Council Meeting of
November 15, 2007

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the Council:

SUBJECT: Public Works – Accept and file status report regarding the Quiet Zone Study. Expenditure: Not applicable.

Recommendation of the Public Works Director that City Council:

1) Accept and file a status report on the findings and results regarding the Quiet Zone Study; and

2) Authorize staff to continue the search for funding for quiet zone implementation that would silence the sound of train horns at eight at-grade crossings within the City limits.

Funding

Not applicable.

BACKGROUND/ANALYSIS

Conceptual design of the quiet zone implementation by Rail Pros has been finalized, and includes modifications at eight (8) at grade crossings, and one (1) pedestrian crossing. The following is a summary of results.

On April 20, 2010 the City of Torrance awarded a contract to Rail Pros, Inc., a rail engineering and project solutions firm, to design and develop a railroad quiet zone plan and cost estimate. Quiet zone is the term used to depict an area of railroad crossings where freight and passenger trains are not required to sound horns. It is developed by upgrading and adding safety measures to crossings that will ensure that vehicle and pedestrians will not encroach upon the railroad tracks when a train is approaching. Residents in the area will be relieved of horn noises along the railroad line between Torrance Boulevard and Sepulveda Boulevard once a quiet zone is in place.

Rail pros diligently proceeded with field observations and analyses to comply with the requirements of the Federal Railroad Administration (FRA), Burlington Northern Santa Fe (BNSF) Railroad and the California Public Utilities Commission (CPUC) for a quiet zone implementation in the City of Torrance. These requirements included notification letters, field meetings and office meetings between these agencies and City staff. Additionally, internal meetings and exchanges were held among the affected City departments, which included Public Works Engineering, Community Development Transportation Planning, Police and Fire, to determine what proposed modifications would be suitable for the day to day functionality of the City. The main focus of this determination was to minimize the impact on day to day traffic, nearby residences/businesses as well as the maneuverability for emergency response vehicles.

The railroad crossings affected by the proposed quiet zone implementation are along the BNSF railroad tracks which cross City streets at the following locations:

1) Torrance Boulevard
2) Pedestrian crossing near El Dorado Street
3) Sonoma Street
4) Carson Street
5) Washington Avenue
6) Arlington Avenue
7) Cabrillo Avenue
8) Border Avenue
9) Sepulveda Boulevard

The improvements proposed in Rail Pros' final quiet zone exhibit include the following along the BNSF railway:

1) Add extended medians which will prevent vehicles from shortcutting through the middle lanes to cut through the railroad intersection. This is proposed on Torrance Boulevard, Carson Street, Washington Avenue, Arlington Avenue, Cabrillo Avenue, Border Avenue and Sepulveda Boulevard.
2) Signage will be replaced with updated required signage (right turn only, one way, train does not sound horn, railroad crossing, etc.).
3) Bring existing gate arms up to current standards which includes a flashing light signal assembly, flashing light signal assembly with automatic gate arm, and/or a flashing light signal assembly with automatic gate arm and additional flashing light over roadway on a cantilever arm.
4) Add ADA compliant ramps and pedestrian gates.
5) Upgrade railroad tracks to current standards for constant warning time detection that automatically closes vehicular and pedestrian gates when a train approaches.
6) Sidewalk reconstruction adjacent to the railroad crossing locations.
7) Reconfigure traffic flow from adjacent alleys and driveways.
8) Vegetation trimming nearest to the crossing.

The total estimated cost for implementing these required supplemental safety measures (SSM) and alternative safety measures (ASM) to create the quiet zone as of April 14, 2011 is between $10,940,324 and $13,552,823.

After some research, and collaboration with the City's grant writers, we have found that most grants do not cover a quiet zone specifically, while some may cover the cost of civil improvements at the intersections. Civil improvements make up approximately 24% of the total cost. The other 76% or $8-$10 million will require funding from other sources. With the submittal of this status update, the Public Works Director respectfully requests that City Council authorize staff to continue to search for grant funding to cover the additional costs.

