

Special Meeting of the Metro Commission and Metro Wastewater JPA

AGENDA

Thursday, October 20, 2016 12:00 p.m.

9192 Topaz Way (MOC II) Auditorium San Diego, California

"The Metro JPA's mission is to create an equitable partnership with the San Diego City Council and Mayor on regional wastewater issues. Through stakeholder collaboration, open dialogue, and data analysis, the partnership seeks to ensure fair rates for participating agencies, concern for the environment, and regionally balanced decisions."

Note: Any member of the Public may address the Metro Commission/Metro Wastewater JPA on any Agenda Item. Please complete a Speaker Slip and submit it to the Administrative Assistant or Chairperson prior to the start of the meeting if possible, or in advance of the specific item being called. Comments are limited to three (3) minutes per individual.

Documentation Included

- 1. ROLL CALL
- 2. PLEDGE OF ALLEGIANCE TO THE FLAG
- 3. PUBLIC COMMENT

Persons speaking during Public Comment may address the Metro Commission/ Metro Wastewater JPA on any subject matter within the jurisdiction of the Metro Commission and/or Metro Wastewater JPA that is not listed as an agenda item. Comments are limited to three (3) minutes. Please complete a Speaker Slip and submit it prior to the start of the meeting.

- 4. REPORT: WASTEWATER FLOW DIAGRAMS NORTH CITY OPERATIONAL STRATEGY – ADDITION OF MORENA PUMP STATION (John Helminski/Amer Barhoumi) (Attachment)
- X 5. ACTION: CONSIDERATION AND POSSIBLE ACTION TO APPROVE AN AGREEMENT WITH AECOM FOR DESIGN ENGINEERING SERVICES FOR MORENA PUMP STATION AND CONVEYANCE SYSTEM (John Helminski/Wendy Gamboa) (Attachment)

Documentation Included

- X 6. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE AN AGREEMENT WITH CH2M HILL ENGINEERS, INC. FOR DESIGN ENGINEERING SERVICES FOR THE NORTH CITY WATER RECLAMATION PLANT EXPANSION AND INFLUENT CONVEYANCE PROJECT (John Helminski/Amy Dorman) (Attachment)
- 7. ACTION: CONSIDERATION AND POSSIBLE ACTION TO APPROVE AN AMENDMENT TO THE SOLE SOURCE AGREEMENT FOR SPECIAL COUNCIL FOR HAWKINS DELAFIELD AND WOOD (HDW) TO PROVIDE SPECIALIZED LEGAL SERVICES FOR THE LANDFILL GAS, COGENERATION AND BIOSOLIDS MANAGEMENT FACILITIES AND SERVICES PROJECT. (John Helminski/Fritz Ortlieb) (Attachment)
- X 8. <u>REPORT</u>: MONTGOMERY WATSON HARZA (MWH) TASK ORDER OVERVIEW (John Helminski/Julie Labonte) (**Attachment**)
- X 9. <u>ACTION</u>: CONSIDERATION AND POSSIBLE ACTION TO APPROVE AMENDMENT NO. 1 TO THE AS-NEEDED ENGINEERING TECHNICAL SERVICES CONSULTANT AGREEMENT WITH MONTGOMERY WATSON HARZA (MWH) AMERICAS, INC., FOR THE PURE WATER SAN DIEGO PROGRAM (John Helminski/Julie Labonte) (Attachment)
 - 10. ADJOURNMENT OF METRO COMMISSION AND METRO WASTEWATER JPA

The Metro Commission and/or Metro Wastewater JPA may take action on any item listed in this Agenda whether or not it is listed "For Action."

Materials provided to the Metro Commission and/or Metro Wastewater JPA related to any open-session item on this agenda are available for public review by contacting L. Peoples at (619) 548-2934 during normal business hours.

In compliance with the AMERICANS WITH DISABILITIES ACT

The Metro Commission/Metro Wastewater JPA requests individuals who require alternative agenda format or special accommodations to access, attend, and/or participate in the Metro Commission/Metro Wastewater JPA meetings, contact E. Patino at (858) 292.6321, at least forty-eight hours in advance of the meetings.

Metro JPA 2016 Meeting Schedule

January 7, 2016	February 4, 2016	March 3, 2016
April 7, 2016	May 5, 2016	June 2, 2016
July 7, 2016	August 4, 2016	September 1, 2016
October 6, 2016	November 3, 2016	December 1, 2016

