



Legislation Details (With Text)

**File #:** 19-0146      **Version:** 1

**Type:** Consent - Staff Report      **Status:** Agenda Ready

**In control:** City Council Regular Meeting

**On agenda:** 3/6/2019      **Final action:**

**Title:** Request by Mayor Napolitano and Councilmember Lesser to Review Two Safe Routes to School (SRTS) Pedestrian Improvements: 1) Solar Powered Flashing Beacons, In-Road Warning Lights and a High Visibility Crosswalk at Blanche Road and 29th Street; and 2) a Solar Powered Radar Speed Awareness Sign Located 130 Feet North 29th Street on the West Side of Blanche Road (Public Works Director Katsouleas).  
RECEIVE REPORT

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. Location Map and Product Sheets

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

**TO:**  
Honorable Mayor and Members of the City Council

**THROUGH:**  
Bruce Moe, City Manager

**FROM:**  
Stephanie Katsouleas, Public Works Director  
Anne McIntosh, Director of Community Development  
Erik Zandvliet, City Traffic Engineer  
Prem Kumar, City Engineer  
Anastasia Seims, Senior Civil Engineer

**SUBJECT:**  
Request by Mayor Napolitano and Councilmember Lesser to Review Two Safe Routes to School (SRTS) Pedestrian Improvements: 1) Solar Powered Flashing Beacons, In-Road Warning Lights and a High Visibility Crosswalk at Blanche Road and 29<sup>th</sup> Street; and 2) a Solar Powered Radar Speed Awareness Sign Located 130 Feet North 29<sup>th</sup> Street on the West Side of Blanche Road (Public Works Director Katsouleas).  
**RECEIVE REPORT**

**RECOMMENDATION:**  
Staff recommends that City Council receive this report regarding pedestrian improvements that were funded by two Safe Routes to School (SRTS) grants and the corresponding construction work undertaken at/near the intersection of Blanche Road and 29<sup>th</sup> Street. The pedestrian improvements include:

- 1) Installation of one high visibility crosswalk, along with two solar-powered flashing beacons and in-road warning lights adjacent to the crosswalk;
- 2) Installation of one solar-powered radar speed awareness sign facing southbound traffic on the west side of Blanche Road, located 130 feet north of 29<sup>th</sup> Street.

**FISCAL IMPLICATIONS:**

Procurement and installation of the solar powered flashing beacons, in-road warning lights and high visibility crosswalk at the intersection of Blanche Road and 29th Street totals approximately \$49,850 and is funded by a SRTS Cycle 10 grant. Procurement and installation of the solar speed awareness sign totals approximately \$8,300 and is funded by a SRTS Cycle 3 grant.

**BACKGROUND:**

Starting in 2011, Manhattan Beach applied for and received three State and federal grants to improve pedestrian facilities, access and safety throughout the City. These grants included:

- A \$490,600 federal Cycle 3 Safe Routes to Schools grant (October 2011).
- A \$223,300 federal Cycle 5 Highway Safety Improvement Program (HSIP) grant with \$25,000 required in local matching funds (October 2011).
- A State \$447,700 Cycle 10 Safe Routes to Schools grant with \$49,800 required in local matching funds (June 2012).

The majority of the proposed pedestrian improvements funded by these grants are located next to schools or along pedestrian routes to those schools. All of the pedestrian enhancements identified in the design specifications also conform to industry standards as identified in the Manual on Traffic Control Devices (MUTCD) issued by the Federal Highway Administration (FHWA). All three grant applications were prepared in cooperation with representatives of the Manhattan Beach Unified School District and Manhattan Beach Police Department. The City conducted meetings with school administration and key school stakeholders to identify problem locations, high crossing location, and potential solutions prior to submitting the applications. Additionally, several meetings regarding the proposed improvements were held with Grand View Elementary personnel and parents, the Parking and Public Improvements Commission and City Council.

On February 7, 2017, staff presented to City Council a summary of the proposed improvement called for under the three grants, along with attachments depicting the locations and equipment specified for installation. The Attachment included with this staff report highlights those specific pedestrian improvements and equipment called for in the neighborhoods surrounding Grand View Elementary, inclusive of the high visibility crosswalk, two solar-powered flashing beacons, in-road warning lights and the solar-powered radar speed awareness sign at/near the intersection of Blanche Road and 29<sup>th</sup> Street. These improvements are part of both Cycle 3 and Cycle 10 grant scopes of work.

On September 19, 2018, and November 20, 2018, City Council awarded bids to two contractors for the Cycle 10 and Cycle 3 pedestrian improvements, respectively. In January, prior to the start of work, residents located within 500 feet of each location were notified of the upcoming construction projects. Simultaneously, each contractor began procuring all construction materials needed to complete the job, including long lead items such as steel poles. Since then, construction has progressed to the point of approximately 70% complete, with full completion anticipated by the end of March 2019.

