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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

APPROVED
By the Board of Directors of
The Metropolitan Water District
of Southern California
at its meeting held

41402

MAY - 9 1995

7-4

Doreen E. DeWitt
EXECUTIVE SECRETARY

April 25, 1995

To: Board of Directors (Engineering and Operations Committee--Action)
(Finance and Insurance Committee--Action)

From: General Manager

Subject: Appropriation No. 708 for \$1,271,000 to Finance all Estimated Costs for Phase One of the Record Drawing Restoration Program

RECOMMENDATION:

That the General Manager be authorized to have all work performed, other than contracts in an amount of \$250,000 or more, to complete Phase One of the two phase Record Drawing Restoration Program .

Authorize Appropriation No. 708 for \$1,271,000 from the Pay-As-You-Go Fund to finance all estimated costs for Phase One of the Record Drawing Restoration Program.

John R. Wodraska
General Manager

Submitted by:
Gary M. Snyder
Gary M. Snyder
Chief Engineer

Concur:

John R. Wodraska

John R. Wodraska
General Manager

JGF:aj
(708-apr.doc/04125)

CAPITAL FUNDING REQUEST																	
PROJECT NAME: Record Drawing Restoration Program																	
APPROPRIATION No.: 708	FUNDING REQUEST No.: NEW	AMOUNT: \$1,271,000															
SOURCE OF FUNDS: PAY-AS-YOU-GO																	
FY 94/95 BUDGET: No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> @ \$		CAPITAL PROGRAM PAGE NO. REFERENCE:															
<u>PROJECT JUSTIFICATION AND TYPE:</u> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> MEET WATER DEMANDS</td> <td style="width: 33%;"><input type="checkbox"/> NEW FACILITY</td> <td style="width: 33%;"><input checked="" type="checkbox"/> REPLACEMENT</td> </tr> <tr> <td><input type="checkbox"/> MANDATED BY LAW</td> <td><input checked="" type="checkbox"/> IMPROVEMENT</td> <td><input type="checkbox"/> EXPANSION</td> </tr> <tr> <td><input checked="" type="checkbox"/> ASSET PROTECTION/RISK MGT.</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> COST AVOIDANCE</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> OTHER _____</td> <td></td> <td></td> </tr> </table>			<input type="checkbox"/> MEET WATER DEMANDS	<input type="checkbox"/> NEW FACILITY	<input checked="" type="checkbox"/> REPLACEMENT	<input type="checkbox"/> MANDATED BY LAW	<input checked="" type="checkbox"/> IMPROVEMENT	<input type="checkbox"/> EXPANSION	<input checked="" type="checkbox"/> ASSET PROTECTION/RISK MGT.			<input checked="" type="checkbox"/> COST AVOIDANCE			<input type="checkbox"/> OTHER _____		
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PROJECT DESCRIPTION:

Record drawings are the official, conclusive record of all changes, modifications and actual installations of Metropolitan's facilities. There are currently over 250,000 engineering drawings stored in hard copy format that, when required, must be retrieved manually, representing a significant amount of accumulative time. Events such as the recent Northridge earthquake show the importance of having up-to-date, readily available record drawings. Staff, when referring to these drawings at any time, must also have the assurance that the information is accurate and up-to-date. Up-to-date record drawings are essential to completing engineering design drawings that provide accurate information to construction crews and preventing errors or omissions which can be costly, dangerous, or result in extensive delays and expensive litigation. Also, record drawings are provided to other agencies and developers who rely on them to accurately reflect the location and condition of Metropolitan's facilities.

A substantial backlog of record drawings that reflects incomplete or inaccurate information has increased significantly in recent years as a result of staff being diverted to completing higher priority capital project assignments.

Completing the Record Drawing Restoration Program will provide two key benefits. First, the program will eliminate the existing backlog of over 4,500 drawings requiring revisions. Second, the program will convert all of the existing record drawings from hard copy to electronic format through a simple scanning process providing for quick accessibility and prevention of any further deterioration inherent in the storage of traditional drawings. The

scanning of drawings represents only a small portion of the total cost of the program.

