



# Staff Report

## City of Manhattan Beach

**TO:** Honorable Mayor Fahey and Members of the City Council

**THROUGH:** Geoff Dolan, City Manager

**FROM:** Neil C. Miller, Director of Public Works  
 Dana Greenwood, City Engineer  
 Ismael Medrano, Engineering Technician II

**DATE:** August 2, 2005

**SUBJECT:** Disbursement of Progress Payment No. 5 in the net amount of \$285,407.58, Approval of Change Order No. 1 in the net amount of \$193,000 to S.P. Pazargad Engineering Construction, Inc. for the El Porto Retaining Wall Project, Approval of Supplemental Appropriation (\$178,000) from the Capital Improvement Program Fund Balance

**RECOMMENDATION:**

Staff recommends that the City Council pass a motion to approve the issuance of the subject progress payment, change order and supplemental appropriation.

**FISCAL IMPLICATION:**

PROJECT	FUNDING	CONTRACT	P.P.#	AMOUNT
El Porto Retaining Wall	Dept. of Beaches and Harbors	\$1,768,999.52	1.	\$ 636,110.97
		Change Order #1:	2.	\$ 167,122.56
	Parking Lot Fund	\$ 193,000.00	3.	\$ 154,390.56
		New Contract:	4.	\$ 114,219.35
		\$1,961,999.52	5.	\$ 285,407.58
			Total:	\$1,357,251.02

Funds previously appropriated for this project are not sufficient to cover the proposed change order work. Funds previously approved covered only \$40,000 of change order work. It is therefore recommended that a supplemental appropriation of \$153,000 from the Capital Improvement Program Fund Balance be approved at this time to cover the anticipated change order work. Staff is working with the Los Angeles County Department of Beaches and Harbors in an attempt to

obtain additional County contributions to partially fund this additional work. The results of these ongoing negotiations will be reported at the end of this project.

To improve drainage characteristics of the lot and relocate the parking meters to facilitate cleaning of the lot, staff is recommending appropriating \$25,000 from the Capital Improvement Program Fund Balance. This appropriation will cover the costs of materials that were not anticipated in this year's operating budget.

**BACKGROUND:**

A total of \$1,930,000 (\$800,000 in this City's 2003-04 Capital Improvement Program budget, \$837,000 from Los Angeles County Department of Beaches and Harbors, and \$293,000 from the County Parking Lot Fund) has been allocated in the Capital Improvement Program for this project. This amount covers the awarded contract amount (\$1,768,999.52), the design costs incurred (\$121,000), and the change order authorization previously approved with the award of contract (\$40,000).

**DISCUSSION:**

***Change Order No. 1***

During the design process, no records were available (at the City or at the County) regarding the original wall's design or construction. The property on which the wall was built was a County parking lot adjacent to the El Porto area. The El Porto area at that time was an unincorporated County area. When the El Porto area was annexed by the City in the early 1980's, the parking lot remained under the County's jurisdiction. Without record drawings to work from, assumptions had to be made with respect to the design and method of construction of the existing wall.

During construction of the new retaining wall, problems developed because of the wide variety of conditions encountered. In addition to a mortar and rubble veneer, the entire wall in many areas consisted of stacked concrete rubble at the core. The chunks of concrete were stacked to heights of up to 6 feet and to varying depths, capped off with a 4-foot sidewalk and curb.

While the new wall was designed completely independent of the original structure, the construction methodology relied on the existing wall remaining intact to avoid shoring or excavation costs. The design of the new wall basically consisted of steel piles and a 9-foot tall (partially buried) reinforced concrete panels spanning between the piles.

During installation of the new wall, a trench was required for the installation of the 9-foot concrete panels. The depth of the existing wall varied considerably. Some existing sections had footings, others did not. Some sections had reinforced steel, others did not. For various reasons, significant portions of the existing wall either failed or were undermined during the trenching operations. To complicate matters further, it became apparent when portions of the wall failed that the backfill behind the wall consisted of concrete rubble mixed with sand. This material was not suitable for backfill by today's standards and had to be removed off site.

As noted above, the intent of the new wall's design was not to disturb the original wall but to encapsulate it by constructing the new wall in front of it, and pouring a new sidewalk on top of the existing sidewalk. The existing curb was to remain in place. The design intent was to avoid the

expense for removals of the original wall, sidewalk, curb and interfering portions of the asphalt parking lot.

Although the design plans allowed for flexibility in the height of the concrete panel, staff felt it would be prudent to maintain the 9-foot panels throughout the entire project. It appeared that portions of the original wall had failed and been reconstructed in the past (presumably because of undermining due to an inadequate cut-off depth). Maintaining the full cut-off depth (bottom elevation of the wall) was felt to be critical to the stability and durability of the new wall. Also, any variation of the wall panel dimensions would have resulted in modifications to the concrete forms, the architectural element, and the reinforcing steel pattern. This in turn would have impacted the contractor's production rate and led to additional costs.

When portions of the wall started to fail, the contractor was directed to continue work on the wall as designed as well as remove the additional debris. This direction was given to avoid delay claims and keep construction progressing. In the meantime, staff negotiated a lower rate on the export and import line items of the contract. Also, considerable effort was expended determining which items (and quantities) would be considered extra work and which were included in the original contract bid.

The total cost of the additional work is projected to be \$193,000 and includes the following items of work:

- 1) Removal of existing sidewalk and curb.
- 2) Removal of asphalt pavement.
- 3) Remove and dispose of portions of existing wall and rubble backfill.
- 4) Import of new backfill material (including compaction).
- 5) Construct new concrete curb.

This additional work will result in a net increase to the contract cost of \$193,000. Staff is recommending approval of a change order in the amount of \$193,000. As noted above, staff is also recommending that a supplemental appropriation of \$153,000 from the Capital Improvement Program Fund Balance be approved.

***Progress Payment No. 5***

Construction is scheduled to be completed on this project by the latter end of September. The Contractor has completed 75% of the construction contract. Work accomplished since the last progress payment includes installation of concrete retaining wall, stairs, handrail, sidewalk and continued removal of the existing rubble wall.

The Contractor is currently setting forms and pouring concrete for the new wall, sidewalk and curb.

The Contractor has submitted a request for Progress Payment No. 5 in the net amount of \$285,407.58. All work items covered by this payment have been reviewed by the Public Works Department and found to be in conformance with the plans and specifications.

***Force Account Materials***

As noted above, portions of the parking lot's asphalt paving had failed and will need to be removed as part of the proposed change order. Staff is recommending that the parking meters be moved behind the new curb, the old bumper stops be disposed of, and new concrete gutter be placed adjacent to the new curb. These improvements will facilitate more efficient cleaning of the lot in the future. Also, the new gutter (along with small grated catch basins) will improve drainage and reduce the need for future maintenance.

This work can be most economically accomplished using City crews. The cost of materials, however, was not included in this year's operational budget. The \$25,000 recommended will cover the cost of the following items:

- Concrete and asphalt
- Sawcutting
- Concrete coring
- Pre-cast catch basins
- PVC pipe
- Miscellaneous fittings and hardware

xc: Bruce Moe, Director of Finance  
Henry Mitzner, Controller  
Clarence Van Corbach, Utilities Manager