PLANNING COMMISSION
RESOLUTION # 2025-01

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ANTIOCH RECOMMENDING THAT THE CITY COUNCIL ADOPT THE ADDENDUM TO THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE LONE TREE RETAIL PROJECT (PD2024-0001) AS ADEQUATE FOR ADDRESSING THE ENVIRONMENTAL IMPACTS OF THE PROPOSED PROJECT

WHEREAS, on February 22, 2005, the City Council of the City of Antioch adopted Resolution No. 2005/20 adopting an Initial Study/Mitigated Negative Declaration for the In-Shape Health Club and Commercial Center Project ("the 2004 IS/MND") as adequate for addressing the environmental impacts of the project;

WHEREAS, the City of Antioch ("City") received an application from Architecture Plus, Inc. for approval of a new Final Development Plan, Use Permit and Design Review for the development of a drive-thru car wash, a quick service restaurant, and combined retail and quick service restaurant, and associated site improvements (PD2024-0001) at a portion of the site (APNs: 072-500-005; 072-500-006; 072-500-007) evaluated in the In-Shape Health Club and Commercial Center Project;

WHEREAS, the City determined an Addendum to the In-Shape Health Club and Shopping Center project Initial Study/Mitigated Negative Declaration is the appropriate environmental document pursuant to Section 15164 of the Guidelines of the California Environmental Quality Act;

WHEREAS, the Planning Commission duly gave notice of public hearing as required by law; and

WHEREAS, on February 19, 2025, the Planning Commission duly held a public hearing on the matter, and received and considered evidence, both oral and documentary; and

WHEREAS, the Planning Commission considered all public comments received, the presentation by City staff, the staff report, and all other pertinent documents regarding the proposed request.

NOW, THEREFORE, BE IT RESOLVED AND DETERMINED AS FOLLOWS:

1. The foregoing recitals are true and correct.

2. **THE PLANNING COMMISSION** hereby finds that substantial changes are not proposed to the project that would require major revisions to the 2004 IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of a previously identified effect.

3. **THE PLANNING COMMISSION** hereby finds that substantial changes have not occurred with respect the circumstances under which the project is undertaken requiring major revisions to the 2004 IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of a previously identified effect.

4. **THE PLANNING COMMISSION** hereby finds that there is no new information of substantial importance which was not known and could not have been known at the time the 2004 IS/MND was certified showing any of the following:

    a. The project will not have a new significant effect not previously discussed in the 2004 IS/MND.
    b. The project will not cause any significant effect examined in the 2004 IS/MND to be substantially more severe.
    c. The mitigation measures in the 2004 IS/MND and adopted in Resolution No. 2005/20 remain feasible, or have already been implemented, but some have been modified to be consistent with the most recent standards and regulations. All mitigation measures identified in this Addendum and required for the proposed project as identified in the 2004 IS/MND that are necessary to reduce the potentially significant impacts to a level of insignificance will be made a requirement of the project and are acceptable by the project proponent.
    d. There are no mitigation measures or alternatives which are considerably different from those analyzed in the 2004 IS/MND that would substantially reduce one or more significant effects on the environment.

5. **THE PLANNING COMMISSION** hereby finds that the modification to Mitigation Measure 4-a.1, and the removal of Mitigation Measure 4-a.2 and 4-a.3 is justified in order to make the mitigation measures consistent with the most recent standards and regulations for burrowing owls, and to provide clarity for enforcement agencies.

BE IT FUTHER RESOLVED, that the Planning Commission does hereby recommend that the City Council ADOPT the Addendum to the IS/MND for the In-Shape Health Club and Commercial Center Project pursuant to the California Environmental Quality Act. All feasible mitigation measures for the project identified in the IS/MND, Addendum and accompanying studies are hereby incorporated into this approval.

* * * * * * * *

I HEREBY CERTIFY that the foregoing resolution was adopted by the Planning Commission of the City of Antioch at a regular meeting thereof held on the 19th day of February 2025, by the following vote:

AYES: Commissioners Jones, Perez, Riley and Webber

NOES: None

ABSTAIN: None

ABSENT: Commissioners Hills and Martin

KWAME P. REED
Secretary to the Planning Commission

EXHIBIT A
ADDENDUM TO THE IS/MND
(SEPARATE PAGE)

CITY OF ANTIOCH
COMMUNITY DEVELOPMENT DEPARTMENT

ANTIOCH
CALIFORNIA

Lone Tree Retail Project

IS/MND Addendum

January 2025

Prepared by

RANEY PLANNING & MANAGEMENT, INC. 25 years
1501 Sports Drive, Suite A, Sacramento, CA 95834

A. INTRODUCTION AND SUMMARY

The purpose of this Addendum is to demonstrate that the Lone Tree Retail Project (proposed project) has been adequately analyzed in the previous environmental review under the California Environmental Quality Act (CEQA) and that further evaluation is not required.

B. PROJECT BACKGROUND

In December 2004, the City of Antioch prepared an Initial Study/Mitigated Negative Declaration (IS/MND), hereafter referred to as the "2004 IS/MND," for the previously approved In-Shape Health Club and Shopping Center Project. The 2004 IS/MND evaluated the development of an 18-acre site, located on the northeast side of Lone Tree Way, with 186,000 square feet (sf) of commercial uses. The commercial uses anticipated in the 2004 IS/MND included a 60,000-sf health club, 101,000-sf retail shopping center, two restaurant buildings totaling 14,000 sf, and a 10,000-sf medical office building. The 2004 IS/MND was adopted as part of a Planned Development approval (PD-04-05).

Of the commercial uses anticipated to be constructed within the 18-acre site in the 2004 IS/MND, only the In-Shape Family Fitness Center and an associated parking lot have been constructed to date, as well as frontage improvements along Long Tree Way for the entirety of the site. In the time since the adoption of the 2004 IS/MND, the City has ministerially approved a residential housing project on the eastern portion of the site through the City's Community Infill Housing overlay via an approval letter, which will replace the previously approved 101,000-sf retail shopping center. The remaining portions of the project site currently remain undeveloped.

C. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary actions required for the project.

Project Location and Setting

The proposed project site consists of the westernmost 3.22-acre portion of the overall 18-acre site analyzed in the 2004 IS/MND (see Figure 1). The project site is located at 4099 Lone Tree Way in the City of Antioch, California and is identified by Assessor's Parcel Numbers (APNs) 072-500-005, -006, and -007 (see Figure 2). The northern half of the project site consists of the 1.21-acre Parcel E (APN 072-500-005) and the 0.96-acre Parcel F (APN 072-500-006); Parcels E and F are undeveloped. The southern half of the project site consists of the 1.05-acre Parcel G (APN 072-500-007). The southern portion of Parcel G is developed with a segment of the In-Shape Family Fitness Center parking lot and the northern portion of the parcel is undeveloped. An existing signaled driveway bisects the project site and separates Parcels E and F from Parcel G. Surrounding existing land uses include medical offices, commercial uses, and undeveloped land which is approved for multi-family residential uses to the north; the In-Shape Family Fitness Center parking lot to the east; the In-Shape Family Fitness Center facility to the southeast; and open space and single-family residences to the west, across Lone Tree Way. The City of Antioch General Plan designates the site as Neighborhood Community Commercial and the site is zoned Planned Development (P-D).

