



# LIVE OAK ASSOCIATES, INC.

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an Ecological Consulting Firm

August 25, 2021

Josh Rupert  
STC Venture, LLC  
10121 Miller Ave., Suite 200  
Cupertino, CA 95014

**RE: Review of the Cityline Sunnyvale Building 1B project's conformance with the City of Sunnyvale's Bird Safe Building Design Guidelines, in the City of Sunnyvale, Santa Clara County, California. (PN 2611-01)**

Dear Mr. Rupert:

Per your request, Live Oak Associates, Inc. (LOA) has conducted a review of a proposed STC Venture, LLC project called Cityline Sunnyvale Building 1B located in the City of Sunnyvale, California. The purpose of the review was to understand and document whether the proposed project conforms with the City's Bird Safe Building Design Guidelines (adopted on January 28, 2014). To accomplish this work, LOA reviewed project plans, studied the setting of the site via aerial imagery, and interviewed project engineers regarding building design. The following report documents our findings.

## **Project Setting.**

The Building 1B project is in downtown Sunnyvale located at the intersection of S. Mathilda Avenue and W. McKinley Avenue. The project site also shares borders with W. Iowa Avenue, Booker Avenue, and Aries Way. The surrounding land uses are primarily commercial and multi-unit residential buildings, roadways, and parking. The City's Redwood Park is approximately 500 feet east of the project site and measures approximately 2.4-acres. Additionally, Redwood Park is slated for redevelopment with multi-story buildings for most of the park footprint. There are no bodies of water larger than 1 acre in extent within 1 mile from the project site, and there is very little open space in the vicinity of the site. Open space occurring within 0.5-mile radius of the project includes Redwood Park as well as Washington Park approximately 0.25 miles to the west.

The proposed project includes development of a site, with no existing buildings, that has been vacant since 1943, into a single 85-foot tall, 6-level building with a mechanical penthouse. The site would consist of three parking levels, one below grade and two above, with ground level retail as well as 153,000 square feet of office space distributed throughout levels 3 through 6.

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## Bird Safe Building Design Guidelines.

The City of Sunnyvale maintains bird safe building design guidelines to inform CEQA review for new development. The guidelines are designed to reduce the impact of buildings, specifically windows, on native birds that are known to collide with windowpanes often resulting in death to the individual bird. Known as the Bird Safe Building Design Guidelines (“Guidelines”)—adopted by the City on January 28, 2014—the Guidelines provide specific design direction for buildings. The Guidelines are separated into two options: Option 1 is for buildings within 300 feet of a water body larger than 1-acre or immediately adjacent to a landscaped area, open space, or park larger than 1-acre, and Option 2 is for other buildings in all other locations within the city. The existing condition of the project site and surrounding area qualifies itself for the guidelines specified in Option 2. Therefore, LOA has reviewed the project’s level of conformance with this set of guidelines. Table 1 lists the Option 2 Guidelines for bird safe building design and documents relevant design elements of the Building 1B project as they are related to each guideline.

<b>Table 1. Sunnyvale Bird Safe Building Design Guidelines – Option2, Building 1B design elements, and conformance level</b>		
<i>Guidelines for buildings not within 300ft of water bodies or immediately adjacent to landscaped area/open space/park</i>	<i>Building 1B Project Design Elements</i>	<i>Conformance</i>
<i>Avoid large expanse of glass near open areas, especially when tall landscaping is immediately adjacent to the glass walls</i>	<p>The proposed buildings would be in a highly urbanized portion of the City of Sunnyvale with limited open space in general and the site itself does not share borders with any of the parks in the area. The closest park—Redwood Park—occurs east of the proposed project approximately 500 feet away at their closest measurement (Note: this park is slated for substantial redevelopment into multi-story buildings). Therefore, all glass elements of the building exterior are not adjacent to open areas. Furthermore, the applicant has reported that concrete and metal elements are interspersed throughout most of the glass panels to make up the building’s façade. This effect would make the building more visible to birds in general.</p> <p>Though there are no open areas adjacent to the site, the landscaping elements of the design do incorporate trees adjacent to the building which can reflect in the glass. Low reflectivity glass proposed as part of the project (J. Steinler, pers. comm. August 2021) would help reduce misidentification of the reflections for suitable habitat.</p> <p>The building also has an expanse of glass wall curtain approximately 130 ft. X 60 ft. in size on the North façade. While this is not inconsistent with Option 2, the use of bird safe glass is recommended for such an expanse to reduce the probability of bird strikes.</p>	In conformance.

