, the proposed project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts are **less than significant** and no mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐

3c. Response: ***(Source: Air Quality and Greenhouse Gas Analysis, LSA Associates, Inc., August 2016)***

Less Than Significant Impact. The cumulative impacts analysis is based on projections in the regional AQMP. As described in the consistency analysis presented in Response 3a, above, the proposed project is consistent with the growth assumptions in the City's General Plan, the 2012 RTP/SCS, and the regional AQMP. Further, as discussed in Response 3b, the proposed project does not increase the frequency or severity of an air quality standards violation or cause a new violation. The cumulative analysis includes projects in Riverside and adjacent cities (i.e., Moreno Valley, Corona, and Norco). This study area is described as the appropriate tool to evaluate discrete project-related circulation impacts for the City that encompass the air quality impacts from the proposed project. As shown in the *Traffic Impact Analysis for Madison Plaza*, the proposed project plus pending and approved baselines (the cumulative scenarios) would not result in any significant LOS change or intersection delay with the implementation of the recommended improvements detailed in Section 16-Traffic. Thus, the combined effects of the related projects would be less than significant. Because there is no cumulative significant impact and the proposed project is consistent with the growth assumptions in the 2012 RTP/SCS and the AQMP, the combined effects are not cumulatively significant. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status in the South Coast Air Basin. Long-term cumulative air quality impacts would be **less than significant** and no mitigation is required.

d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

3d. Response: ***(Source: Air Quality and Greenhouse Gas Analysis, LSA Associates, Inc., August 2016)***

Less Than Significant Impact. Construction of the proposed project would include the use of diesel-powered equipment that releases diesel particulate matter (DPM), a toxic air contaminant with known carcinogenic and chronic health effects. For construction analyses, the emission of DPM is included in the exhaust PM_{10} emissions. Table 3.A, presented in Response 3.a, above, shows that the exhaust PM_{10} emissions from construction would vary from 0.10 lb/day to 1.01 lbs/day during the different phases of project construction. This DPM emissions rate is very low and, to determine the carcinogenic and chronic health risk levels, this emissions rate would be spread over a 30-year exposure period. This low average DPM emissions rate combined with the fact that the nearest sensitive receptors are approximately 50 feet from the project site means the construction health risk levels are very low and well below thresholds of significance.

Because the proposed project is a commercial development, the operational phase of the project is not anticipated to generate significant quantities of toxic air contaminant emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations from operational emissions associated with the proposed project. Impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be **less than significant** and no mitigation is required.

e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

3e. Response: ***(Source: Air Quality and Greenhouse Gas Analysis LSA Associates, Inc., August 2016)***

Less Than Significant Impact. Heavy-duty equipment operating on the project site during construction would emit odors, primarily from equipment exhaust. However, odors associated with the construction activity would be limited to the project site, would disperse quickly, and would cease to occur after construction is completed. Additionally, it is not likely that odors from construction would be noticeable beyond the project boundaries. No other sources of objectionable odors have been identified for the proposed project. In addition, the proposed project is a commercial development, which does not typically produce objectionable odors. Therefore, project impacts related to objectionable odors would be **less than significant** and no mitigation is required.

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

4a. Response: ***(Source: General Plan 2025 – Figure OS-6 – Stephens' Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas, General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 – MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area, Riverside County Integrated Project Conservation Summary Report Generator)***

Less Than Significant With Mitigation Incorporated. The project site is located on a previously developed/improved site within an urbanized area and a search of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) database identified no potential for candidate, sensitive, or special-status species, suitable habitat for such species, Federal Species of Concern, California Species of Special Concern, or California Species Animal or Plants on lists 1–4 of the California Native Plant Society (CNPS) Inventory on site. However, the parking site contains ornamental landscaping, including trees, which may provide nesting habitat for birds.

Therefore, the project may have direct and indirect effects to migratory birds. Direct effects may result from the removal and destruction of nesting bird habitat (e.g., trees and shrubs) and indirect effects may result from increased noise and human presence during construction activities that may cause birds to abandon nests or that may negatively affect nestlings.

Common native urban bird species that may nest in ornamental landscaping include lesser goldfinch (*Carduelis psaltria*), Brewer's blackbird (*Euphagus cyanocephalus*), northern mockingbird (*Mimus polyglottos*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), and hooded oriole (*Icterus cucullatus*). In addition, there is reasonable potential for existing buildings to support nesting opportunities for native birds that are common in urbanized areas, such as American kestrel (*Falco sparverius*), house finch, black phoebe (*Sayornis nigricans*), cliff swallow (*Petrochelidon pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), and white-throated swift (*Aeronautes saxatalis*). A few species, primarily killdeer (*Charadrius vociferus*), may choose to nest on bare ground within the project site and study area.

The ornamental trees and shrubs that occur in the developed area of the site may support nests utilized by birds protected under Migratory Bird Treaty Act (MBTA) or the California Fish and Game Code (Sections 3503, 3503.5, and 3515). Thus, the potential exists for direct and indirect construction-related disturbance for nesting birds. Mitigation Measure Bio-1 requires that nesting bird surveys are conducted prior to any ground-disturbing activities. Therefore, the project will have a **less than significant impact with implementation of mitigation** directly, indirectly, and cumulatively on biological resources.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation Measures

Mitigation Measure Bio-1: Initial ground-disturbing activities (e.g., demolition, grading) should be conducted outside the bird nesting season (February 15 through August 31). If project activities are planned during the bird nesting season, nesting bird surveys should be conducted within 30 days prior to disturbance to ensure birds protected under the MBTA are not disturbed by demolition-related activities such as noise and increased human presence.

The survey shall consist of full coverage of the on-site trees. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist utilizing GPS equipment. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the biologist based on the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.

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

4b. Response: ***(Source: General Plan 2025 – Figure OS-6 – Stephens' Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas, General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 – MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area, MSHCP Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools)***

No Impact. The project is located on a previously developed/improved site within an urbanized area where no riparian habitat or other sensitive natural community exists on site or within proximity to the project site. Therefore, the project will have **no impact** on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service directly, indirectly, or cumulatively. No mitigation is required.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

4c. Response: ***(Source: City of Riverside GIS/CADME USGS Quad Map Layer)***

No Impact. The project is located within an urbanized area where no federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) exist on site or within proximity to the project site. The project site does not contain any discernible drainage courses, inundated areas, wetland vegetation, or hydric soils and thus does not include U.S. Army Corps of Engineers jurisdictional drainages or wetlands. Therefore, the proposed project would have **no impact** to federally protected wetlands as defined by Section 404 of the Clean Water Act directly, indirectly, or cumulatively. No mitigation is required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors,	☐	☐	☐	☒

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
or impede the use of native wildlife nursery sites?				

4d. Response: ***(Source: MSHCP, General Plan 2025 –Figure OS-7 – MSHCP Cores and Linkage)***

No Impact. The project is within an urbanized area and will not result in a barrier to 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. Therefore, the project will have **no impact** to wildlife movement directly, indirectly, or cumulatively. No mitigation is required.

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

4e. Response:

Less Than Significant Impact. Implementation of the proposed project is subject to all applicable federal, state, and local policies and regulations related to the protection of biological resources and tree preservation. In addition, the project is required to comply with Riverside Municipal Code Section 16.72.040 establishing the MSHCP mitigation fee and Section 16.40.040 establishing the Threatened and Endangered Species Fees.

Any project within the City of Riverside's boundaries that proposes planting a street tree within a City right-of-way must follow the *Urban Forest Tree Policy Manual*, which documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute. Any future project will be in compliance with the Tree Policy Manual when planting a tree within a City right-of-way, and therefore, impacts will be **less than significant**. No mitigation is required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

4f. Response: ***(Source: MSHCP, General Plan 2025 – Figure OS-6 – Stephens' Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Stephens' Kangaroo Rat Habitat Conservation Plan, Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, and El Sobrante Landfill Habitat Conservation Plan)***

No Impact. The project site is located on a previously developed/improved site within an urbanized area and will not affect an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan directly, indirectly, or cumulatively. Therefore, the project will have **no impact** on the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation is required.

5. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5 of the CEQA Guidelines?	☐	☒	☐	☐

5a. Response: ***(Source: Historic Impact Assessment, LSA Associates, Inc., May 2016)***

Less Than Significant With Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Section 5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]). A "substantial adverse change" to a historical resource, according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

As part of the *Historic Impact Assessment* (LSA Associates, Inc., May 2016) conducted for the project, the existing Denny's restaurant, built in 1967, was evaluated as a "historical resource" in compliance with CEQA and the City's Cultural Resources ordinance (Title 20 of the Municipal Code). In 2009, this restaurant was evaluated as eligible for listing in the California Register at the local level under Criterion 3 (embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values) for its architecture and eligible for designation under the local ordinance. A subsequent evaluation in 2013 reaffirmed its California Register and Local Landmark eligibility and noted that the interior of the building has been altered and the building does not appear eligible for listing in the National Register of Historic Places under any criterion. A field survey was conducted in January 2016 as part of the *Historic Impact Assessment.* No changes to the exterior of the restaurant or its use since 2013 were identified and the *Historic Impact Assessment* concluded that the restaurant remains a historical resource for the purposes of CEQA.

The project site is currently developed with the Denny's restaurant, and related parking and landscaping. The project proposes to construct two new commercial/retail buildings and a drive-through restaurant and installation of three retention basins and an infiltration basin, plus modifications to an existing Caltrans retention basin. The Denny's restaurant would be preserved in place and parking and landscaping would be reconfigured to accommodate the new buildings and infiltration basin.

Proposed changes to the Denny's restaurant include interior remodeling that would incorporate new kitchen equipment, new interior dining furniture, and upgraded restrooms. A new freezer storage area would also be installed and would result in a new exterior opening at the back of the building. The freezer storage opening would be the only exterior change to the restaurant aside from new exterior paint. The only site design change directly related to Denny's is the proposed installation of seven new parking spaces, including two handicapped-accessible spaces at the south end of the building near the main entrance. Because the Denny's walkway and the parking area are at the same grade in this location, only striping for handicapped access is proposed.

Project impacts were evaluated against the *Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties* standards for rehabilitation. The *Historic Impact Assessment* concluded the project would be in compliance with the rehabilitation standards and would not result in a substantial change to a historical resource because the restaurant will continue operating as a Denny's restaurant within a larger commercial center, the historic-character of the building and features would be retained and preserved, removal of historic materials or alterations of features and spaces that characterize the property are not proposed, no elements that create a false sense of historical development are proposed, and the proposed improvements would not diminish the historic significance of the resource or the integrity of the setting. Furthermore, there is no indication that any of the historic features are in need of repair and the proposed project plans do not indicate any repair or replacement of those features. However, to ensure compliance with this SOIS standard that deteriorated historic features be repaired rather than replaced, Mitigation Measure CR-1 requires that a note be added to the project plans stating that any deteriorated or damaged historic features is to be repaired rather than replaced. Where the severity of deterioration or damage requires replacement of a character-defining feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. With implementation of Mitigation Measure CR-1, the proposed project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines*. Impacts to historical resources would be reduced to **less than significant with implementation of Mitigation Measure CR-1**.

Mitigation Measures:

Mitigation Measure CR-1: Denny's Restaurant Repair. Tthe following note is added to the project plans:

"Any deteriorated or damaged historic features shall be repaired rather than replaced. Where the severity of deterioration or damage requires replacement of a character-defining feature,

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence."				
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5 of the CEQA Guidelines?	☐	☐	☒	☐

5b. Response: ***(Source: General Plan 2025 FPEIR – Figures 5.5-1 Archaeological Sensitivity and 5.5-2 Prehistoric Cultural Resource Sensitivity; Cultural Resource Assessment, LSA Associates, Inc., February 2016)***

Less Than Significant Impact. According to the Riverside General Plan EIR Figures 5.5-1 and 5.5-2, the project site is in an area of unknown archaeological and prehistoric cultural resource sensitivity. As part of the *Cultural Resources Assessment*, a records search for the project was conducted at the Eastern Information Center (EIC), located at University of California, Riverside, on December 10, 2015. The records search included the project site and a 1-mile radius around the site. The EIC houses the pertinent archaeological and historic site and survey information necessary to determine whether cultural resources are known to exist within the project area. The records search included a review of all recorded historic and prehistoric archaeological sites within the 1-mile radius of the project site, as well as a review of known cultural resource survey and excavation reports. Historic aerials and topographic maps ranging from 1901 through the present were also reviewed. In addition, a pedestrian survey of all accessible exposed areas on the project site was conducted on December 23, 2015. The purpose of this survey was to identify and document, prior to the beginning of ground-disturbing activities, any cultural resources and thus also to identify any area(s) that might be sensitive for buried cultural resources.

The records search indicated that eight cultural resources studies have been conducted and 28 cultural resources documented within a mile of the project site. No cultural resources have been documented on the project site. The results of the records search indicate that there are no previously recorded archaeological or historic resources within or near the project site. The entire project site has been previously disturbed and developed. The sensitivity of the project site for potential subsurface cultural resources is negligible. However, in the unlikely event that cultural resources are identified during earthmoving activities, those activities would be halted in the vicinity of the find until it can be assessed for significance by a qualified archaeologist (Standard Condition CR-1). With implementation of Standard Condition CR-1, impacts related to previously undiscovered archaeological resources would be **less than significant** and no mitigation is required.

Standard Conditions: No mitigation is required; however, the following Standard Condition is a regulatory requirement that would be implemented to reduce impacts related to discovery of unknown archaeological resources during construction.

Standard Condition CR-1: **Discovery of Archeological Resources.** Prior to commencement of grading activities, the City of Riverside Director of Building & Safety, or designee, shall verify that all project grading and construction plans include notes specifying that if archaeological resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, state, and local guidelines, including those set forth in California Public Resources Code (PRC) Section 21083.2. Construction personnel shall not collect or move any archaeological materials and associated materials. Construction activity may continue unimpeded on other portions of the project site. The found deposits would be treated in accordance with federal, state, and local guidelines, including those set forth in PRC Section 21083.2.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

5c. Response: ***(Source: General Plan 2025 Policy HP-1.3; Paleontological Analysis of the Madison Plaza Commercial Project, LSA Associates Inc., May 2016)***

Less Than Significant With Mitigation Incorporated. The project site area contains artificial fills and older alluvial fan deposits. Artificial fills may contain fossils, but such fossils have been removed from their original location and are thus

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

out of stratigraphic context. For this reason, they are not considered important for scientific study and have no paleontological sensitivity. Older alluvial fan deposits contain fossils including mammoths, mastodons, horses, bison, camels, saber-toothed cats, coyotes, deer, and sloths, as well as smaller animals like rodents, rabbits, birds, reptiles, and fish. For this reason, these deposits are considered to have high paleontological sensitivity. Ground-disturbing activities for the project are expected to extend into older alluvial fan deposits with high paleontological sensitivity. This is considered a significant impact. Impacts to paleontological resources would be reduced to **less than significant with implementation of Mitigation Measure PAL-1**.

Mitigation Measures

The project area contains Artificial Fill, which has no paleontological sensitivity, overlying Older Alluvial Fan Deposits, which have high paleontological sensitivity. Although there is an unanticipated, low probability that fossil bearing soils/rock will be encountered and significant fossils unearthed during grading, if ground-disturbing activities for the project are expected to extend more than 5.5 feet below existing grade into deposits with high paleontological sensitivity, LSA recommends the following mitigation measure:

Mitigation Measure PAL-1:
A qualified paleontologist shall be hired to develop and submit a Paleontological Resource Impact Mitigation Program (PRIMP) for this project. The PRIMP shall include the methods that will be used to protect paleontological resources that may exist within the project area, as well as procedures for monitoring, fossil preparation and identification, curation into a repository, and preparation of a report at the conclusion of grading, which shall guide further paleontological activities and treatment during the project.

- Excavation and grading activities in deposits with high paleontological sensitivity (Older Alluvial Fan Deposits) below 5.5 feet shall be monitored by a paleontological monitor.
- If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to halt or redirect construction away from the area of the find in order to assess its significance. Insignificant resource shall be removed and the area cleared, and significant resources shall be collected through salvage excavation.
- Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and offered for curation into the permanent collections of a scientific institution.
- At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program.
- In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and a paleontologist shall be contacted to assess the find for significance.

d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

5d. Response: ***(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity)***

Less Than Significant Impact. No known human remains are present on the project site, and there are no facts or evidence to support the idea that Native Americans or people of European descent are buried on the project site. In the

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

unlikely event that human remains are encountered during project grading, the proper authorities would be notified, and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to. Construction contractors are required to adhere to California Code of Regulations (CCR) Section 15064.5(e), PRC Section 5097, and Section 7050.5 of the State Health and Safety Code. To ensure proper treatment of burials, in the event of an unanticipated discovery of a burial, human bone, or suspected human bone, the law requires that all excavation or grading in the vicinity of the find halt immediately, the area of the find be protected, and the contractor immediately notify the County Coroner of the find. The construction contractor, developer, and the County Coroner are required to comply with the provisions of CCR Section 15064.5(e), PRC Section 5097.98, and Section 7050.5 of the State Health and Safety Code. Compliance with these provisions (specified in Standard Condition CR-2) would ensure that any potential impacts to unknown buried human remains would be **less than significant** by ensuring appropriate examination, treatment, and protection of human remains as required by state law. No mitigation is required.

Standard Condition: No mitigation is required; however, the following Standard Condition is a regulatory requirement that would be implemented to reduce impacts related to discovery of human remains during construction.

Standard Condition CR-2: **Discovery of Human Remains.** Consistent with the requirements of California Code of Regulations (CCR) Section 15064.5(e), if human remains are encountered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) Section 5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). With the permission of the property owner, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Consistent with CCR Section 15064.5(d), if the remains are determined to be Native American and an MLD is notified, the City shall consult with the MLD as identified by the NAHC to develop an agreement for treatment and disposition of the remains.

e. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either: 1) 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, that is listed or eligible for listing on the California Register of Historical Resources, or included in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

5e. Response:

No Impact. Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires Lead Agencies evaluate a project's

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical resources or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

Also per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. The tribes on the City's AB 52 noticing list were sent a consultation request letter regarding the proposed project. In response to the request, two Tribes responded. The Morongo Band of Mission Indians indicated they have no additional information or immediate concerns regarding the project, but to contact the Tribe immediately and follow their Standard Development Conditions should cultural artifacts or human remains be discovered. The San Manuel Band of Mission Indians indicated the project is outside of their ancestral territory, and recommended other Tribes be contacted. Therefore, **no impacts** to tribal cultural resources would occur. No mitigation is required.