Figure 1
Regional Vicinity

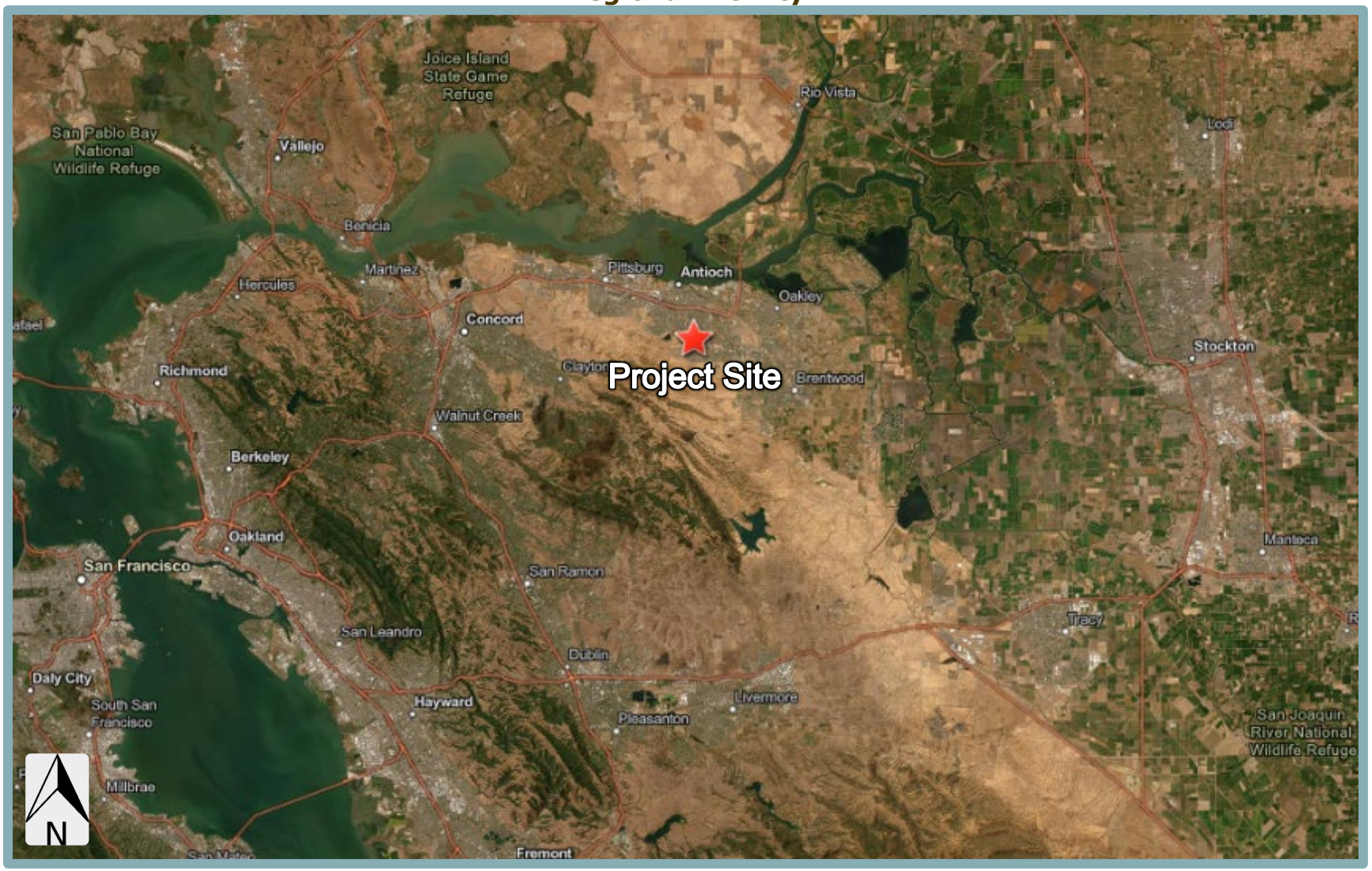


Figure 2
Project Site Boundaries

Project Components

The project site was previously approved for development of two restaurant buildings totaling 14,000 sf, as well as a 10,000-sf medical office building. The proposed project would include the construction of a car wash facility, a quick-service restaurant, and a quick-service restaurant/retail building (see Figure 3).

The proposed project would develop Parcel E with a 4,708-sf car wash, Parcel F with a 2,550-sf quick service restaurant, and Parcel G with a 3,760-sf quick service restaurant/retail building. The proposed project would also include new landscaping medians along the eastern portions of Parcels E and F, adjacent to the future multi-family residential uses.

A comparison of the previously approved and the currently proposed uses within the project site is presented in Table 1, below.

Table 1
Approved vs. Proposed Commercial Uses

Approved	Proposed
Medical Office Building (10,000 sf) Restaurant Buildings (14,000 sf)	Car Wash (4,708 sf) Quick Service Restaurant– Parcel F (2,550 sf) Quick Service Restaurant/Retail Building – Parcel G (3,760 sf)
Total	
24,000 sf	**11,018 sf**

The proposed car wash facility would operate from 7:00 AM to 7:00 PM during winter months, and from 7:00 AM to 8:00 PM during summer months. The quick service restaurant within Parcel F would operate from 10:00 AM to 11:00 PM, and the quick service restaurant/retail building within Parcel G would operate from 10:45 AM to 11:00 PM. Compliance with the foregoing hours of operation would be required as a Condition of Approval for the proposed project.

Vehicle access to the project site would be provided by two existing driveways off of Lone Tree Way located in the center of the site between Parcels F and G, as well as one new driveway from Lone Tree Way into Parcel E the northern portion of the site. Consistent with City requirements, based on the square footage of the proposed retail uses, Parcel E would include 11 parking stalls, including two Americans with Disabilities Act (ADA) compliant spaces; Parcel F would include 17 parking stalls, including two compact spaces and two ADA-compliant spaces; and Parcel G would include 19 parking stalls, including two ADA-compliant spaces. Overall, the proposed project would include 47 new parking spaces. It is noted that the southern portion of Parcel G is currently developed with approximately 27 existing parking spaces that are shared with the In-Shape Family Fitness Center.

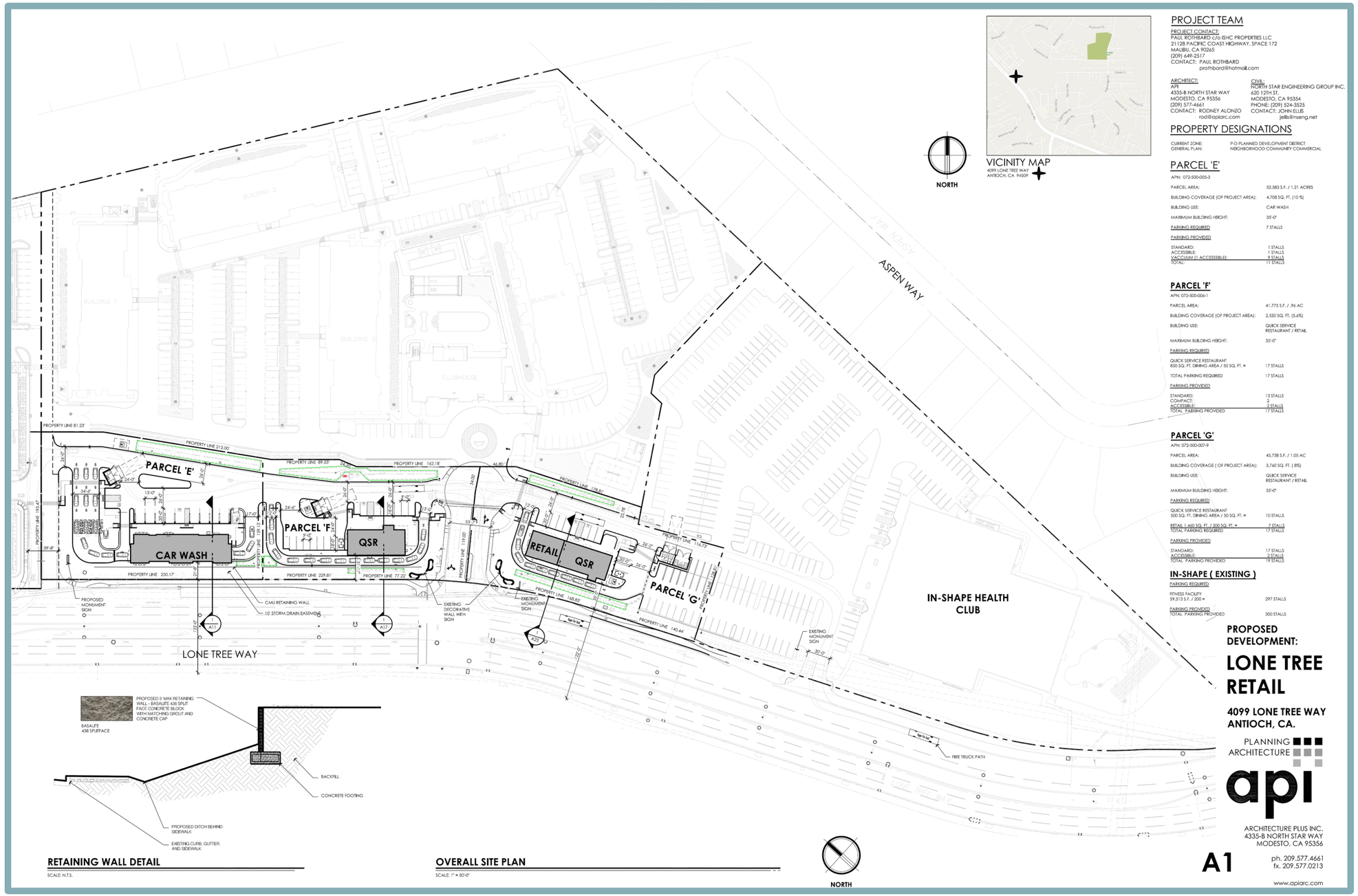
Requested/Required Entitlements

The proposed project would require the following approvals from the City of Antioch:

- Final Development Plan;
- Use Permit; and
- Design Review.

It should be noted that as part of the adjacent multi-family residential development north of the project site, the developer will submit a tentative map to the City, which will include adjusted lot lines for that site and the project site.

Figure 3
Site Plan



The tentative map will be subject to separate City review and approval.

D. DISCUSSION

New significant effects or other grounds require additional environmental review in support of further agency action on a project pursuant to Public Resources Code (PRC) Section 21166 and State CEQA Guidelines Sections 15162 and 15164. Under the guidelines, additional environmental review shall be required if any of the following criteria are met:

15162. Subsequent EIRs and Negative Declarations

(a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

(c) Once a project has been approved, the lead agency‘s role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.