It is proposed that a two-phase approach be implemented to insure an orderly completion of the program. Phase One will serve as a pilot project to complete approximately 20 percent of the drawings representing the highest priority facilities. Based on a successful conclusion of Phase I, a future increase in the appropriation to \$7,295,000 will be requested to complete the second or final phase of the program. Almost all of the work will be completed by temporary employees of the District.

Class: Three—Projects not directly related to delivery of water but demonstrate that economic savings outweigh project costs.

STRATEGIC PLAN PRINCIPLE: 2.0 -- Cost

BENEFIT:

There are benefits associated with increased efficiency, reduction of errors and omissions on drawings, and associated extras in construction work, as well as possible litigation of safety issues; although difficult to quantify, the benefits more than justify the expense of the program.

PROJECT PLAN:

PHASE	COST	% COMPLETE	COST through 3/95	95/96	96/97	97/98	98/99	99/00
PHASE 1	\$1,090,000	0	0					
PHASE 2	5,157,000	0	0					
CONTINGENCY	1,048,000	0	0					
TOTAL	\$7,295,000	0	0					

ALTERNATIVES TO PROPOSED ACTION:

Continue using unverified and inaccurate reference drawings under a manual retrieval process.

CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION:

N/A

FINANCIAL ANALYSIS:

EVALUATION PERIOD: 5 YEARS

A. PROJECTED COSTS (CAPITAL AND O&M):

	YEAR 1	YEAR 2	YEAR 3	OUT YEARS	TOTAL
LABOR/ADDITIVES	\$ 747,000	\$ 769,000	\$ 804,000	\$1,708,000	\$4,028,000
PROFESSIONAL SERVICES	0	0	0	0	0
OTHER	343,000	440,000	460,000	976,000	2,219,000
CONTINGENCY	181,000	203,000	213,000	451,000	1,048,000
TOTAL	\$1,271,000	\$1,412,000	\$1,477,000	\$3,135,000	\$7,295,000

B. PROJECTED SAVINGS:

	YEAR 1	YEAR 2	YEAR 3	OUT YEARS	TOTAL
LABOR/ADDITIVES	\$0	\$0	\$0	\$0	\$0
PROFESSIONAL SERVICES	0	0	0	0	0
OTHER	0	0	0	0	0
TOTAL	\$0	\$0	\$0	\$0	\$0

C. DIFFERENCE (B-A)	(\$ 1,271,000)	(\$1,412,000)	(\$1,477,000)	(\$3,135,000)	(\$7,295,000)
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D. CUMULATIVE DIFFERENCE	(\$1,271,000)	(\$2,683,000)	(\$4,160,000)	(\$7,295,000)	(\$7,295,000)
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PAYBACK PERIOD: N/A YEARS

ESTIMATED LIFE OF PROJECT: N/A YEARS

ASSUMPTIONS:

Prevention of costly and avoidable life-endangering accidents and damage to facilities is not quantifiable, yet is a priority concern.

Attachment

FINANCIAL STATEMENT
(Program No. 5-7080-11)

The total estimated cost breakdown is as follows:

	<u>Cost Estimate</u>
Labor:	
Engineering	\$ 747,000
Total Labor	\$ <u>747,000</u>
Incidental Expenses	15,000
Administrative Overhead	328,000
Contingency	<u>181,000</u>
TOTAL	<u>1,271,000</u>

Source of Funds: Pay As You Go Fund

Projected Expenditure of Funds:

Through Fiscal Year 1995/96	\$1,271,000
Through Fiscal Year 1996/97	1,412,000
Through Fiscal Year 1997/98	1,477,000
Through Fiscal Year 1998/99	1,552,000
Through Fiscal Year 1999/00	1,583,000
TOTAL	<u>\$7,295,000</u>

Capital Program: Funds were not included in the Fiscal Year 1994/95 Capital Program. However, this work is necessary to eliminate the backlog of record drawings and prevent possible accidents during operation or construction due to inaccurate records.

Class: Three--Projects not directly related to delivery of water but demonstrate that economic savings outweigh project costs.

Project Benefit: Will provide more accurate and reliable information in a more expedient manner to all Divisions as well as improving assurances of safe facility operation.