Land Evaluation and Site Assessment

Almond Avenue Warehouse

APN 0292-055-03, 04

Prepared for:

San Bernardino County – Land Use Services
385 N. Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

Prepared by:

Lilburn Corporation
1905 Business Center Drive
San Bernardino, CA 92408

September 2022

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LAND EVALUATION AND SITE ASSESSMENT

This report is an evaluation of potential impacts to agricultural land associated with a proposal to construct and operate a 208,000 square-foot warehouse building on a 9.54-acre site located on the south side of Almond Avenue in the community of Redlands in unincorporated San Bernardino County (APN 0292-055-03 and 04). This report has been prepared by Lilburn Corporation under contract with XEBEC as part of the California Environmental Quality Act (CEQA) compliance for the proposed project. Appendix G of the CEQA Guidelines identifies the California Agricultural Land Evaluation and Site Assessment (LESA) Model as an optional method for assessing impacts to agriculture and farmland associated with development projects.

The LESA was prepared in accordance with the California Department of Conservation Office of Land Conservation (1997). LESA is a term used to define an approach for rating the relative quality of land resources based upon specific measurable features. The LESA system is a point-based approach composed of six factors. Two Land Evaluation factors are based upon soil resource quality. Four Site Assessment factors rate the value of the land for agricultural purposes based on the size of the site, water resource availability, surrounding agricultural lands and surrounding protected resource lands. Each factor is separately rated on a 100-point scale and then weighted relative to one another and combined, resulting in a single numeric score with a maximum attainable score of 100 points. It is this project score that becomes the basis for a determination of a project's potential significance, based upon a range of established scoring thresholds[1].

PROJECT DESCRIPTION AND SETTING

The Applicant is requesting approval of a Conditional Use Permit to allow for the construction and operation of a 208,000 square-foot warehouse building on a 9.54-acre site located on the south side of Almond Avenue just west of Alabama Street in City of Redlands' Sphere of Influence. The project site has a land use category of Limited Industrial (LI) and occurs in the East Valley Area Plan and is zoned East Valley/Special Development (EV/SD). The proposed warehouse is an allowable use per current zoning provided a Conditional Use Permit is approved.

Examination of the project site through the California Important Farmland Finder, revealed that the 9.54-acre project site is designated Prime Farmland (see Figure 1 – Project Site Farmland Designations).[2] San Bernardino County has indicated a LESA is required to evaluate the potential for significant or adverse impacts associated with the loss of agricultural land. If so, mitigation may include the purchase of agricultural land that has been set aside for production in perpetuity.

[1] California Department of Conservation, Land Evaluation and Site Assessment Model, 1997
[2] https://maps.conservation.ca.gov/DLRP/CIFF/, Accessed September 1, 2022.

FIGURE 1 - PROJECT SITE FARMLAND DESIGNATIONS

LESA EVALUATION

The site was evaluated using the California LESA Model to identify whether the proposed project would meet the threshold criteria as a significant impact to Agricultural Resources under the CEQA Guidelines. The factors used to perform the LESA evaluation are described as follows:

LAND EVALUATION

The Land Evaluation (LE) portion of the LESA Model focuses on two main components that are separately rated:

1. **Land Capability Classification Rating**: The Land Capability Classification (LCC) indicates the suitability of soils for most kinds of crops. Soils are rated from Class I to Class VIII. Soils having the fewest limitations receive the highest rating.

2. **Storie Index Rating**: The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture use. This rating is based upon soil characteristics only.

According to the United States Department of Agriculture (USDA) survey, Hanfor sandy loam (HbA) (0-2% slopes) is the only soil type that occurs on the 9.55-acre site. This soil is a Capability Class I soil with a Storie Index rating of 95. According to the Natural Resources Conservation Service (NRCS), Class I soils have few limitations that restrict their use. There are no capability subclasses[3] associated with this soil type and thus no notable limitations.

The LESA Model assigns ratings to each land capability class and multiplies that number by the proportion of the project area that contains each soil class to find the Land Capability Classification score. A Storie Index score is calculated by multiplying the proportion of the project within each soil type by the soil type's Storie Index rating. Table 1 provides a summary of the Land Evaluation (LE) scores.[4] In this case, Class I soils have a LCC Rating of 100. The project site is composed of only one capability class and one corresponding Storie Index.

[3] Soil groups within a class as noted within a small letter to the class numeral (e.g., Class II-e) The letter e shows that the main limitation is risk of erosion.
[4] The final LE and Site Assessment (SA) scores are entered into the Final LESA Score Sheet as shown in Table 5, later in this report.

Table 1
Land Capability Classification (LCC) and Storie Index Score

A	B	C	D	E	F	G	H
Soil Map Unit	**Acres**	**Proportion of Project Area**	**LCC**	**LCC Rating**	**LCC Score**	**Storie Index**	**Storie Score**
HbA	9.55	1.0	I	100	100	95	95
TOTALS	**9.55**	**1.0**		**LCC Total Score**	**100**	**Storie Index Total Score**	**95**

SITE ASSESSMENT

The California LESA Model includes the following four Site Assessment (SA) factors that are separately rated:

- Project Size Rating
- Water Resources Availability Rating
- Surrounding Agricultural Land Rating
- Surrounding Protected Resource Land Rating

A. Project Size Rating

The project size rating recognizes the role that farm size plays in the viability of commercial agricultural operations. In general, larger farming operations provide greater flexibility in farm management and marketing decisions. Further, they tend to have a greater economic impact through direct employment and upon supporting industries that include farm equipment operators, fertilizer/pesticide vendors and food processors.