Attachment 4 Wastewater Flow Diagrams

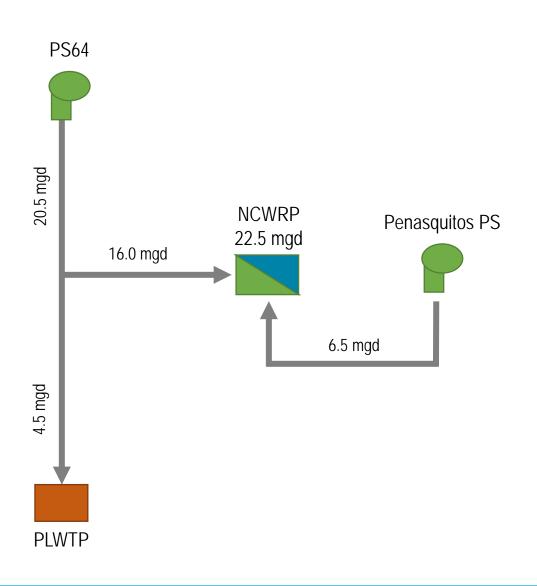
Public Utilities Department

NORTH CITY OPERATIONAL STRATEGY Addition of Morena Pump Station

Metro Commission/JPA October 20, 2016

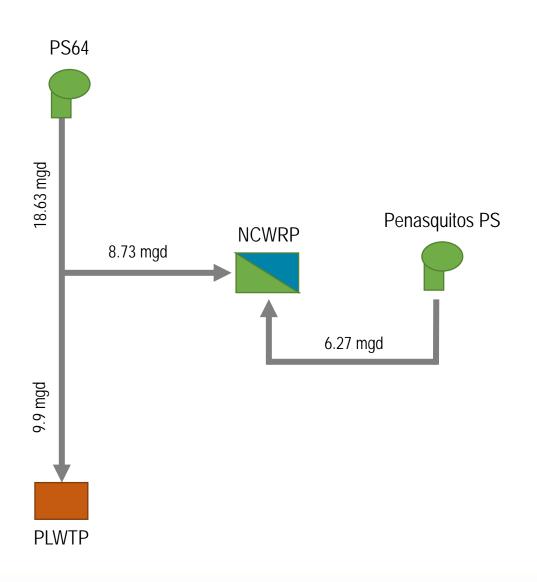


PAST OPERATIONAL STRATEGY



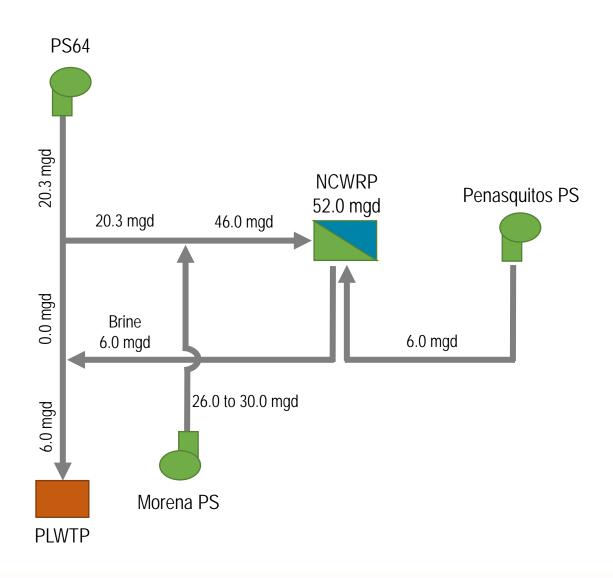
- PS64 Flow= 20.5 mgd
- PQPS Flow=6.5 mgd
- Total NCWRP=22.5 mgd
- NCWRP flow Based on 75% of 30 mgd, originally assumed dictated by grant condition
- Return Flows from NCWRP to PLWTP are not shown in schematic

CURRENT OPERATIONAL STRATEGY



- Grant Condition no longer applies
- Treat Minimum to meet NPR Demands
- Return remaining flows to PLWTP
- Return Flows from NCWRP to PLWTP are not shown in schematic

FUTURE OPERATIONAL STRATEGY



- Treat all flows from PS64 & PQPS.
- Intercept additional flows at Morena and redirect to North City Water Reclamation Plant

Questions



Attachment 5 Agreement with AECOM

METRO JPA/TAC Staff Report Date:

Project Title:			
Morena Pump Station and Conveyance System			
Requested Action:			
		g services agreement between the City of San Diego and	
	•	tion and Conveyance System to City Council for approval.	
	ecommendations:		
Αŗ	prove the contract request.		
	NA 4 TAO	TI: '' A 14 11 TAO ''' A 447	
	Metro TAC:	This item was presented to the TAC committee on August 17,	
		2016 and a request made for more Pure Water program information.	
	IROC:	N/A	
	INOO.	N/A	
	Prior Actions:	This action was approved at Environmental Committee on	
	(Committee/Commission,	September 15, 2016.	
	Date, Result)		
	,		
Fi	scal Impact:		
	Is this projected budgeted?		
	Cost breakdown between	It is estimated that the funding will be allocated as follows:	
	Metro & Muni:	Water: 43% (approximately \$6.8 million), Wastewater: 57%	
		(approximately \$9.1 million) Metro: 100%, Muni: 0%).	
	Figure 1 in part to the Metro	The total contract amount is \$15,875,255.00.	
	Fiscal impact to the Metro JPA:	22 5% of Motro cost (approximately \$2 million)	
	JFA.	33.5% of Metro cost (approximately \$3 million).	
C	apital Improvement Progra		
	New Project? Yes X		
	<u> </u>	No <u>XUpgrade/addition</u> Change	
	Existing Project: Tes	Opgrade/additionOnange	
Pı	evious TAC/JPA Action:		
This item was presented to the TAC committee on August 17, 2016 and a request made for			
more Pure Water program information.			
A	dditional/Future Action:		
	ty Council Action:		
Ci	ty Council approval of the pr	oposed agreement is anticipated on October 25, 2016.	
D.	pokaround: Provide beekare	und information on the need for the project	
	ee discussion below.	and information on the need for the project	
0	o dioddolon bolow.		