6. GEOLOGY AND SOILS. Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

6i. Response: ***(Source: General Plan 2025 Figure PS-1 – Regional Fault Zones & General Plan 2025 FPEIR Appendix E – Geotechnical Report)***

No Impact. Seismic activity is to be expected in Southern California; however, there are no Alquist-Priolo zones in the project area. The project site does not contain any known fault lines and the potential for fault rupture or seismic shaking is low. Compliance with the California Building Code regulations will ensure that **no impacts** related to strong seismic ground will occur directly, indirectly, or cumulatively. No mitigation is required.

ii. Strong seismic ground shaking?	☐	☐	☒	☐

6ii. Response: ***(Source: General Plan 2025 FPEIR Appendix E – Geotechnical Report)***

Less Than Significant Impact. The San Jacinto Fault Zone, located in the northeastern portion of the City, and the Elsinore Fault Zone, located in the southern portion of the City's Sphere of Influence, have the potential to cause moderate to large earthquakes that would cause intense ground shaking. Because the proposed project complies with California Building Code regulations, direct, indirect, or cumulative impacts associated with strong seismic ground shaking will have **a less than significant impact**. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

6iii. Response: ***(Source: General Plan 2025 Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones, General Plan 2025 FPEIR Figure PS-3 – Soils with High Shrink-Swell Potential, and Appendix E – Geotechnical Report)***

Less Than Significant Impact. According to the GP 2025 Liquefaction Zones Map – Figure PS-2, the project site is located in an area with low potential for liquefaction. On-site soils consist of alluvial sands and silty sands. Borings conducted for the site-specific geotechnical study did not encounter groundwater within 50 feet of the ground surface. Based on the lack of

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

shallow groundwater, the geotechnical study indicated that liquefaction is not a design concern for the proposed project. Incorporation of the recommended design measures of the geotechnical study for compliance with the California Building Code regulations will ensure that impacts related to seismic-related ground failure, including liquefaction, are reduced to **less than significant impact** levels directly, indirectly, and cumulatively. No mitigation is required.

iv. Landslides?	☐	☐	☐	☒

6iv. Response: ***(Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Appendix E – Geotechnical Report, Title 18 – Subdivision Code, and Title 17 – Grading Code)***

No Impact. Factors contributing to the stability of slopes include slope height and steepness, engineering characteristics of the earth materials comprising the slope, and intensity of ground shaking. The project site and its surroundings have generally flat topography and are not located in an area prone to landslides, per Figure 5.6-1 of the General Plan 2025 Program Final PEIR. Therefore, there will be **no impact** related to landslides directly, indirectly, or cumulatively. No mitigation is required.

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

6b. Response: ***(Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Title 18 – Subdivision Code, Title 17 – Grading Code)***

Less Than Significant Impact. On-site soils consist of loose to medium dense sands and silty sands. Artificial fill, comprising loose silty fine to medium sands, is located beneath existing on-site pavements. Beneath fills are native alluvial soils, medium dense silty fine to medium sands and fine sandy silts. During grading and construction, disturbance of soil by heavy construction equipment could result in erosion. State and federal requirements call for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The project must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, with the erosion control standards with which all development activity must comply (Title 18), the Grading Code (Title 17) also requires the implementation of measures designed to minimize soil erosion. Compliance with state and federal requirements as well as with Titles 18 and 17 will ensure that soil erosion or loss of topsoil will be a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

6c. Response: ***(Source: General Plan 2025 Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones, General Plan 2025 FPEIR Figure PS-3 – Soils with High Shrink-Swell Potential, Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Appendix E – Geotechnical Report)***

Less Than Significant Impact. The site is generally flat, with less than 10 feet of elevation differential across the site, and slopes toward the south-southwest. On-site soils consist of loose to medium dense sands and silty sands. Artificial fill, comprising loose silty fine to medium sands, is located beneath existing on-site pavements. Beneath fills are native alluvial soils, medium dense silty fine to medium sands and fine sandy silts.

As described previously in this section, on-site soils are not considered susceptible to landslides or liquefaction. In the absence of a shallow groundwater table, lateral spreading is also considered unlikely. The geotechnical investigation indicated that the on-site soils are somewhat compressible and ground subsidence may occur when they are exposed to loads exerted by foundations of the new structures. Per the recommendations of the geotechnical study, the project shall be required to over-excavate areas of compressible soils and place compacted structural fill. In addition, adherence to the City's grading and building requirements will ensure that the property is adequately prepared to prevent the collapse of the graded pad and/or slopes. Compliance with the City's codes and the policies and the project-specific recommendations contained in the geotechnical study will ensure that impacts related to geologic conditions are reduced to **less than**

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
significant impacts level directly, indirectly, and cumulatively. No mitigation is required.				
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒

6d. Response: ***(Source: General Plan 2025 FPEIR Figure 5.6-4 – Soils, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Figure 5.6-5 – Soils with High Shrink-Swell Potential, Appendix E – Geotechnical Report, and California Building Code as adopted by the City of Riverside and set out in Title 16 of the Riverside Municipal Code)***

No Impact. Expansive soils, defined under California Building Code, expand when wet and shrink when dry. The amount of type of clay present in soil determines its shrink-swell potential. On-site soils are mostly sands and silts, and have very low to no potential for expansion. Therefore, the project site does not have expansive soils and there will be **no impact** directly, indirectly, or cumulatively. No mitigation is required.

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?	☐	☐	☐	☒

6e. Response: ***(Source: Project plans)***

No Impact. The proposed project will be served by sewer infrastructure. Therefore, the project will have **no impact.** No mitigation is required.

7. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

7a. Response*: (Source: Air Quality and Greenhouse Gas Analysis, LSA Associates, Inc., August 2016.)*

Less Than Significant Impact. "Greenhouse gases" (GHGs) (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as "global warming." GHGs contribute to an increase in the temperature of the Earth's atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and water vapor. For purposes of planning and regulation, Section 15364.5 of the CCR defines GHGs to include, but are not limited to, CO_2, CH_4, N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Fossil fuel consumption in the transportation sector (e.g., on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

The City has adopted Appendix G of the *State CEQA Guidelines* as the significance threshold for GHG emissions. A project would normally have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

On December 30, 2009, the Natural Resources Agency adopted amendments to the *State CEQA Guidelines* that became effective on March 18, 2010. The amendments to the *State CEQA Guidelines* include new requirements to evaluate GHG emissions. Pursuant to the amended *State CEQA Guidelines*, a lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The City adopted its Riverside Restorative Growthprint (RRG) Economic Prosperity Action Plan (RRG-EPAP) and Climate Action Plan (RRG-CAP) in January 2016. In 2014, the City was one of 12 that collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (Subregional CAP) that includes 36 measures to guide the City's GHG reduction efforts through 2020. Through the WRCOG Subregional CAP process, the City has committed to a 2020 emissions target of 2,224,908 metric tons of carbon dioxide-equivalent gases (MT CO_2e), which is 26.4 percent below the City's 2007 baseline and 15 percent below 2010 emissions. This represents a reduction of 779,304 MT CO_2e from the City's 2020 business-as-usual (BAU) forecast. The City is aiming for a 2035 emissions target of 1,542,274 MT CO_2e, which is 49 percent below the 2007 baseline and represents a reduction of 2,120,931 MT CO_2e from the 2035 BAU forecast.

The RRG-CAP expands upon the efforts of the WRCOG Subregional CAP, employing local measures to help the City achieve deep GHG reductions through the year 2035. To further develop local GHG reduction measures for the RRG-CAP, the City conducted a detailed assessment of local strategies and actions related to the measures identified in the Subregional CAP and expanded the discussion and analysis with respect to implementation (particularly post-2020), costs and funding, performance metrics, and local co-benefits. Importantly, the discussions identify local economic and entrepreneurship opportunities that can be integrated with local, regional, and global GHG reductions (e.g., the development of green enterprise zones).

Currently, there is no statewide GHG emissions threshold used to determine potential GHG emissions impacts of a project. Air districts in the state are still developing and revising threshold methodology and thresholds. To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency. The applicable tier for this project is Tier 2 (determining whether the project is consistent with a GHG reduction plan). This concept is equivalent to the existing consistency determination requirements in *CEQA Guidelines* Sections 15064(h)(3), 15125(d), or 15152(a). This analysis considers GHG emission significance by determining the project's consistency with the policies and goals in the RRG-EPAP and RRG-CAP.

Emissions estimates for the proposed project were calculated as part of *Air Quality and Greenhouse Gas Analysis* (LSA Associates, Inc., August 2016) and are discussed below. GHG emissions estimates are provided herein for informational purposes only because there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis below is based on methodologies and information available to the City and the applicant at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is worse than that which is likely to be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the cities is not sufficiently detailed to allow a direct comparison between particular project

characteristics and particular climate change impacts, or between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of the proposed project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to during its construction). Typically, more than 80 percent of the total energy consumption takes place during the use of buildings and less than 20 percent of energy is consumed during construction.

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs (e.g., CO_2, CH_4, and N_2O). Furthermore, CH_4 is emitted during the fueling of heavy equipment.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive. Preliminary estimates indicate that the total energy used to pump and treat this water exceeds 6.5 percent of the total electricity used in the State per year.
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.
- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips.

Table 7.A lists the annual CO_2 emissions for each of the planned construction phases.

Table 7.A: Construction Greenhouse Gas Emissions

Construction Phase		Total Regional Pollutant Emissions (MT/yr)			
		CO_2	CH_4	N_2O	CO_2e
2016	Site Preparation	19	<0.01	0	19
	Utility Trenching	9	<0.01	0	9
	Grading	32	<0.01	0	32
	Building Construction	119	0.02	0	119
2017	Building Construction	156	0.02	0	156
	Architectural Coating	15	<0.01	0	15
	Paving	9	<0.01	0	9
Total Construction Emissions		357	0.06	0	359
Amortized over 30 years		**12**	**<0.01**	**0**	**12**

Air Quality and Greenhouse Gas Analysis (LSA Associates, Inc., August 2016).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with on-site facilities and customers and visitors to the project site. Area-source emissions would be associated with activities (e.g., landscaping and maintenance of proposed land uses, natural gas for

heating, and other sources). Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in Table 7.B detail the emissions associated with the level of development envisioned by the proposed project at opening.

Table 7.B: Operational Greenhouse Gas Emissions

Source	Pollutant Emissions, MT/yr					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction emissions amortized over 30 years	0	12	12	<0.01	0	12
Operational Emissions						
Area Sources	0	0.01	0.01	<0.01	0	0.01
Energy Sources	0	1,695	1,695	0.04	0.01	1,699
Mobile Sources	0	3,456	3,456	0.14	0	3,459
Waste Sources	105	0	105	6.2	0	235
Water Usage	3	67	70	0.24	<0.01	76
Total Project Emissions	107	5,231	5,338	6.61	0.01	5,482
Total Existing Emissions (CONFIRM THIS IS EXISTING DENNY'S?)	10	423	433	0.60	0	447
Net New Emissions	**97**	**4,808**	**4,905**	**6.01**	**0.01**	**5,035**

Air Quality and Greenhouse Gas Analysis (LSA Associates, Inc., August 2016).
Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
Bio-CO_2 = biologically generated CO_2 MT = metric tons
CH_4 = methane N_2O = nitrous oxide
CO_2 = carbon dioxide NBio-CO_2 = Nonbiologically generated CO_2
CO_2e = carbon dioxide equivalent yr = year

As shown in Table 7.B, the project would result in a net increase of 5,035 MT CO_2e/yr, which is 0.005035 million metric tons of CO_2e per year (MMT CO_2e/yr). For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 176.79 MMT CO_2e/yr, and the existing emissions for the entire state are estimated at approximately 459 MMT CO_2e/yr.

The remaining CO_2e emissions are primarily associated with building heating systems and increased regional power plant electricity generation due to the proposed project's electrical demands. Specific development projects proposed under the project would comply with existing state and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the project's electricity demand. The new buildings constructed in accordance with current energy efficiency standards would be more energy-efficient than older buildings. Since January 1, 2014, several new Building Codes have been enforced in California. All structures other than one- and two-family dwellings and townhomes will be built under the new 2016 California Building Code to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices.

At present, there is a federal ban on chlorofluorocarbons (CFCs); therefore, it is assumed the project would not generate emissions of CFCs. The project may emit a small amount of HFCs from leakage and service of refrigeration and air-conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used at the project site are unknown at this time. PFCs and SF_6 are typically used in industrial applications, none of which would occur on the project site. Therefore, the project is not anticipated to contribute significant emissions of these additional GHGs.

As stated previously, this analysis considers GHG emission significance by determining the proposed project's consistency with the policies and goals in the Riverside RRG-EPAP and RRG-CAP. As discussed in Response 7.b below, the project would be consistent with the strategies and goals from the RRG-CAP. In order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Standard Condition GCC-1 shall be implemented.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Standard Condition GCC-1 includes implementation of reduction goals identified in the Riverside RRG-CAP, AB 232, EO S-3-05, and other strategies to help reduce GHGs. With implementation of Standard Condition GCC-1, project impacts related to greenhouse gas emissions would be **less than significant** and no mitigation is required.

Standard Condition: No mitigation is required; however, the following Standard Condition is a regulatory requirement that would be implemented to reduce impacts related to greenhouse gas emissions.

Standard Condition GCC-1 **Greenhouse Gas Reduction Strategies.** To ensure the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in the Riverside RRG-CAP, Assembly Bill (AB) 32, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce greenhouse gases (GHGs) to the level proposed by the Governor, the project will implement a variety of measures that will reduce its GHG emissions. To the extent feasible, and to the satisfaction of the City of Riverside (City), the following measures will be incorporated into the design and construction of the project:

Construction and Building Materials.

- Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the project.
- Recycle/reuse at least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) if feasible.
- Use "green building materials," such as those materials that are resource-efficient and are recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project.

Energy Efficiency Measures.

- Design all project buildings to meet or exceed the California Building Code's (CBC) Title 24 energy standard, including, but not limited to, any combination of the following:
  - Increase insulation such that heat transfer and thermal bridging is minimized;
  - Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption; and
  - Incorporate ENERGY STAR® or better rated windows, space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.
- Install efficient lighting and lighting control systems. Use daylight as an integral part of the lighting systems in buildings.
- Install "cool" roofs and cool pavements.
- Install energy-efficient heating and cooling systems, appliances and equipment, and control systems.
- Install solar lights or light-emitting diodes (LEDs) for outdoor lighting or outdoor lighting that meets the City Code.

Water Conservation and Efficiency Measures.

- Devise a comprehensive water conservation strategy appropriate for the project and its location. The strategy may include the following, plus other innovative measures that may be appropriate:
  - Create water-efficient landscapes within the development.
  - Install water-efficient irrigation systems and devices, such as soil moisture-based

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

irrigation controls.

- Use reclaimed water, if available, for landscape irrigation within the project. Install the infrastructure to deliver and use reclaimed water, if available.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances, including low-flow faucets and waterless urinals.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff.

Solid Waste Measures.

- To facilitate and encourage recycling to reduce landfill-associated emissions, among others, the project will provide trash enclosures that include additional enclosed area(s) for collection of recyclable materials. The recycling collection area(s) will be located within, near, or adjacent to each trash and rubbish disposal area. The recycling collection area will be a minimum of 50 percent of the area provided for the trash/rubbish enclosure(s) or as approved by the Waste Management Department of the City of Riverside.
- Provide employee education on waste reduction and available recycling services.

Transportation Measures.

- To facilitate and encourage non-motorized transportation, bicycle racks shall be provided in convenient locations to facilitate bicycle access to the project area. The bicycle racks shall be shown on project landscaping and improvement plans submitted for Planning Department approval and shall be installed in accordance with those plans.
- Provide pedestrian walkway and connectivity requirements.

With implementation of Standard Condition GCC-1, the proposed project would not conflict with or impede implementation of the reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, which would have a significant impact on the environment. Associated impacts would be **less than significant** and no mitigation is required.

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

7b. Response:

Less Than Significant Impact. As discussed in Response 7.a, above, the City adopted its Riverside Restorative Growthprint (RRG) Economic Prosperity Action Plan (RRG-EPAP) and Climate Action Plan (RRG-CAP) in January 2016. This analysis considers GHG emission significance by determining the proposed project's consistency with the policies and goals in the Riverside RRG-EPAP and RRG-CAP. Table 7.C lists the applicable strategies and goals from the RRG-CAP and indicates how the proposed project achieves compliance. In order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Standard Condition GCC-1 shall be implemented. Standard Condition GCC-1 includes implementation of reduction goals identified in the Riverside RRG-CAP, AB 232, the EO S-3-05, and other strategies to help reduce GHGs.