<i>Avoid the funneling of open space towards a building face</i>	Open space will not be funneled toward the building. Building is in a densely developed urban center of Sunnyvale.	In conformance.
<i>Prohibit glass skyways or freestanding glass walls</i>	The building design does not include any skyways or freestanding glass walls. It is our understanding that the glass balcony parapets/railings of the building will be redesigned from a plan set that LOA reviewed to be constructed with bird safe glass (J. Rupert, Pers. Comm., August 2021). This would ensure the parapets/railings would not be significantly dangerous for birds.	In conformance.
<i>Avoid transparent glass walls coming together at building corners to avoid birds trying to fly through glass</i>	<p>Much of the building avoids transparent glass corners. Balcony glass railings will utilize bird safe glass, and other corners are composed of opaque materials. Transparent glass corners appear to have been limited for this building, but they do occur in two limited areas:</p> <ol style="list-style-type: none"> <li>1. The walls of S. Mathilda and Booker Ave</li> <li>2. The walls of W. McKinley and S. Mathilda</li> </ol> <p>The corners of W. McKinley and S. Mathilda are joined with a large fin that obscures the very corners of the windows and may deter some species from trying to fly through the clear glass corner beyond the fin. However, some species may still try to fly from one side of the building through the perceived opening to suitable habitat on the other side of the glass corner.</p> <p>The corners of S. Mathilda and Booker are set back from the building edge and partially obscured by the bird safe glass railings of the balconies. Therefore, the likelihood of mortal bird strike occurring is significantly reduced from a typical clear glass to clear glass corner. In fact, non-mortal bird strike at this corner is likely to enable a short fall onto the patio which will prevent the second impact of a long fall to the ground below the building.</p> <p>Based on the project design there is remains a possibility that bird strike could occur at an increased frequency due to birds erroneously seeing a flight path through a glass wall corner. In both cases, this may be reduced from typical clear glass corners.</p>	Partially in conformance.
<i>Reduce glass at top of building, especially when incorporating a green roof into the design;</i>	No green roof is proposed. The top of the building contains a mechanical penthouse that will not have glass panels. The floors below utilize low-reflectivity glass (20%) broken up with concrete and metal elements.	In conformance
<i>Prohibit up lighting or spotlights;</i>	The building design intends to utilize the existing street lighting existing on Mathilda Ave, McKinley Ave, and Aries Way.	In conformance
<i>Shield lighting to cast light down onto the area to be illuminated;</i>	There is no up lighting or spotlights incorporated into the building design.	In conformance

<i>Turn commercial building lights off at night or incorporate blinds into window treatment to use when lights are on at night;</i>	The project is proposed as a shell and core structure; therefore, the interior design is subject to future tenancy. Interior windows are provisioned for interior blinds if the future tenant chooses.	N/A
<i>Create smaller zones in internal lighting layouts to discourage wholesale area illumination;</i>	The project is proposed as a shell and core structure; therefore, the interior design is subject to future tenancy.	N/A

### **Building 1B Project Bird Safe Design Conformance.**

In general, the Building 1B project appears to have adopted elements of the Bird Safe Building Design Guidelines as part of project planning. The proposed project is considered mostly in conformance with the guidelines for buildings that are not within 300 feet of open space or water bodies. Building windows are generally low reflectivity (20%). Most of the windows are not contiguous across floors as they are broken up with alternate opaque materials (i.e., concrete and metal). Glass railings on the balconies are proposed to be constructed with a bird safe design. Additionally, the building design intends to utilize existing street lighting on Mathilda Ave, McKinley Ave, and Aries Way for lighting and will not incorporate up lighting or spotlights. Thus, the proposed project conforms to important protective measures from the Guidelines.

The only detail of the proposed building that does not precisely conform with the Guidelines is the design of two of the building corners where glass panels come to meet at building corners; specifically, at the intersection of S. Mathilda Avenue and Booker Avenue as well as the intersection of S. Mathilda Avenue and W. McKinley Avenue. The later corner does include a large fin that will obscure the view for birds at the very edge of the corner (i.e. several feet into the building). This is likely to deter some bird species from trying to fly through the corner where they may perceive a pathway to suitable habitat. But some species may still try to fly through the two panes of glass at the corner in an attempt to fly around the fin structure they can see but flying into the glass that they cannot see. The corner of Mathilda and Booker is setback from the balcony, and the glass of the balcony railings will include bird safe glass. Therefore, this corner is not as likely to serve in appearance as a highly suitable pathway for birds. Birds may slow slightly navigating the railings. If they do impact the corner in a non-fatal way (which is somewhat common for bird strikes), there is a chance that they land only a short distance beneath the point of impact on the balcony where they will not suffer from a multi-floor fall and they may be able to regain their bearings and return to flight.

If there are economically and aesthetically acceptable ways to decrease visibility through windows at the two corners referenced above, they should be explored. However, the urbanized setting of the building means that species that would be typical in the area are mostly those that are common in urban settings and adapted to occurrence around a variety of building windows.

As noted in Table 1, two of the Guidelines pertain to interior design elements (e.g., interior lighting, use of blinds, etc.). For these, they are dependent on future tenant improvements, which are not included in the project. Therefore, LOA recommends that interior-specific Guidelines be addressed as part of the Tenant Improvement permit stage of the project.

**Conclusion.**

Given that most of the project's design measures are in conformance with the Guidelines, LOA concludes that the proposed Cityline Sunnyvale Building 1B project is mostly in conformance with Option 2 of the City's Guidelines.

Sincerely,



Nathan Hale, M.S.  
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Staff Biologist



Cristal Romero  
Staff Ecologist