

**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-5

November 28, 1995

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

From: *for* General Manager

Submitted by: Gary M. Snyder, Chief Engineer

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Subject: Authorization No. 20 to Increase Appropriation No. 560 from \$ 709,055,000 to \$ 1,150,000,000 and to Award a Contract for Construction of the West Dam, Saddle Dam, and Forebay Features of the Eastside Reservoir Project.

RECOMMENDATION(S)

It is recommended that your Board authorize an increase of \$440,945,000 in Appropriation No. 560 from the 1992 Revenue Bond Construction Fund, to a total of \$1,150,000,000 to expend budgeted funds to finance all remaining costs for the West Dam, Saddle Dam, and Forebay features of the Eastside Reservoir Project.

It is also recommended that a construction contract for the West Dam, Saddle Dam, and Forebay construction in the amount of \$384,150,000 be awarded to Atkinson-Washington-Zachry, A Joint Venture, in accordance with Specifications No. 1326, as amended, and that conditioned upon execution of the contract, all other bids be rejected.

BRIEF DESCRIPTION

Bids have been received under Specifications No. 1326, as amended, for the construction of the West Dam, Saddle Dam, and Forebay. Three bids were received and opened. These bids are shown on the attached abstract of bids (see Attachment B). The low bid from Atkinson-Washington-Zachry, A Joint Venture, in the amount of \$384,150,000 complies with the requirements of the specifications, is \$11,416,960 below the next lowest bid, and is \$92,374,010 below the Engineers Estimate. At this early stage in the construction program these savings have been placed in Project contingency. Following award of all major contracts in late 1996, the total Project budget will be evaluated to determine if a reduction in budget is appropriate.

A \$440,945,000 increase in Appropriation No. 560 is required to finance budgeted costs for the West Dam, Saddle Dam, and Forebay construction. The total estimated cost of the Eastside Reservoir Project is \$1,972,100,000 (see Attachment A).

Plans and specifications for the West Dam, Saddle Dam, and Forebay reflect review comments of the State of California, Division of Safety of Dams (DSOD). By letter, DSOD has indicated that approval of plans and specifications should be provided within a few weeks, after which construction would be initiated.

Contract Type <input checked="" type="checkbox"/> New <input type="checkbox"/> Amended	Funding <input type="checkbox"/> Capital-Appropriation No. 560 <input type="checkbox"/> O & M	Type of Competition <input checked="" type="checkbox"/> Competitive Bidding Specification No. <u>1326</u> <input type="checkbox"/> Negotiated Contract <input type="checkbox"/> Sole Source
Contract Form <input type="checkbox"/> Lease <input type="checkbox"/> Professional Services <input checked="" type="checkbox"/> Construction	Budget Status <input checked="" type="checkbox"/> FY 95-96 Amount \$226,490,400 <input type="checkbox"/> Out-Year Amount \$1,273,592,900 <input type="checkbox"/> Non-Budget Amount	

PURPOSE/BACKGROUND

The Eastside Reservoir Project (ESRP) will be formed by the construction of the West, East, and Saddle Dams within the Domenigoni and Diamond Valleys. The completed reservoir will provide 800,000 acre-feet of additional storage capacity to the Metropolitan service area, providing critical storage needs for emergencies, droughts, and peak summer months, and for the enhancement of local groundwater storage programs.

Work performed under a previous contract (Contract 1440, Specification 1305) included excavating the West Dam foundation to approximately 60 feet below the existing valley floor. Under this contract, the West Dam excavation will be completed, foundation grouting will be accomplished, cutoff walls will be excavated and installed through the alluvial foundation, and approximately 65 million cubic yards of earth/rock materials will be placed to construct the West Dam embankment. Also under this contract, the Saddle Dam excavation and foundation grouting will be accomplished and approximately 3 million cubic yards of earth/rock materials will be placed to construct the Saddle Dam embankment. Excavation for the approach channel to the Inlet/Outlet tower will be performed, as well as excavation and construction of the Forebay embankment and appurtenant structures. These major earth and rock moving features near the West Dam area are integrally related and have been combined as a single contract for proper construction logistics. Embankment materials for both the West and Saddle Dams will be obtained from onsite sources; either from required excavations of the dam foundations, from required excavation of the Inlet/Outlet approach channel or from alluvial and rock borrow areas. A rock processing plant will be furnished, erected, and operated to produce filter and drain materials.

ACTION(S) AND MILESTONE(S)

Final design of the West Dam, Saddle Dam, and Forebay was completed in August 1995. Construction is anticipated to start January 1996 and be completed in April 1999.