(d) A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.

15164. Addendum to an EIR or Negative Declaration

(a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.

(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

(d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

In addition to the above, the following guidance is relevant to the proposed analysis:

- If new measures will be adopted to mitigate new potentially significant impacts to a less-than-significant level, the agency may adopt a subsequent negative declaration addressing those impacts.
- If the agency makes minor technical changes or additions to the prior negative declaration, it may prepare an addendum to the negative declaration.
- If the agency concludes that none of the conditions requiring a subsequent EIR or negative declaration have occurred, and if there is no need to make changes or additions to the prior negative declaration, the agency need not prepare any further environmental documentation but may make a record of its determination.

The applicability of the criteria to the proposed project is described in the following sections.

Criterion 15162(a)(1)

As described above, whereas the 2004 IS/MND anticipated the development of the project site with two restaurant buildings, the currently proposed project would include the construction of a car wash facility, a quick-service restaurant, and a quick-service restaurant/retail building. Although altered from what was originally anticipated, the proposed commercial uses would be consistent with the commercial nature of the anticipated uses, and would be consistent with what is permitted in the Neighborhood Community Commercial land use and P-D zoning designations. In addition, as discussed in additional detail below, the proposed project would not result in any new significant environmental impacts or a substantial increase in the severity of any previously identified significant impacts.

Based on the above, substantial changes to the project which would require major revisions of the previous IS/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects would not occur as a result of the proposed project. Therefore, the proposed project would not meet the criteria set forth in CEQA Guidelines Section 15162(a)(1), and preparation of an addendum would provide the appropriate level of environmental review.

Criterion 15162(a)(2)

As discussed above, the 2004 IS/MND that assessed the impacts of commercial development of the project site has been adopted by the City. Significant updates to local, State, and federal regulations have not been adopted since the certification of the previous IS/MND that would require major revisions to the previous analysis due to a resultant new significant environmental effect or substantial increase in the severity of a previously identified significant effect. Similarly, other substantial changes have not occurred with respect to the circumstances under which the proposed project will be undertaken requiring major revisions of the 2004 IS/MND due to new or substantially more severe effects. Therefore, the proposed project would not meet the criteria set forth in CEQA Guidelines Section 15162(a)(2), and preparation of an addendum would provide the appropriate level of environmental review.

Criterion 15162(a)(3)

As discussed above, an IS/MND that assessed the impacts of commercial development of the project site has been adopted by the City. The proposed project would involve commercial development similar to what was anticipated for the site in the 2004 IS/MND, and would not modify the land use designation of the site. There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous IS/MND was adopted, indicating that the proposed project would result in a new or more severe significant impact from what was identified in the 2004 IS/MND, as discussed in further detail below. Therefore, the proposed project would not meet the criteria set forth in in CEQA Guidelines Section 15162(a)(3), and preparation of an addendum would provide the appropriate level of environmental review.

E. ENVIRONMENTAL IMPACT ANALYSIS

The following sections provide discussions of potential impacts associated with the proposed project in comparison to those previously identified in the 2004 IS/MND. According to CEQA Guidelines Section 15164(b), an addendum may be prepared if only minor technical changes or additions to the previous mitigated declaration are necessary or if none of the conditions described in Section 15162 calling for the preparation of a subsequent mitigated declaration have occurred. Given the limited scope of changes to the project, this Addendum provides a detailed evaluation of those select CEQA topics most affected by the changes, whereas the remaining CEQA topics are appropriately discussed at a lesser level of detail.

Air Quality

The 2004 IS/MND determined that the In-Shape Health Club and Shopping Center Project would not result in any significant impacts related to air quality. The currently proposed project would result in a similar amount of ground disturbance as what was anticipated in the 2004 IS/MND for the project site. In addition, whereas the 2004 IS/MND anticipated construction of approximately 24,000 sf of commercial uses within the project site, the proposed project would develop a total of approximately 11,018 sf of commercial uses, which is less than half of what was analyzed in the 2004 IS/MND. The proposed project would also be required to comply with the most current applicable laws and regulations related to reducing construction emissions, which are more strict

than those in effect when the 2004 IS/MND was adopted. Therefore, construction emissions associated with buildout of the project site would be less than what was anticipated and analyzed in the 2004 IS/MND.

Operational air quality impacts associated with the proposed project would also be reduced from what was anticipated for the project site in the 2004 IS/MND. According to the Local Transportation Analysis (LTA) prepared for the proposed project by Kimley-Horn (see Appendix A),[1] the proposed car wash facility, quick-service restaurant, and quick-service restaurant/retail building are anticipated to generate a total of 1,542 new daily trips. The 2004 IS/MND anticipated that the entire In-Shape Health Club and Shopping Center Project would generate 8,454 daily trips; without the trips generated by the existing In-Shape Family Fitness Center and the Shopping Center anticipated for development north of the current project site, the 2004 IS/MND anticipated that the on-site development would generate approximately 2,141 daily trips. As such, the currently proposed project would generate 599 fewer daily trips than was previously anticipated in the 2004 IS/MND. Due to the commercial nature of both the currently proposed project and the development previously anticipated for the project site in the 2004 IS/MND, other operational emissions generated by the proposed project would also be within the scope of what was previously anticipated in the 2004 IS/MND. While the proposed project would include drive-throughs, idling events associated with light-duty vehicles (i.e., passenger vehicles and light duty trucks) represent a relatively minor percentage of total vehicle operations, and, as a result, the California Air Resources Board (CARB) has indicated that idling emissions are accounted for within typical mobile emissions associated with light-duty vehicles. As such, idling emissions associated with the proposed drive-throughs are not assumed to substantially generate pollutant emissions beyond presumed mobile emissions accounted for within the prior analysis. Therefore, operational air quality impacts associated with the proposed project would be within the scope of the prior analysis.

Overall, based on the above, the proposed project would not result in any new significant impacts or a substantial increase in the severity of a previously identified significant impact related to air quality.

Greenhouse Gas Emissions

Since the 2004 IS/MND was adopted, a number of regulations have been enacted for the purpose of, or with an underlying goal for, reducing greenhouse gas (GHG) emissions, such as the California Green Building Standards Code (CALGreen Code) and the California Building Energy Efficiency Standards Code. Such regulations have become increasingly stringent since the 2004 IS/MND was adopted. The proposed project would be required to comply with all current applicable regulations associated with GHG emissions, including the CALGreen Code and California Building Energy Efficiency Standards Code. Requirements of the CALGreen Code include, but are not limited to, the following measures:

- Compliance with relevant regulations related to future installation of electric vehicle (EV) charging infrastructure in residential and non-residential structures;
- Indoor water use consumption is reduced through the establishment of maximum fixture water use rates;
- Outdoor landscaping must comply with the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), or a local ordinance, whichever is more stringent, to reduce outdoor water use;

[1] Kimley-Horn. *Antioch Lone Tree Shopping Center Local Transportation Analysis (LTA)*. May 2, 2024.

- Diversion of 65 percent of construction and demolition waste from landfills;
- Required solar photovoltaic system and battery storage standards for certain buildings; and
- Mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board.

In addition, technological advancements for the reduction of GHG emissions are ever-evolving. As such, the currently available technologies and regulations would inherently cause the proposed project to result in substantially fewer GHG emissions than what would have been predicted for the site had such analysis been undertaken during the preparation of the 2004 IS/MND.

The primary GHG emitted by human activities is carbon dioxide (CO_2); one of the largest sources of CO_2 includes the burning of fossil fuels for transportation and electricity. Although the proposed commercial uses are similar to what was anticipated for the site in the 2004 IS/MND, unlike the previously approved In-Shape Health Club and Shopping Center Project, the proposed project would include two quick-service restaurants with drive-throughs and a car wash, which would result in idling vehicles on-site. However, as discussed above, according to the LTA, the proposed project would generate 599 fewer daily vehicle trips than what was anticipated for the site in the 2004 IS/MND. Because vehicle trips would decrease under the proposed project as compared to what was anticipated in the 2004 IS/MND, the associated GHG emissions would also decrease. Furthermore, the proposed project would result in the reduction of 12,982 sf of commercial use as compared to what was anticipated in the 2004 IS/MND, and would be required to comply with the most current and more stringent regulations. Therefore, GHG emissions associated with the proposed project would not result in a new or significant impact beyond what was anticipated in the 2004 IS/MND.

Noise

The 2004 IS/MND determined that given compliance with applicable City noise ordinances, the In-Shape Health Club and Shopping Center Project would not result in any significant impacts related to noise.

According to the 2015 Supreme Court Case, *California Building Industry Association v. Bay Area Air Quality Management District (Case No. S213478),* "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents." As such, because the CEQA Guidelines do not require analysis of effects of the environment on the project, including impacts of noise on future residents, or in the case of the proposed project, customers of the proposed commercial uses, the potential effects related to noise exposure at the proposed project are not considered a CEQA impact. Any subsequent analysis of noise impacts associated with the proposed project on future residents of the adjacent planned residential development is presented for informational purposes only, and does not affect the CEQA analysis.