Revised: 20140409

Discussion: Provide information on decisions made to advance the project

San Diego's imported water supplies face increasing stresses from a variety of sources. As a result, the region's supplies are becoming less reliable and more expensive. These circumstances, and the threat limitation on San Diego's water supplies, have intensified the need for new sources of water. Pure Water San Diego is the City of San Diego's (City) 20-year program to provide a safe, secure and sustainable local drinking water supply for San Diego. Recycled water will be turned into drinkable water through the use of water purification technology. Further, Pure Water's system-wide reuse will significantly reduce flows to the Point Loma Wastewater Treatment Plant and will make San Diego more water independent. On April 29, 2014, City Council adopted Resolution Number R-308906 supporting the Pure Water Program.

Pure Water implementation includes design and construction of new treatment and conveyance facilities. To ensure quality design and construction of future Pure Water facilities, the Public Utilities Department has elected to obtain professional engineering and technical services for completing the design work.

One of the projects that is proposed under the Pure Water Program is the Morena Pump Station and Conveyance System (MPS). This system will take wastewater from Morena Blvd. near Friars Road and pump it approximately 11 miles north, to the North City Water Reclamation Plant (NCWRP) via a new 48-inch sewer force main. The additional wastewater is needed by the NCWRP to support both recycled water customer demands, and to provide tertiary -treated water to the future North City Pure Water Facility. Brine, a byproduct of the purification process, will then be conveyed approximately 11 miles back to the North Mission Valley Interceptor Sewer on Friars Road, via a 24-inch pipeline.

The MPS project also includes approximately 3.5 miles of new 36-inch transmission water mains to create system redundancy, and replacement of approximately 3.7 miles of existing 16-inch cast iron and asbestos cement distribution water mains. These water main replacements are part of the Water CIP – for coordination purposes and minimizing community disruptions along Morena Blvd, their design and construction are being bundled with the design and construction of Pure Water facilities.

In February 2016, the Public Utilities Department requested proposals from qualified firms for the Design Engineering services for the MPS. In March 2016, a total of five (5) firms submitted proposals pursuant to the Request for Proposal. Subsequently, all five (5) firms were invited to participate in the interview process. In April 2016, the Selection Panel interviewed the five (5) firms. Based on the selection rating criteria, AECOM was selected as the most qualified firm.

The proposed design engineering services for the MPS agreement with AECOM has a total not to exceed amount of \$15,875,255 for a duration of five (5) years.

Project Schedule: The table below presents the anticipated schedule.

Activity	Date
Metro JPA/ Metro Commission	10/20/2016
City Council Approval	10/25/2016

Bid Results: If bidding was done provide bidding format and results Not Applicable.

Public Utilities Department
Pure Water Division

Agreement with AECOM for Design Engineering Services for Morena Pump Station and Conveyance System

Metro Commission/JPA October 20, 2016

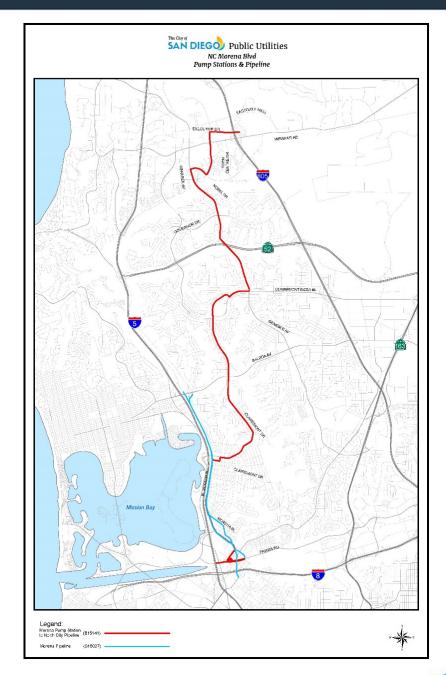


Project Purpose

- Component of North City Pure Water Phase 1
- Convey additional wastewater to the expanded North City Water Reclamation
 Plant
- Support Pure Water Phase 1 delivery of 30 mgd

Project Scope & Location

- Pure Water Facilities
 - 32-mgd Morena Pump Station, east of
 I-5 near Morena Boulevard
 - 48-inch wastewater force main
 - 24-inch brine conveyance
- Water CIP Improvements
 - Within same right-of-way as Pure Water pipelines
 - Bundled with Pure Water pipelines to ensure design coordination and cost savings



Selection Process and Contract Terms

- February 2016, Request for Proposal (RFP) advertised
- Five firms submitted proposals, all five firms interviewed
- AECOM was selected as the most highly qualified firm
- Total contract amount: \$15,875,255
 - Metro-funded amount: \$9,071,777
 - Water-funded amount: \$6,803,478
- Contract duration: 5 years
- Requested action: Recommend approval of this contract



A&D



Attachment 6

Agreement with CH2M Hill Engineers, Inc.

