

- **Board of Directors**
Engineering and Operations Committee

September 9, 2003 Board Meeting

8-2

Subject

Authorize entering into engineering services agreements and amending a consultant agreement in support of board-approved Capital Investment Plan programs

Description

Staff has identified the need to augment existing personnel with engineering consultants in order to execute previously authorized and funded Capital Investment Plan (CIP) projects in accordance with board-adopted schedules. In order to effectively utilize the required supplemental engineering services, staff developed a series of Requests for Proposals (RFPs) and Requests for Qualifications (RFQs) to provide supplemental services in several disciplines: general design engineering, environmental planning, and process engineering.

This action requests authorization to enter into six new agreements with consultants and amend one existing agreement. The duration of the agreements will vary from three to five years. Funding for the work to be assigned to the various consultants is budgeted and has previously been approved by the Board under individual O&M or capital programs for the initial work assignments. Later assignments will be funded when projects are approved by the Board and funds are appropriated for the individual programs. No funding or project authorizations are requested at this time.

The consulting agreements recommended are based on Metropolitan's areas of need on specific capital and O&M programs. These agreements will allow Metropolitan's staff to be strategically utilized on projects so as to best maintain key engineering competencies and to address projects with special needs or issues. Engineering consultants will be utilized to supplement staff's capabilities only where necessary to accomplish budgeted CIP work while minimizing impacts to other essential projects and core O&M activities. Contracting with multiple firms provides Metropolitan with maximum flexibility in obtaining necessary engineering services tailored to each firm's expertise.

Design Engineering Services

Staff intends to package discrete portions of larger designs, as well as entire smaller designs, to be completed by consultants. Consultants will perform studies and investigations and produce final plans and specifications. Projects to be initially assigned to these firms fall under the Distribution System – Control and Equipment Upgrade Program, Skinner Filtration Plant – Expansion No. 4 Program, and Diemer Oxidation Retrofit Program (ORP). RFP 575 was issued in January 2003 for engineering design support services. Staff reviewed proposals from 16 firms, of which three are recommended for agreements at this time. This action authorizes the Chief Executive Officer (CEO) to enter into five-year design engineering support agreements with MWH Americas, Inc., not to exceed \$2 million per year; RBF Consulting, not to exceed \$1 million per year; and Richard Brady and Associates, not to exceed \$1 million per year.

Environmental Planning Services

Staff requires supplemental environmental engineering services to perform activities such as preparing California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents, preparing and analyzing technical environmental reports, analyzing environmental resource issues, assisting in permit preparation and agency coordination, and preparing and implementing Mitigation Monitoring Plans. The initial projects to be assigned to consultants relate to the Whitewater Siphon Protection Program, the Weymouth ORP, and the Lake Perris Water Quality Improvements Program.

RFQ 546 was issued in October 2002 for environmental planning services. Staff reviewed Statements of Qualifications (SOQs) from 24 firms, of which two are recommended for agreements at this time: Helix Environmental Planning, Inc., and MWH Americas, Inc. This action authorizes the CEO to enter into three-year agreements with these firms, not to exceed \$500,000 per year, for environmental planning services.

Process Engineering Services

Staff requires supplemental process engineering services for CIP projects at Metropolitan's five filtration plants and other locations. Process engineering primarily involves water treatment-related work. Services required include tasks such as performing studies and investigations, preparing preliminary and final designs, and providing construction support.

RFQ 578 was issued in December 2002 for process engineering services. Staff reviewed SOQs from 13 firms, of which one is recommended for an agreement at this time. This action authorizes the CEO to enter into a five-year agreement with CH2M Hill for process engineering services, not to exceed \$500,000 per year. Among the first tasks to be addressed involves the Treatment Plants – Control and Equipment Upgrade Program.