To define agricultural productivity, the size of the farming operation is considered as well as the proportion of different quality lands comprising the total acreage. Lands with higher quality soils facilitate greater management and cropping flexibility and have the potential to provide higher economic return per acre unit than land with lower quality soils. Thus, rather than rely upon a single acreage figure in the Project Size rating, the project is divided into three acreage groupings based upon possible LCC ratings. Under the Project Size rating, relatively fewer acres of high quality soils are required to achieve a maximum Project Size score. Alternatively, a maximum score on lesser quality soils could also achieve a maximum Project Size score. Table 2 summarizes the Project Size score for the proposed project. As shown, the 9.55-acre site is composed entirely of Class I soils, and due to the site of the site (less than 10 acres) the corresponding Project Size score is zero (0).

Table 2
Project Size Score

	LCC CLASS I-II	LCC CLASS III	LCC CLASS IV-VIII
Total Acres	**9.55**	**0**	0
Project Size Scores	**0**	**0**	**0**

B. Water Resources Availability Rating

The Water Resources Availability Rating is based upon the availability of water sources that supply the project site and then determining whether restrictions in supply are likely to take place in years characterized as periods of drought and non-drought.

The 9.55-acre site was developed as agricultural land and used for a citrus grove, however there were no groundwater wells noted on-site. According to the Phase I ESA (March 28, 2022), water is brought in from an off-site well and is filtered on-site before application to the orange grove irrigation system. A municipal water supply serves the vicinity by the Redlands Municipal Utilities Department; there are distribution mains adjacent to the site in Almond Avenue and Alabama Street. As referenced, without water for irrigation purposes, the soils would not achieve the Class I rating. For the purposes of this discussion, it is assumed an uninterrupted supply of water is available for irrigation and/or domestic uses. Thus, the site was given the highest Water Resource Availability Rating (i.e., 100) due to the consistent water availability. The project site has no known physical or economic restrictions that could alter water supply during either drought or non-drought years. Table 3 summarizes the Water Resources Availability score.

Table 3
Water Resource Availability

Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score
Well water	100%	100	100
Total Water Resource Score			**100**

C. Surrounding Agricultural Land Rating

The Surrounding Agricultural Land Rating is designed to provide a measurement of the level of agricultural land use within the Zone of Influence (ZOI) of the project site. The "Zone of Influence" is defined as land within one-quarter mile from the project site boundary. Parcels that are intersected by the 0.25-mile buffer are included in their entirety. Based upon the percentage of agricultural land in the ZOI, the project site is assigned a Surrounding Agricultural Land score.

The LESA Model rates the potential significance of the conversion of an agricultural parcel that has a large proportion of surrounding land in agricultural production more highly than one that has a relatively small percentage of surrounding land in agricultural production.

The project site is currently occupied by a single-family residence and orange groves. Surrounding land uses include a storage warehouse to the north, multi-family and commercial to the south, a commercial shopping center to the east and a storage warehouse to the west. Figure 2 depicts the ZOI within 0.25 miles of the project site boundary. Per the LESA Instruction Manual, because no portion of the surrounding land is used for agricultural production, the Surrounding Agricultural Land Score for the proposed project is zero as shown in Table 4.

Table 4
Surrounding Agricultural Lands

Total Acreage within "Zone of Influence"	Acres in Agricultural Production	Acres of Protected Resource Land	Percent in Agriculture	Percent Protected Resources Land	Surrounding Agricultural Land Score	Surrounding Protected Resource Land Score
240	0	0	0%	0%	**0**	**0**