The following analysis includes a discussion of noise standards and criteria applicable to various land uses, as well as potential traffic noise and non-transportation noise sources associated with the proposed project. The analysis below is based on the Environmental Noise and Vibration

Assessment (ENVA) prepared for the proposed project by Bollard Acoustical Consultants, Inc. (BAC) (see Appendix B).[2] The following terms are referenced in this discussion:

- Decibel (dB): A unit of sound energy intensity. An A-weighted decibel (dBA) is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels. All references to dB in this discussion will be A-weighted unless noted otherwise.
- Day-Night Average Level (DNL): The average sound level over a 24-hour period, with a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Community Noise Equivalent Level (CNEL): The average sound level over a 24-hour period, with a penalty of 5 dB applied to noise occurring during daytime hours (7:00 AM to 10:00 PM) and a penalty of 10 dB applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM).
- Equivalent Sound Level (L_{eq}): The average sound level over a given time-period.
- Maximum Sound Level (L_{max}): The maximum sound level over a given time-period.
- Sound Exposure Level (SEL): A rating (dB) of a discrete event that compresses the total sound energy of the event into a one-second time period.

Sensitive Receptors

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are considered to be sensitive to noise because intrusive noise can be disruptive to such activities. Within the project vicinity, and for the purposes of a CEQA evaluation, the nearest sensitive receptors are the single-family residences to the north, east, west, and south of the project site.

Existing Noise and Vibration Environment

The ambient noise environment in the immediate project vicinity is defined by noise from traffic on Lone Tree Way, as well as activities at nearby commercial uses. In order to quantify the existing ambient noise environment within the project vicinity, BAC conducted long-term ambient noise level measurements at three locations on June 19 and 20, 2023. The noise survey locations are shown in Figure 4, and are identified as Sites 1, 2, and 3. The ambient noise level survey results are summarized below in Table 2.

The ambient noise measurements obtained at Sites 1, 2, and 3 are believed to be representative of the existing ambient noise environments at the existing single-family residential uses to the north, east, and west of the project site, respectively.

During BAC site visits on June 18 and 21, 2024, vibration levels at the project site were below the threshold of human perception.

[2] Bollard Acoustical Consultants, Inc. *Environmental Noise and Vibration Assessment: Lone Tree Retail Project*. December 12, 2024.

Figure 4
Noise Survey Locations

Source: Bollard Acoustical Consultants, Inc. 2024.

Table 2
Ambient Noise Survey Results

Survey Location[1]	Date	Time Period[2]	Average Measured Noise Levels (dB)		CNEL (dB)
			L_{eq}	L_{max}	
Site 1	6/19/24	Daytime	47	64	51
		Evening	47	68	
		Nighttime	43	57	
	6/20/24	Daytime	46	63	51
		Evening	47	64	
		Nighttime	43	59	
Site 2	6/19/24	Daytime	52	68	56
		Evening	54	74	
		Nighttime	48	62	
	6/20/24	Daytime	52	68	55
		Evening	52	74	
		Nighttime	47	64	
Site 3	6/19/24	Daytime	58	78	62
		Evening	61	87	
		Nighttime	53	69	
	6/20/24	Daytime	59	77	62
		Evening	58	80	
		Nighttime	54	72	

Notes:
[1] Noise survey site locations are shown in Figure 4.
[2] Daytime: 7:00 AM to 7:00 PM; Evening: 7:00 PM to 10:00 PM; Nighttime: 10:00 PM to 7:00 AM.

Source: Bollard Acoustical Consultants, Inc. 2024.

City Noise Standards and Criteria

The Environmental Hazards Element of the City of Antioch General Plan contains objectives and policies to ensure that City residents are not subjected to noise beyond acceptable levels. Pursuant to Objective 11.8.1, Noise Objective, of the General Plan, the allowable exterior noise level for single-family residential uses is defined as 60 dB CNEL within rear yards, and the allowable exterior noise level for multi-family residential uses is 60 dB CNEL within interior open spaces. In addition, pursuant to General Plan Policy 11.8.2(g), appropriate noise mitigation is required when a new development would cause noise in excess of the General Plan noise objectives or an audible (3 to 5 dBA) increase in noise in areas where General Plan noise objectives are already exceeded due to existing development.

Pursuant to Sections 5-17.04 and 5-17.05 of the City of Antioch Code of Ordinances, the operation of heavy construction equipment and construction activities are prohibited on weekdays prior to 7:00 AM and after 6:00 PM; on weekdays within 300 feet of occupied dwelling space prior to 8:00 AM and after 5:00 PM; and on weekends and holidays prior to 9:00 AM and after 5:00 PM, irrespective of the distance from an occupied dwelling.

Project Construction Noise

During project construction activities, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained. Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point.

Table 3 includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power of operation at a distance of 50 feet. It should be noted that not all of the construction activities would be required of the proposed project. Table 3 data also include predicted maximum (L_{max}) equipment noise levels at the nearest existing and planned residential uses, which assume a standard spherical spreading loss of 6 dB per doubling of distance. As discussed above, the project construction noise levels at the adjacent future multi-family residential development are presented for informational purposes only, and do not affect the analysis.

Table 3
Reference and Projected Noise Levels for Construction Equipment

Type of Equipment	Reference Noise Level at 50 feet, L_{max} (dB)	Projected Noise Level, L_{max} (dB)			
		Site 1 (575 feet)	Site 2 (385 feet)[1]	Site 3 (300 feet)	Future Multi-Family Residential (220 feet)[2]
Air compressor	80	59	52	64	62
Backhoe	80	59	52	64	62
Ballast equalizer	82	61	54	66	64
Ballast tamper	83	62	55	67	65
Compactor	82	61	54	66	64
Concrete mixer	85	64	57	69	67
Concrete pump	82	61	54	66	64
Concrete vibrator	76	55	48	60	58
Crane, mobile	83	62	55	67	65
Dozer	85	64	57	69	67
Excavator	85	64	57	69	67
Generator	82	61	54	66	64
Grader	85	64	57	69	67
Impact wrench	85	64	57	69	67
Loader	80	59	52	64	62
Paver	85	64	57	69	67
Pneumatic tool	85	64	57	69	67
Pump	77	56	49	61	59
Saw	76	55	48	60	58
Scarifier	83	62	55	67	65
Scraper	85	64	57	69	67
Shovel	82	61	54	66	64
Spike driver	77	56	49	61	59
Tie cutter	84	63	56	68	66
Tie handler	80	59	52	64	62
Tie inserter	85	64	57	69	67
Truck	84	63	56	68	66
Low		**55**	**48**	**60**	**58**
High		**64**	**57**	**69**	**67**
Average		**61**	**54**	**67**	**64**

Notes:
[1] Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
[2] Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: ***Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006. Bollard Acoustical Consultants, Inc. 2024.***

Consistent with Section 5-17.05 of the City's Code of Ordinances, it is assumed that construction activities associated with the proposed project would not occur on weekdays prior to 7:00 AM and after 6:00 PM; on weekdays within 300 feet of occupied dwelling space prior to 8:00 AM and after 5:00 PM; and on weekends and holidays prior to 9:00 AM and after 5:00 PM. Based on the measured ambient maximum (L_{max}) daytime noise levels at Sites 1, 2, and 3, which encapsulates the City's allowable construction hours (7:00 AM to 6:00 PM), as presented in Table 2, the predicted construction activity noise levels presented in Table 3 are either below or within the range of the ambient measured maximum noise levels at the nearest residential uses.

However, noise from heavy equipment operations during on-site construction activities would add to the noise environment in the immediate project site vicinity. A potentially significant impact would occur if project-related construction activities were to noticeably increase ambient noise levels above background levels at the nearby noise-sensitive residential uses. As discussed above, the threshold of perception of the human ear is approximately 3 to 5 dB; a 5 dB change is considered to be clearly noticeable. Consistent with General Plan Policy 11.8.2(g), a noticeable increase in ambient noise levels is therefore assumed to occur where noise levels increase by 3 dB or more over existing ambient noise levels.

Using the calculated average measured maximum (L_{max}) noise levels at Sites 1, 2, and 3 during the allowable construction hours (7:00 AM to 6:00 PM), and the calculated averages of predicted construction equipment maximum noise levels shown in Table 3, BAC calculated the ambient plus project construction equipment noise level increases at the nearby existing residential uses. BAC concluded that project-generated increases in ambient maximum noise levels would range from 0.2 dB L_{max} to 2.1 dB L_{max} at the closest existing residential uses. The calculated increases in ambient maximum noise levels at the nearest sensitive receptors are below the applied increase significance criterion of 3 dB. Therefore, construction activities associated with the proposed project would not result in a temporary increase in ambient noise levels in excess of the standards established in the City's General Plan, and a less-than-significant impact would occur.