METRO JPA/TAC Staff Report Date: 10/19/2016

Project Title:

Agreement with CH2M Hill Engineers, Inc. for Design Engineering Services for the North City Water Reclamation Plant Expansion and Influent Conveyance Project

Requested Action:

Approve design engineering services agreement between the City of San Diego and CH2M Hill Engineers, Inc. for the North City Water Reclamation Plant Expansion and Influent Conveyance Project and forward item to Metro JPA/ Metro Commission for approval.

Recommendations:

Approve the contract request				
Metro TAC:	Forward the subject item to Metro JPA/ Metro Commission for			
	approval.			
IROC:	N/A			
Prior Actions:	The item was approved by the Environment Committee on			
(Committee/Commission,	October 12, 2016.			
Date, Result)				
Fiscal Impact:	W W N			
Is this projected budgeted?				
Cost breakdown between	It is estimated that the funding will be allocated as follows:			
Metro & Muni:	Water: 16% (approximately \$2.7 million), Wastewater: 84%			
	(approximately \$14.5 million) (Metro: 100%, Muni: 0%).			
= 11 11 11 11 11	The total contract amount is \$17,198,752.			
Fiscal impact to the Metro	33.5% of Metro cost (approximately \$4.8 million)			
JPA:				
Capital Improvement Progra				
New Project? Yes X	<u> </u>			
Existing Project? Yes	_ No <u>X</u> Upgrade/addition Change			
Previous TAC/JPA Action:				
None				
Additional/Future Action:				
Present the proposed agreement to Metro JPA/ Metro Commission on October 20, 2016 prior to				
City Council approval.				
City Council Action:				
City Council approval of the proposed agreement is anticipated on October 25, 2016.				
Background:				
Please view discussion below.				

Revised: 20140409

Discussion:

San Diego's imported water supplies face increasing stresses from a variety of sources. As a result, the region's supplies are becoming less reliable and more expensive. These circumstances, and the threat limitation on San Diego's water supplies, have intensified the need for new sources of water. Pure Water San Diego is the City of San Diego's 20-year program to provide a safe, secure, and sustainable local drinking water supply for San Diego. Recycled water will be turned into drinkable water through the use of water purification technology. Further, Pure Water's system-wide reuse will significantly reduce flows to the Point Loma Wastewater Treatment Plant and will make San Diego more water independent. On April 29, 2014, City Council adopted Resolution Number R-308906 supporting the Pure Water Program.

Pure Water implementation includes design and construction of new treatment and conveyance facilities. To ensure quality design and construction of future Pure Water facilities, the Public Utilities Department has elected to obtain professional engineering and technical services for completing the design work.

One of the projects that is being proposed under the Pure Water Program is the expansion of the existing North City Water Reclamation Plant (NCWRP). The NCWRP treats wastewater from several San Diego Communities and distributes recycled water for irrigation and industrial purposes in the northern San Diego region. As part of the Pure Water Program implementation, the NCWRP will be expanded so the facility can treat an average annual flow of 52 million gallons per day (mgd), continue serving recycled water customers, and provide tertiary-treated water to the future North City Pure Water Facility so it can produce 30 mgd of pure water. This project also includes the design of a pump station and pipeline (Influent Conveyance), which will be located at the NCWRP site and will convey tertiary-treated flows produced at the NCWRP to the future North City Pure Water Facility.

In March 2016, the Public Utilities Department requested proposals from qualified firms for the Civil Engineering Services for North City Water Reclamation Plant Expansion and Influent Conveyance contract. In April 2016, a total of two (2) firms submitted proposals pursuant to the Request for Proposal. Subsequently, the Department Selection Panel evaluated all the proposals and determined that a total of two (2) firms were highly qualified to participate in the interview process. In May 2016, the Selection Panel interviewed the two (2) firms. Based on the selection rating criteria, the Department selected CH2M Hill Engineers, Inc. as the most qualified firm.

The proposed design engineering services for the North City Water Reclamation Plant Expansion and Influent Conveyance agreement with CH2M Hill Engineers, Inc. has a total not to exceed amount of \$17,198,752 for a duration of five (5) years effective from the date of City Council's approval.

Project Schedule: The table below presents the anticipated schedule.

Activity	Date
Metro JPA/ Metro Commission	10/20/2016
City Council Approval	10/25/2016
Issue Notice to Proceed	11/2016

Bid Results: *If bidding was done provide bidding format and results* Not applicable.

