



City of Arts & Innovation

Transportation Committee

TO: TRANSPORTATION COMMITTEE MEMBERS DATE: JULY 13, 2017

FROM: PUBLIC WORKS DEPARTMENT WARDS: 1, 2 & 3

SUBJECT: PROPOSED QUIET ZONE ALONG THE UNION PACIFIC RAILROAD AT THE PALM AVENUE AND BROCKTON AVENUE RAIL CROSSINGS AND UPDATE ON PANORAMA ROAD AND CRIDGE STREET QUIET ZONES - DIRECT SUBMITTAL

ISSUES:

Review concept designs for a proposed quiet zone along the Union Pacific Railroad line at the Palm Avenue and Brockton Avenue rail crossings and recommend preferred design alternatives for the project, and receive report on Panorama Road and Cridge Street Quiet Zones.

RECOMMENDATIONS:

That the Transportation Committee:

1. Recommend the City Council approve the concept design for the Palm Avenue/ Union Pacific Railroad crossing and concept design alternative I for the Brockton Avenue/UP crossing, and 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; and
2. Receive and file this report providing an update on the Panorama Road/ Union Pacific Railroad and Cridge Street/Burlington Northern Santa Fe Railroad Quiet Zone Projects.

BACKGROUND:

City Council

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.

DISCUSSION:

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, discussed in detail in subsequent sections.

Following selection and approval of the preferred concept designs, the next step to establish the quiet zone is the filing of the Notice of Intent to Create New Quiet Zone (NOI). The filing of the NOI will trigger a sixty day comment period. Once the comment period ends, Public Works will complete negotiations with the UP for the construction and maintenance of the project.

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 is proposed to 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 \$745,000. 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 equipment required for the quiet zone.

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.

Alternative 2 - consists of the basic street improvements required for the quiet zone with a raised center median extending approximately 100 feet northerly of the crossing to block left turns to and from the southerly DMV driveway. This alternative was developed to address the CPUC's concerns regarding potential conflicts between vehicles making left turns to and from the southerly DMV driveway and northbound traffic on Brockton Avenue. The concern is that vehicles will cause accidents or otherwise block the northbound lane causing traffic to queue across the tracks. The raised center median, which was strongly recommended by the CPUC, will have significant impacts. Access to the DMV parking lot will be limited to right in and out turning movements, and motorists on Brockton Avenue may attempt to make U-turns at un-signalized intersections to access the DMV.

On March 15, 2017, Public Works forwarded copies of concept design Alternative 1 and 2 plans to the DMV for review and comments regarding any project impacts to site access or operations. On May 4, 2017, Public Works received a response from the DMV indicating Alternative 1 would work best for their site and have the least impacts.

The total estimated cost to establish a quiet zone at the crossing is \$880,000 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.

Panorama Road/UP Update

The Panorama Road/UP quiet zone is on track to be completed in mid-2018. The NOI was filed on August 27, 2010. The final engineering design is 95% complete. Public Works is negotiating an agreement with the UP for the construction and maintenance of the required safety improvements. The agreement is expected to be finalized within the next several months and brought to the City Council for approval by September. Upon execution of the agreement, Public Works will request CPUC authorization to construct the improvements. Project construction is expected to begin in early 2018 and be complete by June 30, 2018.

After construction is complete, the City will provide a Notice of New Quiet Zone Establishment (NOE) to the Federal Railroad Administration (FRA), CPUC, Caltrans and all railroads operating at the crossing in accordance with the FRA's Final Rule (49 CFR Part 222). The quiet zone will become effective at the date and time specified in the NOE.

The total estimated cost to establish a quiet zone at the crossing is \$1.03 million. Annual maintenance costs for the additional crossing equipment required for the quiet zone are currently estimated at \$18,530 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.

Cridge Street/BNSF Update

The Cridge Street/BNSF crossing was initially part of the Riverside Quiet Zone I Project (RQZI). The crossing was removed from the RQZI project in 2011 to avoid conflicts with the SR 91 HOV construction. As a result, a new NOI was required for the crossing and was filed on March 28, 2017. The NOI was sent to the FRA, CPUC, Caltrans and all railroads operating at the crossing in accordance with the FRA's Final Rule (49 CFR Part 222). The notice triggered a 60 day comment period which ends on May 27, 2017.

The Cridge Street/BNSF quiet zone is scheduled to be completed in mid-2018 providing no significant issues are raised during the 60 day NOI comment period. The final engineering design is 95% complete. Public Works is negotiating agreements with the BNSF and UP for the construction and maintenance of the required safety improvements. The agreements are expected to be finalized within the next several months and brought to the City Council for approval in the fall. Public Works will then request CPUC authorization to construct the improvements. Project construction is expected to begin in early 2018 and be complete by June 30, 2018.

After construction is complete, the City will provide a NOE to the FRA, CPUC, Caltrans and all railroads operating at the crossing in accordance with the FRA's Final Rule (49 CFR Part 222). The quiet zone will become effective at the date and time specified in the NOE.

The total estimated cost to establish a quiet zone at the crossing is \$3.39 million. Annual maintenance costs for the additional crossing equipment required for the quiet zone are currently estimated at \$26,860 per year. The responsibility for the additional annual maintenance costs will be addressed in the future construction and maintenance agreements between the City and BNSF and UP. It is expected the City will be responsible for maintenance costs incurred for the additional equipment required for the quiet zone.

FISCAL IMPACT:

There is no impact to the General Fund associated with this report. The total estimated cost to implement a quiet zone at the Palm Avenue and Brockton Avenue crossings is \$1.62 million. The estimated total cost includes \$1.2 million for UP to design and install the additional warning devices, and \$280,000 for the proposed street improvements. 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 \$140,000. Sufficient funds are available in account numbers 9872130-440313 and 9872127-440223 to complete the project design.

The total estimated cost to implement quiet zones at the Panorama Road and Cridge Street crossings is \$4.42 million. Sufficient funds are available in account numbers 9593430-440313 and 9590132-440312 to complete the project design and construct the project.

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

Attachments:

1. Location Map
2. Palm Avenue/UP Preferred Alternative
3. Brockton Avenue/UP Alternative1
4. Brockton Avenue/UP Alternative 2
5. Presentation