Project Operational Noise

The proposed project consists of a car wash facility in Parcel E, a quick service restaurant with a drive-through in Parcel F, and a quick service restaurant/retail building with a drive-through in Parcel G. According to the ENVA, the primary noise sources associated with project operations are drive-through operations (i.e., idling vehicles and amplified menu speak boards), delivery truck circulation, truck delivery activities, car wash tunnel operations, vehicle vacuum equipment, and building mechanical equipment (heating, ventilation, and air conditioning [HVAC]). As discussed above, the proposed car wash facility would operate from 7:00 AM to 7:00 PM during winter months, and from 7:00 AM to 8:00 PM during summer months. The quick service restaurant within Parcel F would operate from 10:00 AM to 11:00 PM, and the quick service restaurant/retail building within Parcel G would operate from 10:45 AM to 11:00 PM. As part of the proposed amendment to PD-04-05, the proposed project would be required to comply with the foregoing hours of operations as a Condition of Approval.

An analysis of each of the identified project operational noise sources at the nearby existing single-family residential uses (Sites 1, 2, and 3) and the future multi-family residential use is provided below.

Drive-Through Noise

As discussed above, the proposed project would include the development of Parcels F and G with two quick service restaurants with drive-throughs. The two drive-through lanes would have amplified menu speaker posts, the locations of which are shown in Figure 5.

Although the amplified speaker menu models have not yet been determined, in order to quantify the noise emissions of the proposed drive-through speaker usage, BAC utilized noise level measurements from the speaker manufacturer of a commonly installed model. BAC determined that the speaker posts have the ability to incorporate automatic volume control (AVC), which adjusts outbound volume based on the ambient noise level environment. For example, assuming an outdoor ambient noise level of 45 dB, the speaker would adjust the volume of the system to 45 dB for a resulting overall sound level of 48 dB at a distance of four feet. Without the AVC option, the speaker reference noise level would be 72 dB at four feet. Based on data collected for similar drive-through operations, the ENVA determined that drive-through vehicle passages, including vehicle idling, have median and maximum noise levels of 60 dB L_{eq} at a distance of five feet.

To calculate the project drive-through operations noise level exposure relative to the City's CNEL standard, the ENVA conservatively assumed that project drive-through menu speaker and vehicle noise from both quick service restaurants, combined, would occur during every hour of the proposed hours of operations, and that speaker posts would operate without the AVC option enabled (i.e., worst-case speaker post noise exposure).

Using the foregoing information, and assuming a standard spherical spreading loss of -6 dB per doubling of distance, data were projected from the proposed drive-through lanes and speaker posts to the nearest existing and planned noise-sensitive residential uses. The results of such projections are summarized in Table 4, below.

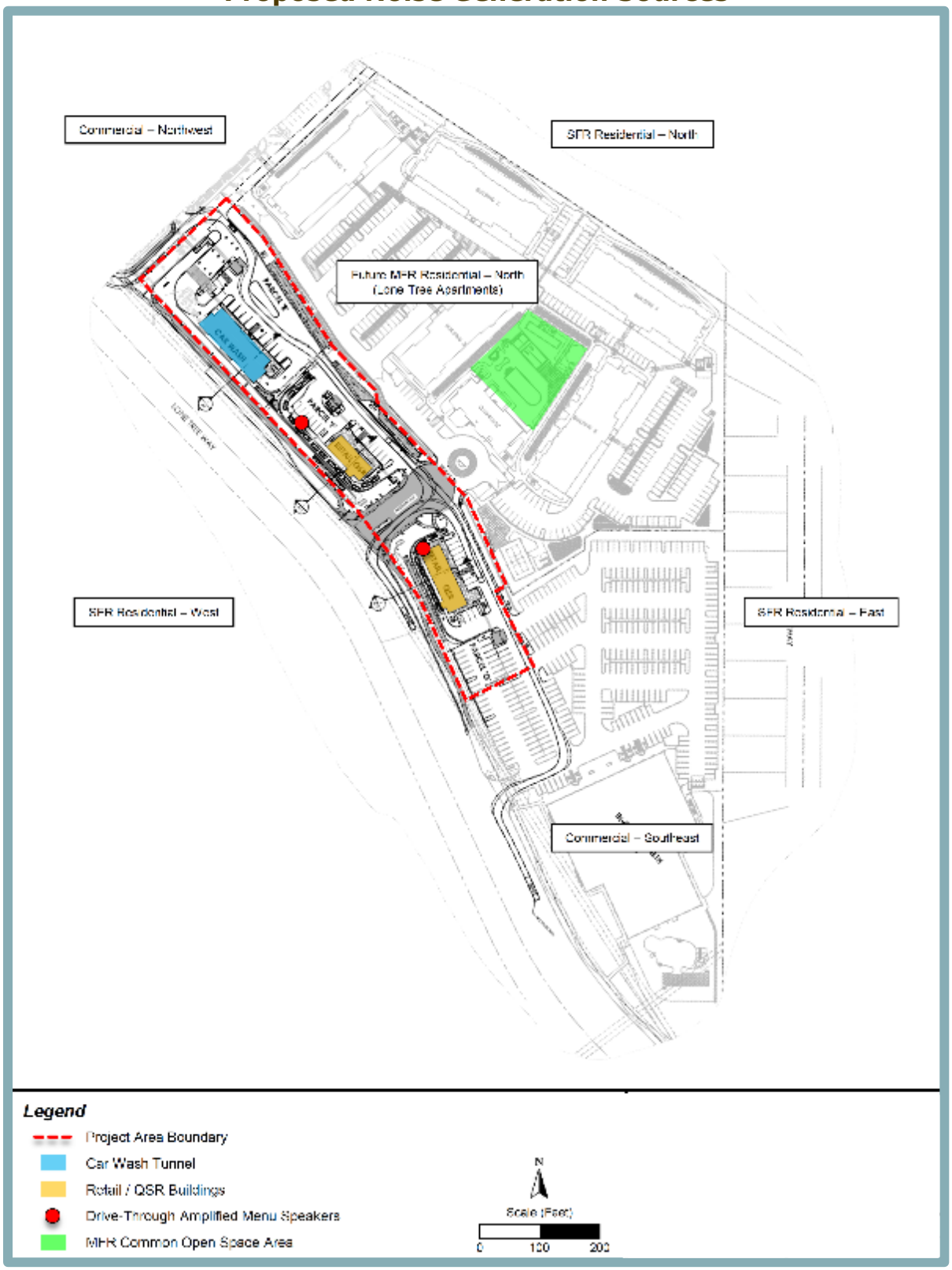
Table 4
Predicted Combined Drive-Through Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Combined Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	32	**60**
Site 2	24	
Site 3	39	
Future Multi-Family Residential	34	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted combined CNEL assumes continuous quick service restaurant/retail building operation during all proposed hours of operation.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

Figure 5
Proposed Noise Generation Sources



Source: Bollard Acoustical Consultants, Inc. 2024.

As shown in Table 4, drive-through operational noise is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. It is noted that activation of the drive-through speaker model's AVC option would further reduce speaker noise level exposure. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that drive-through related increases in ambient noise levels would be less than 0.1 CNEL at the closest existing and planned noise-sensitive residential uses. The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to noise generated by the proposed drive-through operations would be less than significant.

On-Site Truck Circulation Noise

BAC anticipates that deliveries of product to the proposed quick service restaurant and quick service restaurant/retail building would occur at the front of the buildings with medium-duty vendor trucks/vans. On-site truck passbys are expected to be relatively brief and would occur at low speeds. The ENVA determined that single-event medium truck passby noise levels are approximately 66 dB L_{max} and 76 dB SEL at a reference distance of 50 feet. In order to calculate hourly average noise level exposure from truck circulation, the ENVA assumes that the quick service restaurant and quick service restaurant/retail building could each receive two deliveries from a medium duty truck/van during a worst-case busy hour of deliveries, for a total of four project-generated truck deliveries during a given busy hour. Given an SEL of 76, and assuming four medium truck passbys during a given hour, BAC calculated the hourly average to be 46 dB L_{eq}. In order to calculate CNEL exposure, the ENVA conservatively assumed that the four truck deliveries could occur during nighttime hours, which would be the worst-case CNEL exposure. Based on the foregoing information, and assuming a standard spherical spreading loss of -6 dB per doubling of distance, project-generated on-site truck circulation noise exposure at the nearest existing and planned noise-sensitive residential uses was calculated. The results of such calculations are presented in Table 5, below.

Table 5
Predicted On-Site Truck Circulation Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	<20	**60**
Site 2	<20	
Site 3	28	
Future Multi-Family Residential	25	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted CNEL assumes a total of four truck deliveries all occurring during nighttime hours.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

As shown in Table 5, on-site truck circulation noise is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that increases in ambient noise levels related to on-site truck circulation would be less than 0.1 CNEL at the closest existing and planned noise-sensitive residential uses. The calculated increase in

ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to noise generated by the on-site truck circulation associated with operation of the proposed project would be less than significant.