Public Utilities Department

Agreement with CH2M Hill Engineers, Inc. for Design Engineering Services for the North City Water Reclamation Plant Expansion and Influent Conveyance Project

Metro Commission/JPA October 20, 2016

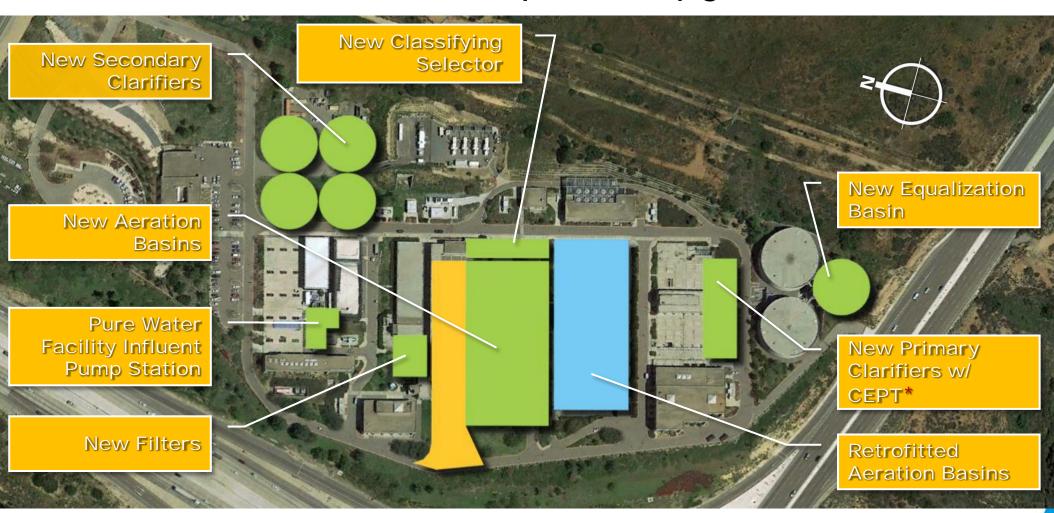




Project Objective/ Purpose

- ❖ Component of North City Phase 1 delivery of 30 mgd of Pure Water
- ❖ Increase treatment capacity of North City Water Reclamation Plant
- Convey tertiary-treated water to the future North City Pure Water Facility

NCWRP Aerial View - Proposed Upgrades



^{*} CEPT-Chemically Enhanced Primary Treatment



Proposed Contract

- In March 2016, PUD advertised a Request for Proposal for design engineering services in support of the NCWRP Expansion and Influent Conveyance Project
- Two firms submitted proposals; both were interviewed
- CH2M Hill Engineers, Inc. was selected as the most highly qualified firm
- ❖ Total contract amount: \$17,198,752
- Contract duration: 5 years



Q & A



Attachment 7 Agreement with HDW

METRO JPA/TAC Staff Report Date: 10/19/2016

Project Title:

Amendment No. 1 to the Sole Source Agreement with Hawkins Delafield and Wood (HDW) to provide specialized legal services for the Landfill Gas, Cogeneration and Biosolids Management Facilities and Services Project.

Requested Action:

Request to forward Amendment No. 1 to the Sole Source Agreement between the City of San

	I Gas, Cogeneration and Biosolids Management Facilities and IPA/ Metro Commission for approval.
Recommendations:	177 Motio Commission to approvai.
Approve the contract request	
Metro TAC:	Forward the subject item to Metro JPA/ Metro Commission for
17.00	approval.
IROC:	N/A
Prior Actions:	N/A
(Committee/Commission,	
Date, Result)	
Fiscal Impact:	V V N-
Is this projected budgeted?	
Cost breakdown between Metro & Muni:	It is estimated that the funding will be allocated as follows:
Metro & Murii.	Water: 50% (\$495,000), Wastewater: 50% (\$495,000) (Metro: 100%, Muni: 0%).
	The total contract amount is \$990,000.
Fiscal impact to the Metro	33.5% of Metro cost (approximately \$165,825)
JPA:	33.5% of Metro cost (approximately \$165,625)
Capital Improvement Progra	m:
New Project? Yes X	No N/A
Existing Project? Yes	No X Upgrade/addition Change
Previous TAC/JPA Action:	
None	
Additional/Future Action:	
Present the proposed agreeme	ent to Metro JPA/ Metro Commission on October 20, 2016 prior to
City Council approval.	
City Council Action:	
City Council approval of the pro	oposed agreement is anticipated on October 25, 2016.
Background:	
Please view discussion below.	

Discussion:

The project will provide considerable reduction in Greenhouse Gas (GHG), by capturing fugitive emissions from the landfill, to meet the City's Climate Action Plan target to reduce carbon gas emissions. The City will be able to produce renewable energy by utilizing landfill gas (LFG) and biogas from solid waste digesters, to generate electricity that supports the expansion of the North City Water Reclamation Plant (NCWRP), the North City Pure Water Facility (NCPWF), and expansion of biosolids production at the Metropolitan Biosolids Center (MBC), while providing significant cost savings to the City. In addition, the City and the U.S. Navy and Marine Corps wish to develop further cogeneration capacity from landfill gas. The project will also utilize waste heat from energy co-generation to improve biosolids processing from Class B to Class A for beneficial reuse. Additionally, the project will include the management and operation of the existing LFG collection system when "Gas Rights" return to the City on January 1, 2019.

The project will be developed using a Design/Build/Finance/Operate/Maintain (DBFOM) delivery method for the management, operation and expansion of the Miramar Landfill Gas Collection System on January 1, 2019; construction and operation of a Co-generation facility to generate up to 20MW of power utilizing landfill gas and biogas at MBC; construction and operation of an advanced biosolids handling facilities to produce Class A biosolids at MBC utilizing waste heat from the co-generators to increase digesters efficiency; and marketing and sale of Class A biosolids. The work sought by this retainer will yield a privately financed project that will result in avoided capital expenditures of an estimated \$300 million to \$400 million.