Table 7.C: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6). Maximize energy efficiency building and	**Compliant.** The proposed project would comply with the requirements of Measure

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6) including measures to incorporate energy-efficient building design features.			
Water Conservation and Efficiency Measures				
Water Use Efficiency. Reduce per capita water use by 20% by 2020. SB X7-7 is part of a California legislative package passed in 2009 that requires urban retail water suppliers to reduce per-capita water use by 10% from a baseline level by 2015, and to reduce per-capita water use by 20% by 2020. Green accountability performance (GAP) Goal 16 directly aligns with SB X7-7. In Southern California, energy costs and GHG emissions associated with the transport, treatment, and delivery of water from outlying regions are high. Therefore, the region has extra incentive to reduce water consumption. While this is considered a state measure, it is up to the local water retailers, jurisdictions, and water users to meet these targets.	**Compliant.** The project would comply with the requirements of Measure W-1: Water Conservation and Efficiency, including measures to increase water use efficiency. Water-efficient irrigation systems and devices and drought-tolerant landscaping would be installed on the project site.			
Solid Waste Reduction Measures				
Construction and Demolition Waste Diversion. Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 90% of C&D waste from landfills by 2035. Effective July 1, 2014, CALGreen, the state's Green Building Standards Code, requires jurisdictions to divert a minimum of 50% of their nonhazardous C&D waste from landfills. Reductions for the year 2020 assume that 100% of new construction and applicable retrofit projects meet the minimum diversion rates established by the state. For 2035, this measure assumes that C&D waste diversion would increase to 90% for new construction and retrofit projects. This increase is in line with GAP Goal 6.A which aims to develop measures to encourage that a minimum of 90% of recoverable waste from all construction sites be recycled throughout Riverside by 2015, beginning with 40% in 2010 and increasing by 10% each year thereafter.	**Compliant.** The project would comply with Measure SR-13: Construction and Demolition Waste Diversion. At least 50 percent of the demolished and/or grubbed construction materials (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard) would be reused/recycled.			
Transportation and Motor Vehicle Measures				
Measure SR-6: Pavley and Low Carbon Fuel Standard (LCFS). ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. **Measure SR-12: Electric Vehicle Plan and Infrastructure.** SCAG has developed a regional plug-in electric vehicle (PEV) readiness plan, and WRCOG has a similar subregional plan for PEV readiness. Together, these plans identify viable locations for charging stations, changes to development codes, and other strategies to encourage the purchase and use of electric vehicles. This measure is anticipated to reduce nearly 82,000 MT CO_2e in participating WRCOG jurisdictions by 2020.	**Compliant.** The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the project site would comply with Measure SR-6: Pavley and Low Carbon Fuel Standard. The project would comply with Measure SR-12: Electric Vehicle Plan and Infrastructure. Electric vehicle charging stations would be provided on the project site.			
Mixed-Use Development. Provide for a variety of development types and uses. Increasing the level of mixed-use within each City can provide more opportunities for walking, biking, and transit trips by allowing persons to satisfy multiple trip needs within one automobile trip.	**Compliant.** The project would comply with Measure T-7: Mixed-Use Development because the project includes a health club, restaurant, and supermarket.			
Shade Trees. Strategically plant trees at new developments to reduce the urban heat island effect. Planting additional trees in urban environments has a number of benefits, including lowering peak-load energy demands during the hottest months, enhancing the visual aesthetic of a community, and naturally sequestering carbon dioxide. Properly selected and located shade trees can help keep indoor temperatures low, thereby reducing air conditioner demands and utility costs. Trees can also provide shade for parking lots and other paved areas, reducing urban	**Compliant.** The project would comply with Measure E-2: Shade Trees. Landscaping and shade trees would be provided throughout the project site.			

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

heat island effect communitywide.	
Bicycle Parking. Provide additional options for bicycle parking. Safe and convenient bicycle parking is a relatively low-cost action that leads to a demonstrated shift from automobile use to bicycle use. The City intends to help business owners understand the potential benefits of bicycle parking and requiring new development projects to include bike racks as a condition of approval can facilitate implementation of this measure.	**Compliant.** The project would comply with Measure T-2: Bicycle Parking. Bicycle parking would be provided around the health club on the project site.

Source: Air Quality and Greenhouse Gas Analysis (LSA Associates, Inc., August 2016).
ARB = California Air Resources Board
GHG = greenhouse gas

With implementation of Standard Condition GCC-1, impacts related to conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases would be **less than significant** and no mitigation is required.

8. HAZARDS & HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

8a. Response:

Less Than Significant Impact. Construction of the project has the potential to create a hazard to the public or environment through the routine transportation, use and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical of materials delivered to construction sites. The future retail uses of the site may include the storage and use of common hazardous materials such as paints, cleaners, batteries, and pesticides. These materials would be stored on site in small quantities, and therefore would not pose a significant threat to the public. Oversight by the appropriate federal, state, and local agencies, and compliance by the new development with applicable regulations related to the handling, storage and disposal of hazardous materials will cause the project to have a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.

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?	☐	☐	☒	☐

8b. Response:

Less Than Significant Impact. The project may involve the use of hazardous materials but shall comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the CCR, which describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable federal, state and local laws related to the transportation, use and storage of hazardous materials would reduce the likelihood and severity of accidents during transit, use and storage to a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.

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

8c. Response: ***(Source: General Plan 2025 Public Safety and Education Elements, GP 2025 FPEIR Table 5.7-D - CalARP RMP Facilities in the Project Area, Figure 5.13-2 – RUSD Boundaries, Table 5.13-D RUSD Schools, Figure 5.13-3 AUSD Boundaries, Table 5.13-E AUSD Schools, Figure 5.13-4 – Other School District***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Boundaries, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code)

Less Than Significant Impact. Two schools are located within one-quarter mile of the proposed project: Madison Elementary School and Casa Blanca Headstart daycare center. Although hazardous materials and/or waste generated from the proposed development may pose a health risk to nearby existing or proposed schools, all businesses that handle or have on-site transportation of hazardous materials are required to comply with the provisions of the City's Fire Code and any additional regulations as required in the California Health and Safety Code Article 1 Chapter 6.95 for the Business Emergency Plan. Compliance with existing federal and state regulations impacts associated with the exposure of schools to hazardous materials caused by this project will result in a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.

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?	☐	☒	☐	☐

8d. Response: ***(Source: General Plan 2025 Figure PS-5 – Hazardous Waste Sites, GP 2025 FPEIR Tables 5.7-A – CERCLIS Facility Information, Figure 5.7-B – Regulated Facilities in TRI Information and 5.7-C – DTSC EnviroStor Database Listed Sites)***

Less Than Significant Impact With Mitigation Incorporated. No hazardous materials sites, compiled pursuant to Government Code Section 65962.5, are depicted on or adjacent to the project location on the EnviroStor online database. In addition, the FPEIR (Figure 5.7-1) does not list any hazardous waste sites on or adjacent to the project site.

Dry cleaning facilities existed on the site between 1966 and at least 1981. During this period, tetrachloroethene (PCE) was used as a cleaning solvent. PCE spills pose a threat to human health, as the substance is highly toxic and a probable carcinogen. PCE can bind to soil particles, dissolve into groundwater, and travel as a vapor. In 2013, a Soil and Vapor Assessment conducted for the proposed project found detectable PCE in 3 out of 71 soil samples. In addition, 36 out of 44 soil vapor samples conducted for the assessment identified PCE levels above California Human Health Screening Levels (CHHLs) for commercial/industrial soils (0.603 µg/L). Since this evaluation, the applicant has filed and recorded a Covenant and Environmental Restriction on Property (Covenant) with the County of Riverside Assessor-County Clerk-Recorder dated February 22, 2016. The Covenant sets forth vapor mitigation that will remain in effect on the property as part of its title. The Covenant was established for the benefit of the Santa Ana Regional Water Quality Control Board. The Covenant requires installation of a vapor barrier and venting system in the area of the identified PCEs.

No other hazardous materials sites have been associated with the project location. With the issuance of the Covenant, all necessary actions to mitigate PCE vapors emanating from the site have been taken. In order to ensure installation of the system, **Mitigation Measures HAZ-1 through HAZ-6** are required. Therefore, the project will have a **less than significant impact with implementation of Mitigation Measures HAZ-1 through HAZ-6** related to creating any significant hazard to the public or environment directly, indirectly, or cumulatively.

Mitigation Measures:

Mitigation Measure HAZ-1 through HAZ-6: The following measures are required to reduce impacts to hazardous and hazardous materials to less than significant.

Mitigation Measure HAZ-1: A vapor barrier system shall be constructed in conjunction with the health club and fitness center. It will consist of a membrane or liner with a passive ventilation system installed beneath structures. The vapor barrier system shall be in compliance with all applicable local, state and federal requirements, if any. The vapor barrier system shall be maintained intact, as per the Regional Water Quality Control Board approved design, by the owner, occupants, purchaser, lessees, and possessors of all or any portion of the Proposed Project. Furthermore, the design and shall be in compliance with the Riverside County Department of

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Public Health, Hazardous Materials Division and the Regional Water Quality Control Board.

Mitigation Measure HAZ-2: No Owner or Occupant shall conduct or permit any work to excavate soil within or on the Burdened Property, unless expressly permitted in writing by the Board, provided that the consent of the Regional Water Quality Control Board shall not be required for any work involving minor excavation and grading to repair, maintain, resurface, grade and/or regrade any existing or future Site Improvements as long as such excavation does not compromise the structural integrity of the vapor barrier that exists beneath the Proposed Project. Any contaminated soils brought to the surface by grading, excavation, trenching, or backfilling shall be managed by the Owner, or Occupant, as applicable, performing the work in accordance with all applicable provisions of local, state and federal law.

Mitigation Measure HAZ-3: Except as provided above, any excavation conducted on the Burdened Property shall be performed pursuant to an appropriate and fully implemented Health and Safety Plan approved in writing by the Regional Water Quality Control Board.

Mitigation Measure HAZ-4: All uses and development of the existing Building Improvements on the Burdened Property shall preserve the integrity of the existing vapor barrier, unless otherwise expressly permitted in writing by the Regional Water Quality Control Board.

Mitigation Measure HAZ-5: No Owner, or Occupant shall drive, bore, otherwise construct, or use a well within the Burdened Property for the purpose of extracting water for any use, including but not limited to, domestic, potable, or industrial uses, unless expressly permitted in writing by the Board; nor shall any Owner, Lessee or Occupant knowingly permit or engage any third party to do such acts.

Mitigation Measure HAZ-6: No Owner, or Occupant shall act in any manner that or is likely to aggravate or contribute to the existing residual contamination on the Proposed Project.

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

8e. Response: ***(Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, RCALUCP and March Air Reserve Base/March Inland Port Comprehensive Land Use Plan, 1999).***

Less Than Significant Impact. The proposed project is located within an Airport Safety Zone for the Riverside Municipal Airport, Zone D, as depicted on Figure 5.7-2 of the General Plan 2025 Program FPEIR. Zone D includes limitations to residential densities and buildings heights. The project was reviewed by the Airport Land Use Commission (ALUC) or Planning staff to ensure that the project is consistent with the compatibility zone as well as in compliance with the land use standards in the RCALUP. Zone D only has restrictions on residential densities and is consistent with the compatibility criteria. Because the project has been found to be consistent with the RCALUCP by the ALUC, and the Riverside planning staff, impacts related to hazards from airports are **less than significant impacts** directly, indirectly, and cumulatively. No mitigation is required.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

8f. Response: ***(Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, RCALUCP)***

No Impact. Because the proposed project is not located within proximity of a private airstrip and does not propose a private airstrip, it will not expose people residing or working in the City to safety hazards related to a private airstrip and would have **no impact** directly, indirectly, or cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

8g. Response:

Less Than Significant Impact. The project is within an urbanized area and will be served by the surrounding network of existing, full improved streets. All streets have been designed to meet the Public Works and Fire Department specifications. As part of the project's construction, temporary street closure may be necessary and would be implemented in accordance with a typical traffic control plan approved by the City. Any street closing will be of short duration so as not to interfere or impede with any emergency response or evacuation plan. Therefore, the project will have a **less than significant impact** directly, indirectly, and cumulatively to an emergency response or evacuation plan. No mitigation is required.

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

8h. Response: ***(Source: General Plan 2025 Figure PS-7 – Fire Hazard Areas, GIS Map Layer VHFSZ 2010, City of Riverside's EOP, 2002, Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1/Part 2 and OEM's Strategic Plan)***

No Impact. The proposed project is located in an urbanized area where no wildlands exist and the property is not located within a Very High Fire Severity Zone (VHFSZ) or adjacent to wildland areas or a VHFSZ; therefore, **no impact** regarding wildland fires either directly, indirectly, or cumulatively from this project will occur. No mitigation is required.

9. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐

9a. Response: ***(Source: GP 2025 FPEIR Table 5.8-A – Beneficial Uses Receiving Water)***

Less Than Significant Impact. The project is located on an 8.21-acre property within the Santa Ana River Watershed. The project site currently is partially developed with mostly impervious structures and some landscaped areas; approximately 45 percent of the project site is graded, albeit undeveloped, earthen ground surface. The project consists of the construction of three attached buildings and one additional detached building and will involve site clearing, demolition, rough grading and compaction, pouring of concrete and asphalt, and construction of multiple structures. The site clearing and grading phases will disturb vegetation and surface soils, potentially resulting in erosion and sedimentation. If left exposed and with no vegetative cover, the site's bare soil would be subject to additional wind and water erosion. Since the project involves over one acre of ground disturbance, it is subject to National Pollution Discharge Elimination System (NPDES) requirements and must implement a Storm Water Pollution Prevention Plan (SWPPP). Implementation of site-specific best management practices (BMPs) as established by the SWPPP will ensure all impacts related to erosion and sedimentation from ground disturbance are less than significant. The existing site drains from the southeast to the northwest corner of the site where runoff enters a city storm drain leaving the site. The proposed site will maintain the existing drainage pattern from the southeast to the northwest corner. The proposed site has been graded to direct flow to sump conditions. Each sump has an infiltration/bioretention facility for treatment with an overflow/outlet storm drain that will connect and discharge to the existing city storm drain in the northwest corner. To address potential water contaminants, the project is required to comply with applicable federal, state, and local water quality regulations. Given compliance with all applicable local, state, and federal laws regulating surface water quality, the proposed project as designed is anticipated to result in a **less than significant impact** directly, indirectly, or cumulatively to any water quality standards or waste discharge. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. 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)?	☐	☐	☐	☒

9b. Response: ***(Source: General Plan 2025 Table PF-1 – RPU Projected Domestic Water Supply (AC-FT/YR), Table PF-2 – RPU Projected Water Demand, RPU Map of Water Supply Basins, RPU Urban Water Management Plan)***

Less Than Significant Impact. The proposed project is located within the Riverside South Water Supply Basin. The proposed project site has been designed to maximize the landscape areas, thereby minimizing the impervious area to the maximum extent possible; runoff from the site will disperse into infiltration/bioretention facilities or adjacent landscape planting prior to discharging into the city storm drain. Additionally, the proposed project will utilize water conservation project design features such as low-flush toilets, low-flow faucets, and drought-tolerant landscaping. Furthermore, the proposed project is required to comply with all NPDES regulations, which will further ensure the project will 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. Therefore, the proposed project will result in a **less than significant impact** to groundwater supplies and recharge either directly, indirectly, or cumulatively. No mitigation is required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐

9c. Response:

Less Than Significant Impact. The project is subject to NPDES requirements; areas of one acre or more of disturbance are subject to preparing and implementing an SWPPP for the prevention of runoff during construction activities. No existing streams or rivers exist on the site. There is an existing Caltrans water quality infiltration basin on site that will be modified as part of the project, but the modifications will maintain existing conditions in which the retention basin will only accept discharge from the adjacent SR-91 freeway. The existing project site does not have any other features or facilities promoting infiltration except that which occurs as runoff surface flows across the barren dirt to the storm drain in the northwest corner. The proposed sump condition basins to where the site is designed to flow will infiltrate the maximum volume of runoff feasible. The existing site drains from the southeast to the northwest corner of the site where runoff enters a city storm drain leaving the site. The proposed site will maintain the existing drainage pattern from the southeast to the northwest corner. The proposed site has been graded to direct flow to sump conditions. Each sump has an infiltration/bioretention facility for treatment with an overflow/outlet storm drain that will connect and discharge to the existing city storm drain in the northwest corner. Therefore, the project will have a **less than significant impact** directly, indirectly, or cumulatively to existing drainage patterns. No mitigation is required.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?	☐	☐	☒	☐

9d. Response:

Less Than Significant Impact. There is a Caltrans water quality infiltration basin on site, but this has been designed to only accept discharge from the adjacent SR-91 freeway. The existing project site does not have any other features or

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

facilities promoting infiltration except that which occurs as runoff surface flows across the barren dirt to the storm drain in the northwest corner. The proposed sump basins to where the site is designed to flow will infiltrate the maximum volume of runoff feasible. The existing site drains from the southeast to the northwest corner of the site where runoff enters a city storm drain leaving the site. The proposed site will maintain the existing drainage pattern from the southeast to the northwest corner. The proposed site has been graded to direct flow to sump conditions. Each sump has an infiltration/ bioretention facility for treatment with an overflow/outlet storm drain that will connect and discharge to the existing city storm drain in the northwest corner. Therefore, no flooding on- or off-site as a result of the project will occur and there will be a **less than significant impact** directly, indirectly, and cumulatively that would substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. No mitigation is required.

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f. Otherwise substantially degrade water quality?	☐	☐	☒	☐

9e-f. Response:

Less Than Significant Impact. The project is over one acre in size and is required to have coverage under the State's General Permit for Construction Activities (SWPPP). As stated in the permit, during and after construction, BMPs will be implemented to reduce/eliminate adverse water quality impacts resulting from development. All impacts related to runoff during site preparation, demolition, and grading will be addressed by the SWPPP. The site has been designed to maximize the landscape areas, thereby minimizing the impervious area to the maximum extent practicable. All runoff from the built project site will disperse into infiltration/bioretention facilities or adjacent landscape planting prior to discharging into the storm drain. As any sources of storm water pollution will mitigated through adherence to NPDES permit requirements, the project will not create or contribute runoff water exceeding capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. For these reasons, there will be a **less than significant impact** directly, indirectly, or cumulatively from storm water exceeding the capacity of existing or planned storm water drainage systems, substantial additional sources of polluted runoff, or other sources of water quality degradation. No mitigation is required.

g. Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

9g. Response: ***(Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas, and FEMA Flood Hazard Map Number 06065C0720G)***

No Impact. The project does not involve the construction of housing. There will be **no impact** caused by this project directly, indirectly, or cumulatively as it will not place housing within a 100-year flood hazard area. No mitigation is required.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

9h. Response: ***(Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas, and FEMA Flood Hazard Number 06065C0720G)***

No Impact. The project site is not located within or near a 100-year flood hazard area as depicted on General Plan 2025 Program FPEIR Figure 5.8-2 – Flood Hazard Areas and the National Flood Insurance Rate Map (Map Number 06065C0720G Effective Date August 28, 2008). Therefore, the project will not place a structure within a 100-year flood hazard area that would impede or redirect flood flows and **no impact** will occur directly, indirectly, or cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

9i. Response: ***(Source: General Plan 2025 FPEIR Figure 5.8-2 – Flood Hazard Areas, and FEMA Flood Hazard Number 06065C0720G)***

Less Than Significant Impact. The project is located partially within the Mary Street Dam inundation area that may be affected in the event of a dam failure, as depicted on General Plan 2025 Program FPEIR Figure 5.8-2 – Flood Hazard Areas. In the event of a dam failure, first flow waters are expected to reach the site in 112 minutes. Therefore, the proposed project may expose people and/or structures to the risk of loss, injury, or death involving flooding as a result of the failure of a levee or dam.