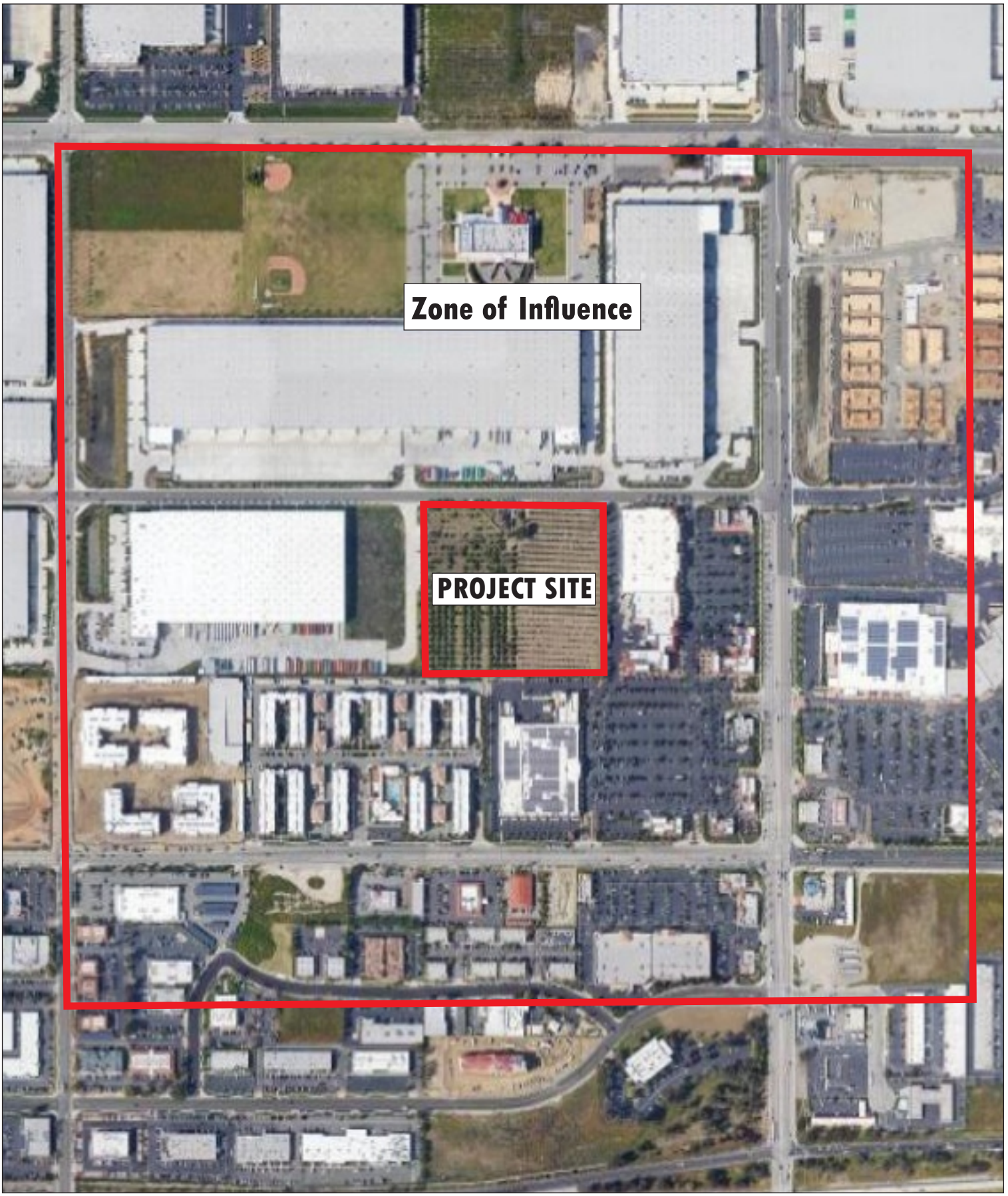
D. Surrounding Protected Resource Land Rating

The Surrounding Protected Resource Land Rating is an extension of the Surrounding Agricultural Land Rating and is scored in a similar manner. Protected resource lands are those lands with long-term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following:

- Williamson Act contracted land;
- Publicly owned lands maintained as park, forest, or watershed resources; and
- Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

No land within 0.25 miles of the project site occurs within a protected land resource (i.e., under Williamson Act Contract). Per the LESA Instruction Guide, since less than 40 percent of the surrounding land is protected, the Surrounding Protected Resource Land Rating score is zero.

FIGURE 2 - PROJECT ZONE OF INFLUENCE



CONCLUSION

The LESA Model is weighted so that one-half of the total score is derived from the LE and one-half from the SA. As shown in Table 5, the LE sub-score is 48.75, while the SA sub-score is 15. The final LESA score is 63.75. As discussed in Section IV of the LESA Instruction Manual, a final LESA score between 60 and 79 is considered significant unless either the LE sub-score or the SA sub-score is less than 20 points. In this case, the LE sub-score is greater than 20 points (48.75); however, the SA sub-score is less than 20 (15). Thus, the project would have a less than significant impact on agricultural resources. Therefore, no mitigation for agricultural impacts would be required should the project be developed as proposed.

Table 5
Final LESA Score Sheet Summary

	Factor Rating (0-100 Points)	Factor Weighting (Total = 1.00)	Weighted Factor Rating
Land Evaluation (LE)			
1. Land Capability Classification (LCC Rating)	100	0.25	25
2. Storie Index Rating	95	0.25	23.75
		LE Sub-score	**48.75**
Site Assessment (SA)			
1. Project Size Rating	0	0.15	0
2. Water Resource Availability Rating	100	0.15	15
3. Surrounding Agricultural Land Rating	0	0.15	0
4. Surrounding Protected Resource Lands Rating	0	0.05	0
		SA Sub-score	**15**
		TOTAL	**63.75**

REFERENCES

California Department of Conservation, *California Agricultural Land Evaluation and Site Assessment Model, Instruction Manual*, 1997.

United States Department of Agriculture Soil Conservation Service, Soil Survey of San Bernardino County Southwestern Part, California, Sheet 9 (Redlands Quadrangle), January 1980.