MBE/WBE

The specifications, as amended, established certified Minority-Owned Business Enterprise (MBE) and Women-Owned Business Enterprise (WBE) participation goals of 10 percent MBE and 3 percent WBE. The specifications also provided that a bidder which does not meet the indicated participation goals must submit documentation of its good faith effort to meet such goals. Atkinson-Washington-Zachry, A Joint Venture, achieved 2.4 percent certified MBE participation and 3.1 percent certified WBE participation. None of the bidders met the MBE participation goals. Atkinson-Washington-Zachry has provided good faith documentation demonstrating their efforts to meet participation goals. This documentation has been reviewed by the Business Outreach Office of Metropolitan and has been deemed to be adequate. Atkinson-Washington-Zachry, A Joint Venture, has proposed to sub-contract a total of approximately 15 percent of their activities. The MBE and WBE sub-contractors are listed in Attachment C.

CEQA COMPLIANCE/ENVIRONMENTAL DOCUMENTATION

All California Environmental Quality Act (CEQA) requirements have been satisfied for the proposed action. In October 1991, your board certified the Final Environmental Impact Report for the Eastside Reservoir Project. This action satisfied the provisions of CEQA, and no further environmental documentation or reviews are necessary for your Board to take action on this recommendation.

Plan and Bid Statistics

150 Contractors Requested Plans

3 Bids Submitted

Evaluation Criteria

Low bid that meets the requirements of the specifications. Bidders qualifications and MBE/WBE participation are also considered.

Contractual Details

- Anticipated Duration 835 Work Days
- Hourly Rates
- Prevailing Wage Rates Will Apply

FISCAL STATEMENT
Eastside Reservoir and Related Facilities
(Program No.5-5600-11)

Project Summary:

Total Project

	Current Budget	Total Appropriation
Planning	15,000,000	15,000,000
Land*	334,000,000	334,000,000
Mitigation*	32,681,000	32,681,000
Design	120,450,000	120,450,000
Construction	1,300,936,000	590,204,937
Recreation	33,000,000	
Contingency	136,033,000	57,664,063
TOTAL	\$ 1,972,100,000	\$ 1,150,000,000

* Land costs include \$28.3 million for land purchases at the Santa Rosa Plateau and Shipley Reserve which when added to non-real estate mitigation costs of \$32.7 million results in a total mitigation value of \$61million.

The total cost breakdowns for Authorization Nos. 19 and 20 to Appropriation No, 560 are shown below:

	AUTHORIZATION NO. 19	AUTHORIZATION NO. 20
Specification No. 1326		384,150,000
Construction	118,194,914	118,194,914
Labor:		
Preliminary Engineering, Final Engineering, and Preparation of Specifications	26,878,741	26,878,741
Post Design	858,012	858,012
Contract Administration Inspection and Survey	7,327,100	16,765,788
Labor Subtotal	35,063,853	44,502,541
Materials and Supplies	1,337,595	1,337,595
Right of Way Acquisition	303,500,000	303,500,000
Incidental Expenses	14,806,652	16,806,652
Professional Services	203,902,298	203,902,298
Operating Equipment Use	1,483,501	1,483,501
Administrative Overhead	16,871,205	22,078,757
Contingencies	17,515,303	57,664,063
Reimbursable from Agencies	-3,620,321	-3,620,321
TOTAL	\$709,055,000	\$1,150,000,000

Fiscal Statement
(Program No. 5-5600-11)

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Attachment A

Estimated Funds Required:

REVISION	DATE	AMOUNT
Initial	June 27, 1988	8,300,000
Revision No.1	November 1, 1989	5,000,000
Revision No.2	May 2, 1989	45,000,000
Revision No.3	November 27, 1990	20,000,000
Revision No.4	February 19, 1991	15,600,000
Revision No.5	March 26, 1991	12,000,000
Revision No.6	September 24, 1991	189,100,000
Revision No.7	January 22, 1993	12,300,000
Revision No.8	September 17, 1993	112,000,000
Revision No.9	October 21, 1993	1,670,000
Revision No.10	June 28, 1994	987,000
Revision No.11	July 18, 1994	952,000
Revision No.12	July 25, 1994	19,621,000
Revision No.13	November 29, 1994	94,100,000
Revision No.14	December 23, 1994	56,758,000
Revision No.15	December 23, 1994	22,331,000
Authorization No.16	February 7, 1995	59,500,000
Authorization No.17	February 7, 1995	23,319,000
Authorization No.18	May 8, 1995	9,977,000
Authorization No.19	November 14, 1995	540,000
Authorization No.20	November 28, 1995	440,945,000
Remaining		823,000,000
TOTAL		\$ 1,972,100,000

Source of Funds:

1992 Revenue Bond Construction Fund

Class One:

Projects directly related to delivery of water.