The DBFOM delivery method creates one point of responsibility for multiple services; transfers design risks; and assume construction, operation and maintenance responsibilities for the project. This method also provide cost savings with performance guarantees and shorter project schedule. The project is a 20-year Public-Private Partnership (P3) that will allow for public ownership and private financing.

The Public Utilities Department, in conjunction with the City Attorney's Office and the Environmental Services Department are in the process of preparing a Request For Statement of Qualification (RFSQ) to solicit qualified DBFOM entities, followed by a Request For Proposal (RFP) to demonstrate the qualified DBFOM entities' design, construction, financial, operational and maintenance capabilities for successful delivery of the project.

Due to the specialized nature of the project scope with multifaceted elements, magnitude, intricate legal and financial complexities of the Public-Private Partnerships; RFSQ/RFP development, proposal evaluation, service agreement preparation, contract negotiation and post-contract execution, the City Attorney's Office deemed special counsel necessary for the remaining contract duration. Hawkins Delafield and Wood (HDW) possesses an in-depth legal and economic understanding necessary for developing terms and conditions associated with complex 20-year services agreement, facilitation of Public-Private Partnerships (P3), which includes DBFOM delivery method for publicly owned facilities with private financing for the purpose of operating and maintaining an existing landfill collection system at Miramar Landfill on January 1, 2019; construction and operation of a Co-generation facility to generate up to 20 MW of power utilizing landfill gas and biogas at MBC; construct and operate an advanced biosolids handling facilities to produce Class A biosolids at MBC; and utilize waste heat from the co-generators to increase digesters efficiency; including the marketing and sale of Class A biosolids.

HDW will provide similar services to the City that it had provided in the negotiation and drafting of the original privatization agreement with NEO San Diego LLC (NEO SD), and Minnesota Methane San Diego LLC (MMSD) for the Miramar landfill gas collection system, and for the MBC and North City Cogeneration facilities. Both the NEO SD and MMSD facilities are currently owned by Fortistar Methane Group (Fortistar). The privatization agreement, originally entered into in 1995 yielded the ratepayers savings of over \$60 million in audited costs.

Revised: 20140409

Additionally, HDW has assisted the City in negotiating the 2011 agreement amendment with Fortistar for the expansion of the landfill gas collection system to support development of a new 3.2 MW cogeneration facility for MCAS Miramar (through the Miramar Energy LLC). The term of the cogeneration agreement with Miramar Energy LLC runs through calendar year 2026.

Amendment No.1 is requested to increase the contract by \$990,000 for a total not to exceed amount of \$1,240,000. The additional funding will allow the City to continue to access the specialized legal services to support the Landfill Gas, Cogeneration and Biosolids Management Facilities and Services Project.

Project Schedule: The table below presents the anticipated schedule.

Activity	Date
Metro JPA/ Metro Commission	10/20/2016

Bid Results: If bidding was done provide bidding format and results Not applicable.

Public Utilities Department

Amendment 1 to Sole Source Agreement with Hawkins Delafield and Wood (HDW) for Legal Consultant Services

Metro Commission/JPA October 20, 2016



Background

PUD in conjunction with the City Attorney's Office and Environmental Services Department retained Hawkins Delafield and Wood (HDW) for legal consultant services to:

- ❖ Provide legal advice to the City on an energy generation agreement and subsequent amendments with Fortistar.
- ❖ Assist the City in developing a Request for Proposal (RFP) to:
 - Operate landfill gas collection system at Miramar Landfill after January 1, 2019
 - Expand landfill gas power production capacity at Metropolitan Biosolids Center (MBC) and North City Water Reclamation Plant (NCWRP)

Project Objective/Purpose

Provide specialized legal service:

- To develop a Service Agreement with a Private Partner
- Provide specialized legal services to develop an agreement to:
 - Operate and maintain an existing landfill collection system at Miramar Landfill after January 1, 2019
 - Design, build, finance, operate and maintain a cogeneration facility to produce renewable energy for Pure Water
 - Assess needs for advanced biosolids handling facilities to process Class A Biosolids, including marketing of materials
 - Design, build, finance, operate and maintain a cogeneration facility to produce 1.6 MW renewable energy for MCASM

Landfill Gas, Cogeneration and Biosolids Management Facilities and Services Project



HDW Contract – Previous Actions

- ❖ Approval of Sole Source Certification for original Contract on April 15, 2015
- ❖ Mayoral Action approved original Contract on July 14, 2015 for:
 - Contract Value: \$250,000
 - Contract Duration: 5 years
- ❖ Approval of Sole Source Certification for Amendment 1 on August 10, 2016

HDW Contract – Proposed Amendment and Work

- Increase contract value by \$990,000 for a total not-to-exceed amount of \$1,240,000, with no time extension
- Finalize Draft Request for Statement of Qualifications
- Develop RFP and Draft Service Agreement to include the following project components:
 - Cogeneration Facility for Pure Water
 - Biosolids Management Facilities
 - Operation and Maintenance Services
- Assist with Contract Negotiations
- Post-Contract Support for Services Agreement