Truck Delivery Activity Noise

As discussed above, BAC anticipates that deliveries of product to the proposed quick service restaurant and quick service restaurant/retail building would occur at the front of the buildings with medium-duty vendor trucks/vans. The primary noise sources associated with delivery activities are trucks stopping (air brakes), trucks backing into position (back-up alarms), and trucks pulling away from the loading/unloading area (revving engines). The ENVA states that noise levels associated with truck deliveries are approximately 76 dB SEL at a distance of 100 feet. In order to conservatively estimate noise level exposure from truck delivery activity, the ENVA assumes that the quick service restaurant and the quick service restaurant/retail building could each receive two deliveries from a medium duty truck/van during a worst-case busy hour of deliveries, for a total of four project-generated truck deliveries during a given busy hour. In order to calculate CNEL exposure, the ENVA conservatively assumed that the four truck deliveries could occur during nighttime hours, which would be the worst-case CNEL exposure. Based on the foregoing information, and assuming a standard spherical spreading loss of -6 dB per doubling of distance, project-generated truck activity noise level exposure at the nearest existing and planned noise-sensitive residential uses was calculated. The results of such calculations are presented in Table 6, below.

Table 6
Predicted Truck Delivery Activity Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	26	**60**
Site 2	20	
Site 3	30	
Future Multi-Family Residential	30	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted CNEL assumes a total of four truck deliveries all occurring during nighttime hours.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

As shown in Table 6, truck delivery activity noise is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that increases in ambient noise levels related to truck delivery activity would be less than 0.1 CNEL at the closest existing and planned noise-sensitive residential uses. The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to noise generated by the truck delivery activity associated with operation of the proposed project would be less than significant.

Car Wash Drying Assembly Noise

According to BAC, noise levels generated by car washes are primarily due to the drying portion of the operation. Based on information obtained from the project applicant about the models proposed to be used in the drying portion of the proposed car wash, the blower assembly generates a maximum noise level of 75 dB L_{max} at a distance of 100 feet. The car wash cycle lasts approximately 1.5 minutes, with the drying assembly in operation during the last 0.5 minutes of the cycle. Based on the forgoing information, the ENVA calculated that the car wash would go through 40 full cycles and the drying would operate for approximately 20 minutes during a busy hour of operations. Based on 20 minutes of dryer operations per hour, the resulting hourly average (L_{eq}) drying assembly noise level was calculated to be approximately 5 dB lower than the equipment's 75 dB L_{max} referenced above. In order to calculate project-generated car wash drying assembly noise levels relative to the General Plan's CNEL descriptor, a 24-hour average standard, BAC conservatively assumed that the hourly average car wash drying operations noise identified above could occur during every hour of proposed car wash operations during the summer hours (7:00 AM to 8:00 PM). Furthermore, BAC determined that the noise level generation of car wash drying assemblies vary depending on the orientation of the measurement position relative to the tunnel opening. Worst-case drying assembly noise levels occur at a position directly facing the car wash exit, considered to be 0 degrees off-axis. At off-axis positions, the tunnel building facade provides varying degrees of noise level reduction. At positions 45 degrees off-axis relative to the facade of the car wash exit and entrance, drying assembly noise levels are approximately 5 dB lower. At 90 degrees off-axis, drying assembly noise levels are approximately 10 dB lower.

Based on the foregoing information, and assuming a standard spherical spreading loss of -6 dB per doubling of distance, worst-case project-generated car wash drying assembly noise exposure at the nearest existing and planned noise-sensitive residential uses was calculated. The results of such calculations are presented in Table 7, below.

Table 7
Predicted Car Wash Drying Assembly Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	39	60
Site 2	38	
Site 3	48	
Future Multi-Family Residential	43	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted CNEL based on drying assembly in operation during every hour from 7:00 AM to 8:00 PM.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

As shown in Table 7, project-generated car wash drying assembly noise exposure is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that increases in ambient noise levels related to project-generated car

wash drying assembly noise would range from 0.1 CNEL to 0.3 CNEL at the closest existing and planned noise-sensitive residential uses.

The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to project-generated car wash drying assembly noise would be less than significant.

Vacuum System Noise

As part of the proposed car wash facility, the proposed project would include the installation of a central vacuum piping system consisting of a vacuum area containing a total of nine vacuum stalls with 10 vacuum suction nozzles. The vacuum piping system's noise-generating vacuum turbine producer is proposed to be contained within an eight-foot solid masonry enclosure located adjacent to the vacuum area. Measured and projected noise levels from the proposed vacuum turbine producer, as well as the vacuum suction nozzles when hanging off of the nozzle hangers, are provided in Appendices H and G, respectively, of the ENVA. In order to calculate project-related vacuum equipment noise levels relative to the General Plan's CNEL descriptor, BAC conservatively assumed that all of the proposed vacuum suction nozzles and system turbine producer would be in concurrent operation during every hour of proposed car wash operations during the summer hours (7:00 AM to 8:00 PM). Based on the foregoing information, and assuming a standard spherical spreading loss of -6dB per doubling of distance, worst-case project-generated vacuum equipment noise exposure at the nearest existing and planned noise-sensitive residential uses was calculated. The results of such calculations are presented in Table 8, below.

Table 8
Predicted Vacuum System Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	33	60
Site 2	22	
Site 3	36	
Future Multi-Family Residential	32	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted CNEL based on vacuum equipment in concurrent operation during every hour from 7:00 AM to 8:00 PM.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

As shown in Table 8, project-generated vacuum equipment noise exposure is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that increases in ambient noise levels related to project-generated car wash drying assembly noise would be less than 0.1 CNEL at the closest existing and planned noise-sensitive residential uses.

The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to project-generated vacuum equipment noise would be less than significant.

Mechanical Equipment Noise

In preparing the ENVA, BAC determined that HVAC requirements for the proposed quick service restaurant and quick service restaurant/retail building would most likely be met using packaged roof-mounted systems. BAC reference file data for HVAC systems indicate that a 12.5-ton packaged unit would be expected to generate an A-weighted sound power level of 85 dB. In order to calculate project-generated HVAC equipment noise levels relative to the General Plan's CNEL descriptor, BAC conservatively assumed that the HVAC equipment would be in continuous operation during a 24-hour period. Based on the foregoing information, and assuming a standard spherical spreading loss of -6 dB per doubling of distance, project HVAC equipment noise exposure at the nearest existing and planned noise-sensitive residential uses was calculated. The results of such calculations are presented in Table 9, below.

As shown in Table 9, project-generated HVAC equipment noise exposure is predicted to be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. In addition, using the ambient noise measurements presented in Table 2, the ENVA determined that increases in ambient noise levels related to project-generated HVAC equipment noise would range from 0.1 CNEL to 0.2 CNEL at the closest existing and planned noise-sensitive residential uses.

Table 9
Predicted HVAC Equipment Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Level, CNEL (dB)[2,3,4]	City Noise Standard, CNEL (dB)
Site 1	38	**60**
Site 2	31	
Site 3	45	
Future Multi-Family Residential	40	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Predicted CNEL based on continuous HVAC equipment usage from both quick service restaurant/retail buildings for a 24-hour period.
3 Predicted noise levels at Site 2 include a -10 dB offset to account for the existing 10-foot wall.
4 Predicted noise levels at the future multi-family residential development include a -5 dB offset for screening of pool area by buildings.

Source: Bollard Acoustical Consultants, Inc. 2024.

The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to project-generated HVAC equipment noise would be less than significant.

Combined On-Site Operational Noise

The calculated combined noise levels from all foregoing analyzed on-site operations at the closest existing and planned noise-sensitive residential uses are presented in Table 10, below.

Table 10
Combined On-Site Noise Levels at Nearby Residential Uses

Receiver[1]	Predicted Noise Levels, CNEL (dB)						Cumulative CNEL (dB)[3]	City Noise Standard, CNEL (dB)
	Drive-Through[2]	On-Site Truck Circulation	Truck Deliveries	Car Wash Dryers	Vacuum System	HVAC		
Site 1	32	19	26	39	33	38	43	**60**
Site 2	24	13	20	38	22	31	39	
Site 3	39	28	30	48	36	45	50	
Future Multi-Family Residential	34	25	30	43	32	40	46	

Notes:
1 Noise survey site locations are shown in Figure 4.
2 Combined noise levels from drive-through operations sources (i.e., menu speakers and vehicles).
3 Calculated combined noise levels are based on the predicted noise levels presented in the analysis above.

Source: Bollard Acoustical Consultants, Inc. 2024.

As indicated in Table 10, calculated combined noise level exposure from project operations would be below the applicable City of Antioch 60 dB CNEL exterior noise level standard at the closest noise-sensitive receptors. Furthermore, the ENVA determined that combined project-related increases in ambient noise levels would range from 0.1 CNEL to 0.6 CNEL at the closest existing and planned noise-sensitive residential uses. The calculated increase in ambient noise levels indicated above is well below the General Plan ambient noise level increase significance criterion of 3 dB. Therefore, impacts related to combined noise level exposure from project operations would be less than significant.