The City Municipal Code, Title 18 – Subdivision Code, Section Chapter 18.210 – Development Standards, Section 18.210-100 – Flood Prone Lands and Drainage and Title 16 Buildings & Construction, Chapter 16.18 Flood Hazard Area & Implementation of Natural Flood Insurance Program, Sec. 16.8050 requires new construction located within flood hazard areas to mitigate flood hazards by including on-site drainage, anchoring methods to prevent floating structures, elevating buildings above flood levels, and flood proofing, which requires buildings to be inspected and certified by a professional engineer, surveyor, or building inspector. The proposed project will be conditioned to meet these requirements, including compliance with State Civil Code Section 1103 through 1103.4 requiring notification to those potentially affected of the risk involved in locating within a flood hazard or dam inundation area. Therefore, the potential to place a structure within an area that would expose people or structures to a significant risk of loss, injury, or death as a result of the failure of a levee or dam will be **less than significant** directly, indirectly, or cumulatively. No mitigation is required.

j. Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

9j. Response: ***(Source: GP 2025 FPEIR Chapter 7.5.8 – Hydrology and Water Quality)***

No Impact. Tsunamis are large waves that occur in coastal areas; therefore, since the city is not located in a coastal area, **no impacts** due to tsunamis will occur directly, indirectly, or cumulatively. The proposed project site and its surroundings have generally flat topography and are within an urbanized area not within proximity to Lake Mathews, Lake Evans, the Santa Ana River, Lake Hills, Norco Hills, Box Springs Mountain Area or any of the nine arroyos that transverse the City and its sphere of influence. Therefore, **no impact** potential for seiche or mudflow exists either directly, indirectly, or cumulatively. No mitigation is required.

10. LAND USE AND PLANNING: Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒

10a. Response: ***(Source: General Plan 2025 Land Use and Urban Design Element, , City of Riverside GIS/CADME map layers)***

No Impact. The project site is located within the General Plan land use designation Mixed Use-Urban (MU-U). The existing zoning for the site is Commercial Retail (CR) and Commercial Retail - Two Story Building - Building Setback Overlay Zones (CR S-2-X). The area west of the project site is zoned R-1-7000, zoning to the east is Commercial Retail – One Story Building – Building Setback Overlay Zones (CR S-1-X) and Two Story Building - Building Setback Overlay Zones (CR S-2-X), and to the north is Multi-family residential (R-3-1500). State Route 91 (SR-91) is located immediately south of the site. The project includes the construction of a new commercial center. The project is currently served by fully improved public streets and other infrastructure and does not involve the subdivision of land or the creation of streets that could alter the existing surrounding pattern of development or an established community. Therefore, **no impact** directly, indirectly, or cumulatively to an established community will occur. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

10b. Response: ***(Source: General Plan 2025, General Plan 2025 Figure LU-10 – Land Use Policy Map, Table LU-5 – Zoning/General Plan Consistency Matrix, Figure LU-7 – Redevelopment Areas, Title 18 – Subdivision Code, Title 7 – Noise Code, Title 17 – Grading Code, Title 20 – Cultural Resources Code, Title 16 – Buildings and Construction and Citywide Design and Sign Guidelines)***

No Impact. The project is the redevelopment of an existing commercial retail site consistent with the General Plan 2025 and the Ramona Neighborhood Plan. It is not located within other plan areas and it is not a project of statewide, regional or areawide significance. For these reasons, this project will have **no impact** on an applicable land use plan, policy, or regulation directly, indirectly, or cumulatively. No mitigation is required.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

10c. Response: ***(Source: Regional Conservation Authority, http://www.wrc-rca.org/webimages/mshcpsize.pdf) General Plan 2025 – Figure OS-7 – MSHCP Core and Linkage)***

No Impact. The project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). However, according to the General Plan 2025 Open Space Element Figure OS-7, the project site is not located in any MSHCP habitat core or habitat linkage area. In addition, the project site is located in a fully developed urban area and includes the construction of a new commercial center. No significant biological habitat exists on the site. For these reasons the project will have **no impact** on any applicable habitat conservation plan or natural community conservations plans. No mitigation is required.

11. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

11a. Response: ***(Source: General Plan 2025 Figure – OS-1 – Mineral Resources)***

No Impact. The proposed project is located in MRZ-4, which indicates that there are insufficient data to know whether mineral resources can be found on site. The project site is currently developed with a Denny's and a parking lot. Previous grading and excavation activities on the site have failed to reveal feldspar, silica, limestone, and/or other rock products. Therefore, it is unlikely the demolition and construction under the project would affect significant mineral deposits. Therefore, the project will have **no impact** on regionally or statewide significant mineral resources directly, indirectly, or cumulatively. No mitigation is required.

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?	☐	☐	☐	☒

11b. Response: ***(Source: General Plan 2025 Figure – OS-1 – Mineral Resources)***

No Impact. The GP 2025 FPEIR determined that there are no specific areas within the City of Sphere of Influence that have locally-important mineral resource recovery sites and that the implementation of the General Plan 2025 would not significantly preclude the ability to extract state-designated resources. The proposed project is consistent with the General Plan 2025. Therefore, the project will have **no impact** on locally significant mineral resources directly, indirectly, or cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

12a. Response: ***(Source: Noise and Vibration Impact Analysis, LSA Associates, Inc., July 2016; City of Riverside Municipal Code, 2005; Traffic Impact Analysis, LSA Associates, Inc., November 2016.***

Less Than Significant With Mitigation Incorporated. A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the noise criteria listed in the City's Municipal Code and in the Noise Element of the General Plan.

City of Riverside Noise Element. The City in its General Plan Noise Element has established noise/land use noise compatibility criteria. Single-family and multi-family residences are normally acceptable in exterior noise environments up to 60 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) and conditionally acceptable in exterior noise environments of up to 65 dBA CNEL. Infill residential uses are normally acceptable in exterior noise environments up to 65 dBA CNEL and conditionally acceptable in exterior noise environments of up to 75 dBA CNEL. Interior noise levels within residential structures are acceptable up to 45 dBA CNEL. Commercial uses are normally acceptable in exterior noise environments of up to 65 dBA CNEL. Industrial uses are normally acceptable up to 70 dBA CNEL. For the purposes of the noise and vibration impact analysis, the multifamily (apartments or condominiums) and single-family residential uses with outdoor active use areas located to the north and/or west of the project site (e.g., patios or balconies) exposed to noise levels exceeding 65 dBA CNEL would need to be mitigated.

City of Riverside Municipal Code Noise Ordinance. The City has incorporated the following measures in its Municipal Code to control loud, unnecessary, and unusual nuisance noises:

- **Exterior Sound Level Limits.** Unless a variance has been granted, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:
  - The exterior noise standard of the applicable land use category (see Table 12.A), up to 5 dB (up to 60 dBA during the day and up to 50 dBA during the night), for a cumulative period of more than 30 minutes in an hour; or
  - The exterior noise standard of the applicable land use category, plus 5 dB (60 dBA during the day and 50 dBA during the night), for a cumulative period of more than 15 minutes in any hour; or
  - The exterior noise standard of the applicable land use category, plus 10 dB (65 dBA during the day and 55 dBA during the night), for a cumulative period of more than 5 minutes in any hour; or
  - The exterior noise standard of the applicable land use category, plus 15 dB (70 dBA during the day and 65 dBA during the night), for a cumulative period of more than 1 minute in any hour; or
  - The exterior noise standard of the applicable land use category, plus 20 dB (75 dBA during the day and 70 dBA during the night) or the maximum measured ambient noise level, for any period of time.

- **Interior Sound Level Limits.** No person shall operate or cause to be operated, any source of sound indoors that causes the noise level, when measured inside another dwelling unit, school, or hospital, to exceed:
  - The interior noise standard for the applicable noise category (see Table 12.A), up to 5 dB (up to 50 dBA during the day and up to 40 dBA during the night), for a cumulative period of more than 5 minutes in any hour; or
  - The interior noise standard for the applicable land use category, plus 5 dB (55 dBA during the day and 45 dBA during the night), for a cumulative period of more than 1 minute in any hour; or
  - The interior noise standard for the applicable land use category, plus 10 dB (60 dBA during the day and 50 dBA during the night) or the maximum measured ambient noise level, for any period of time.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 12.A: City of Riverside Sound Level Limits (dBA)

Land Use Category	Time Period	Exterior Noise Standard	Interior Noise Standard
Residential	Night (10:00 PM to 7:00 AM) Day (7:00 AM to 10:00 PM)	45 55	35 45
School	7:00 AM to 10:00 PM (while school is in session)	N/A[1]	45
Hospital	Anytime	N/A	45
Office/Commercial	Anytime	65	N/A
Industrial	Anytime	70	N/A
Community Support	Anytime	60	N/A
Public Recreation Facility	Anytime	65	N/A
Nonurban	Anytime	70	N/A

Source: Municipal Code (City of Riverside, 2005).
[1] N/A = Not Applicable. The City of Riverside has not established a sound level limit for this land use.
dBA = A-weighted decibels

Based on Table 12.A and Sections 7.25.010 and 7.30.015 of the City Municipal Code, the maximum exterior noise level for residential uses is 75 dBA maximum noise level (L_{max}) (55 dB + 20 dB) during daytime hours and 65 dBA L_{max} (45 dB + 20 dB) during nighttime hours, or the maximum measured ambient noise level for any period of time. Similarly, the maximum interior nuisance noise level for residential uses is 55 dBA L_{max} (45 dB + 10 dB) during daytime hours and 45 dBA L_{max} (35 dB + 10 dB) during nighttime hours, or the maximum measured ambient noise level for any period of time.

Based on Table 12.A, the maximum exterior noise level for a public recreation facility is 85 dBA L_{max} (65 dBA + 20 dBA) during daytime hours, or the maximum measured ambient noise level for any period of time. There is no maximum interior nuisance noise level for a public recreation facility.

Construction activities are restricted within the City to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays, and are prohibited on Sundays and federal holidays.

Construction Impacts. Short-term noise impacts would be associated with grading and erecting of buildings on site during construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area today, but would no longer occur once construction of the project is completed. Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 87 dBA L_{max}), the effect on longer term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during grading and building erection on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site, and therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical construction noise levels range up to 86 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels, because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery, such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of earthmoving equipment such as bulldozers, haul trucks, front-end loaders, and water and pickup trucks at the project site. The maximum noise level generated by each scraper on the proposed project site is assumed to be 84 dBA L_{max} at 50 feet from the scraper. Each bulldozer would generate 82 dBA L_{max} at 50 feet from the bulldozer. Each doubling of the sound sources with equal strength increases the noise level

by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 86 dBA L_{max} at a distance of 50 feet from the active construction area.

Land uses adjacent to the project site include residential uses, streets, and highways. Construction on the project site would potentially expose noise-sensitive uses in the project vicinity to intermittent noise levels exceeding 80 dBA L_{max} during project construction. The multifamily residences to the north of the project site are approximately 53 feet from the project boundary and are shielded by an existing 6-foot-high perimeter wall and those to the west are approximately 50 feet from the project boundary and are shielded by an existing 6-foot-high perimeter wall. These residences would be potentially exposed to intermittent maximum construction noise reaching 80 dBA. However, the proposed project would also be required to comply with the construction hours specified in the City's Noise Ordinance to ensure that noise impacts from earthmoving equipment would be reduced. Construction activities are restricted within the City to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 8:00 a.m. and 5:00 p.m. on Saturdays, and are prohibited on Sundays and federal holidays.

To the east of the project site across Madison Street, the commercial uses are more than 200 feet from the project construction area and are not considered noise sensitive. Noise from on-site construction would not only be reduced by the distance attenuation but would also be masked by traffic noise on Madison Street, so no sensitive receivers on the east side of Madison Street would be exposed to substantial noise from on-site construction activity. As a worst-case scenario, even if construction noise occurs continuously and lasts for hours, the resulting noise level on the east side of Madison Street would be below 65 dBA L_{max}, a level that is lower than or compatible with traffic noise from Madison Street.

Compliance with the construction hours specified in the City's Noise Ordinance would reduce noise impacts to nearby sensitive receptors from earthmoving equipment. As specified in Mitigation Measure NOI-1, construction activities would be restricted to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between 8:00 a.m. and 5:00 p.m. on Saturdays, and prohibited on Sundays and federal holidays. In addition, as specified in Mitigation Measure NOI-1, the construction contractor would be required to equip construction equipment with mufflers, position construction equipment to direct noise away from sensitive receptors, and place staging areas at the greatest distance possible from sensitive receptors. Construction noise impacts to nearby sensitive receptors would be **less than significant with mitigation incorporated**.

Operational Impacts. As discussed below, long-term noise associated with the project site would be generated from vehicle traffic and on-site stationary sources, such as truck delivery and loading/unloading.

Long-Term Vehicular Traffic Noise Impacts. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions along the roadway segments in the project vicinity. Traffic volumes provided in the Traffic Impact Analysis (LSA Associates, Inc., November 2016) were used to assess the existing and future traffic noise impacts. A typical vehicle mix for Southern California was used. Table 12.B provides the traffic noise levels along the roadways adjacent to the project site under the existing (2016) conditions. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

Table 12.B: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (Feet)	Centerline to 65 dBA CNEL (Feet)	Centerline to 60 dBA CNEL (Feet)	CNEL (dBA) 50 Feet from Centerline of Outermost Lane
Madison Street north of Magnolia Avenue	10,600	< 50	107	227	67.6
Madison Street between Magnolia Avenue and Orchard Street	13,900	63	128	271	68.8
Madison Street between Orchard Street and Garden Street	14,800	65	133	283	69.1
Madison Street between Garden Street and Indiana Avenue	16,500	70	143	304	69.5
Madison Street between Indiana Avenue and Evans Street	11,800	57	115	243	68.1
Madison Street east of Evans Street	10,400	< 50	106	224	67.5

ISSUES (AND SUPPORTING INFORMATION SOURCES):			Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Magnolia Avenue west of Madison Street	17,600	72	149	317	69.8	
Magnolia Avenue east of Madison Street	17,600	72	149	317	69.8	
Orchard Street west of Madison Street	1,900	< 50	< 50	< 50	57.7	
Orchard Street east of Madison Street	600	< 50	< 50	< 50	52.7	
Garden Street east of Madison Street	3,500	< 50	< 50	59	60.4	
Indiana Avenue west of Madison Street	12,900	< 50	101	216	67.7	
Indiana Avenue east of Madison Street	14,200	< 50	108	230	68.2	
Evans Street west of Madison Street	1,400	< 50	< 50	< 50	56.4	
Evans Street east of Madison Street	1,400	< 50	< 50	< 50	56.4	
SR-91 at Madison Street	175,500	1,120	2,411	5,194	87.3	

Source: Noise and Vibration Impact Analysis (LSA Associates, Inc., July 2016)
Note: Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level SR-91 = State Route 91

Table 12.B reveals that, under existing conditions, traffic noise levels along roadway segments in the project vicinity are moderate to high along Madison Street, Indiana Avenue, and Magnolia Avenue, with the 65 dBA CNEL extending to 149 feet from the roadway centerline. Traffic noise levels along Orchard Street and Evans Street are low, with both the 70 and 65 dBA CNEL contours confined to within the roadway right-of-way.

Traffic on SR-91 had 172,000 average daily traffic (ADT) volumes in 2014. Assuming a 1 percent annual growth, the traffic will grow to 175,500 ADT under the existing condition. It is also assumed that the proposed project would not measurably add to the traffic volumes on SR-91. Therefore, this ADT would continue to be 175,500 in 2017.

Tables 12.C and 12.D provide the traffic noise levels for the "without" and "with" project conditions along the roadways adjacent to the project site under the Existing and Opening Year (2017) traffic conditions. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn.

Based on the Traffic Impact Analysis, the proposed project is expected to generate a daily traffic volume of 6,227 vehicle trips. These traffic volumes are expected to travel on roadways in the project vicinity. As a rule of thumb, traffic volumes would need to double the baseline volume to increase the traffic noise by 3 dBA. Because project-related traffic volumes would contribute a small percentage to the existing and projected daily traffic volumes on area roadways, as can be seen in Table 12.C, the project-related traffic noise level increase along all area roadways would be less than 1 dBA over the corresponding without project levels. This range of traffic noise level increases is small and would not be discernible to the human ear in an outdoor environment. Similarly, for traffic on area roadways, project-related daily trips would be less than 10 percent of the opening year (2017) traffic volumes, and would increase the traffic noise by 0.6 dBA at most. None of the street segments would result in 3 dBA or higher project-related traffic noise level increases. Therefore, project-related traffic noise impacts on off-site land uses would be less than significant and no mitigation is required.

For on-site proposed land uses, the 65 dBA CNEL from Madison Street would extend to 158 feet from the roadway centerline. The proposed on-site restaurants do not have any outdoor eating areas proposed that would be exposed to traffic noise levels exceeding 65 dBA CNEL, the City's acceptable noise level for such uses. In addition, no outdoor noise-sensitive uses would be associated with the proposed commercial and retail uses on the western portion of the project site. Traffic noise impacts from SR-91 on the proposed on-site land uses would be **less than significant** and no mitigation is required.