Weymouth ORP Consultant Agreement Amendment

In March 2002, Metropolitan's Board appropriated funds for preliminary design of oxidation facilities at the F. E. Weymouth Filtration Plant. In July 2003, the Board selected ozonation as the disinfection process for the Weymouth plant and modified the CIP schedule to include an accelerated on-line date for the Weymouth ORP of 2009. Utilization of consultants is required to meet the on-line date. This action authorizes amending the professional services agreement with Carollo Engineers for Weymouth ORP preliminary engineering design services, with a total increase of \$2 million, for a new not-to-exceed total of \$2.5 million. Carollo was selected through a competitive process (RFP 556 to Provide Process Engineering Services for Skinner, Diemer and Weymouth ORPs) in which staff reviewed five proposals. Amendment of this agreement is consistent with Carollo's scope of work and with the planned approach for project implementation.

A detailed report is included as [Attachment 1](#). A summary table of requested agreements and assignments is included in [Attachment 2](#). A complete list of RFP and RFQ respondents is included in [Attachment 3](#).

Policy

Metropolitan Water District Administrative Code § 8117: Professional and Technical Consultants

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and 3:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as personnel-related actions, general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities that do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). For those future activities and projects to be developed in conjunction with these agreements and that are subject to CEQA, applicable CEQA review, evaluation, and documentation will be processed prior to Metropolitan taking future discretionary actions.

The CEQA determination is: Determine that the proposed action for entering into engineering services agreements is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and

- a. Authorize the Chief Executive Officer to enter into the following consultant agreements:
 - MWH Americas, Inc., five years, not to exceed \$2 million per year, for design support services
 - RBF Consulting, five years, not to exceed \$1 million per year, for design support services
 - Richard Brady & Associates, five years, not to exceed \$1 million per year, for design support services
 - Helix Environmental Planning, Inc., three years, not to exceed \$500,000 per year, for environmental planning services
 - MWH Americas, Inc., three years, not to exceed \$500,000 per year, for environmental planning services
 - CH2M Hill, five years, not to exceed \$500,000 per year, for process engineering services; and
- b. Authorize amending the professional services agreement with Carollo Engineers for a new not-to-exceed total of \$2.5 million for Weymouth ORP preliminary engineering design services.

Fiscal Impact: None, expenditures are budgeted and approved under the appropriate projects on a case-by-case basis.

Option #2

Do not authorize entering into consulting agreements and amending the ORP professional services agreement, and instead use Metropolitan staff to perform all design, environmental, and process engineering services, and Weymouth ORP preliminary engineering design services. This option would result in delays to essential projects and may require additional staff to be hired.

Option #3

Adopt the CEQA determination and

- a. Authorize the Chief Executive Officer to enter into an agreement with MWH Americas, Inc., three years, not to exceed \$500,000 per year, for environmental planning services
- b. Authorize amending the professional services agreement with Carollo Engineers for a new not-to-exceed total of \$2.5 million for Weymouth ORP preliminary engineering design services; and
- c. Do not authorize entering into all other new consulting agreements listed under Option #1.
This option would result in delays to essential projects and may require additional staff to be hired, but would not affect the Weymouth ORP schedule.

Staff Recommendation

Option #1



 Roy L. Wolfe
 Manager, Corporate Resources

8/15/2003

Date



 Ronald R. Gastelum
 Chief Executive Officer

8/22/2003

Date

[Attachment 1 – Detailed Report](#)

[Attachment 2 – Summary of Requested Agreements and CIP/O&M Program Assignments](#)

[Attachment 3 – RFQ and RFP Respondents](#)

Detailed Report

Engineering Services Agreements

Purpose/Description

Staff has identified the need to augment existing personnel with engineering consultants in order to execute previously authorized and funded Capital Investment Plan (CIP) projects in accordance with board-adopted schedules and to complete some O&M activities. The capital projects are often large design efforts, such as Skinner Filtration Plant Expansion No. 4, or distribution system control upgrades. Use of consultants to supplement staff's capabilities is required to minimize impacts to other essential projects and on-going core O&M activities.

Staff has recently advertised several Requests for Proposals (RFP) and Requests for Qualifications (RFQ) in preparation for upcoming CIP work. Staff recommends five-year agreements for engineering support services to correspond with the typical duration of capital projects. Three-year agreements are recommended for environmental planning services. No work is guaranteed to any of the consultants under these agreements.