Based on the above, implementation of the proposed project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the City's General Plan. Therefore, impacts related to noise associated with the proposed project would be within the scope of what was anticipated for the project site in the 2004 IS/MND, and the proposed project would not result in a new or more severe significant impact related to noise than what was anticipated in the 2004 IS/MND.

Vibration

Similar to noise, vibration involves a source, a transmission path, and a receiver. However, noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency.

A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of the velocity in decibels in root-mean-square (VdB, RMS).

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of construction activities. According to the ENVA, the nearest existing residential structure to the project site has been identified as the single-family residence located west of the project site. The nearest existing commercial structure has been identified as the commercial building located northwest of the project site. Because the foregoing structures have been engineered relatively recently and were constructed in compliance with the current building code, neither are highly susceptible to damage by vibration.

Table 11 shows the typical vibration levels produced by construction equipment at 25 feet, as well as projected equipment vibration levels at the nearest existing residential and commercial structures identified above. The ENVA notes that construction of the proposed project is not anticipated to require pile driving activities, or any other construction activities that would create substantial vibration.

Based on the data presented in Table 11, vibration levels generated from on-site construction activities are predicted to be below the applicable threshold for damage to engineered structures (98 VdB). In addition, construction-related vibration levels at the nearest existing residential and commercial buildings are predicted to be below or barely approach the 65 VdB threshold of human perception. Therefore, on-site construction is not anticipated to result in excessive groundbourne vibration levels at nearby existing residential or commercial structures. With respect to groundbourne vibrations generated by project operations, due to the commercial nature of the proposed project, such operations are not anticipated to generate significant vibration.

Table 11
Reference and Project Vibration Levels for Construction Equipment

Type of Equipment	Reference Maximum Vibration at 25 feet, VdB (rms)	Projected Maximum Vibration Level VdB (RMS)	
		Single-Family Residence (340 feet west)	Commercial Building (80 feet northwest)
Hoe Ram	87	57	66
Large bulldozer	87	57	66
Caisson drilling	57	57	66
Loaded trucks	86	56	65
Jackhammer	79	<55	60
Small bulldozer	58	<55	<55

Source: 2018 Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual and BAC calculations.

Based on the above, impacts related to vibration associated with the proposed project would be within the scope of what was anticipated for the project site in the 2004 IS/MND, and the proposed project would not result in any additional significant impacts or more severe significant impacts related to vibration as compared to the 2004 IS/MND.

Transportation

Since the release of the 2004 IS/MND, the law has changed with respect to how transportation-related impacts may be addressed under CEQA. At the beginning of 2019, updated CEQA Guidelines went into effect. The updated CEQA Guidelines require lead agencies such as the City of Antioch to transition from using "level of service" (LOS) to vehicle miles travelled (VMT) as the metric for assessing transportation impacts under CEQA (see Section 15064.3). The State's requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in GHG emissions. Pursuant to CEQA Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use VMT rather than LOS as the metric to analyze transportation impacts. However, LOS remains an important metric used by the City for the purpose of determining consistency with General Plan goals and policies including, but not limited to, General Plan Policies 3.4.4(d), 3.4.4(e), 7.3.2(a), and 7.3.2(d). Although no longer used for determining significant impacts under CEQA, the LTA prepared for the proposed project includes both a LOS and VMT analysis.

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts, with other relevant considerations consisting of the effects of the project on transit and non-motorized travel. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips, with one end within the project site. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, development projects located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

Consistent with the State's legislation, the City of Antioch adopted the Transportation and VMT Impact Analysis Guidelines (VMT Guidelines) in June 2023.[3] The VMT Guidelines provide screening threshold recommendations that are intended to identify when a project can be determined to cause a less-than-significant impact without conducting a detailed VMT evaluation. The screening threshold recommendations are based on project type and size, location in low VMT areas, and proximity to transit. One such recommendation is that local-serving retail developments (considered to be less than 50,000 sf in size) may be assumed to cause a less-than-significant impact on VMT. Because the buildings proposed for construction as part of the proposed project would not exceed 50,000 sf, both individually and combined, the proposed project qualifies for screening pursuant to the City's VMT Guidelines, and a significant VMT impact would not occur.

Furthermore, according to the LTA, it is reasonable to assume that the location of the proposed project along Lone Tree Way would offer services for the traveling public that are already on the roadway system and need to stop for services. As such, it is reasonable to assume that the proposed project would not generate new demand, but would satisfy existing demand in the region, and would therefore shorten the distance that customers would otherwise travel.

With respect to site access and circulation, site access would be provided from three existing intersections: the signalized Lone Tree Way/Antioch Town Center intersection, and the right in/right out Lone Tree Way/In-Shape Health Club Driveway and Lone Tree Way/Commercial Driveway North intersections. According to the LTA, sufficient storage will be provided within the existing turn pockets to contain anticipated queues following project buildout. In addition, the LTA determined that the proposed project includes adequate access to buildings to accommodate emergency vehicles and refuse services. Furthermore, the LTA determined that the drive-through within Parcel G would have a seven-vehicle queueing capacity; based on the site design, Kimley-Horn concluded that the probability of exceeding the queuing capacity is between one and five percent, and the average queue length would range from 1.1 to 2.2 vehicles, which can be accommodated within the available storage. Similarly, the probability that the queue within the drive-through in Parcel F would exceed the nine-vehicle queuing capacity would range from four to 26 percent, with average queue length ranging from 2.7 to seven vehicles, which can be accommodated by the available storage. Finally, the probability that the queue for the automated car wash within Parcel E would exceed the nine-vehicle capacity would range from two to seven percent, with average queue lengths ranging from two to 3.3 vehicles, which can be accommodated within the available storage. As such, the LTA concluded that the configurations of the proposed drive-throughs and car wash are unlikely to result in on-site queuing issues. Therefore, although the proposed car wash, quick service restaurant, and quick service restaurant/retail building were not anticipated in the 2004 IS/MND, the LTA concluded that impacts related to site circulation and site access would be less than significant.

It is noted that all mitigation measures included in the 2004 IS/MND related to transportation have already been implemented, and, therefore, do not apply to the proposed project. For example, the longer southbound left turn lane from Lone Tree Way into the project entrance required by Mitigation Measure 14a.1 was constructed at the same time as the In-Shape Family Fitness Center. Similarly, the right turn deceleration lane in to the site's signalized entrance on Lone Tree Way, as required by Mitigation Measure 14a.3, has already been constructed.

Based on the above, impacts related to transportation associated with the proposed project would be within the scope of what was anticipated for the project site in the 2004 IS/MND, and the

[3] City of Antioch. *Transportation and VMT Impact Analysis Guidelines*. June 2023.

proposed project would not result in any additional significant impacts or more severe significant impacts related to transportation as compared to the 2004 IS/MND.

Remaining Impact Areas

In addition to the CEQA topics discussed in the previous sections of this Consistency Memorandum, the 2004 IS/MND included analysis of the following issue areas:

- Aesthetics;
- Agriculture and Forestry Resources;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Population and Housing;
- Public Services;
- Recreation;
- Tribal Cultural Resources;
- Utilities and Service Systems; and
- Wildfire.

As discussed previously, construction and operation activities associated with the proposed project would occur within a site previously analyzed as part of the 2004 IS/MND and would not result in any increase to the area of disturbance previously anticipated by the 2004 IS/MND. For these reasons, and given that site conditions, as well as conditions in the project vicinity, have remained the same since adoption of the 2004 IS/MND, or, in the case of Parcel G, have been partially developed consistent with what was anticipated in the 2004 IS/MND, the proposed project would not result in new significant impacts or substantially more significant impacts related to the following environmental issue areas: aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, public services, recreation, tribal cultural resources, and wildfire. For example, new scenic vistas have not appeared within the project vicinity subsequent to the adoption of the 2004 IS/MND, and project design would be required to comply with applicable General Plan policies and City of Antioch regulations related to building height, setback, and lighting. Similarly, the project site has not undergone changes related to farmland, subsurface conditions, or hydrology since adoption of the 2004 IS/MND. The existing uses within the project vicinity are the same or similar to those that existed during preparation of the 2004 IS/MND; the surrounding single-family residences were generally constructed prior to 2000, and construction of the medical offices and commercial uses to the north began in 2004. As such, project construction would not be anticipated to result in substantial increases in impacts to existing sensitive receptors beyond the levels anticipated by the 2004 IS/MND. Therefore, the proposed project would not result in any additional significant impacts or more severe significant impacts related to the aforementioned environmental topics as compared to the 2004 IS/MND, and further environmental review related to such is not required.