On-Site Operational Stationary Source Noise Impacts. Potential long-term noise impacts would be associated with on-site stationary sources. These activities are potential point sources of noise that could affect off-site, noise-sensitive receptors (e.g., residences to the north and west). On-site, noise-producing activities include loading/unloading activity and parking lot activities that include slow-moving vehicles, doors slamming, vehicle engines starting, and people conversing in the parking lots. As noise spreads from a source, it loses energy; thus, the farther the noise receiver is from the noise source, the lower the perceived noise level by the receiver. Geometric spreading causes the sound level to attenuate, or be reduced, resulting in a 6 dBA reduction in the noise level for each doubling of distance from a single-point source of noise (e.g., a car door slam) to the noise-sensitive receptor of concern.

Table 12.C: Existing Traffic Noise Levels Without and With Project

	Existing Without Project (Baseline)					Existing With Project						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 feet from Centerline of Outermost Lane
Madison Street north of Magnolia Avenue	10,600	< 50	107	227	67.6	11,000	400	< 50	110	232	67.8	0.2
Madison Street between Magnolia Avenue and Orchard Street	13,900	63	128	271	68.8	14,900	1,000	66	133	284	69.1	0.3
Madison Street between Orchard Street and Garden Street	14,800	65	133	283	69.1	16,000	1,200	68	140	298	69.4	0.3
Madison Street between Garden Street and Indiana Avenue	16,500	70	143	304	69.5	18,900	2,400	75	156	332	70.1	0.6
Madison Street between Indiana Avenue and Evans Street	11,800	57	115	243	68.1	12,500	700	59	119	253	68.3	0.2
Madison Street east of Evans Street	10,400	< 50	106	224	67.5	10,600	200	< 50	107	227	67.6	0.1
Magnolia Avenue west of Madison Street	17,600	72	149	317	69.8	17,800	200	73	150	319	69.9	0.1
Magnolia Avenue east of Madison Street	17,600	72	149	318	69.8	17,800	200	73	150	319	69.9	0.1
Orchard Street west of Madison Street	1,900	< 50	< 50	< 50	57.7	2,100	200	< 50	< 50	< 50	58.2	0.5
Orchard Street east of Madison Street	600	< 50	< 50	< 50	52.7	600	0	< 50	< 50	< 50	52.7	0.0
Garden Street east of Madison Street	3,500	< 50	< 50	59	60.4	3,500	0	< 50	< 50	59	60.4	0.0
Indiana Avenue west of Madison Street	12,900	< 50	101	216	67.7	13,100	200	< 50	102	218	67.8	0.1
Indiana Avenue east of Madison Street	14,200	< 50	108	230	68.2	14,400	200	< 50	109	232	68.2	0.0
Evans Street west of Madison Street	1,400	< 50	< 50	< 50	56.4	1,600	200	< 50	< 50	< 50	57.0	0.6
Evans Street east of Madison Street	1,400	< 50	< 50	< 50	56.4	1,700	300	< 50	< 50	< 50	57.3	0.9
SR-91 at Madison Street	175,500	1,120	2,411	5,194	87.3	175,500	0	1,120	2,411	5,194	87.3	0.0

Source: Noise and Vibration Impact Analysis, LSA Associates, Inc. (July 2016).
Note: Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels

Table 12.D: Opening Year (2017) Traffic Noise Levels Without and With Project

	Opening Year (2017) Without Project (Baseline)					Opening Year (2017) With Project						
Roadway Segment	ADT	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	CNEL (dBA) 50 feet from Centerline of Outermost Lane	Increase over Opening Year CNEL (dBA) 50 feet from Centerline of Outermost Lane
Madison Street north of Magnolia Avenue	10,800	< 50	109	230	67.7	11,200	400	56	111	235	67.9	0.2
Madison Street between Magnolia Avenue and Orchard Street	14,200	64	129	275	68.9	15,200	1,000	66	135	288	69.2	0.3
Madison Street between Orchard Street and Garden Street	15,100	66	135	286	69.2	16,300	1,200	69	141	301	69.5	0.3
Madison Street between Garden Street and Indiana Avenue	16,900	71	145	309	69.6	19,300	2,400	76	158	337	70.2	0.6
Madison Street between Indiana Avenue and Evans Street	12,100	58	117	247	68.2	12,800	700	60	121	257	68.4	0.2
Madison Street east of Evans Street	10,600	< 50	107	227	67.6	10,800	200	< 50	109	230	67.7	0.1
Magnolia Avenue west of Madison Street	18,000	73	151	322	69.9	18,200	200	74	152	324	70.0	0.1
Magnolia Avenue east of Madison Street	18,000	73	151	322	69.9	18,200	200	74	152	324	70.0	0.1
Orchard Street west of Madison Street	1,900	< 50	< 50	< 50	57.7	2,100	200	< 50	< 50	< 50	58.2	0.5
Orchard Street east of Madison Street	610	< 50	< 50	< 50	52.8	610	0	< 50	< 50	< 50	52.8	0.0
Garden Street east of Madison Street	3,500	< 50	< 50	59	60.4	3,500	0	< 50	< 50	59	60.4	0.0
Indiana Avenue west of Madison Street	13,200	< 50	103	219	67.8	13,400	200	< 50	104	221	67.9	0.1
Indiana Avenue east of Madison Street	14,600	53	110	234	68.3	14,800	200	54	111	236	68.3	0.0
Evans Street west of Madison Street	1,500	< 50	< 50	< 50	56.4	1,600	200	< 50	< 50	< 50	57.0	0.6
Evans Street east of Madison Street	1,500	< 50	< 50	< 50	56.7	1,700	200	< 50	< 50	< 50	57.3	0.6
SR-91 at Madison Street	177,300	1,128	2,428	5,229	87.4	177,300	0	1,128	2,428	5,229	87.4	0.0

Source: Noise and Vibration Impact Analysis, LSA Associates, Inc. (July 2016).
Note: Traffic noise within 50 feet of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels

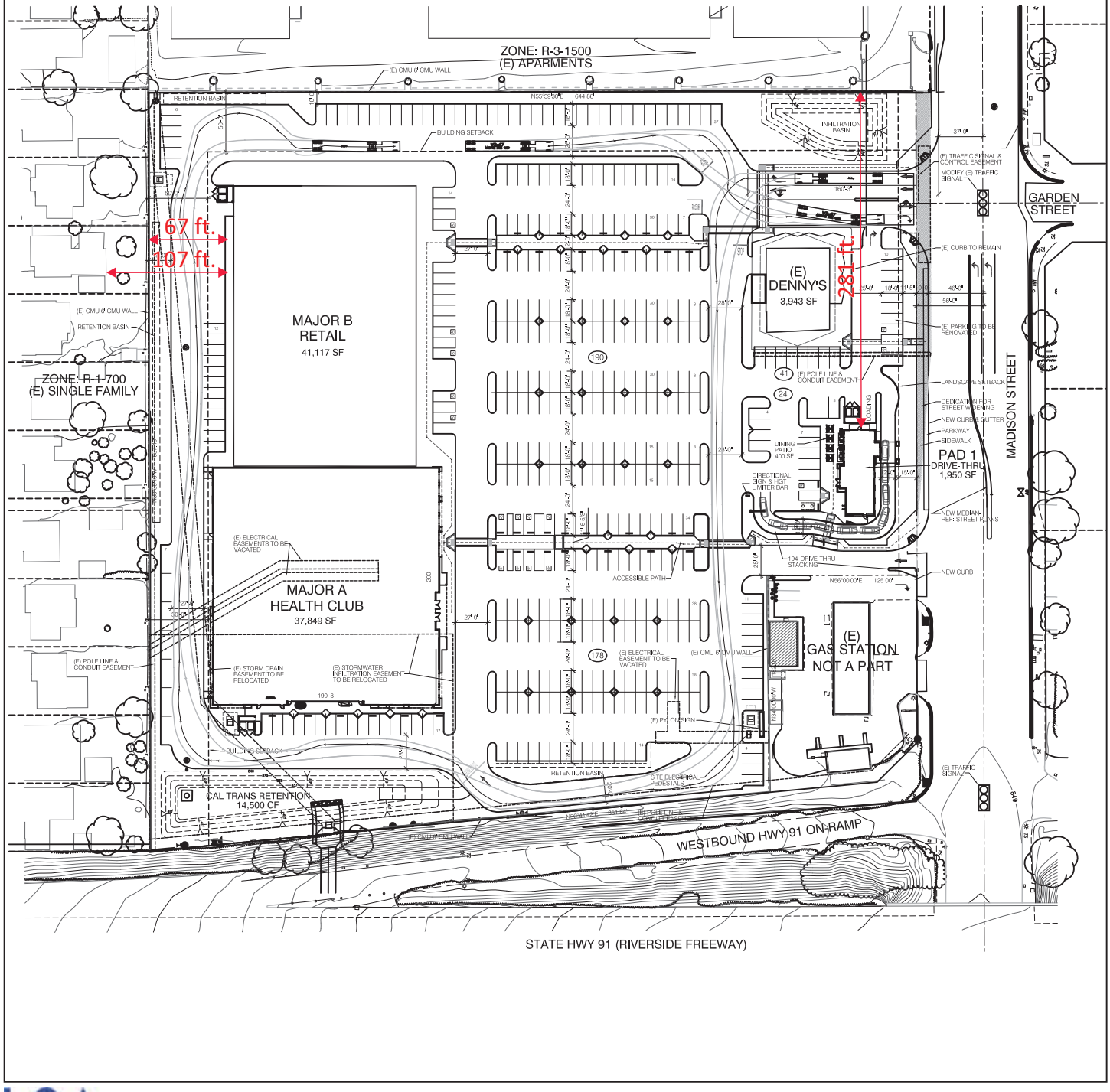
ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

On-site HVAC Mechanical Equipment Noise. The proposed buildings are expected to have rooftop HVAC equipment for central air system. The representative HVAC equipment would generate approximately 65 dBA L_{max} at 3 feet. The shortest distance between these residences to the west and where the HVAC units would be located is approximately 100 feet (30 dBA noise reduction compared to the noise level measured at 3 feet), and would be reduced to 35 dBA L_{max} by distance attenuation alone. Under the most stringent assumption that the maximum noise level would last over the entire period when the HVAC is being used, then the noise level from this stationary source would be 35 dBA L_{eq}. This range of noise levels would be lower than the ambient noise levels dominated by traffic noise from the SR-91 and would not exceed the City's 35 dBA exterior noise level threshold from stationary sources under the nighttime conditions (10:00 p.m. to 7:00 a.m.). Similarly, the shortest distance between existing multifamily residences to the north and the nearest on-site buildings with rooftop HVAC units is approximately 500 feet, which would provide 44 dBA of noise attenuation and reduce the HVAC noise to 21 dBA. No significant noise impacts at residences adjacent to the project site would occur and no mitigation would be required.

On-site Drive-thru Intercom Noise. Noise associated with menu board ordering was measured at close range at an existing McDonald's Restaurant on Rosecrans Avenue in the City of Norwalk (November 24, 2003). The sound level meter was positioned at a distance of approximately 15 feet from the speaker. When measured in front of the drive-through vehicle with the highest exposure to the speaker, sound from the speaker fluctuated between 55 and 65 dBA L_{max}. At a distance of 50 feet from the sound level meter, the menu board ordering noise would be reduced by 10 dBA to 45 to 55 dBA L_{max}. LSA conducted noise measurements at another existing McDonald's on Norwalk Boulevard in the City of Norwalk (January 14, 2004) at 50 feet from the existing menu board. Sound associated with menu board ordering ranged from 53.7 to 57.9 dBA and was audible or distinguishable only when there was no traffic on Norwalk Boulevard and Imperial Highway, i.e., when the background noise was low. Therefore, as a worst case scenario, the noise level range of 54 to 58 dBA is used in this analysis. At a distance of 500 feet, the drive-thru intercom noise would be reduced from 54 to 58 dBA to 34 to 38 dBA at the nearest existing multi-family residences to the north of the project site. The existing single-family residences more than 1,000 feet to the west would be partially shielded by the other on-site buildings, and noise associated with the drive-thru intercom would therefore be attenuated to a level that is not audible.

Truck Delivery and Loading/Unloading. Given the nature of the activities expected to occur at the loading and unloading areas for the proposed project, the noise impacts associated with delivery trucks are accurately analyzed by comparing the maximum noise levels experienced to the daytime and nighttime noise levels standards presented above with the addition of 20 dBA per Section 7.25.010 of the Municipal Code. The maximum daytime and night noise levels standards of 75 dBA L_{max} and 65 dBA L_{max}, respectively, will be utilized. Delivery trucks for the on-site commercial/restaurant uses would result in maximum noise similar to noise readings from loading/unloading activities for other commercial use projects, which would generate a noise level of 75 dBA L_{max} at 50 feet based on LSA's measurements conducted in past years. Specific noise level impacts included in the measured activities as well as typical truck deliveries may include any or all of the following: release of air brakes, engine noise from movement or idling, back-up emergency beeper or tire noise.

The closest residential property line to the west is located approximately 67 feet from the proposed loading dock at Major B Retail on the project site as shown on Figure 3. The closest residential building to the west is approximately 107 feet from this loading dock shown on Figure 3. Delivery trucks would park at the loading dock to unload goods. The on-site commercial uses may have delivery occurring once in the morning and once in the afternoon. The 67-foot distance would provide a noise reduction of 3 dBA compared to the noise level measured at 50 feet from the noise source. The 107-foot distance would provide approximately 7 dBA in noise attenuation compared to the noise level measured at 50 feet. In addition, the existing 6-foot-high barrier would provide approximately 6 dBA in noise reduction. The loading/unloading noise associated with the on-site commercial uses would be reduced to 66 dBA L_{max} or lower near the property line, the more sensitive area during daytime hours, or 63 dBA L_{max} at the nearest residential use west of the project site, the area of greatest concern during nighttime hours when people are sleeping. This range of loading/unloading noise would be lower than the City's 75 dBA L_{max} during daytime hours and 65 dBA L_{max} during nighttime hours.



LSA

FIGURE 3

X ft. Distance to Sensitive Recptors

0 61 122

FEET

Madison Plaza

Distance to Sensitive Receptors

SOURCE: GK Pierce Architects, December 7, 2012

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The loading dock proposed for the 1,950-squre foot restaurant is located on the north side of the building, south of the existing Denny's building that will remain. Loading/unloading noise from the proposed restaurant would be blocked by the Denny's building itself from the nearest residences to the north, approximately 281 feet from this parking area (see Figure 3). The 281-foot distance would provide a noise reduction of 18 dBA compared to the noise level measured at 50 feet from the noise source, and the shielding provided by the proposed restaurant building would reduce the loading/unloading noise by at least 10 dBA. In addition, the existing 6-foot-high wall would provide these residences at least 5 dBA in noise attenuation. Therefore, loading/unloading noise associated with the on-site restaurant uses would be reduced to 42 dBA L_{max} or lower at the nearest outdoor living areas (i.e., patios and/or balconies) north of the project site. This range of loading/unloading noise would be lower than the City's 75 dBA L_{max} during daytime hours and 65 dBA L_{max} during nighttime hours.

Although a typical truck unloading process takes an average of 15 to 20 minutes, the maximum loading/unloading noise level occurs in a much shorter period of time, in a few minutes over each truck delivery. In addition, truck idling for more than 5 minutes is not permitted under state regulations. For events lasting 5 minutes or shorter, the City's noise standards show that up to 65 dBA, exceeded 8 percent of the time during the stated period (L_8), is acceptable. Because this range of noise levels from the project site is below the City's exterior noise standards, noise associated with loading/unloading activities at on-site commercial/restaurant uses would not result in noise levels exceeding the noise standards at the nearest off-site sensitive receptors (i.e. outdoor living areas/backyards). In addition, the proposed landscaping along the western property line will further attenuate noise from trucks on the drive aisle. Impacts are **less than significant** and no mitigation is required.

In warm-climate areas (e.g., Southern California), with windows or doors open, the exterior-to-interior noise attenuation would be 12 dBA. With windows closed, this noise attenuation increases to 24 dBA. For off-site residential units that are located to the west of the project site near the proposed market uses, standard building construction (with windows closed) would provide sufficient exterior-to-interior noise attenuation (63 dBA - 24 dBA = 39 dBA) for noise from stationary sources to meet the City's 60 and 50 dBA L_{max} interior noise standards during daytime and nighttime hours, respectively. For off-site residential units to the north of the project site near the proposed restaurant uses, standard building construction (with windows rated Sound Transmission Class [STC] 24 to STC-28) would also provide sufficient exterior-to-interior noise attenuation (47 dBA - 24 dBA = 23 dBA) for noise from stationary sources to meet the City's 50 dBA L_{max} interior noise standard. Therefore, no window upgrades would be required to reduce the exterior stationary-source noise to meet the City's 50 dBA L_{max} interior noise standard. For these reasons, noise impacts associated with loading/unloading would be **less than significant,** and no mitigation is required.

Slow-Moving Project Trucks on the Perimeter Drive Aisles. LSA's past noise measurement results show that vehicles, including trucks which generate higher pass-by noise than automobiles (Noise Impact Analysis for Poway Super Walmart, LSA 2001) at low speeds (15 to 35 miles per hour) would result in a maximum noise level of 68 dBA L_{max} at 50 feet. The closest residences to the north of the project site are approximately 60 feet from the driveway along the north side of the project site, and would be potentially exposed to vehicle pass-by noise intermittently reaching 66 dBA L_{max} without any shielding. The existing 6-foot high concrete masonry unit wall would provide 6 dBA in noise reduction to ground-floor receivers at the apartment complex, thus reducing the intermittent maximum vehicle noise to 60 dBA L_{max}. Depending on the number of vehicles driving by on the northern driveway and the times they would occur (during daytime, evening, or nighttime hours), the effects to the 24-hour weighted average CNEL would vary. However, the CNEL is not expected to reach or exceed the City's 65 dBA CNEL exterior noise standard for residential uses due to the peak/intermittent noise from slow-moving vehicles on the northern driveway alone.