Q & A



Attachment 8 MWH Task Order Review

Public Utilities Department

Pure Water Phase I Task Order Review

Metro Commission/JPA October 20, 2016



Authorized Task Orders

TO No.	Description	Total Cost	Wastewater Cost	Water Cost
1	Pure Water Program Initiation	\$2,113,000	\$1,016,000	\$1,015,000
2	Predesign of North City Upgrades	\$14,177,000	\$4,016,000	\$10,161,000
3	Reservoir Modeling	\$253,000	\$0	\$253,000
4	Impact of Pure Water on Water Treatment Plant Operations	\$424,000	\$0	\$334,000
5	PMO/Program Management Services	\$3,431,000	\$1,715,000	\$1,716,000
6	Stress Testing and In-Operation Capacity of the North City Water Reclamation Plant (NCWRP)	\$158,000	\$158,000	\$0
7	Cogeneration Evaluation for the NCWRP and North City Advanced Water Purification Facility (NCAWPF)	\$341,000	\$170,000	\$171,000
8	Conveyance Reservoir Inlet Analysis	\$173,000	\$0	\$146,000
9	Test Plan and Analysis for Prequalification and Preselection for NCAWPF	\$1,844,000	\$0	\$1,722,000
10	Technical Advisory Committee Support of North City Predesigns	\$60,000	\$25,000	\$25,000

Authorized Task Orders (Continued)

TO No.	Description	Total Cost	Wastewater Cost	Water Cost
11	Impact of RO Brine on Wastewater Treatment Plant Operations	\$30,000	\$0	\$30,000
12	Regulatory Support for Phase I Projects	\$1,226,000	\$381,000	\$381,000
13	Strategic Oversight of Environmental Issues for the Pure Water Program	\$50,000	\$25,000	\$25,000
14	Phase 1 Environmental Site Assessment	\$20,000	\$0	\$19,000
15	Small Business Outreach	\$70,000	\$34,000	\$35,000
16	Centrate Management Options Study	\$98,000	\$98,000	\$0
17	Establish Pure Water Automation (i.e. COMNET) Requirements	\$260,000	\$131,000	\$130,000
18	Evaluate the Impacts of the NCWRP Expansion on the MBC	\$373,000	\$373,000	\$0
19	Public Outreach and Education Services	\$556,000	\$278,000	\$278,000
20	Operator Training for Future AWPF	\$122,000	\$0	\$122,000

Authorized Task Orders (Continued)

TO No.	Description	Total Cost	Wastewater Cost	Water Cost
21	Develop the Enterprise Level Control Strategy	\$57,000	\$28,000	\$29,000
22	Additional Modeling for Miramar Reservoir	\$426,000	\$0	\$426,000
23	Pure Water Program Management Services for FY17	\$2,161,000	\$1,081,000	\$1,080,000
24	Update the 2009 MBC Biosolids Process Evaluation	\$321,000	\$321,000	\$0
25	Value Engineering Review of Pure Water San Diego North City Projects	\$195,000	\$0	\$195,000
26	Evaluate Disposal Options for Centrate Generated at the MBC Facility	\$156,000	\$156,000	\$0
27	Update City Specification Sections 13300 and 13400	\$88,000	\$44,000	\$44,000
28	Design Reviews and Technical Support	\$347,000	\$227,000	\$120,000
29	Co-generation/Biosolids DBOFM	\$188,000	\$93,000	\$94,000
30	NCWRP White Paper	\$112,000	\$159,000	\$0
31	O & M Readiness Plan	\$192,000	\$96,000	\$96,000
	Total Authorized Amount to Date	\$29,272,000	\$10,625,000	\$18,647,000

Future Task Orders

TO No.	Description
А	Brine Impacts – Bench Scale Testing
В	Miramar WTP Pilot Studies
С	Miramar WTP Improvements Predesign
D	CM Program Planning

Questions?



Attachment 9 MWH Contract Amdt. 1

METRO JPA/TAC **Staff Presentation** Date: 10/19/2016

Project	Title:
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Amendment No. 1 to the As-Needed Engineering Technical Services Consultant agreement with Montgomery Watson Harza (MWH) Americas, Inc., for the Pure Water San Diego Program

Requested Action:

Approve Amendment No. 1 to the As-Needed Engineering Technical Services Consultant

agreement for the Pure Water Americas, Inc.	San Diego Program between the City of San Diego and MWH				
Recommendations:					
• •	the As-Needed Engineering Technical Services Consultant				
agreement with MWH America	·				
Metro TAC: N/A					
IROC:	N/A				
Prior Actions: (Committee/Commission, Date, Result) The item was presented and approved by the Environme Committee on July 21, 2016.					
Fiscal Impact:					
Is this projected budgeted?	Yes <u>X</u> No				
Cost breakdown between	It is estimated that the funding will be allocated as follows:				
Metro & Muni:	Water: 72%, Wastewater: 28% (Metro: 100%, Muni: 0%). (Note : The funding distribution will be task order based.)				
Fiscal impact to the Metro JPA:	Estimated fiscal impact= \$1,538,320 (33.5% of Metro Cost)				
Capital Improvement Progra					
New Project? Yes	_ No <u>X</u> N/A				
Existing Project? Yes X	Existing Project? Yes X No L Upgrade/addition Change				
Previous TAC/JPA Action: The original agreement was presented and approved by Metro TAC on October 15, 2014 and by Metro JPA/ Metro Commission on December 4, 2014.					
Additional/Future Action:					
City Council Action:					
City Council approval of the item is anticipated on October 25, 2016.					
Background:					
Please view discussion below.					

