



Outlets at San Clemente

PEDESTRIAN SAFETY PROJECT SUMMARY



Location: San Clemente, California

Client: [Outlets at San Clemente](#)

Type: Mixed-Use Commercial

Architect: [Togawa Smith Martin, Inc.](#)

Project Size: 69 IRWLs, 36 Bollards, 7 W-11
LED Border-Enhanced Pedestrian Signs

Installing Contractor: [Sasco Electric](#)

Overview: Outlets at San Clemente is a mixed-use commercial development on a 51-acre site in the city of San Clemente adjacent to the San Diego Freeway. The property features 70+ retail shops, a multi-screen cinema complex, restaurants and a hotel, as well as structured and at-grade parking. The various buildings are designed in a Mission style, but with variations to appear as if each was added to the ensemble at a different time. Outlets at San Clemente facility management desired an enhanced level of pedestrian safety with increased visibility and warning to drivers at vulnerable plaza entry points, at-grade parking and pedestrian crossings.

Requirements: A robust, flexible traffic safety solution that's proven effective at warning motorists up to 1,000 feet in advance of pedestrians in a crosswalk. Shopper excitement and other visual distractions created the need for automatic (passive) detection activation with no action required by pedestrians. LED border-enhanced pedestrian warning signs that flash in sync with the IRWLs were also required for a higher level of visibility. Additionally, traffic safety equipment needed to complement the architectural design, existing color palette and Mission style aesthetic of this newly constructed shopping center.

Solution 1:

69 LightStar™ In-Roadway Warning Lights (IRWL)

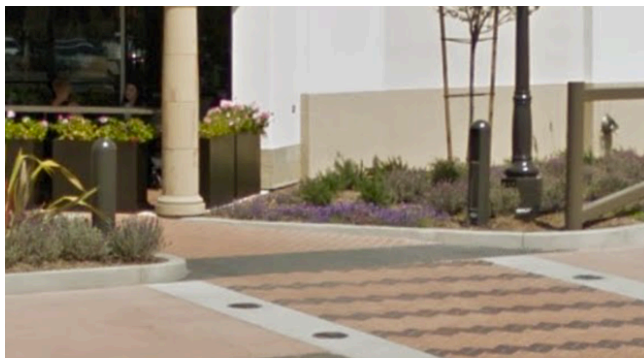


LightGuard Systems provided 69 IRWLs with high-intensity LEDs that alert motorists up to 1,000 feet in advance of pedestrian inside a crosswalk. Visible both day and night, they activate via passive detection bollards and flash only when a pedestrian is present. The client selected 10" composite (pictured) base plates and A/C power controller. IRWLs are MUTCD compliant and a proven method of increasing driver awareness up to 95%. Highly flexible, IRWLs are an ideal safety solution at curved mall parking entrances, and at-grade walkways.



Solution 2:

36 Custom Bronze T6 Automatic Pedestrian Detection Bollards



Our T6 Bollard activation method was selected due to its elliptical, elegant design and its directionally sensitive infrared light beams, which activate only as pedestrians enter the crosswalk. Placed at crosswalk entrances in pairs, pedestrian shoppers automatically trigger the system's flashing IRWLs and LED signs simply by walking in-between them—making them the safest, most effective activation method. Bollards have a range of sixty feet and contain vandal-resistant stainless steel fasteners. A custom bronze color was used for this project which coordinate beautifully with the architectural design and other lighting elements.

Solution 3:

7 Flashing LED Pedestrian Crossing Signs

Our W11-2 flashing LED border-enhanced signs were added to crossings where additional visibility was desired. MUTCD compliant, only LightGuard Systems' LED signs contain 8 light bars with 96 high-intensity flashing LEDs. Visible from 1,000 feet, LED signs help to increase motorist yielding. Plaza San Clemente's LED signs activate via passive detection bollards and flash only when a pedestrian is present.

