



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: APRIL 10, 2018

FROM: PUBLIC WORKS DEPARTMENT WARD: 3

**SUBJECT: PROPOSED QUIET ZONE ALONG THE UNION PACIFIC RAILROAD
CORRIDOR AT THE PALM AVENUE AND BROCKTON AVENUE RAIL
CROSSINGS – CONCEPT DESIGN APPROVAL AND PROJECT
AUTHORIZATION**

ISSUES:

Approve concept designs for the Palm Avenue/Union Pacific Railroad and Brockton Avenue/Union Pacific Railroad crossings, and direct the Public Works Department to complete the project design and file a Notice of Intent to Create New Quiet Zone for the Palm Avenue and Brockton Avenue Quiet Zone.

RECOMMENDATIONS:

That the City Council:

1. Approve the concept design for the Palm Avenue/Union Pacific Railroad crossing;
2. Approve concept design Alternative 1 for the Brockton Avenue/Union Pacific Railroad crossing; and
3. Direct the Public Works Department to complete the project design and file a Notice of Intent to Create New Quiet Zone at the Palm Avenue to Brockton Avenue rail crossings.

COMMITTEE RECOMMENDATION:

The Transportation Committee met on August 10, 2017, with Chair Soubrouse and Member Melendrez present, to review concept designs and recommend preferred design alternatives for the proposed quiet zone along the Union Pacific Railroad at the Palm Avenue and Brockton Avenue rail crossings. The Committee unanimously voted to recommend the City Council:

1. Approve the concept design for the Palm Avenue/Union Pacific Railroad crossing;
2. Approve concept design Alternative 1 for the Brockton Avenue/Union Pacific Railroad crossing; and
3. Direct the Public Works Department to complete project design and file a Notice of Intent to Create New Quiet Zone for the Palm Avenue and Brockton Avenue Quiet Zone.

BACKGROUND:

On February 15, 2011, the City Council approved a Memorandum of Understanding (MOU) with the Riverside County Transportation Commission (RCTC) to provide approximately \$7.7 million in regional Measure A funds for the Burlington Northern Santa Fe (BNSF) Quiet Zone project. The RCTC made the funds available by reallocating excess 1988 Measure A funds from the La Sierra Avenue and Van Buren Boulevard Interchange projects.

On January 7, 2014, the City Council approved Amendment No. 1 to the MOU to establish the final cost savings for the Van Buren Interchange. On July 22, 2014, the City Council approved Amendment 2 to the MOU to establish the final cost savings for the La Sierra Interchange. The cost savings for the La Sierra Interchange exceeded the original estimate by \$1.697 million allowing the City to add additional quiet zone locations to the MOU. The locations added include the Palm Avenue and Brockton Avenue crossings along the Union Pacific Railroad (UP), and Mission Inn Avenue, 3rd Street and Spruce Street crossings along the BNSF.

The planning and conceptual design for the Palm Avenue and Brockton Avenue quiet zone began in July 2014. Following research and assessment of the crossings, the Public Works Department determined installation of additional safety improvements, known as Supplemental Safety Measures (SSMs) in the Federal Railroad Administration's Final Rule (Final Rule), is the best way to establish the quiet zone. The installation of at least one SSM at each crossing combined with appropriate street improvements, signage, striping and noticing is sufficient to qualify the crossing for quiet zone status under the Final Rule.

On November 17, 2015, the Public Works Department conducted a field diagnostic team meeting with UP and California Public Utilities Commission (CPUC) personnel. Concept plans incorporating the diagnostic team recommendations were completed and routed for UP and CPUC comments in early April 2016. The UP concurred with the concept plans for both crossings. The CPUC requested a raised center median be installed northerly of the tracks on Brockton Avenue to block left turns to and from the southerly Department of Motor Vehicle (DMV) driveway. The Public Works Department developed Alternative 2 for the Brockton Avenue crossing to address the CPUC's concerns.

On August 10, 2017, Public Works presented the concept design for the Palm Avenue/UP crossing and concept design Alternatives 1 and 2 for the Brockton Avenue/UP crossing to the Transportation Committee for review and preferred design recommendations. The Committee voted to recommend City Council approve the Palm Avenue/UP concept design and design Alternative 1 for the Brockton Avenue crossing which includes a shorter median and allows left turns at the southerly DMV driveway.

On November 3, 2017, the CPUC advised Public Works personnel that the proposed four quadrant gate system at the Brockton Avenue/UP crossing would suffice to deter motorists from driving around the gates, and deferred the decision regarding the center median length to the City. The CPUC also advised that pedestrian gates should be installed on the easterly side of Brockton Avenue to accommodate the high pedestrian volumes.

