

2. Wind

Existing Conditions

This wind section is based upon the Pedestrian Wind Study prepared by Rowan Williams Davies and Irwin Inc. (RWDI), dated March 29, 2001, July 17, 2001, and February 8, 2002 (**Appendix 4**). The purpose of the study was to assess the wind environment around the subject property in terms of pedestrian comfort and safety for typical summer and winter seasons, and identify impacts associated with implementation of the Project. The study was prepared using a 1:400 scale model of Century City, which included existing and proposed configurations of the subject property, and all relevant surrounding buildings and topography within a 1,600 feet radius of the study site. The model was placed in a boundary layer wind tunnel. Up to seventy wind speed sensors were placed throughout the model to measure mean and gust wind speeds at a full scale height of approximately 5 feet.

Wind statistics recorded at the Santa Monica Municipal Airport between 1973 and 1999 were analyzed for the Summer (May through October) and Winter (November through April) seasons. Winds from the southwesterly directions are predominant in both seasons. The wind statistics were combined with the wind tunnel data in order to predict the frequency of occurrence of full scale wind speeds.

Average gust wind speeds predicted to occur at each test location on the model were compared to pedestrian comfort criteria to determine the acceptability of the wind conditions for pedestrian use and assigned to one of four general comfort categories. Wind conditions are acceptable for sitting, standing, or walking if the wind speeds are within their specified ranges at least 80% of the time. An uncomfortable designation means that the 80% criterion was not satisfied for walking. The four comfort categories are:

- **Sitting:** Gust speeds up to 11 miles per hour (mph) – Low wind speed areas where one could read a newspaper without it blowing away;
- **Standing:** Gust speeds up to 16 mph – Slightly higher wind speeds that would be strong enough to rustle leaves;
- **Walking:** Gust speeds up to 20 mph – Winds that would lift leaves, cause movement to litter, hair and loose clothing;
- **Uncomfortable:** Gust speeds greater than 20 mph – The effects of winds at this level would range from small trees swaying and wind force felt on the body (approximately 26 mph) to whole trees in motion and inconvenience being felt when walking (52 mph gust).

Safety is also considered by the criteria. Wind speeds in excess of 55 mph can adversely affect a pedestrian's balance and footing. If winds of this magnitude occur more than three times per year, a fail designation is assigned to the sensor location.

The plaza area is generally considered comfortable for walking. The area between the 2020 and 2040 Avenue of the Stars buildings is generally considered comfortable for standing. The northern portion of the plaza was characterized as comfortable for standing, with the area nearest to Constellation Boulevard comfortable for walking. Several areas in the corridor between and around the existing Century Plaza Tower buildings are considered uncomfortable. Street level locations along Avenue of the Stars and near the Century Plaza Hotel are generally considered comfortable for standing.

Threshold of Significance

The Project would result in a significant impact if the proposed design were to alter the existing wind condition, such that it would create an unsafe wind condition at a location currently considered safe.²⁰

Project Impacts

The wind analysis performed for the proposed Project determined that wind conditions in the plaza area were considered comfortable for walking. Wind conditions comfortable for sitting are preferable for uses such as outdoor cafes or amphitheaters. In the plaza area, locations nearest to the eastern side of the proposed building were sheltered from the prevailing southwesterly winds as in the existing condition. This effectively yielded comfortable sitting conditions in the summer and standing conditions in the winter. In the winter, these locations were acceptable for sitting 79 percent and 76 percent of the time. These conditions would be considered appropriate for outdoor seating areas. Wind conditions comfortable for standing were also found in the plaza around the north and southeastern perimeter of the plaza for both seasons and the eastern most portion of the plaza in the summer. The southeastern portion of the plaza would improve from walking to standing as a result of the proposed Project. Winds in the plaza area most commonly deflected off the Century Plaza Towers or channeled into the plaza from Constellation Boulevard similarly to existing conditions. Wind conditions on the northern portion of the Plaza Level would not be considered comfortable for outdoor seating; however, no areas within the proposed plaza area would be considered unsafe.

Around the main entrance to the proposed building, wind conditions would be comfortable for standing or better during summer and winter. Conditions better than standing at this location would be an improvement from the existing conditions. Suitable wind conditions were recorded in other pedestrian areas immediately around the proposed building. The proposed wind conditions were monitored in pedestrian areas along the perimeter of the development site, including Olympic Boulevard, the Century Plaza Hotel and the intersection of Avenue of the Stars and Constellation Boulevard. Based on the analysis of the results at these locations, wind conditions would be comfortable for standing or walking. In a Report dated February 8, 2002, RWDI summarized the potential effects of the proposed building on existing wind conditions along Avenue of the Stars in front of the Century Plaza Hotel and along the residential structures to the south across Olympic Boulevard and indicated that wind conditions in these areas were similar for both before and after conditions. Additionally, RWDI indicated that the Project wind impact at off-site locations, if any, would be less than significant.

The southeastern portion of the Street Level near the cultural facility experienced wind conditions comfortable for standing at most locations. The south edge of the terrace was the exception with wind conditions comfortable for walking during both seasons.

As in the existing condition, several locations in the area between and around the existing Century Plaza Tower buildings were considered uncomfortable. The prevailing southwesterly winds are intercepted by the Century Plaza Towers and deflected down to the grade level, resulting in wind flow acceleration at the corners and in the area between the Towers.

Overall, wind speeds throughout the proposed Project area would be considered acceptable for their planned activities. The proposed Project would result in improved wind conditions between the Century Plaza Towers, the southeastern portion of the lawn, and at the entrance to the proposed building. As in the existing condition, several locations around the Century Plaza Towers were

²⁰ If winds speeds in excess of 55 miles per hour occur more than 3 times per year (0.1% of the time) at a location, the wind condition is considered unsafe. Source: RWDI, July 2001.

found to have uncomfortable wind conditions. These conditions were caused by the existing Century Plaza Towers configuration, and are not negatively affected by the proposed development. It is anticipated that no location within the Project redeveloped area would experience unsafe conditions; therefore wind would have a less than significant impact on the proposed Project. Additionally, the Project would result in a less than significant impact at off-site locations.

Mitigation Measures

As described above, the proposed Project would not result in a significant wind impact. Mitigation Measures are not required.

Significant Project Impacts After Mitigation

The proposed Project would not result in significant unavoidable impacts.

Cumulative Impacts

The wind study prepared for the Project indicated that the proposed redevelopment has a building mass similar to that of existing conditions on site and is unlikely to have any negative impact on the wind environment in the area. Therefore, the project contribution to wind impacts would not be cumulatively considerable.