Respectfully submitted,

ROBERT J. BESTE
Public Works Director

By Elizabeth Overstreet
Engineering Manager

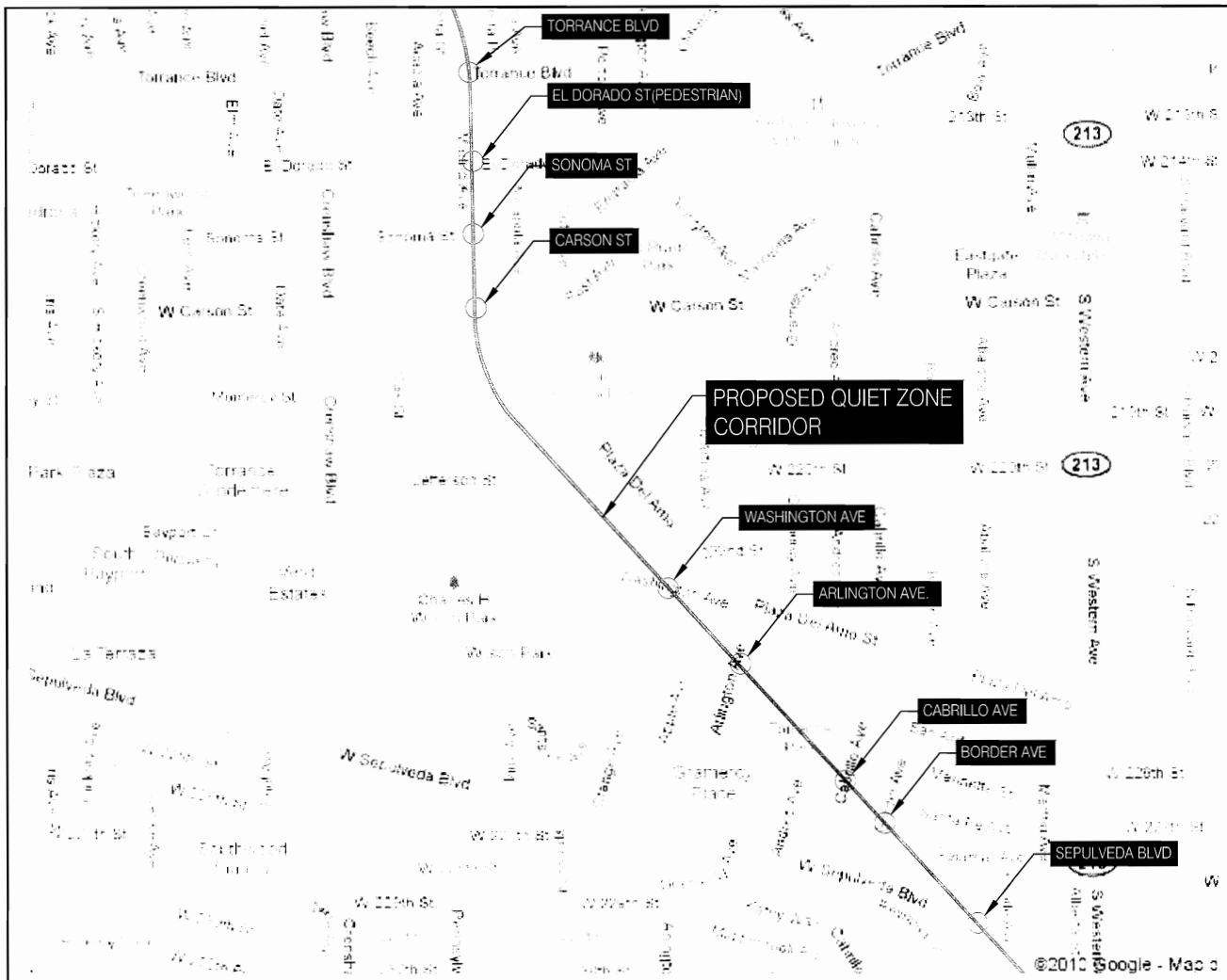
Lea Reis
Associate Engineer

CONCUR:

Robert J. Beste
Public Works Director

LeRoy J. Jackson
City Manager

Attachment: A) Map of proposed quiet zone



SHEET INDEX

T1	LIMITS OF QUIET ZONE & SHEET INDEX	
T2-1	RAILROAD WARNING DEVICE DETAILS	
T2-2	DETAILS A, B, & C	
A1	TORRANCE BLVD	RAISED MEDIANS WITH AND WITHOUT PED GATES
A2	EL DORADO ST	INSTALL PED GATES WITH RAMPS
A3	SONOMA ST	4 QUAD GATES
A4	CARSON ST	RAISED MEDIANS WITH AND WITHOUT PED GATES
A5	WASHINGTON AVE	PED CROSSINGS ON BOTH SIDES
A6	ARLINGTON AVE	INSTALL RAISED MEDIANS W/ LEFT TURN POCKET
A7	CABRILLO AVE	RAISED MEDIANS
A8	BORDER AVE	ENTRANCE GATES AND RAISED MEDIANS
A9	SEPULVEDA BLVD	RAISED MEDIANS

GENERAL NOTES

1. ALL RAILROAD WARNING DEVICES SHALL BE REPLACED WITH NEW DEVICES CONFORMING TO CURRENT CPUC GENERAL ORDERS
2. UPDATE SIGNING AND STRIPING AS PER CURRENT CA-MUTCD REQUIREMENTS
3. INSTALL NO PARKING SIGNAGE AND/OR RED CURBS AT LEAST 50' FROM THE CROSSING

DRAFT
PRELIMINARY
SUBJECT TO CHANGE

N
NO SCALE

CITY OF TORRANCE
PUBLIC WORKS DEPARTMENT

RAILPROS
1 Ada Parkway | Suite 200 | Irvine | California | 92618
www.railpros.com

CITY OF TORRANCE - QUIET ZONE EXHIBIT

LIMITS OF QUIET ZONE AND SHEET INDEX

SUBMITTED BY	TITLE	DRAWING NO.	DATE ISSUED
		CPUC-EXH-T1	4/12/2011