DISCUSSION:

Palm Avenue/UP

One concept design is presented for the Palm Avenue crossing (Attachment 2). The concept

design includes new curb, gutter and sidewalk; tactile strips; striping; signage, and additional grade crossing warning devices consisting of exit gates. The existing automated stationary horns, commonly known as “wayside horns,” will be removed. Palm Avenue will be narrowed from 64 feet to 40 feet in width to accommodate the new street improvements and additional crossing warning devices. Pedestrian access northerly of Dewey Avenue will be limited to the westerly side of Palm Avenue. The proposed street improvements are consistent with existing improvements to the north and south. With the addition of the exit gates, gates will be in place at all four quadrants of the crossing. Four quadrant gates are the proposed SSM for the crossing due to the proximity of Dewey Avenue.

The total estimated cost to implement a quiet zone at the Palm Avenue crossing is \$800,000. Annual maintenance costs for the additional crossing equipment are currently estimated at \$17,680 per year. The responsibility for the additional annual maintenance costs will be addressed in the future construction and maintenance agreement between the City and UP. It is expected the City will be responsible for maintenance costs incurred for the additional quiet zone equipment.

Brockton Avenue/UP

Two alternatives are presented for the Brockton Avenue crossing (Attachments 3 and 4). Both alternatives include new curb, gutter and sidewalk; raised center medians, tactile strips; striping; signage; concrete crossing surface extensions, and additional grade crossing warning devices consisting of exit gates. The existing wayside horns will be removed. With the addition of the exit gates, gates will be in place at all four quadrants of the crossing. Four quadrant gates are the proposed SSM for the crossing due to the proximity of Dewey Avenue.

Alternative 1 consists of the basic street improvements required to implement the quiet zone. The alternative also includes pedestrian gates on the easterly side of Brockton Avenue. The pedestrian gates were added at the CPUC’s request in November 2017. The pedestrian gate improvements will encroach into DMV property and UP right of way. The City will need to acquire an easement from the DMV to reconstruct a portion of the block wall and the planter area at the southwest corner of the parking lot. The City will also need to purchase an additional easement from the UP to accommodate the additional sidewalk required for the pedestrian gates.

Alternative 2 consists of the basic street improvements required for the quiet zone and a raised center median extending approximately 100 feet northerly of the crossing to block left turns to and from the southerly DMV driveway. The center median would limit access to the DMV parking lot to right in and right out turning movements, and motorists may attempt to make U-turns at unsignalized intersections to access the DMV. This alternative was developed in 2016 to address the CPUC’s concerns that vehicles making a left turn to enter or exit the southerly DMV driveway could cause accidents or otherwise block northbound traffic on Brockton Avenue causing traffic to queue across the tracks. In November 2017, the CPUC deferred the center median length decision to the City. Alternative 2 would also require pedestrian gates on the easterly side of Brockton Avenue, reconstruction of a portion of the block wall and planter area at the southwest corner of the DMV parking lot, and acquisition of right of way from the DMV and UP.

The total estimated cost to establish a quiet zone at the crossing is \$1.2 million for project Alternative 1. Annual maintenance costs for the additional crossing equipment required for the quiet zone are currently estimated at \$15,640 per year. The responsibility for the additional annual maintenance costs will be addressed in the future construction and maintenance agreement between the City and UP. It is expected the City will be responsible for maintenance costs incurred for the additional equipment required for the quiet zone.

Next Steps


Following selection and approval of the concept designs, the next step to establish the quiet zone will be to provide a Notice of Intent to Create New Quiet Zone (NOI) to the Federal Railroad Administration (FRA), California Public Utilities Commission, Caltrans and all railroads operating within the quiet zone in accordance with the Final Rule. The filing of the NOI will trigger a sixty day comment period. Once the comment period ends, Public Works will finalize the project design and complete negotiations with the UP for the construction and maintenance of the project.

FISCAL IMPACT:

The total estimated cost to implement a quiet zone at the Palm Avenue/UP and Brockton Avenue/UP rail crossings is \$2 million. The estimated total cost includes \$1.5 million for the UP to design and install the additional warning devices, and \$325,000 for the proposed street improvements and right of way acquisition. The total estimated cost for the quiet zone design, including street design, project management, railroad negotiations and coordination, railroad oversight costs, permitting and agreements with the UP and CPUC is approximately \$175,000. Sufficient funds, including funds programmed for 2018/19 CIP, are available in account numbers 9872130-440313 and 9872127-440223 to complete the project design.

Prepared by: Kris Martinez, Public Works Director
Certified as to
availability of funds: Adam Raymond, Chief Financial Officer/Treasurer
Approved by: Al Zelinka, FAICP, Assistant City Manager
Approved as to form: Gary G. Geuss, City Attorney

Concurs with;



Councilmember Soubirous, Chair
Transportation Committee

Attachments:

1. Location Map
2. Palm Avenue/UP Preferred Alternative
3. Brockton Avenue/UP Alternative 1
4. Brockton Avenue/UP Alternative 2
5. Presentation