



**COMMUNITY/CONVENTION CENTER**  
CITY OF SACRAMENTO

May 7, 1984

CITY MANAGER'S OFFICE  
**RECEIVED**  
MAY 22 1984

City Council  
Sacramento, California

Honorable Members in Session:

SUBJECT: Renovation of Retractable Sound Partitions in the Sacramento  
Convention Center Exhibit Hall

**APPROVED**  
BY THE CITY COUNCIL

MAY 29 1984

OFFICE OF THE  
CITY CLERK

SUMMARY

The retractable sound partitions have design deficiencies in the track, trolley, and partition top channel that have resulted in premature component failure, inordinate maintenance costs, operational difficulties, and reduced suppression of sound transmission. The current cost for necessary repairs and the anticipated life span of those repairs is such that this report recommends the solicitation of proposals for the replacement of the track and trolley system, and the top channel of the panels, and also recommends the expenditure of approximately \$180,000 from the Convention Center Joint Authority Construction Fund to finance this project.

BACKGROUND INFORMATION

The retractable partitions are used in the Exhibit Hall to divide the hall into as many as three sections, providing both a visual and sound barrier permitting simultaneous use of different sections of the hall by different events.

Design deficiencies have become apparent over the years. The major problems can be summarized as follows:

1. Pivot pins rotating in their holder resulting in an elongation of the pin opening in the top channel.
2. Excessive wearing of the drive rivet that attaches the top guide plate to the trolley. This wear in the rivet causes the rivet to eventually shear and the guide plate to then fall off.



3. The excessive movement of the guide plate due to rivet wear permits the trolley stem to be forced into the edge of the track, creating extreme drag caused by the track edge cutting into the stem.
4. Trolley stem movement has placed pressure on the stem retainer within the panel, causing the retainer welds to break, thereby allowing the trolley to "float" within the panel head.
5. Operational difficulties exist on the running track in that the partitions are very hard to push due to the component failures described above.
6. Operational difficulties are encountered in the partition storage area when attempting to transfer a partition from the running track to the storage track. This is due in part to the component failures described above, but is also due to the design of the 90 degree crossover switch and the difficulty in maneuvering by hand a partition that is 18 feet high and 5 feet wide into a 90 degree change of direction.

Over the years, several corrective actions were considered and several tests involving panel, track and trolley modifications were conducted, but none of these proposals addressed the total scope of the problem and the tests did not yield satisfactory results. Considering the cost of these partial solutions and the results of each test, it was decided to take a comprehensive approach to all the problems faced.

To accomplish this, contact was made with three corporations that have broad experience in partitions of this size and weight. All aspects of the problems were thoroughly reviewed with representatives of these companies, who then reviewed the matter with their engineering departments. Each company, working independently, reached approximately the same conclusion: no modification to the existing system short of replacing the track and trolley and completion of the corresponding modifications to the top channel would yield satisfactory results in terms of reduced component failure, reduced maintenance, and ease of operation. The proposals all recommended replacing the track, installing radius track and switches to eliminate the ninety degree crossovers in the current system, replacing the combination ball bearing and roller trolleys with a different design of roller trolley, and replacement/modification of the partition top channel.

The proposals from these companies were then reviewed by the Engineering Department of the City who conducted further discussions with these companies and continued the investigation in depth, ending with the development of drawings and specifications distilled from the proposals and discussions. Convention Center staff have gone to installations utilizing the type of system recommended in the specifications to verify the ease of maintenance and operation.

Preliminary cost estimates obtained from the manufacturer of the partitions indicates an expenditure of \$79,740 to bring the partitions back to original condition. This expenditure, however, would not correct any of the design deficiencies that exist in the system, and thus would result in the same component failure and operational difficulties currently experienced. It appears that the life span of the trolley as designed is two to three years before component failure occurs, with the recurring repair cost to trolleys alone being estimated

at \$38,000. Recurring repairs needed for top channels would be in addition to that amount.

FINANCIAL DATA

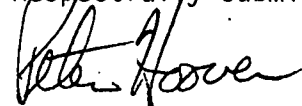
This project was approved by the Sacramento Convention Center Joint Authority with funding allocated from the Construction Fund in March of 1979. The Engineering Department estimates the cost of this project as not exceeding \$180,000.

RECOMMENDATION

It is recommended that:

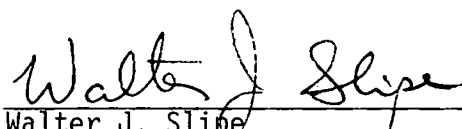
1. The City Council adopt the specifications prepared by the Engineering Department.
2. The City Council authorize solicitation of bids for this project, bids due June 19, 1984.

Respectfully submitted,



Peter Hoover  
Facilities Superintendent

Recommendation Approved:

  
Walter J. Slipe  
City Manager

PH:jb

May 29, 1984  
DISTRICT NO. 1

September 5, 1984

The Robert Cronin Co, Inc.  
1331 T Street  
Sacramento, CA 95814

Gentlemen:

On September 4, 1984, the Sacramento City Council accepted the bid of Advanced Equipment in the amount of \$155,800.00 for Renovation of the Retractable Sound Partitions/Community Convention Center.

It is the policy of the City to hold the bid security of the three lowest bidders until a finalized contract has been received by this office.

Upon receipt of the finalized contract your bid security will be returned.

Sincerely,

LORRAINE MAGANA  
CITY CLERK

Connie R. Petersen  
Deputy City Clerk

LM/CRP/km/31