



September 1, 2020

A2R Architects
190 S. Orchard Ave. Suite C250
Vacaville, CA 95688
707-453-0196
Email: rob.h@a2rarch.com

Project: Lister Construction Building
Subject: Analysis of Open Land Requirement

Dear Mr. Henley:

We understand that A2R Architects is designing a 20,500-square-foot building north of the Nut Tree Airport on E. Monte Vista Ave near Aviator Drive. The project site is 3.66 acres and is triangular in shape. The building's majority tenant (15,125 SF) will be Ambrose Solar. The remainder of the building (5,420 SF) will be occupied by Lister Construction. Due to the site's proximity to the Nut Tree Airport, the project will need to comply with the Solano County Airport Land Use Compatibility Plan (ALUCP).

As requested, Mead & Hunt, Inc. (Mead & Hunt) is providing an analysis of the ALUCP's Open Land Requirement and whether the proposed project would meet those requirements. Other airport land use compatibility factors addressed by the ALUCP (e.g., noise, safety, overflight, and airspace protection) are not included in our analysis.

The ALUCP for the Nut Tree Airport (May 1988) designates six zones (A – F) with varying land use compatibility restrictions for the areas surrounding the Nut Tree Airport. The proposed project lies within the "B" Zone, also referred to as the "Inner Approach/Departure Zone." The ALUCP requires 50% of Zone B to remain as open land.

Note 3 for the Compatibility Criteria Table states the following:

The indicated percentage of gross area (total area in zone, including airport property except in zone A) would remain free of structures and other major obstacles. To be considered open land the area must be sufficiently large and unobstructed to enable an aircraft to make an emergency landing with a high probability of no serious injuries to the occupants of the aircraft or major damage to structures on the ground. Substantial damage to the aircraft may occur. Spaces as small as approximately 100 feet by 300 feet or 75 feet by 400 feet are considered adequate, although larger areas are desirable. Roads and adjacent landscaping qualify if they are wide enough and not obstructed by large trees, signs, or poles. These areas should be oriented as closely as practical to the common direction aircraft flight over the area....

The City of Vacaville has prepared the two attached graphics depicting the remaining open land within Zone B should the proposed project be developed. One graphic shows the open land remaining within the northern portion of Zone B where the proposed project is located, while the second graphic shows the remaining open land within the entirety of Zone B (north and south portions of Zone B). The ALUCP isn't clear if the 50% open land requirement applies to each of the two B Zones separately, or as one whole zone. However, in either case, the open land remaining after development of the proposed project would remain above 50%.

- The portion of open land remaining available in only the northern Zone B is 53%
- The portion of open land remaining available in both the northern and southern Zone B is 60%

As a practical matter, we would recommend that the open land be calculated and met for each end separately. Aircraft operating north of the airport may not have the option to reach the southern open area (and vice versa) in the event of an emergency landing.

In the open land graphics prepared by the City of Vacaville, two narrow strips of open land are included to the north and east of the proposed project site. These don't appear to meet the minimum sizes specified in the ALUCP (100'x300' or 75'x400'). We recommend the City revise the graphic if necessary and recalculate the total open space percentage if appropriate.

It appears that the City excluded a portion of the Interstate 505 right-of-way as suitable landing space due to the presence of a freeway overpass that would potentially interfere with an aircraft making an emergency landing. It appears that portions of the excluded area would meet the minimum size requirements. Regardless, if those areas were included, they would only serve to increase the available open land in the Zone.

Based on our review of the ALUCP open land requirement, the exhibits prepared by the city, and the assumption that any revision to the small areas of open land designation on the north and east of the proposed project site would not substantially change the overall open land percentage, it is Mead & Hunt's professional opinion that the required open land for Zone B would be achieved based on existing open land areas within the zone.

Mead & Hunt was not asked to evaluate the project with respect to other compatibility factors: safety, airspace, overflight, and noise. Nonetheless, no obvious concerns were apparent to us.

Sincerely,

MEAD & HUNT, Inc.



Corbett Smith, C.M.
Aviation Planner

Attachment: Zone B Map 1 & 2