Funding for the work to be assigned to the various consultants is budgeted and has previously been approved by the Board under individual O&M or capital programs for the initial work assignments. Later assignments will be funded when projects are approved by the Board and funds are appropriated for the individual programs. No funding or project authorizations are requested at this time.

Attachment 2 summarizes the requested agreements and lists the initial CIP/O&M assignments under each agreement category. The table also includes the Small Business Enterprise (SBE) participation included in each agreement.

Design Engineering Services

A RFP to provide engineering design support services (RFP 575) was issued in January 2003. Sixteen firms submitted proposals for general design services. Staff evaluated the proposals and short-listed six firms.

Staff recommends entering into agreements with three firms for general design support: MWH Americas, Inc., RBF Consulting, and Richard Brady & Associates. Five-year design support agreements will be limited to \$2 million per year for MWH Americas, Inc., and \$1 million per year for RBF Consulting and Richard Brady and Associates. Richard Brady and Associates is a registered SBE.

Metropolitan selected these three firms to provide staff with the highest level of flexibility and support. The consultants may be requested to work on pipelines, flow control structures, metering and valve structures, pumping facilities, water treatment plants or other equipment/processes. The scope of work for these consultants may include seismic integrity assessments, calculations, preliminary designs, final designs, or specifications. Some projects may require only professional engineering services, while others may require only designer/drafting services.

Programs to be supplemented under these agreements initially include the Distribution System – Control and Equipment Upgrade Program (15398); the Skinner Filtration Plant – Expansion No. 4 Program (15410); and the Diemer Oxidation Retrofit Program (15389).

Environmental Planning Services

A RFQ for environmental planning services (RFQ 546) was issued in October 2002. Staff reviewed 24 Statements of Qualifications (SOQs) and shortlisted 10 firms. Staff recommends entering into agreements with two firms: Helix Environmental Planning, Inc., and MWH Americas, Inc. The three-year agreements will be limited to \$500,000 per year.

These two firms will supplement staff in preparing California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) documents, preparing and analyzing technical environmental reports,

analyzing environmental resource issues, assisting in permit preparation and agency coordination, and preparing and implementing mitigation monitoring plans.

The initial projects to be assigned to these consultants involve the Whitewater Siphon Protection Program, the Weymouth Oxidation Retrofit Program (ORP), and the Lake Perris Water Quality Improvements (O&M) Program.

Process Engineering Services

RFQ 578 was issued in December 2002 for process engineering services. Process engineering primarily consists of water treatment-related work. Services required include such tasks as performing studies and investigations, preparing preliminary and final designs, and providing construction support. Staff reviewed 13 process engineering SOQs and short-listed six firms.

Staff recommends entering into a five-year agreement with CH2M Hill for process engineering services, not to exceed \$500,000 per year. This firm will be used to supplement staff where expertise is needed to support existing treatment-related programs such as the Treatment Plants - Control and Equipment Upgrade Program.

Weymouth ORP Consultant Agreement Amendment

In March 2002, Metropolitan's Board authorized funds for preliminary design activities for oxidation facilities at the F. E. Weymouth Filtration Plant. Weymouth plant siting studies, which recommend the locations of future plant facilities including the ORP and buildings to be relocated, were recently completed. Staff efforts were supplemented with process engineering services provided by competitively selected consultants. Upcoming preliminary design activities will include: geotechnical investigations; detailed layout of facilities; hydraulic analyses; utility supply analyses; major pipeline and rail routing; development of detailed design criteria; cost estimating; architectural renderings; identification of permits and code compliance issues; construction sequencing; and continuing input to the environmental documentation.