Projected Expenditures of Funds:

Through	Fiscal Year 1992/93	\$251,800,0000
	Fiscal Year 1993/94	\$105,889,0000
	Fiscal Year 1994/95	\$96,920,7000
	Fiscal Year 1995/96	\$211,363,9000
	Fiscal Year 1996/97	\$462,716,3000
	Fiscal Year 1997/98	\$534,561,3000
	Fiscal Year 1998/99	\$266,012,0000
	Fiscal Year 1999/2000	\$42,836,8000
	TOTAL.....	\$1,972,100,0000

The Metropolitan Water District of Southern California

**Abstract of Bids Received November 15, 1995 at 2:00 p.m.
Specifications No. 1326, as Amended
Eastside Reservoir Project
West Dam, Saddle Dam, and Forebay**

The West Dam, Saddle Dam, and Forebay project includes clearing, grubbing, and stripping; demolition; excavation; foundation dewatering; rock foundation treatment; plastic concrete cutoff in the West Dam foundation; foundation grouting; foundation clean-up; dam embankment and instrumentation; Forebay embankment, liner, structures and road; and all other work shown, specified or otherwise required to complete the work.

Engineer's Estimate: \$476,524,010

Bidder & Location	Item 1 Mobilization	Total of All Work
Atkinson-Washington-Zachry, A Joint Venture San Bruno, California	\$20,000,000	\$384,150,000
Kiewit-Granite, A Joint Venture Vancouver, Washington	\$20,000,000	\$395,566,960
Tutor-Saliba Corporation, Perini Corporation, Buckley & Company, Inc., and O&G Industries, Inc., A Joint Venture Sylmar, California	\$20,000,000	\$437,259,350

MBE/WBE PARTICIPATION

Name of Bidder: Atkinson-Washington-Zachry, A Joint Venture

Name, Address, and Telephone Number of Certified MBE/WBE Subcontractor	Work to Be Performed or Materials To Be Supplied	Participation	
		MBE%	WBE%
G & C Equipment Corporation 1875 W. Redondo Beach Blvd., Suite 102 Gardena, CA 90247 (310) 515-6715	Equipment Rental	.039%	
Geofon Incorporation 5552 Cerritos Ave., Suite B Cypress, CA 90630 (714) 220-2777	Instrumentation	.799%	
Haro Engineering & Construction 901 W. Arrow Highway Glendora, CA 91741 (818) 332-9677	Survey	.390%	
Pinnacle Petroleum, Inc. 5901 Warner Ave., Suite 203 Huntington Beach, CA 92649 (714) 841-1494	Fuel Supply		1.535%
Ayala & Sons, Inc. P.O. Box 1264 San Bernardino, CA 92402 (909) 888-0369	Paving	.157%	
Coast Geo Constructors 150 Executive Park Blvd. #3600 San Francisco, CA 94134 (415) 467-7700	Drilling	.130%	
Regional Steel Corporation 215 York Place Claremont, CA 91711 (909) 625-4721	Rebar	.919%	

MBE/WBE PARTICIPATION

Name of Bidder: Atkinson-Washington-Zachry, A Joint Venture

Name, Address, and Telephone Number of Certified MBE/WBE Subcontractor	Work to Be Performed or Materials To Be Supplied	Participation	
		MBE%	WBE%
W. C. Goolsby, Inc. 10222 Rosecrans Ave. Bellflower, CA 90706 (310) 866-3420	Fuel Supply		1.535%
Total Participation		2.43%	3.07%

Attachment D

COST SUMMARY

WEST DAM, SADDLE DAM, AND FOREBAY

The total cost breakdown for the West Dam, Saddle Dam, and Forebay is shown below:

Construction Specification No. 1326	384,150,000
Labor:	
Preliminary Engineering, Final Engineering, and Preparation of Specifications	
Post Design	
Contract Administration	
Inspection and Survey	9,438,688
Labor Subtotal	<u>9,438,688</u>
Materials and Supplies	
Incidental Expenses	2,000,000
Professional Services	
Operating Equipment Use	
Administrative Overhead	5,207,552
Contingencies	40,148,760
TOTAL	<u><u>\$440,945,000</u></u>



TO COLORADO RIVER AQUEDUCT

EASTSIDE PIPELINE

SALT CREEK CHANNEL

SAN DIEGO PIPELINE NO.S 1 & 2

WINCHESTER ROAD

RELOCATED NEWPORT ROAD

SAN DIEGO CANAL

SECONDARY INLET

SADDLE DAM

ACCESS ROADS

MMD FIELD OFFICE

NEWPORT ROAD

P-1 PRESSURE TUNNEL

P-1

FOREBAY

I/O APPROACH CHANNEL EXCAVATION

BA1W2

DIVERSION DIKE

NMMS EL 1756.0

RELOCATED SAN DIEGO CANAL

WEST DAM

BA3

BA2

RECREATION AREA

APPROXIMATE LIMITS OF WORK

PROPERTY BOUNDARY

0 1500 3000 4500

SCALE IN FEET