The existing residences to the west of the project site are more than 60 feet from the project's driveway along the western project boundary. The existing 6-foot high concrete masonry wall along the western project boundary would provide shielding to the residences to the west of the project site. With the distance attenuation and noise shielding from the existing wall, vehicle pass-by noise would be reduced to 58 dBA L_{max} or lower and would not result in any significant noise impacts. In addition, vehicle noise on SR-91 would mask the majority of the noise from the project site. Because noise levels would not exceed the City's noise standards on the residents adjacent to

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

the project site, operational noise impacts associated with vehicles using the northern driveway would be **less than significant** and no mitigation is required.

Parking Lot Activity Noise. The representative parking lot activities (e.g., door slamming, engine starting, and slow-moving vehicles) would generate approximately 60 to 70 dBA L_{max} at 50 feet. The closest off-site residences to the north that are approximately 60 feet (2 dBA noise reduction compared to the noise level measured at 50 feet) away from the parking lot and shielded by the existing 6-foot high CMU wall (minimum 5 dBA noise reduction) would be exposed to noises from the project's nearest parking lot activities that would range from 53 to 63 dBA L_{max}. This range of intermittent noise levels would not result in significant noise impacts at residences to the north.

The existing residences to the west of the project site are approximately 100 feet (6 dBA noise reduction compared to the noise level measured at 50 feet) from the project's parking area and would be shielded by the existing 6-foot-high concrete masonry unit wall along the project's western boundary (minimum 6 dBA noise reduction). With the distance attenuation and noise shielding provided by the existing concrete masonry unit wall, parking lot activity noise would be reduced to 58 dBA L_{max} or lower and would not result in any significant noise impacts at residences to the west. In addition, traffic noise from Madison Street would mask the majority of the noise from the project site. Therefore, impacts related to parking lot noise would be **less than significant** and no mitigation is required.

Mitigation Measures: Mitigation is required to reduce construction noise impacts to the single-family residences to the west of the project site to a less than significant level.

Mitigation Measure NOI-1: **Construction Noise.** Prior to issuance of building permits, the Director of the City of Riverside Department of Building and Safety, or designee, shall verify that all construction plans include notes stipulating the following:

- Construction activities shall be restricted within the City of Riverside to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays, and are prohibited on Sundays and federal holidays.
- During all project site excavation and grading on site, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

Implementation of Mitigation Measure NOI-1 would reduce construction-related noise impacts to the nearby sensitive receptors to a less than significant level.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

12b. Response: ***(Source: Noise and Vibration Impact Analysis, LSA Associates, Inc., July 2016; Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment (2006), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf Website accessed April 2016; California Department of Transportation (Caltrans), Transportation-Related Earthborne Vibrations, Technical Advisory, 1992.)***

Less Than Significant Impact. Vibration refers to groundborne noise and perceptible motion. Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but without the effects associated with the shaking of a building, there is less adverse reaction. Vibration propagation is more efficient in stiff, clay soils than in loose, sandy soils. Shallow rock concentrates the vibration energy close to the surface and can result in groundborne vibration problems at some distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration.

Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

The Federal Transit Administration (FTA) in its Transit Noise and Vibration Impact Assessment (2006) included groundborne vibration and noise impact criteria guidance, as shown in Table 12.E. The criteria presented in Table 12.E account for variation in project types, as well as the frequency of events, which differ widely among transit projects. Although the criteria are provided for community response to groundborne vibration from rail rapid transit systems, they also provide useful guidelines for human response to exposure to vibration in general and are used in this analysis for vibration impact assessment. Table 12.F lists the vibration damage criteria for various structural categories. These are identified by the FTA as criteria that should be used during the environmental impact assessment phase or environmental review process in general to identify problem locations that must be addressed during final design.

Table 12.E: Groundborne Vibration and Noise Impact Criteria

Land Use Category	Ground-Borne Vibration Impact Levels (VdB re 1 µin/sec)		Ground-Borne Noise Impact Levels (dB re 20 µPa)	
	Frequent[1] Events	Infrequent[2] Events	Frequent[1] Events	Infrequent[2] Events
Category 1: Buildings where low ambient vibration is essential for interior operations.	65 VdB[3]	65 VdB[3]	dB[4]	dB[4]
Category 2: Residences and buildings where people normally sleep.	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use.	75 VdB	83 VdB	40 dBA	48 dBA

Source: Noise and Vibration Impact Analysis (LSA Associates, Inc., July 2016)

[1] "Frequent Events" is defined as more than 70 events per day.

[2] "Infrequent Events" is defined as fewer than 70 events per day.

[3] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research requires detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

[4] Vibration-sensitive equipment is used in buildings where sufficient noise attenuation is provided; additionally, such equipment is not sensitive to either airborne or ground-borne noise.

µin/sec = microinches per second
µPa = micropascals
dB = decibels
dBA = A-weighted decibels
FTA = Federal Transit Administration
HVAC = heating, ventilation, and air conditioning
VdB = vibration velocity decibels

Table 12.F: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate Lv[1]
Reinforced concrete, steel, or timber (no plaster)	0.5	102
Engineered concrete and masonry (no plaster)	0.3	98
Nonengineered timber and masonry buildings	0.2	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: Noise and Vibration Impact Analysis (LSA Associates, Inc., July 2016)

[1] RMS VdB re 1 µin/sec.

µin/sec = microinches per second
in/sec = inches per second
Lv = 20 log10 (V/Vref) is the vibration velocity in decibels
PPV = peak particle velocity
RMS = root mean square
VdB = vibration velocity decibels

Tables 12.E (criteria in terms of vibration velocity decibels [VdB]) and 12.F (criteria in terms of inches per second [in/sec] and VdB) are FTA-recommended thresholds used to evaluate the effects of vibration on human response and structural damage. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 102 VdB (0.5 in/sec) (FTA 2006) is considered safe and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec).

Additionally, for new residential buildings, the vibration damage potential threshold recommended by Caltrans is 1 in/sec from transient sources, such as pile driving and blasting. Caltrans also states that it takes at least 0.9 in/sec of peak particle velocity (PPV) for the human response to be strongly perceptible, or 0.25 in/sec to be distinctly perceptible.

The nearest residences are approximately 50 feet to the west and 53 feet to the north. Construction on the project site would result in the exposure of persons to excessive groundborne vibration or groundborne noise levels. However, groundborne vibration during construction activity is temporary and would cease to occur after project construction is completed. The proposed project would require the use of excavators, scrapers, and graders, as well as a bulldozer and other construction equipment. As shown in Table 12.G, a large bulldozer would generate approximately 0.089 PPV (in/sec) when measured at 25 feet, while a loaded truck would generate 0.076 PPV (in/sec) at 25 feet. Jackhammering would generate approximately 0.035 PPV (in/sec) when measured at 25 feet.

Table 12.G: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 feet	
	PPV (in/sec)	L_V (VdB)
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	**0.089**	**87**
Caisson Drilling	0.089	87
Loaded Trucks	**0.076**	**86**
Jackhammer	**0.035**	**79**
Small Bulldozer	0.003	58

Sources: Source: Noise and Vibration Impact Analysis (LSA Associates, Inc., July 2016)
Note: Equipment and associated source vibration levels that are expected to be used on the project site are shown in **bold**.
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
VdB = velocity decibels

Regarding the potential for building damage, vibration levels from construction equipment and activities, including bulldozers, drilling, trucks, and jackhammers, would be less than 0.1 in/sec at 25 feet from the project site and lower than the 0.2 PPV (in/sec) FTA vibration damage criteria at the nearest residential structures that are more than 50 feet away for non-engineered timber and masonry buildings. The predicted vibration levels (all below 0.1 in/sec) also would not exceed the Caltrans vibration damage potential threshold for residential buildings of 1 in/sec from transient sources (Caltrans 1992). Therefore, no building damage would occur as a result of project construction.

Regarding the potential for vibration impacts to sensitive receptors, none of the predicted vibration levels (all below 0.1 in/sec) for sensitive uses in the vicinity of the project site would reach either of the Caltrans threshold levels (0.9 in/sec of PPV for the human response to be strongly perceptible or 0.25 in/sec to be distinctly perceptible) (Caltrans 1992). Therefore, vibration impacts to sensitive receptors would be **less than significant**.

Table 12.H lists the projected vibration level from various construction equipment expected to be used on the project site to the sensitive uses in the project vicinity. For typical construction activity, the equipment with the highest vibration generation potential is the large bulldozers, which would generate 87 VdB at 25 feet. With the vibration attenuation through distance divergence, the vibration from project construction would be reduced to 78 VdB or lower at the nearest residential buildings adjacent to the project site. Vibration levels from project construction would therefore be reduced to 78 VdB (0.033 in/sec PPV) or lower at the nearest residential buildings to the west and north. This range of vibration levels from construction equipment or activity would be below the FTA 94 VdB threshold and would not exceed the FTA threshold of 80 VdB for residences due to infrequent events. Therefore, vibration impacts during construction would be **less than significant** and no mitigation is required.

Table 12.H: Summary of Construction Equipment and Activity Vibration

Equipment/Activity	Vibration Level (VdB)			
	At 25 feet	Distance Attenuation	Intervening Buildings/Sound Walls[1]	Maximum Vibration Level
Residences adjacent to the site, 50 feet				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Large dozers, front end loaders, grader, backhoe	87	9	0	78
Loaded trucks	86	9	0	77
Jackhammers, forklift	79	9	0	70

Source: Noise and Vibration Impact Analysis (LSA Associates, Inc., July 2016)
Note: The FTA recommended threshold is 0.2 in/sec or approximately 94 VdB at the receiving property structure or building.
[1] Intervening buildings/sound walls put weight on the transmission path and provide a damping effect on vibration.
[2] Large bulldozers represent the construction equipment with the highest vibration potential that would be used on site. Other equipment would result in lower vibration levels compared to that of large bulldozers.
in/sec = inches per second
FTA = Federal Transit Administration
VdB = vibration velocity decibels

Operations of the proposed project would not involve any vibration sources that would cause exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Vehicles with rubber tires on roadway segments surrounding the project site would not generate any significant groundborne vibration that would exceed the 65 VdB perception threshold for such uses. Therefore, vibration impacts during operation would be **less than significant** and no mitigation is required.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

12c. Response: ***(Source: Noise and Vibration Impact Analysis, LSA Associates, Inc., July 2016).***

Less Than Significant Impact. The primary existing noise sources in the project area are transportation facilities. Traffic on SR-91, Madison Street, and other local streets. A substantial permanent increase associated with the project would occur if the project would cause noise levels to increase by 3 dBA or more. As discussed in Response 12a, neither the long-term traffic nor stationary noise sources would cause an increase in ambient noise levels of more than 3 dBA at sensitive receptors in the vicinity of the project site; thus, the impact related to permanent increases in ambient noise levels would be **less than significant** and no mitigation is required.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐

12d. Response: ***(Source: Noise and Vibration Impact Analysis, LSA Associates, Inc., July 2016).***

Less Than Significant With Mitigation Incorporated. As discussed in Response 12a above, implementation of the proposed project would include construction activities that would result in a substantial temporary increase in ambient noise levels in the project site vicinity above levels existing without the project, but would no longer occur once construction is completed. Sensitive receptors in the project vicinity are as close as 50 feet from proposed construction areas. Compliance with the hours specified in the City's Municipal Code regarding construction activities, as well as implementation of noise reduction measures (e.g., those discussed in Mitigation Measure NOI-I), would help reduce construction noise impacts on adjacent noise-sensitive land uses when construction occurs near the project boundaries. Implementation of Mitigation Measure NOI-I would reduce construction noise levels to **less than significant**.

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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

12e. Response: ***(Sources: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas; General Plan 2025 Figure N-8 – Riverside and Flabob Airport Noise Contours; Noise and Vibration Impact Analysis, LSA Associates, Inc., July 2016).***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact. The project site is located approximately 1.5 miles southeast of the Riverside Municipal Airport. The project site is located in Zone D of the Riverside Municipal Airport Land Use Compatibility Plan. However, the project site is outside the 55 dBA noise contour for the Riverside Municipal Airport. Additionally, according to the *Noise and Vibration Impact Analysis*, the dominant source of ambient noise on the project site is traffic on SR-91, Madison Street, and other local streets. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from a public airport or public use airport. The project would have a **less than significant** impact related to airport noise and no mitigation is required.

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

12f. Response: ***(Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas).***

No Impact. The project site is not within the vicinity of a private airstrip. Therefore, it would have **no impact** related to private airstrips and no mitigation is required.

13. POPULATION AND HOUSING. Would the project:				
a. Induce substantial 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)?	☐	☐	☒	☐

13a. Response: ***(Source: General Plan 2025 Table LU-3 – Land Use Designations, FPEIR Section 5.12-Population and Housing, FPEIR Table 5.12-A – SCAG Population and Households Forecast, Table 5.12-B – General Plan Population and Employment Projections–2025, Table 5.12-C – 2025 General Plan and SCAG Comparisons, Table 5.12-D – General Plan Housing Projections 2025, Capital Improvement Program and SCAG's RCP and RTP)***

Less Than Significant Impact. The project is in an urbanized area and does not propose new homes or businesses that would directly induce substantial population growth. It does not involve the addition of new roads or infrastructure that would indirectly induce substantial population growth because the project consists of the construction of a 84,859-square foot shopping center (inclusive of the existing 3,943 square foot Denny's) development designed to revitalize an existing, underutilized commercial parcel along established transportation corridors in an area zoned for commercial development. The proposed project will be developed in accordance with related General Plan policies designed to minimize adverse conditions to population and housing increases for the City. Therefore, this project will have **a less than significant impact** on population growth either directly or indirectly. No mitigation is required.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

13b. Response: ***(Source: CADME Land Use 2003 Layer, Google imaging etc.)***

No Impact. The project will not displace existing housing, necessitating the construction of replacement housing elsewhere because the project site is proposed on a previously improved site that has no existing housing located on it that will be removed or affected. There will be **no impact** on existing housing either directly, indirectly, or cumulatively. No mitigation is required.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

13c. Response: ***(Source: CADME Land Use 2003 Layer, Google imaging etc.)***

No Impact. The project will not displace any people, necessitating the construction of replacement housing elsewhere

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

because it is proposed on a previously improved site that has no existing housing or residents that will be removed or affected by the proposed project. Therefore, the project will have **no impact** on people, necessitating the need for replacement housing either directly, indirectly, or cumulatively. No mitigation is required.

14. PUBLIC SERVICES.

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:

a. Fire protection?	☐	☐	☐	☒

14a. Response: ***(Source: FPEIR Table 5.13-B – Fire Station Locations, Table 5.13-C – Riverside Fire Department Statistics and Ordinance 5948 § 1)***

No Impact. The project is in an urbanized area and consists of the construction and operation of an 84,859-square-foot shopping center. Adequate fire facilities and services are provided by Station 10 located at 2590 Jefferson Street to serve this project. In addition, with implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Fire Department practices, there will be **no impact** on the demand for additional fire facilities or services either directly, indirectly, or cumulatively.

b. Police protection?	☐	☐	☒	☐

14b. Response: ***(Source: General Plan 2025 Figure PS-8 – Neighborhood Policing Centers)***

Less than significant impact. The project may require police services during construction and operation of the proposed retail uses. Adequate police facilities and services are provided by Magnolia Neighborhood Policing Center, located at 10540-B Magnolia Avenue, to serve this project. In addition, with implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Police Department practices, there will be **less than significant impact** on the demand for additional police facilities of services either directly, indirectly, or cumulatively.

c. Schools?	☐	☐	☐	☒

14c. Response: ***(Source: FPEIR Figure 5.13-2 – RUSD Boundaries, Table 5.13-D – RUSD, Figure 5.13-3 – AUSD Boundaries, Table 5.13-E – AUSD, Table 5.13-G – Student Generation for RUSD and AUSD By Education Level, and Figure 5.13-4 – Other School District Boundaries)***

No Impact. The project is a non-residential use that will not involve the addition of any housing units that would increase numbers of school-age children. Therefore, there will be **no impact** directly, indirectly, or cumulatively created by the construction of new or expansion of existing school facilities caused by the increase in the demand for school facilities or services.

d. Parks?	☐	☐	☐	☒

14d. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Parks Master Plan 2003, GP 2025 FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative)***

No Impact. The project is a non-residential use that will not involve the addition of any housing units that would increase the population. Therefore, there will be **no impact** directly, indirectly, or cumulatively created by the construction of new or expansion of existing park facilities caused by the increase in the demand for park facilities or services.

e. Other public facilities?	☐	☐	☐	☒

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

14e. Response: ***(Source: General Plan 2025 Figure LU-8 – Community Facilities, FPEIR Figure 5.13-5 – Library Facilities, Figure 5.13-6 – Community Centers, Table 5.3-F – Riverside Community Centers, Table 5.13-H – Riverside Public Library Service Standards)***

No Impact. The project would develop retail uses within an urbanized area. Adequate public facilities and services, including libraries and community centers, are provided in the Ramona Neighborhood to serve this project. In addition, with implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Park and Recreation and Community Services and Library practices, there will be **no impact** on the demand for additional public facilities or services either directly, indirectly, or cumulatively.

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

15a. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Figure CCM-6 – Master plan of Trails and Bikeways, Parks Master Plan 2003, FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Table 5.14-D – Inventory of Existing Community Centers, Riverside Municipal Code Chapter 16.60 – Local Park Development Fees, Bicycle Master Plan May 2007)***

No Impact. The proposed project consists of construction of a health club and adding retail and restaurant services. No new housing is proposed; therefore, no increase in residents is proposed. The City's adopted standard for developed park acreage of 3 acres per 1,000 residents will not be adversely affected. Additionally, the proposed project site is not located in an area of the City identified to have a parkland shortage. Furthermore, the health club provides alternative recreation activities to neighborhood residents who would otherwise utilize existing neighborhood and regional parks for similar purposes. Since the proposed project does not include any uses that would increase the use of existing neighborhood and regional parks such that substantial physical deterioration of the facilities would occur or be accelerated, this project will have **no impacts** directly, indirectly, or cumulatively on existing neighborhood and regional parks. No mitigation is required.

