



*Dedicated to
Satisfying our Community's
Water Needs*

**AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Tuesday, February 21, 2017
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting**

**ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, February 21, 2017 at 3:30 p.m.**

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

Non-Agendized Matters: Members of the public are invited to address the Board on matters which are not on the Agenda. Each speaker is limited to three (3) minutes. The Board will set aside thirty (30) minutes for public comments.

Agendized Matters: Members of the public may comment on Agenda items before action is taken, or after the Board has discussed the item. Each speaker is limited to five (5) minutes.

CONSENT CALENDAR ITEMS:

Approve all matters under the Consent Calendar by one motion unless a Board member, staff, or a member of the public requests a separate action.

1. Developer Project Status Report
2. Mesa Water® and Other Agency Projects Status Report
3. Water Quality Call Report
4. Committee Policy & Resolution Review or Development
5. Water Operations Status Report
6. Municipal Water District of Orange County Activities Update
7. Orange County Water District Activities Update

PRESENTATION AND DISCUSSION ITEMS:

Items recommended for approval at this meeting may be agendized for approval at a future Board meeting.

8. Reservoirs 1 and 2 Improvements
9. Capital Projects Update – Fiscal Year 2017

ACTION ITEMS:

10. Great Plains and Cogsdale CSM Support

REPORTS:

11. Report of the General Manager



12. Directors' Reports and Comments

INFORMATION ITEMS:

13. Well 8 Demolition Project Design

14. California Urban Water Conservation Council Update

In compliance with California law and the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 631-1206. Notification 48 hours prior to the meeting will enable Mesa Water District (Mesa Water) to make reasonable arrangements to accommodate your requests.

Members of the public desiring to make verbal comments utilizing a translator to present their comments into English shall be provided reasonable time accommodations that are consistent with California law.

Agenda materials that are public records, which have been distributed to a majority of the Mesa Water Board of Directors (Board), will be available for public inspection at the District Boardroom, 1965 Placentia Avenue, Costa Mesa, CA and on Mesa Water's website at www.MesaWater.org. If materials are distributed to the Board less than 72 hours prior or during the meeting, the materials will be available at the time of the meeting.