Discussion:

The Public Utilities Department (PUD) utilizes the As-Needed Engineering Technical Services Consultant agreement with MWH Americas, Inc., for specialized technical services to support the Pure Water Program implementation. The services generally relate to planning, design, engineering, regulatory, and program management support. The original agreement was approved by City Council on December 9, 2014, via Resolution No. R-309350. The agreement was issued on January 8, 2015, for an amount not to exceed \$30 million, for a term of five (5) years.

The contract scope and amount were based on Pure Water implementation prior to program acceleration. The initial dates for cumulative production of 15, 30, and 83 million gallons per day (mgd) were 2023, 2027, and 2035, respectively. Conditions since the contract was awarded are no longer optimal. Through work accomplished via the MWH Americas, Inc., contract, the PUD is now positioned to bring the first 30 mgd of pure water online in 2021 (versus 2023 and 2027), and is doing so through a more favorable program of facilities and projects.

The decision to accelerate came in response to the heightened sense of urgency for new local water supplies to respond to California's multi-year historic drought and climate change impacts. Bringing the first 30 mgd of Pure Water on line up to six years early will reduce the City's reliance on imported water. The acceleration has also required MWH Americas, Inc., to perform activities that would not have otherwise been needed within the term of the contract, for meeting the original 2023 and 2027 implementation dates.

Amendment No. 1 is requested to increase the not to exceed agreement value by an additional \$16,400,000 for a total not to exceed amount of \$46,400,000. The additional funding will be utilized to execute immediate and near term engineering services and will allow the PUD to continue to access technical services to support the Pure Water San Diego Program.

Project Schedule: The table below presents the anticipated schedule.

Activity	Date
Metro JPA/ Metro Commission	10/20/2016
City Council Approval	10/25/2016
Issue Notice to Proceed	11/2016

Bid Results: *If bidding was done provide bidding format and results* Not applicable.

Public Utilities Department

Pure Water – MWH Americas, Inc. Contract Amendment 1

Metro Commission/JPA October 20, 2016





MWH Contract – Original Terms & Scope

- 1. \$30 million for 5 years
- 2. Scope: Provide program management services, including project management/controls, risk/change/quality management, regulatory permitting, engineering/pre-designs and technical support
- 3. Pre-design Scope: Conveyance and treatment facilities for 30 mgd of pure water production
- 4. Program Management Team
 - Prime Consultant: MWH, now part of Stantec
 - Major Subconsultants: Brown & Caldwell and Trussell Technologies
 - Team comprised of 40+ subconsultants



Remaining Work

- Technical evaluations
 - Update City biosolids management plan, pilot testing for RO brine impacts on Point Loma, wastewater treatment optimization studies, pilot studies for Miramar system impacts, Miramar Reservoir modeling
- 2. Preliminary designs
 - Centrate conveyance
 - RFQ/RFP Miramar WTP improvements
 - Co-gen facility/energy production facility
- 3. Regulatory support (DDW/RWQCB permits)
 - Title 22 Engineering Report
 - NPDES Permit and repost of waste discharge
 - Operations Optimization Plan



Remaining Work (Continued)

- 3. Technical and value engineering reviews of final designs
- 4. Pre-qualification/pre-selection of advance water treatment equipment
- 5. Construction phase planning (CM Plan)
- 6. Program management support
 - Reduce by 50% in FY18 after all designs are complete
- 7. O&M Readiness Plan and operator training
- 8. Public outreach support



MWH Contract – Proposed Amendment

Increase contract value by \$16.4 million to \$46.4 million; Contract spending accelerated as a result of following:

- Formulation of new program delivery strategy to leverage new regulatory opportunities and reduce program costs
- New projects added to Phase 1 of Pure Water as a result of low wastewater flows and consolidation of first 30 mgd at North City
 - Morena Pump Station and Pipeline, North City Water Reclamation Plant (NCWRP)
 Expansion, Metro Biosolids Center (MBC) Improvements
- Additional/unanticipated scope items:
 - Co-generation facility; biosolids management; pre-qualification/pre-selection of key advanced water treatment facilities; various studies to assess impacts on existing facilities; reservoir modeling; operator training; enterprise-level control strategy



Summary

	Estimated Costs		
Category	Total	Wastewater	Water
Authorized*	\$30 million	\$11 million	\$19 million
Pending	\$16.4 million	\$1.9 million	\$14.5 million
Amended Contract Total	\$46.4 million	\$12.9 million	\$33.5 million

^{*} Authorized NTE cost for Contract. Actual cost encumbered thus far is \$29M.



Questions?