On February 19, 2019, City Council requested that the SRTS proposed improvements at Blanche

Road and 29<sup>th</sup> Street be brought back for discussion at the March 8, 2019, City Council meeting. This staff report represents that request.

### **DISCUSSION:**

Blanche Road is inherently a busy local collector roadway, carrying over 4,000 vehicles per day between Rosecrans Blvd. and Valley Drive. Pedestrians and school children who live in the 500, 600 and 700 blocks of the Tree Section commonly use 27<sup>th</sup> and 29<sup>th</sup> Streets (crossing Blanche Road) as a route to school. While the intersection of Blanche Road and 27<sup>th</sup> Street is a four-way stop, there is no stop sign for vehicles traveling in the northbound and southbound directions on Blanche Road at 29<sup>th</sup>. Thus, the solar powered flashing beacons, in-road warning lights and high visibility crosswalk planned at this intersection to alert drivers to east-west pedestrian traffic, as well as the solar speed awareness sign, are expected to reduce the approach speed in both directions and improve the visual awareness of pedestrians to southbound drivers cresting Blanche Road between 33<sup>rd</sup> and 31<sup>st</sup> Street. Actual speed studies indicate the 85<sup>th</sup> percentile (prevailing) speed is 31 miles per hour (mph) on a 25 mph signed roadway, showing that drivers are exceeding the posted speed limit. These improvements are designed to provide a significantly safer east-west pedestrian crossing condition over what exists today.

It is the Traffic Engineer's professional opinion that all of the design elements are needed in order to work together as a complete crossing system. These include:

- The high-visibility crosswalk designates the proper crossing path for pedestrians and helps alerts drivers via roadway markings.
- Rectangular rapid flashing beacons have the highest driver compliance rate of any flashing beacon type, pursuant to documented studies. They are mounted at eye-level to catch the motorist's attention.
- The in-pavement flashing crosswalk lights will provide enhanced driver awareness of a pedestrian in the crosswalk, especially at night, in foggy/inclement conditions.

The rapid flashing beacons and in-ground lighting are only activated when the controller is pushed, and flash for a short duration while pedestrians cross the street. Further, as mentioned above, all of the pedestrian enhancements identified in the design specifications for these projects conform to industry standards as identified in the CA-MUTCD and other State and federal design standards and specifications. They are proven countermeasures and thus "eligible projects" for grant funding pursuant to the Federal Grant application guidelines; they do not require additional warrants or justification to determine their potential effectiveness. Therefore, no additional analysis was conducted regarding accident history prior to submitting the grant.

Once the installations are complete, staff will observe them under daytime and nighttime conditions for both effectiveness and potential impacts to surrounding residents and properties. Then staff can make recommendations for, or directly undertake, modifications to minimize or eliminate the lighting impacts to adjacent residents.

Staff is committed to working with the affected residents toward a resolution, which may include supplemental equipment such as programmable functions, auto-dimming of flashing lights and speed displays, light shrouds, limited operation at night, and other equipment modifications.

### **PUBLIC OUTREACH/INTEREST:**

The grant project applications were presented to the Parking and Public Improvement Commission and City Council at public meetings in 2011 and 2012. The grant projects were also presented and discussed in detail, with accompanying design schematics and locations, at the February 7, 2017, City Council meeting and provided again when the contracts to complete the work were awarded in September 2018 and November 2018. Lastly, a summary of the planned work for all three grants was presented to the Manhattan Beach Unified School District Board on December 12, 2018, by City staff.

**LEGAL REVIEW:**

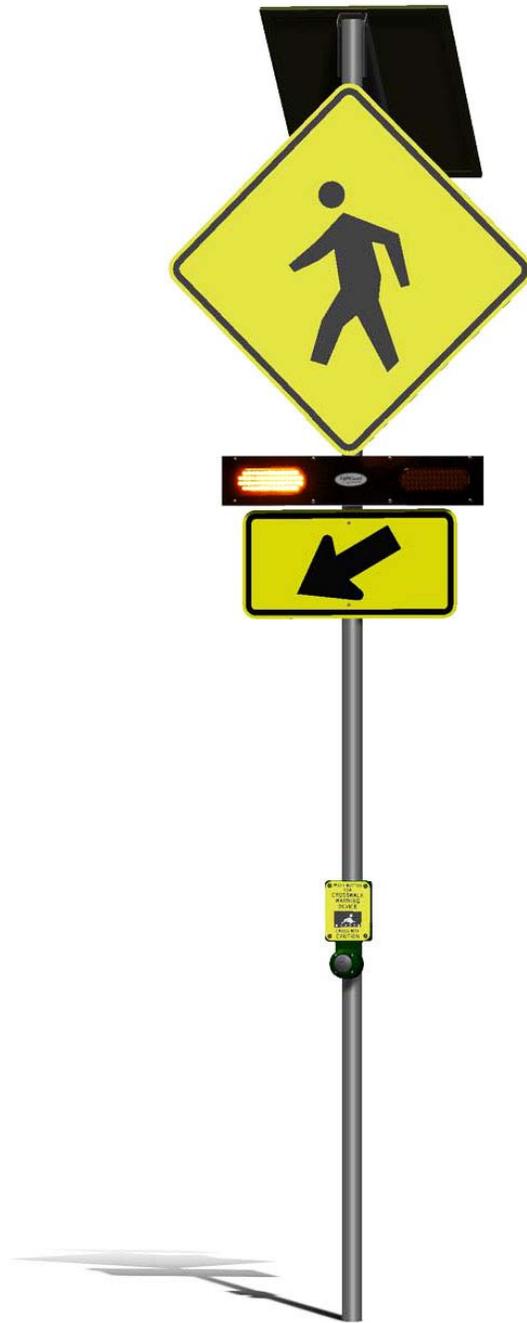
The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