In July 2003, Metropolitan's Board selected ozonation as the disinfection process for the F. E. Weymouth Filtration Plant and modified the CIP schedule to include an on-line date for the Weymouth ORP of 2009. To achieve this on-line date, staff recommends increasing professional services Agreement No. 51144 with Carollo Engineers by \$2 million to a maximum amount of \$2.5 million to provide Weymouth ORP preliminary engineering design services. Carollo was selected through a competitive process (RFP 556 to Provide Process Engineering Services for Skinner, Diemer and Weymouth ORPs). Amendment of this agreement is consistent with Carollo's scope of work and with the planned approach for project implementation. Metropolitan staff will perform project management, system hydraulic analyses, and project oversight. No additional funding is requested for these preliminary design activities at this time.

Summary of Requested Agreements and CIP/O&M Program Assignments

	Agreement Duration	Agreement NTE/year Amount*	SBE Participation	CIP/O&M Assignments and Program No.
Design Engineering Services				
MWH Americas, Inc.	5 years	\$2 million	20%	Design support for: Distribution System – Control and Equipment Upgrade Program (15398); Skinner Filtration Plant – Expansion No. 4 Program (15410); Diemer Oxidation Retrofit Program (15389)
RBF Consulting	5 years	\$1 million	20%	
Richard Brady & Associates	5 years	\$1 million	100%	
Environmental Planning Services				
Helix Environmental, Inc.	3 years	\$500,000	100%	Environmental documentation for: Whitewater Siphon Protection Program (15341); Weymouth Oxidation Retrofit Program (15392); Lake Perris Water Quality Improvements Program (O&M)
MWH Americas, Inc.	3 years	\$500,000	To be established	
Process Engineering Services				
CH2M Hill, Inc.	5 years	\$500,000	20%	Process engineering support for the Treatment Plants - Control and Equipment Upgrade Program (15399)
ORP Process Engineering Services				
Carollo Engineers	N/A**	+\$2 million***	15%	Preliminary design engineering services for the Weymouth Oxidation Retrofit Program (15392)

* NTE: Not to exceed

** Existing agreement; no time extension required

*** Amend existing Agreement No. 51144 to increase maximum amount payable from \$500,000 to \$2.5 million

RFQ and RFP Respondents

RFP 575 – Engineering Design Support Services

Bechard Long & Associates, Inc.
Bibb and Associates
Burns and McDonnell Engineering Company, Inc.
Carollo Engineers
Dahl, Taylor & Associates, Inc.
David Evans and Associates, Inc.
Kennedy/Jenks Consultants
KPR Civil Structural Consulting
Lee & Ro, Inc.
MWH Americas, Inc
Pettit, Inc.
Qual Tech Engineering
RBF Consulting
Richard Brady & Associates
US Infrastructure, Inc.
Wheeler & Gray, Inc.

RFQ 546 – Environmental Planning Services

Bonterra Consulting, Inc.
David Evans & Associates, Inc.
Dudek & Associates
Earth Tech, Inc.
EDAW, Inc.
Entrix, Inc.
Environmental Science Assoc.
Foster Wheeler Environmental
Helix Environmental Planning, Inc.
Impact Sciences, Inc.
Jones & Stokes Associates, Inc.
LSA Associates, Inc.
Michael Brandman Associates
Mooney & Associates
MWH Americas, Inc.
Myra L. Frank & Assoc., Inc.
P&D Consultants
Sapphos Environmental, Inc.
Science Applications International, Corp (SAIC)
The Keith Companies, Inc.
TRC
Ultra Systems Environmental
URS Corporation
William D. Wagner, Consulting Biologist

RFQ and RFP Respondents

RFQ 578 – Process Engineering Services

Accord Engineering, Inc.
Bibb and Associates, Inc.
Black & Veatch
Burns and McDonnell
Carollo Engineers, P.C.
Camp Dresser & McKee Inc. (CDM)
CH2M Hill, Inc.
EMA, Inc.
Kennedy/Jenks Consultants
MWH Americas, Inc. (MWH)
Pettit, Inc.
QualTech Engineering Corp.
Richard Brady and Associates

RFP 556 – Process Engineering Services for Skinner, Diemer and Weymouth Oxidation Retrofit Programs

Black & Veatch Corporation
Camp Dresser and McKee, Inc.
Carollo Engineers, P.C.
CH2M Hill, Inc.
MWH Americas, Inc.