Similarly, the biological resources in the project vicinity and at the project site have remained the same since adoption of the 2004 IS/MND. The 2004 IS/MND determined that the only special-

status species protected under State and/or federal regulations with the potential to occur on-site is the burrowing owl. The 2004 IS/MND concluded that implementation of Mitigation Measures 4-a.1 through 4-a.3, which require preconstruction surveys for the species and appropriate actions should burrowing owl be discovered on-site, would reduce potential impacts to the species to a less-than-significant level. As shown below, the aforementioned mitigation measures have been revised to be consistent with the most recent standards and regulations. Compliance with such mitigation would ensure that new or substantially more significant impacts beyond what was identified in the 2004 IS/MND would not occur. Therefore, the proposed project would not result in any additional significant impacts or more severe significant impacts related to biological resources as compared to the 2004 IS/MND, and further environmental review related to such is not required.

With respect to energy, the proposed project would be subject to the currently adopted 2022 California Green Building Standards Code (CALGreen Code) and the Building Energy Efficiency Standards (Title 24, Part 6 of the California Code of Regulations), which include more stringent requirements related to energy efficiency than previous iterations of the aforementioned regulations to move the State closer to its net-zero energy goals. The 2022 Building Energy Efficiency Standards are designed to move the State closer to its net-zero energy goals for new development by requiring indoor water use consumption to be reduced through the establishment of maximum fixture water use rates, diversion of 65 percent of construction and demolition waste from landfills, and mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particle board. Energy reductions relative to previous Building Energy Efficiency Standards are achieved through various regulations, including requirements for the use of high-efficacy lighting, improved water heating system efficiency, and high-performance attics and walls. As incorporated in the 2019 Building Energy Efficiency Standards, the 2022 Building Energy Efficiency Standards require that that certain non-residential developments be constructed with solar readiness for the future installation of rooftop solar panels. Additionally, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction. Therefore, the proposed project would not result in any additional significant impacts or more severe significant impacts related to energy as compared to the 2004 IS/MND, and further environmental review related to such is not required.

Finally, with respect to land use and planning and population and housing, the proposed project would not physically divide an established community. In addition, because the proposed uses would be consistent with the General Plan land use and zoning designations for the site, the proposed project would be generally consistent with the uses anticipated in the 2004 IS/MND. New utility lines installed as part of the proposed project would be extended from existing lines in the adjacent roadway network and would be constructed consistent with the City's applicable engineering design standards. Additionally, any new utility lines associated with the proposed project would be sized to accommodate only the project, thereby ensuring the project does not induce substantial unplanned population growth. Furthermore, the proposed project would be subject to applicable development impact fees, ensuring the project's fair-share contribution for any improvements to various public services and utilities. Therefore, the proposed project would

not result in any additional significant impacts or more severe significant impacts related to land use and planning and population and housing as compared to the 2004 IS/MND, and further environmental review related to such is not required.

Overall, the proposed project would not result in any additional significant impacts or more severe significant impacts as compared to the 2004 IS/MND, and further environmental review related to aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, Tribal cultural resources, and wildfire is not required.

It should be noted that the 2004 IS/MND did not identify any significant impacts and associated mitigation measures beyond those discussed above related to biological resources and transportation. Therefore, the 2004 IS/MND does not include any additional mitigation measures that would be applicable to the proposed project.

Thus, with respect to the foregoing issue areas, the proposed project would result in similar impacts as those identified within the 2004 IS/MND. Compliance with applicable federal, State, and local policies, regulations, and standards would ensure impacts related to the aforementioned issue areas would be reduced to a less-than-significant level.

F. CONCLUSION

As established in the discussions above, the proposed project would be within the scope of the 2004 IS/MND analysis related to each CEQA Appendix G environmental resource area. The proposed project would not result in any new significant information of substantial importance, new impacts, new or revised alternatives, or an increase in the severity of previously identified significant impacts that would require major revisions to the 2004 IS/MND. As such, the proposed project would not result in any conditions identified in CEQA Guidelines Sections 15162 or 15164. Therefore, additional environmental review under CEQA would not be required for the proposed project.

G. APPLICABLE MITIGATION MEASURES

As stated above, transportation related mitigation measures contained in the 2004 IS/MND have been fully implemented by the existing project. The following biological mitigation measures from the 2004 IS/MND have been revised to comply with current standards and to provide clarity for the enforcement agencies.

Mitigation Measure 4-a.1.

> *If construction is scheduled to begin during the non-breeding season (late September through the end of January) for burrowing owl, a qualified biologist shall conduct a survey for burrowing owls and burrows or debris that represent suitable nesting or refugia habitat for burrowing owls within areas of proposed ground disturbance. Should owls be present, construction activities shall avoid the refugia by 250 feet until the burrowing owl vacates the site. If burrow exclusion/passive relocation is required during the non-breeding season, the project applicant shall consult with the CDFW pursuant to Fish and Game Code Section 2081. Avoidance and minimization measures prescribed as part of the consultation process would include recommendations provided in the CDFW Staff Report on Burrowing Owl*

Mitigation (2012). Survey results shall only be valid for the year in which they are conducted.

If clearing and construction activities are planned to occur during the nesting period for burrowing owls (February 1–August 31), a qualified biologist shall conduct a targeted burrowing owl nest survey of all accessible areas within 500 feet of the proposed construction area no more than 14 days prior to construction initiation, as described in the CDFW Staff Report on Burrowing Owl Mitigation (2012). Surveys shall be repeated if project activities are suspended or delayed for more than 14 days during nesting season. The results of the surveys shall be submitted to the City of Antioch Community Development Department. If burrowing owls are not detected, further mitigation is not required. Survey results shall only be valid for the year in which they are conducted.

If an active burrowing owl nest burrow (i.e., occupied by more than one adult owl, and/or juvenile owls are observed) is found within 250 feet of a construction area, construction shall cease within 250 feet of the active burrow until a qualified biologist determines that the young have fledged and adult has vacated, or it is determined that the nesting attempt has failed. If the applicant desires to work within 250 feet of the nest burrow, a qualified biologist shall make recommendations on an appropriate buffer and consult with the City and CDFW to determine whether and/or how the nest buffer can be reduced.

If nesting burrowing owls are found during the pre-construction survey, a habitat assessment shall be conducted and mitigation for the permanent loss of burrowing owl habitat, as determined by a qualified biologist, shall be accomplished consistent with the recommendations in the CDFW Staff Report on Burrowing Owl Mitigation.

A report detailing compliance with the provisions established herein shall be submitted for review and approval to the City of Antioch Community Development Department within 30 days of completion of all such provisions.

~~*Mitigation Measure 4-a.2.*~~

~~*During the non-nesting season (defined as September 1 - January 31) and prior to any construction on the site, the project sponsor shall complete a survey within the project's impact areas including areas on the East Bay Municipal Utility District easement which may experience disturbance during construction.*~~

~~*If owls are found within the project area during the non- nesting season, a qualified ornithologist, in consultation with regulatory agencies, could evict any owls within 250 feet of construction zones and other associated impact areas, to avoid mortality of any owls or destruction of occupied burrows. If breeding owls are found on the site during the nesting season (February 1 - August 31), no activity within 250 feet shall be allowed until an ornithologist has determined all young have fledged. Any eviction activities shall be dependent on a signed Mitigation Agreement (MA) between the project sponsor and CDFG. If owls are known to have nested or been resident on the project site within three years prior to site alteration, the project sponsor shall comply with the off-site habitat compensation measures described in Mitigation 4-A.3, below.*~~

~~*Mitigation Measure 4-a.3.*~~

> ~~*If occupied burrows are present at the project site the project applicant shall compensate for the loss of suitable burrowing owl nesting and foraging habitat present on the project site. CDFG recommends that 6.5 acres of mitigation be required for a pair or single owl. To implement this mitigation measure, CDFG recommends that the City of Antioch require the applicant to establish a conservation easement or purchase credits at an approved mitigation bank for the loss of burrowing owl habitat.*~~
>
> ~~*Prior to the issuance of a grading permit for the project, the applicant shall post a performance bond with the City guarantying that they will either establish a conservation easement for burrowing owls on a suitable parcel (approved by CDFG) or purchase the required amount of credits (one credit equals one acre) at the Haera Wildlife Conservation Bank in eastern Alameda County (just south of I-580), which is certified as a mitigation bank by CDFG.*~~

New Mitigation Measures

None required.

2025-01_Lone Tree Retail IS-MND_PD2024-0001

Final Audit Report 2025-02-26

Created:	2025-02-26
By:	Monique Villagrana (mvillagrana@antiochca.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAADOIo4pMZQBaQJL7-Up-G07yG_SNc1Qhs

"2025-01_Lone Tree Retail IS-MND_PD2024-0001" History

Document created by Monique Villagrana (mvillagrana@antiochca.gov)
2025-02-26 - 7:51:52 PM GMT

Document emailed to Kwame Reed (kreed@antiochca.gov) for signature
2025-02-26 - 7:52:02 PM GMT

Email viewed by Kwame Reed (kreed@antiochca.gov)
2025-02-26 - 10:05:22 PM GMT

Document e-signed by Kwame Reed (kreed@antiochca.gov)
Signature Date: 2025-02-26 - 10:20:37 PM GMT - Time Source: server

Agreement completed.
2025-02-26 - 10:20:37 PM GMT