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?	☐	☐	☒	☐

15b. Response:

Less Than Significant Impact. The proposed project is an infill development designed to revitalize an existing, underutilized commercial parcel comprising a Denny's restaurant along established transportation corridors in an area zoned for mixed-use development. The proposed project will be developed in accordance with the City's General Plan, General Plan EIR, Park and Recreation Master Plan, and all other applicable local, state, and/or federal regulatory requirements. Potentially adverse physical effects on the environment are addressed wholly in this Initial Study. Therefore, there will be **a less than significant impact** directly, indirectly, or cumulatively to the environment from the proposed construction of the commercial center. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC. Would the project result in:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐

16a. Response: ***(Source: Traffic Impact Analysis, LSA Associates, Inc., November 2016)***

***Construction*. Less Than Significant Impact.** Construction trips that would be generated on a daily basis throughout each phase of construction would derive from construction workers and delivery of construction materials. It is anticipated that project construction would generate haul trips that would be distributed throughout the day. During construction, there would also be passenger car construction trips associated with employee arrivals and departures. The weekday a.m. peak period is 7:00 to 9:00 am and the weekday p.m. peak period is 4:00 p.m. to 6:00 p.m. It is anticipated that the majority of construction workers would arrive and depart outside the peak hours, while delivery trucks would arrive and depart throughout the day.

Project construction is anticipated to take nine months, with an expected start date of February 2017 and completion date of October 2017. All construction equipment, including construction worker vehicles, would be staged on the project site for the duration of the construction period. In addition, the proposed project construction schedule would comply with the City of Riverside's Municipal Code, which limits construction activities to Monday through Friday, 7:00 a.m. to 7:00 p.m., and Saturday from 8:00 a.m. to 5:00 p.m. No construction activities would occur on Sundays or federal holidays.

All large construction vehicles entering and exiting the project site would be guided by personnel using signs and flags to direct traffic. As specified in Compliance Measure TRA-1, if there are partial closures to streets surrounding the project site, such closures would occur in conformance with an approved Traffic Control Plan, would be subject to certain conditions (e.g., providing warning signs, lights and devices), and would be required to plan routine street closures outside of peak traffic hours (i.e., Monday through Friday, 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). With implementation of Compliance Measure TRA-1, construction impacts related to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would be **less than significant**. No mitigation is required.

***Operation*. Less Than Significant With Mitigation Incorporated.** Roadway performance is most often controlled by the performance of intersections, specifically during peak traffic periods. This is because traffic control at intersections interrupts traffic flow that would otherwise be relatively unimpeded except for the influences of on-street parking, access to adjacent land uses, or other factors resulting in interaction of vehicles between intersections. For this reason, traffic analyses for individual projects typically focus on peak-hour operating conditions for key intersections rather than roadway segments. Operating conditions at intersections are typically described in terms of level of service (LOS). LOS is a measure of a roadway's operating performance and is a tool used in defining thresholds of significance. LOS is described with a letter designation from A to F, with LOS A representing the best operating conditions (free-flow traffic) and LOS F the worst (traffic jammed). Table 16.A summarizes the relationship of delay and LOS at unsignalized and signalized intersections.

Table 16.A: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55

E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: Traffic Impact Analysis (LSA Associates, Inc., November 2016)

The City's significance criteria are used for all study intersections under the City's jurisdiction. The City uses LOS D as its minimum level of service for intersections and roadways of Collector or higher classification; LOS C is to be maintained on other street intersections. For projects in conformance with the City's General Plan, a significant project impact occurs at a study intersection when the peak hour LOS falls below D (E or F), which indicates that LOS D or better is to be maintained on Arterial Streets wherever possible. Since the proposed project is consistent with the City's General Plan, a significant project impact occurs when the peak hour LOS falls below D in this analysis.

Caltrans considers an acceptable level of service to be between C and D (delay of 45 seconds) at all intersections under its jurisdiction. For Caltrans intersections, a significant project impact occurs when the peak hour delay falls below 45 seconds. If project traffic contributes to a Caltrans intersection already operating at delay greater than 45 seconds in the without project condition, it is considered a cumulative impact.

The study area for traffic includes the following ten intersections:

1. Madison Street/Magnolia Avenue;
2. Madison Street/Elementary School Outlet;
3. Madison Street/Orchard Street;
4. Madison Street/Driveway 1-Garden Street;
5. Madison Street/Driveway 2;
6. Madison Street/Mobil Gas Station Access;
7. Madison Street/SR-91 Westbound Ramps;
8. Madison Street/SR-91 Eastbound Ramps;
9. Madison Street/Indiana Avenue; and
10. Madison Street/Evans Street.

The intersections of Madison Street/SR-91 Westbound Ramps and Madison Street/SR-91 Eastbound Ramps are under the jurisdiction of Caltrans. The remaining study intersections are solely under the jurisdiction of the City.

Consistent with the City's Traffic Impact Analysis guidelines, the 2010 *Highway Capacity Manual* (HCM) analysis methodologies were used to determine intersection levels of service for all study area intersections. The traffic analysis examined traffic operations in the vicinity of the proposed project under the following six scenarios:

- Existing traffic conditions;
- Existing with project traffic conditions;
- Project completion (2017) conditions;
- Project completion (2017) with project traffic conditions;
- Cumulative (2017) traffic conditions; and
- Cumulative (2017) with project traffic conditions.

For each scenario, traffic operations at study intersections are evaluated for the a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

Table 16.B summarizes the a.m. and p.m. peak hour and daily project trip generation and shows that the project is expected

to generate 237 gross a.m. peak hour trips, 469 gross p.m. peak hour trips, and 5,329 gross daily trips. After accounting for pass-by trips and trip credits for the health club, the project would generate 193 net new trips in the a.m. peak hour, 297 net new trips in the p.m. peak hour, and 5,113 net new daily trips.

Table 16.B: Project Trip Generation

Land Uses	Units		A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Major B Market[1]									
Trips/Unit			2.11	1.29	3.40	4.83	4.65	9.48	102.24
Trip Generation	41.117	TSF	87	53	140	199	191	390	4,204
Pass By Trips[2]						(70)	(70)	(140)	(140)
Net New Trips			**87**	**53**	**140**	**129**	**121**	**250**	**4,064**
Major A Health Club[3]									
Trips/Unit			0.71	0.71	1.41	2.01	1.52	3.53	32.93
Proposed Trip Generation	37.849	TSF	27	27	54	76	57	133	1,247
PAD 1 Drive-Through Restaurant[4]									
Trips/Unit			23.16	22.26	45.42	16.98	15.67	32.65	496.12
Trip Generation	1.950	TSF	45	43	88	33	31	64	968
Pass By Trips[5]			(22)	(22)	(43)	(16)	(16)	(32)	(75)
Net New Trips			**23**	**21**	**45**	**17**	**15**	**32**	**893**
PAD 2 Retail/Restaurants			**Existing Denny's Restaurant trips already exist and have not been accounted for in the project trip generation.**						
Trip Generation	3.943	TSF							
Total Gross New Trips			159	123	282	308	279	587	6,419
Total Pass-By Trips			(22)	(22)	(43)	(86)	(86)	(172)	(215)
Total Net New Trips			**138**	**102**	**239**	**222**	**193**	**415**	**6,204**

TSF = thousand square feet

1 Rates are based on Land Use 850 - "Supermarket" from *Institute of Transportation Engineers (ITE) Trip Generation (9th Edition).*

2 Pass-by rates are based on Land Use 850 - "Supermarket" from *ITE Trip Generation Handbook, 2nd Edition.* During the a.m. peak hour pass-by trips are nominal for supermarket uses and therefore no pass-by credit was taken during the a.m. peak hour. Since no daily pass-by rates are provided in the *ITE Trip Generation manual*, therefore, p.m. pass-by trips were used for daily pass-by trips as a conservative approach.

3 Rates are based on Land Use 492 - "Health/Fitness Club" from *ITE Trip Generation (9th Edition).*

4 Rates are based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from *ITE Trip Generation (9th Edition).*

5 Pass-by rates are based on Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" from *ITE Trip Generation Handbook, 2nd Edition.*

Tables 16.C, 16.D, and 16.E summarize the delay and LOS at the study area intersections without the project and with the project for the 2017 (project completion) and 2017 (cumulative) scenarios. These tables show that in the without the project all study area intersections are projected to operate at satisfactory levels of service with the exception of the following:

- Madison Street/Evans Street (p.m. peak hour).

Tables 16.C, 16.D, and 16.E also show that with the project all study area intersections are projected to operate at satisfactory levels of service with the exception of the following:

Table 16.C: Existing Intersection Levels of Service

	Intersection	Control	Without Project				With Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Madison Street/Magnolia Avenue	Signal	41.3	D	37.7	D	42.9	D	39.2	D
2	Madison Street/Elementary School Outlet	Signal	3.6	A	1.7	A	3.5	A	1.6	A
3	Madison Street/Orchard Street	TWSC	18.6	C	14.9	B	20.5	C	16.0	C
4	Madison Street/Driveway 1-Garden Street	Signal	6.3	A	10.5	B	11.7	B	15.9	B
5	Madison Street/Driveway 2	TWSC	27.4	D	23.6	C	38.0	E	139.2	F
6	Madison Street/Mobil Gas Station Access	TWSC	12.8	B	13.4	B	13.3	B	14.5	B
7	Madison Street/SR-91 Westbound Ramps	Signal	23.6	C	16.9	B	24.4	C	17.3	B
8	Madison Street/SR-91 Eastbound Ramps	Signal	16.4	B	16.8	B	17.2	B	17.8	B
9	Madison Street/Indiana Avenue	Signal	32.7	C	35.2	D	33.6	C	38.5	D
10	Madison Street/Evans Street	TWSC	24.6	C	35.5	E	28.7	D	50.1	F

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 16.D: Project Completion Intersection Levels of Service

	Intersection	Control	Without Project				With Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Madison Street/Magnolia Avenue	Signal	43.5	D	39.0	D	45.4	D	40.7	D
2	Madison Street/Elementary School Outlet	Signal	3.6	A	1.7	A	3.5	A	1.7	A
3	Madison Street/Orchard Street	TWSC	19.4	C	15.2	C	21.4	C	16.4	C
4	Madison Street/Driveway 1-Garden Street	Signal	6.3	A	13.7	B	11.7	B	17.4	B
5	Madison Street/Driveway 2	TWSC	28.4	D	24.4	C	40.0	E	157.5	F
6	Madison Street/Mobil Gas Station Access	TWSC	12.9	B	13.6	B	13.4	B	14.6	B
7	Madison Street/SR-91 Westbound Ramps	Signal	23.9	C	17.0	B	24.7	C	17.4	B
8	Madison Street/SR-91 Eastbound Ramps	Signal	16.6	B	16.9	B	17.4	B	17.9	B
9	Madison Street/Indiana Avenue	Signal	33.3	C	37.1	D	34.5	C	39.7	D
10	Madison Street/Evans Street	TWSC	25.6	D	38.3	E	30.0	D	54.7	F

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 16.E: Cumulative Intersection Levels of Service

	Intersection	Control	Without Project				With Project			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
1	Madison Street/Magnolia Avenue	Signal	43.5	D	39.0	D	45.4	D	40.7	D
2	Madison Street/Elementary School Outlet	Signal	3.6	A	1.7	A	3.5	A	1.7	A
3	Madison Street/Orchard Street	TWSC	19.4	C	15.2	C	21.4	C	16.4	C
4	Madison Street/Driveway 1-Garden Street	Signal	6.3	A	13.7	B	11.7	B	17.4	B
5	Madison Street/Driveway 2	TWSC	28.5	D	24.4	C	40.0	E	157.5	F
6	Madison Street/Mobil Gas Station Access	TWSC	12.9	B	13.6	B	13.4	B	14.7	B
7	Madison Street/SR-91 Westbound Ramps	Signal	23.9	C	17.0	B	24.7	C	17.4	B
8	Madison Street/SR-91 Eastbound Ramps	Signal	16.6	B	16.9	B	17.4	B	18.0	B
9	Madison Street/Indiana Avenue	Signal	33.5	C	37.6	D	34.7	C	40.4	D
10	Madison Street/Evans Street	TWSC	25.6	D	38.3	E	30.2	D	54.7	F

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 16.F: Existing With Improvements Intersection Levels of Service

	Intersection	With Project					With Project With Improvements				
			A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
		Control	Delay (sec.)	LOS	Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS
4	Madison Street/Driveway 1-Garden Street	Signal	11.7	B	15.9	B	Signal	15.7	C	22.7	C
5	Madison Street/Driveway 2	TWSC (full access)	38.0	E	139.2	F	TWSC (right-in/right-out)	12.2	B	13.9	B
10	Madison Street/Evans Street	TWSC	28.7	D	50.1	F	TWSC	28.7	D	15.3	C

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 16.G: Project Completion With Improvements Intersection Levels of Service

Intersection		With Project					With Project With Improvements				
			A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
		Control	Delay (sec.)	LOS	Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS
4	Madison Street/Driveway 1-Garden Street	Signal	11.7	B	17.4	B	Signal	15.7	C	23.4	C
5	Madison Street/Driveway 2	TWSC (full access)	40.0	E	157.5	F	TWSC (right-in/right-out)	12.3	B	14.0	B
10	Madison Street/Evans Street	TWSC	30.0	D	54.7	F	TWSC	30.0	D	15.6	C

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

Table 16.H: Cumulative With Improvements Intersection Levels of Service

Intersection		With Project					With Project With Improvements				
			A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
		Control	Delay (sec.)	LOS	Delay (sec.)	LOS	Control	Delay (sec.)	LOS	Delay (sec.)	LOS
4	Madison Street/Driveway 1-Garden Street	Signal	11.7	B	17.4	B	Signal	15.7	C	23.4	C
5	Madison Street/Driveway 2	TWSC (full access)	40.0	E	157.5	F	TWSC (right-in/right-out)	12.3	B	14.1	B
10	Madison Street/Evans Street	TWSC	30.2	D	54.7	F	TWSC	30.2	D	15.7	C

TWSC = Two-Way Stop Control
Delay = Average control delay in seconds (For TWSC intersections, reported delay is for worst-case movement).
LOS = Level of Service

- Madison Street/Driveway 2 (a.m. and p.m. peak hours); and
- Madison Street/Evans Street (p.m. peak hour).

As specified in Mitigation Measure TRA-2, as part of the project, the Madison Street/Driveway 2 intersection will be converted from full-access driveway to right-in/right-out access by extending the median on Madison Street to the south of Driveway 2. As specified in Mitigation Measure TRA-3, the project applicant will install appropriate signage to prohibit eastbound left-turn movements during the p.m. peak hour at the Madison Street/Evans Street intersection. As shown in Tables 16.F, 16.G, and 16.H, all study intersections would operate at a satisfactory LOS with the implementation of the Mitigation Measures TRA-2 and TRA-3. Therefore, operational impacts related to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system would be **less than significant with implementation of Mitigation Measures TRA-2 and TRA-3**.

Compliance Measures: In addition to Mitigation Measures TRA-2 and TRA-3, below, the project would comply with the following Compliance Measure to reduce traffic impacts during construction.

Compliance Measure TRA-1: **Traffic Control Plan.** A Traffic Control Plan shall be prepared for approval by the City of Riverside, Traffic Engineering Section City Engineer, or designee, and implemented during project construction. The Traffic Control Plan would be consistent with the City of Riverside WATCH Manual (Work Area Traffic Control Handbook) and the MUTCD (Manual on Uniform Traffic Control Devices). The Traffic Control Plan may include, but not be limited to, the following:

- Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways and ensure the safe access into and out of the site (e.g., warning signs, lights and devices, flag person);
- Planning routine street closures outside of peak traffic hours (i.e., 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Monday through Friday);
- Rerouting construction trucks to reduce travel on congested streets;
- Prohibiting construction-related vehicles from parking on public streets;
- Providing safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers;
- Scheduling construction-related deliveries, other than concrete and earthwork-related deliveries, so as to reduce travel during peak travel periods;
- Obtaining the required permits for truck haul routes from the City of Riverside prior to the issuance of any permits for the project;
- All emergency access to the project site and adjacent areas shall be kept clear and unobstructed during all phases of demolition and construction; and
- Flag persons shall be trained to assist in emergency response by restricting or controlling the movement of traffic that could interfere with emergency vehicle access.

Mitigation Measures:

Mitigation Measure TRA-2: **Madison Street/Driveway 2 Intersection.** Prior to issuance of a Certificate of Occupancy, the Director of the City of Riverside Department of Building and Safety, or designee, shall verify that the Madison Street/Driveway 2 intersection has been converted from a full-access driveway to a right-in/right-out access by extending the median on Madison Street to the south of Driveway 2.

Mitigation Measure TRA-3: **Madison Street /Evans Street Intersection.** Prior to issuance of a Certificate of Occupancy, the developer shall supply to the City appropriate signage to prohibit eastbound left-turn

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
movements during the p.m. peak hour. The City will be responsible for installing the left-turn prohibition signage.				
b. Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐

16b. Response: ***(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, FPEIR Figure 5.15-4 – Volume to Capacity (V/C) Ratio and Level of Service (LOS) (Typical 2025), Table 5.15-D – Existing and Future Trip Generation Estimates, Table 5.15-H – Existing and Typical Density Scenario Intersection Levels of Service, Table 5.15-I – Conceptual General Plan Intersection Improvement Recommendations, Table 5.15-J – Current Status of Roadways Projected to Operate at LOS E or F in 2025, Table 5.15.-K – Freeway Analysis Proposed General Plan, Appendix H – Circulation Element Traffic Study and Traffic Study Appendix, SCAG's RTP)***

Less Than Significant Impact. The "2011 Riverside County Congestion Management Program" includes guidelines to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality. These guidelines establish a system of state highways and principal arterial roadways designated by the Riverside County Transportation Commission (RCTC). The adopted minimum Level of Service (LOS) threshold for CMP state highways and principal arterial roadways is LOS E, unless the intersection or segment had a lower LOS (LOS F) in 1991; these facilities are exempt from CMP deficiency plan requirements. Exhibit 4-1 in the CMP lists the exempt facilities, which include the project study area intersections and highway segments on Madison Street. Therefore, since the intersections and highway segments included in the study area are exempt from the CMP deficiency plan, a CMP analysis is not required. Additionally, the LOS standard and significance criteria used for this analysis is more conservative than the CMP thresholds of significance. Therefore, the TIA presents a more conservative analysis for evaluating project impacts within the study area.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

16c. Response: ***(Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas)***

Less Than Significant Impact. The project site is located approximately 1.5 miles southeast of the Riverside Municipal Airport. The project site is located in Zone D of the Riverside Municipal Airport Land Use Compatibility Plan. Height limitations are imposed on projects within an airport hazard area so that structures or trees do not obstruct the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to the landing or taking off of aircraft. However, according to the Riverside Municipal Airport Land Use Compatibility Plan, there is no height requirement within Zone D. Therefore, impacts to air traffic patterns would be **less than significant** and no mitigation is required.