**ATTACHMENT:**

1. Location Map and Product Sheets



SOLAR-POWERED RECTANGULAR RAPID FLASHING BEACON  
WITH PEDESTRIAN CROSSING SIGNS





# LumiStar™ the industry's only wireless and solar in-roadway light (IRWL)



## Tough & Durable

- Stainless steel, 17-4 alloy.
- Exceeds HS-20 Wheel Load Testing.
- Endures extreme weather cycles.
- 5 Year Warranty, 10 Year Life Expectancy.

## Brightest In-Roadway Light

- Visible from 3,000 ft. in bright sunny conditions.
- Emits over 4 million cd/m<sup>2</sup>.

## Solar Powered

- Lasts up to 60 days with no sun.
- Only requires an average of 4 hours of sun per day.

## Easy Installation

- No saw cutting or trenching between the IRWLs
- No service cabinets or large solar panels
- No conduit
- No electrical license required.

## Bicycle Friendly

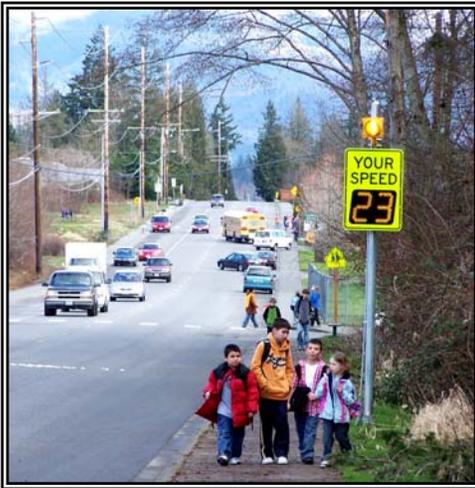
- Gentle approach & departure angles for a smooth and safe ride.



THE BEST IN THE BUSINESS

# SPEEDCHECK™

## “YOUR SPEED” Display



At SpeedCheck we know radar speed displays, it's all we do. We are committed to delivering the best solution on the market with a 4<sup>th</sup> generation display.

- ✓ SpeedCheck displays offer superior visibility in all conditions with UltraClear™, delivering the highest contrast, even in direct sunlight
- ✓ Safety Mask™ prevents viewing of the sign outside of drivers normal field of view, keeping the driver's eyes on the hazard zone ahead
- ✓ Vandalism protection - display can take a direct hit without damaging internal components, by deflecting up to 2 inches
- ✓ Integrated Violation Alert, High Speed Cut-off and optional Slow Down Message at user-defined speed thresholds
- ✓ Large selection of programming options to meet your needs
- ✓ Field repairable design - agency technicians can support displays with easy-to-access modular design
- ✓ Lowest power consumption available; solar power packages guaranteed 365 days, 24 x 7
- ✓ Quality product with 100% solid state design, backed with a 3-year standard warranty and 10-years for LED panels



Specification	15"	18"
Display Housing	26 1/2" x 20" x 6" (67 x 51 x 15 cm)	31" x 22 3/4" x 5" (79 x 58 x 13 cm)
Sign Dimensions	30" x 42" (76 x 107 cm)	36" x 48" (91 x 122 cm)
Weight	36 Lbs. (16.3 kg.)	42 Lbs. (19.0 kg.)

### 2006 National Survey

Traffic engineers, police officers, and safety professionals identified radar signs as the most effective means of slowing traffic in neighborhoods and around school zones and playgrounds.

### Police hail new traffic measures

Edythe Jensen, *The Arizona Republic*, Oct. 15, 2007  
CHANDLER, AZ - Police are responding to fewer intersection accidents since the city expanded photo traffic enforcement and installed 64 speed-reader boards this summer, according to traffic Officer Seth Tyler.

