

REPORT OF GENERAL MANAGER

APPROVED
MAY 7 2008

NO. 08-109

DATE May 7, 2008

C.D. 4

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: GRIFFITH OBSERVATORY RENOVATION AND EXPANSION (#1504C)
(W.O. #E170210F) - FINAL ACCEPTANCE

R. Adams	_____	J. Kolb	_____
H. Fujita	_____	F. Mok	_____
S. Huntley	_____	K. Regan	_____
V. Israel	_____	*M. Shull	<u>CMJ p.m.s.</u>

[Signature]
General Manager

Approved _____

Disapproved _____

Withdrawn _____

RECOMMENDATION:

That the Board:

1. Approve the final acceptance of work performed under Contract No. 3068 as outlined in the body of this report;
2. Approve final Closeout Change Order No. 462 in the amount of \$2,850,000 as outlined in the body of this report; and,
3. Authorize the Board Secretary to release all retention monies held in escrow under Contract No. 3068 and furnish a letter of final completion to Amoroso Construction, Inc., immediately upon approval by the Board.

SUMMARY:

The construction contract for the Griffith Observatory Renovation And Expansion (#1504C) (W.O. #E170210F) project was awarded to Amoroso Construction, Inc. on September 20, 2002 (Board Report No. 02-339), in the amount of \$41,790,000. Five additional contract additive alternates have been exercised, in the total amount of \$4,060,000 (Board Report Nos. 03-138, 03-226 and 04-53), which brings the base contract amount (with additive alternates) to a total of \$45,850,000. The Griffith Observatory Renovation and Expansion (#1504C) (W.O. #E170210F) project, which is located at 2800 East Observatory Road, provided for a complete renovation and a

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40,000 square foot underground expansion, of the Griffith Observatory. The Griffith Observatory Renovation and Expansion (#1504C) (W.O. #E170210F) project was substantially completed on October 30, 2006 and was opened to the public on November 3, 2006. The project was partially accepted by the Board on October 3, 2007 (Board Report No. 07-224).

The project is complete and all Operations and Maintenance Manuals, As-Built Drawings, and Warranties for the work have been delivered to Department staff. The project was completed with 440 change orders, in the total amount of \$8,400,142. The total change order percentage was 18.3% of the contract amount.

The project completion was determined to be 552 calendar days late. The contractor submitted 13 change order requests for delays that occurred during the construction of the project. The sum of the contractor's initial requests was \$5,657,612. Bureau of Engineering staff had several meetings from early 2007 through early 2008 with the contractor to resolve the delay change order requests. Ultimately, an agreement was reached with the contractor for a total of 234 calendar days compensable delay, at the rate of \$12,179.49 per calendar day for extended overhead. This equates to a total change order amount of \$2,850,000. This agreement also includes a non-compensable delay of 318 calendar days.

There were various causes for the delays. In mid-2003, an isolated slope failure occurred in the main underground expansion area in the front lawn. The result of this failure resulted in additional shoring (Board Report No. 03-259, dated August 13, 2003) and a 45 calendar day delay to the project schedule (Board Report No. 04-04, dated January 7, 2004). Due to the pre-existing fault plane in the soil previously encountered in the front lawn, extreme caution was used in prosecuting the work at the adjacent Northeast Mechanical Plant Structure. Several individual delay issues were a result of the unexpected soil conditions which modified the footing layout and sequence of excavation at the North East Mechanical Plant Structure. Additionally, a new retaining wall was installed by this outdoor structure which also contributed to site work delays. The existing underground electrical Room required a structural slab replacement, which in turn delayed the electrical equipment installation and permanent power. There were structural changes to the stairs in the Depths of Space and the West Restroom/Kitchen area structural wall footings, both of which caused delays. There were also delays associated with the Leonard Nimoy Event Horizon Theater control room air conditioning changes. There were security system changes and fire alarm and sprinkler changes required by the Fire Inspector late in the project, which also caused delays. Many of the interior architectural metals were late in fabrication and installation, which caused delays primarily to the Leonard Nimoy Event Horizon Theater, and were the responsibility of the contractor. These delays were concurrent with City-caused delays such as audio/visual changes in the theater and electrical changes to support the exhibit installation.

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This final closeout change order agreement has been reached with the City Engineer and the contractor, subject to Board approval.

FISCAL IMPACT STATEMENT:

The facility is now in operation. Ongoing operation and maintenance costs are funded through the City's General Fund, with assistance from sales of merchandise at the Observatory store, food sales and catering at the Observatory restaurant, and financial assistance from the Friends of the Observatory (FOTO).

This report was prepared by Larry Gonzalves, Project Manager, BOE Construction Management Division. Reviewed by Neil Drucker, Program Manager, BOE Recreational and Cultural Facilities Program; Deborah Weintraub, Acting Chief Deputy Engineer; and, Michael A. Shull, Superintendent, Planning and Development Division.