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

16d. Response: ***(Source: Project Site Plans)***

Less Than Significant Impact. Vehicular access to the project site would be provided via two driveways on Madison Street. Vehicular traffic to and from the project site would utilize the existing network of regional and local roadways that serve the project site area. The proposed project would not introduce any new roadways or introduce a land use that would conflict with existing urban land uses in the surrounding area. The project would include a new median, new left-turn lane, and a modified traffic signal on Madison Street at the project site entrance (Driveway 2). Design of the proposed project, including curb cuts, ingress, egress, and other streetscape changes, would be subject to review by Traffic Engineering

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Section of the Public Works Department, as specified in Compliance Measure TRA-4. Therefore, the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts related to hazardous design features would be **less than significant** and no mitigation is required.

Compliance Measure: No mitigation is required; however, the following Compliance Measure is a regulatory requirement that would be implemented to reduce traffic impacts.

Compliance Measure TRA-4: Prior to issuance of a grading permit, the project site plans, including improvements on Madison Street, curb cuts, ingress, egress, and other streetscape changes, shall reviewed and approved by the City of Riverside, Traffic Engineering Section City Engineer, or designee.

e. Result in inadequate emergency access?	☐	☐	☒	☐

16e. Response: ***(Source: California Department of Transportation Highway Design Manual, Municipal Code, and Fire Code)***

Less Than Significant Impact. Direct access for emergency vehicles would be provided via the two driveways on Madison Street. Sufficient space and turning radius for fire trucks would be provided on the project site around the proposed buildings. In addition to the two (2) existing fire hydrant along Madison Street, the proposed project includes five (5) fire hydrants located adjacent to the new retail buildings Major A, Major B, and Major C. The two driveways to the project site would remain open during construction, and project site access would be maintained. Therefore, implementation of the proposed project would not result in inadequate emergency access, resulting in a **less than significant impact** and no mitigation is required.

f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities)?	☐	☐	☐	☒

16f. Response: ***(Source: FPEIR, General Plan 2025 Land Use and Urban Design, Circulation and Community Mobility and Education Elements, Bicycle Master Plan, School Safety Program – Walk Safe! – Drive Safe!)***

No Impact. The project would not affect adopted policies supporting alternative transportation and would be subject to compliance with policies, plans, and programs of the City and other applicable agencies regarding alternative modes of transportation. Pedestrians accessing the project may utilize pedestrian facilities (e.g., sidewalks and crosswalks) that are part of the surrounding street system. A sidewalk is located along Madison Street and can be used to access the project site. Magnolia Avenue, Indiana Avenue, and SR-91 are served by transit facilities (Riverside Transit Agency [RTA] Bus Routes 1 and 14, and Commuter Route 216). Bus stops at the Madison Avenue/Indiana Avenue intersection and the Madison Avenue/Magnolia Avenue intersection are the closest bus stops to the project site. The project would not remove or relocate any alternative transportation access points. Therefore, the project does not conflict with adopted plans, policies, or programs supporting alternative transportation. **No impact** related to public transit, bicycle, or pedestrian facilities plans would occur and no mitigation is required.

17. UTILITIES AND SYSTEM SERVICES. Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

17a. Response: ***(Source: General Plan 2025 Figure PF-2 – Sewer Facilities Map, FPEIR Figure 5.16-5 – Sewer Service Areas, Table 5.16-K – Estimated Future Wastewater Generation for the City of Riverside's Sewer Service Area, Figure 5.8-1 – Watersheds, Wastewater Integrated Master Plan and Certified EIR)***

Less Than Significant Impact. The project is within the boundaries of the Santa Ana Regional Water Quality Control Board (RWQCB). Wastewater in the surrounding area is transported to the Riverside Regional Water Quality Control

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Plant. All new development is required to comply with all provisions of the NPDES program and the City's Municipal Separate Sewer Permit (MS4), as enforced by the RWQCB. Therefore, the proposed project would not exceed applicable wastewater treatment requirements of the RWQCB with respect to discharges to the sewer system or storm water system within the City. Because the proposed project is required to adhere to the above regulations related to wastewater treatment, the project will have a **less than significant** impact.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

17b. Response: ***(Source: General Plan 2025 Table PF-1 – RPU PROJECTED DOMESTIC WATER Supply (AC-FT/YR), Table PF-2 – RPU Projected Water Demand, RPU, FPEIR Table 5.16-G – General Plan Projected Water Demand for RPU Including Water Reliability for 2025, Table 5.16-K – Estimated Future Wastewater Generation for the City of Riverside's Sewer Service Area, Figure 5.16-4 – Water Facilities and Figure 5.16-6 – Sewer Infrastructure and Wastewater Integrated Master Plan and Certified EIR)***

No Impact. The project will not result in the construction of new or expanded water or wastewater treatment facilities. The project is consistent with the Typical Growth Scenario of the General Plan 2025 wherein future water and wastewater generation was determined to be adequate (see Tables 5.16-E, 5.16-F, 5.16-G, 5.16-H, 5.16-I, 5.16-J and 5.16-K of the General Plan 2025 Final PEIR). Therefore, the project will have **no impact** resulting in the construction of new water or wastewater treatment facilities or the expansion of existing facilities directly, indirectly, or cumulatively.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

17c. Response: ***(Source: FPEIR Figure 5.16-2 – Drainage Facilities)***

Less Than Significant Impact. The proposed project will result in an increase in impervious surface areas. Overall, the project will result in approximately 75 percent coverage with impervious surface area. This impervious area will generate increased storm water flows with potential to affect drainage facilities and require the provision of additional facilities. However, the Subdivision Code (Title 18, Section 18.48.020) requires drainage fees to be paid to the City for new construction. Fees are transferred into a drainage facilities fund that is maintained by Riverside County Flood Control and Water Conservation District. This section also complies with the California Government Code (Section 66483), which provides for the payment of fees for construction of drainage facilities. Fees are required to be paid as part of the conditions of approval/waiver for filing of a final map or parcel map.

General Plan 2025 Policies PF 4.1 and PF 4.3 require the City to continue to routinely monitor its storm drain system and to fund and improve those systems as identified in the City's Capital Improvement Plan. Implementation of these policies will ensure that the City is adequately served by drainage systems. The General Plan 2025 also includes policies and programs that will minimize the environmental effects of the development of such facilities. Therefore, the project will have a **less than significant** impact on existing storm water drainage facilities and would not require the expansion of existing facilities directly, indirectly, or cumulatively.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒

17d. Response: ***(Source: FPEIR Figure 5.16-3 – Water Service Areas, Figure 5.16-4 – Water Facilities, Table 5.16-E – RPU Projected Domestic Water Supply AC-FT/YR, Table 5.16-F – Projected Water Demand, Table 5.16-G – General Plan Projected Water Demand for RPU including Water Reliability for 2025)***

No Impact. The project will not exceed expected water supplies. The project is consistent with the General Plan 2025

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Typical Growth Scenario where future water supplies were determined to be adequate (see Tables 5.16-E, 5.16-F, 5.16-G, 5.16-H, 5.16-I and 5.16-J of the General Plan 2025 Final PEIR). Therefore, the project will have **no impact** resulting in insufficient water supplies either directly, indirectly, or cumulatively.				
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

17e. Response: ***(Source: FPEIR Figure 5.16-5 – Sewer Service Areas, Figure 5.16-6 – Sewer Infrastructure, Table 5.16-K – Estimated Future Wastewater Generation for the City of Riverside's Sewer Service Area, and Wastewater Integrated Master Plan and Certified EIR)***

No Impact. The project will not exceed wastewater treatment requirements of the RWQCB. The project is consistent with the General Plan 2025 Typical Growth Scenario wherein future wastewater generation was determined to be adequate (see Table 5.16-K of the General Plan 2025 Final PEIR). Further, the current Wastewater Treatment Master Plan anticipates and provides for this type of project. Therefore, **no impact** related to wastewater treatment directly, indirectly, or cumulatively will occur.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐

17f. Response: ***(Source: FPEIR Table 5.16-A – Existing Landfills and Table 5.16-M – Estimated Future Solid Waste Generation from the Planning Area, CalEEMod Appendix A)***

Less Than Significant Impact. The project includes the development of retail uses. Solid waste from construction and future operations will be transported to the Badlands Landfill, located east of the City of Moreno Valley. Badlands Landfill has a current remaining capacity of 8.3 million tons, a maximum daily load of 4,000 tons per day, and an average daily load of 2,195 tons per day. Construction of the project would generate waste. Per the California Green Building Code, a minimum of 50 percent of this debris will be diverted. In addition, the project would continuously generate waste from the restaurants, retail shops, and fitness center once operational. Based on the capacity and daily load of the landfill, it has sufficient permitted capacity to accommodate the project's solid waste disposal needs. Therefore, impacts to landfill capacity directly, indirectly, and cumulatively will be **less than significant**.

g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

17g. Response: ***(Source: California Integrated Waste Management Board 2002 Landfill Facility Compliance Study)***

No Impact. The California Integrated Waste Management Act under the Public Resource Code requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The City is currently achieving a 60 percent diversion rate, well above state requirements. In addition, the California Green Building Code requires all developments to divert 50 percent of non-hazardous construction and demolition debris for all projects and all excavated soil and land clearing debris for all non-residential projects beginning January 1, 2011. The proposed project must comply with the City's waste disposal requirements as well as the California Green Building Code. For these reasons, the project would not conflict with any federal, state, or local regulations related to solid waste. Therefore, **no impact** related to solid waste statutes will occur directly, indirectly, or cumulatively.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

18a. Response:

Less Than Significant Impact With Mitigation Incorporated. The proposed project's impacts to biological resources and historical resources were analyzed in this Initial Study and all direct and cumulative impacts were determined to be no impact, a less than significant impact, or rendered a less than significant impact with implementation of mitigation. Therefore, impacts to biological resources and historical resources would be less than significant with implementation of mitigation, and no additional mitigation is required.

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.)	☐	☒	☐	☐

18b. Response:

Less Than Significant Impact With Mitigation Incorporated. The proposed project's potential cumulative impacts to Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Waste, Noise, and Traffic were analyzed in this Initial Study, and all cumulative impacts were less than significant or rendered less than significant with mitigation measures.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

18c. Response:

Less Than Significant Impact With Mitigation Incorporated. Impacts related to air pollution and greenhouse gas emissions, noise, and hazards and hazardous waste that could potentially affect human beings directly or indirectly were analyzed in this Initial Study. All direct and cumulative impacts were less than significant or rendered less than significant with implementation of mitigation measures.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151, Public Resources Code; Sundstrom v. County of Mendocino, 202 Cal.App.3d 296 (1988); Leonoff v. Monterey Board of Supervisors, 222 Cal.App.3d 1337 (1990).

MITIGATION MEASURES

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
TRAFFIC	**Mitigation Measure TRA-2: Madison Street/Driveway 2 Intersection.** The Madison Street/Driveway 2 intersection to be converted from a full-access driveway to a right-in/right-out access by extending the median on Madison Street to the south of Driveway 2.	Prior to issuance of Certificate of Occupancy	Public Works Department Planning	Plans review and inspection
	Mitigation Measure TRA-3: Madison Street /Evans Street Intersection. The developer shall supply to the City appropriate signage to prohibit eastbound left-turn movements during the p.m. peak hour. The City will be responsible for installing the left-turn prohibition signage.	Prior to issuance of Certificate of Occupancy	Public Works Department	Compliance with Project Conditions of Approval
NOISE	**Mitigation Measure NOI-1: Construction Noise.** All construction plans include notes stipulating the following: • Construction activities shall be restricted within the City of Riverside to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 5:00 p.m. on Saturdays, and are prohibited on Sundays and federal holidays. • During all project site excavation and grading on site, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. • The project contractor shall place all	Prior to building permit issuance	Building and Safety Division Planning Division	Compliance with Project Conditions of Approval

[1] All agencies are City of Riverside Departments/Divisions unless otherwise noted.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. • The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.			
HAZARDS AND HAZARDOUS MATERIALS	**Mitigation Measure HAZ-1:** A vapor barrier system shall be constructed in conjunction with the health club and fitness center. It will consist of a membrane or liner with a passive ventilation system installed beneath structures. The vapor barrier system shall be in compliance with all applicable local, state and federal requirements, if any. The vapor barrier system shall be maintained intact, as per the Regional Water Quality Control Board approved design, by the owner, occupants, purchaser, lessees, and possessors of all or any portion of the Proposed Project. Furthermore, the design and shall be in compliance with the Riverside County Department of Public Health, Hazardous Materials Division and the Regional Water Quality Control Board.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	Mitigation Measure HAZ-2: No Owner or Occupant shall conduct or permit any work to excavate soil within or on the Burdened Property, unless expressly permitted in writing by the Board, provided that the consent of the Regional Water Quality Control Board shall not be required for any work involving minor excavation and grading to repair, maintain, resurface, grade and/or regrade any existing or future Site Improvements as long as such excavation does not compromise the structural integrity of the vapor barrier that exists beneath the Proposed Project. Any contaminated soils brought to the surface by grading, excavation, trenching, or backfilling shall be managed by the Owner, or Occupant, as applicable, performing the work in accordance with all applicable provisions of local, state and federal law.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval
	Mitigation Measure HAZ-3: Except as provided above, any excavation conducted on the Burdened Property shall be performed pursuant to an appropriate and fully implemented Health and Safety Plan approved in writing by the Regional Water Quality Control Board.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval
	Mitigation Measure HAZ-4: All uses and development of the existing Building Improvements on the Burdened Property shall preserve the integrity of the existing vapor barrier, unless otherwise expressly permitted in writing by the Regional Water Quality Control Board.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	Mitigation Measure HAZ-5: No Owner, or Occupant shall drive, bore, otherwise construct, or use a well within the Burdened Property for the purpose of extracting water for any use, including but not limited to, domestic, potable, or industrial uses, unless expressly permitted in writing by the Board; nor shall any Owner, Lessee or Occupant knowingly permit or engage any third party to do such acts.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval
	Mitigation Measure HAZ-6: No Owner, or Occupant shall act in any manner that or is likely to aggravate or contribute to the existing residual contamination on the Proposed Project.	During Plan Check Review Process	Environmental Compliance Planning	Compliance with Project Conditions of Approval
CULTURAL	The project area contains Artificial Fill, which has no paleontological sensitivity, overlying Older Alluvial Fan Deposits, which have high paleontological sensitivity. Although there is an unanticipated, low probability that fossil bearing soils/rock will be encountered and significant fossils unearthed during grading, if ground-disturbing activities for the project are expected to extend more than 5.5 feet below existing grade into deposits with high paleontological sensitivity, LSA recommends the following mitigation measure: **Mitigation Measure PAL-1:** A qualified paleontologist shall be hired to develop and submit a Paleontological Resource Impact Mitigation Program (PRIMP) for this project. The PRIMP shall include the methods that will be used to protect paleontological resources that may exist within the project area, as well as procedures for monitoring, fossil preparation and identification, curation into a	Prior to the issuance of building permits	Historic Preservation Planning	Compliance with Project Conditions of Approval

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	repository, and preparation of a report at the conclusion of grading, which shall guide further paleontological activities and treatment during the project. • Excavation and grading activities in deposits with high paleontological sensitivity (Older Alluvial Fan Deposits) below 5.5 feet shall be monitored by a paleontological monitor. • If paleontological resources are encountered during the course of ground disturbance, the paleontological monitor shall have the authority to halt or redirect construction away from the area of the find in order to assess its significance. Insignificant resource shall be removed and the area cleared, and significant resources shall be collected through salvage excavation. • Collected resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and offered for curation into the permanent collections of a scientific institution. • At the conclusion of the monitoring program, a report of findings shall be prepared to document the results of the monitoring program. • In the event that paleontological resources are encountered when a paleontological monitor is not present, work in the immediate area of the find shall be redirected and a paleontologist shall be contacted to assess the find for significance.			

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	Mitigation Measure CR-1: Denny's Restaurant Repair. The following note is added to the project plans: • "Any deteriorated or damaged historic features shall be repaired rather than replaced. Where the severity of deterioration or damage requires replacement of a character-defining feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence."	Prior to the issuance of building permit.	Historic Preservation Planning	Compliance with Project Conditions of Approval
BIOLOGICAL RESOURCES	**Mitigation Measure Bio-1:** Initial ground-disturbing activities (e.g., demolition, grading) should be conducted outside the bird nesting season (February 15 through August 31). If project activities are planned during the bird nesting season, nesting bird surveys should be conducted within 30 days prior to disturbance to ensure birds protected under the MBTA are not disturbed by demolition-related activities such as noise and increased human presence. The survey shall consist of full coverage of the on-site trees. If no active nests are found, no additional measures are required. If active nests are found, the nest locations shall be mapped by the biologist utilizing GPS equipment. The nesting bird species will be documented and, to the degree feasible, the nesting stage (e.g.,	Prior to ground disturbance or construction activities	Planning	Report provided to Planning Staff

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[1]	Monitoring/Reporting Method
	incubation of eggs, feeding of young, near fledging). The biologist shall establish a no-disturbance buffer around each active nest. The buffer will be determined by the biologist based on the species present and surrounding habitat. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume.			