ADJOURNMENT

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2126	573 Victoria	37 New Homes	<p>Plans received and plan check fees paid 10/7/14. Design of improvements found not to be satisfactory, and a meeting was held on 10/23/14 to discuss design alternatives. New meeting held on 2/6/15. Awaiting revised plans from developer. Revised plans submitted 4/6/15. Plans sent back for second revision 4/7/15. Plans sent back for third revision 7/17/15. Plans currently in fourth plan check 7/30/15. Plans approved and permit issued on 8/20/15. Hot-tap and service abandonment on 10/20/15. Pipeline installation ongoing 10/22/15. Pipeline pressure tested on 11/23/15. Bac-T testing completed on 11/30/15 & 12/1/15. Mainline turned on 12/25/15. Meter boxes installed and angle-stops locked on 1/19/15. Services lowered on 6/30/16 in preparation of meter installation. Meter box placement for model homes on 7/13/16. Backflows tested on 1/4/17. Fireline backflow tested on 1/30/17. (2/10/17)</p>
MC 2149	1620-1644 Whittier Ave and 970 16th St	89 Single Family Homes	<p>Plans received and plan check fees paid 2/2/14. Working with developer to receive more information about the floor plans and irrigation as of 2/3/15. Hydraulic model is being performed by RBF. Conceptual Plan Check Completed and returned to customer 4/20/15. Second plan check returned to customer on 5/1/15. Third plan check returned to customer on 5/21/15. Permit issued on 7/23/15. Pre-con meeting held on 7/27/15. Pipeline installation on 10/21/15. Pressure test and chlorination on 11/5/15. Bac-T testing completed on 11/24/15 and 11/25/15. Waterline tied-in at Whittier, Newhall, and West 16th Street and angle-stops locked on 12/14/15. 4 - 1" meters installed on model homes on 2/25/16. 1 - 1.5" irrigation meter and 1 - 1" domestic meter installed and locked on 4/5/16. Inspected rock base on 7/11/16. Installed 7 - 1" meters on 7/13/16. Flow-thru tested on 8/25/16 and 9/8/16. Rock base and meters installed on 11/3/16. Flow-thru check on 12/1/16. (2/10/17)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2168	650 Hamilton	24 Single Family Homes	Plans received and plan check fees paid 4/30/15. Comments returned on 5/21/15. Permit issued on 6/16/15. Fireline installed and turned on 9/29/15. Meters and boxes installed and locked on 1/21/16. Irrigation backflow tested and flow-thru system on models tested 3/31/16. Flow-thru tested for 6 units on 7/11/16. Flow-thru tested for 7 units on 7/26/16. Flow-thru tested for 7 units on 9/28/16. Meters unlocked on 11/29/16. (2/10/17)
MC 2177	125 East Baker Street	240 Unit Apartment Complex	Concept plans received and plan check fees paid on 6/11/15. First plan check comments returned on 7/31/15. Second plan check returned on 8/20/15. Third plan check submitted on 10/8/15. Additional information provided on 10/28/15. Hydraulic model initiated on 11/5/15. Additional information requested on 12/28/15 and information was provided on 1/4/16. Hydraulic model completed on 3/1/16. Adjacent supporting Mesa Water system improvements are not required. Revised plans submitted on 4/6/16. Final mylars and payment received and permit issued on 5/4/16. Permit issued on 5/10/16. Precon held on 5/24/16. Abandoned water connections on 6/28/16. Installed hydrant, domestic, and fireline tap on 7/7/16. Abandoned 2 services on 7/27/16. Installed 1 fire hydrant on 8/1/16. Pipeline lateral installed on 10/5/16. Backflows tested on 10/24/16. Turned on mainline on 11/18/16. (2/10/17)
MC 2187	2245 Tustin Ave	Single Family Home	Plans received and plan check fees paid on 7/8/15. Second plan check submitted on 7/31/15 and comments returned on 8/17/15. Fees paid on 3/1/16. Permit issued on 3/11/16. Meter installed on 8/26/16. Regular site visit on 11/4/16 with no progress to report. Letter sent regarding outstanding items on 2/9/17. (2/10/17)
MC 2196	580 Anton Ave	250 Unit Apartment Complex	Plans received and plan check fees paid on 7/28/15. Plan check comments returned 8/28/15, requesting information to complete a hydraulic model. Requested information provided on 10/25/15. Hydraulic model initiated on 11/5/15. Hydraulic model completed on 2/1/16. Mesa Water system improvements are not required. Fees paid and permit issued on 2/9/16. Pre-con held on 2/29/16. Abandoned waterline on 3/15/16. Shutdown test on 7/19/16. Valve replaced on 10/3/16 to allow for abandonment. (2/10/17)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2203	1239 Victoria Street	28 Single Family Homes	Plans received and plan check fees paid on 8/25/15. Second submittal received on 10/25/15 and returned on 11/6/15. Mylars and fees delivered on 11/25/15. Permit issued on 11/30/15. Pre-con held on 1/4/2016. Installed 2 - 8" manifolds on 1/14/16. Installed services on 1/28/16. Abandoned existing services on 1/29/16. 28 - 1" meters installed and locked on 2/22/16. Backflows tested on 6/20/16. Flow-thru tested on model homes on 7/20/16. Backflows tested on 8/18/16. Backflows tested on 12/7/16. Site visit on 2/6/17, empty lots remain. (2/10/17)
MC 2204	1672 Placentia	31 Single Family Homes	Plans received and plan check fees paid on 8/26/15. Plan check picked up by customer on 10/6/15. Second plan check submitted on 2/11/16 and returned on 2/26/16. Mylars submitted, fees paid, and permit issued on 5/5/16. Tee cut-ins on 6/22/16. Pressure Test and Bac-T test on 7/7/16. Water main turned on 7/21/16. Services installed and locked off on 9/6/16. Meter installation on 10/28/16. Backflows tested on 11/16/16. Backflow tested on 12/9/16. Rock base on 2/1/17. (2/10/17)
MC 2206	247 E 23rd St	Single Family Home	Plans received and plan check fees paid on 9/21/15. Plans did not require changes. Fees paid on 11/25/15. Permit issued on 12/1/15. Pre-con held on 1/27/16. 1 - 1" meter installed on 2/4/16. Property owner contacted to check project status on 8/3/16. Regular site visit on 10/7/16 with no progress to report. Letter sent regarding outstanding items on 2/9/17. (2/10/17)
MC 2208	353 & 355 Rochester St.	2 Single Family Homes	Plans received and plan check fees paid on 9/22/15. First submittal picked up on 10/23/15. Second plan check submitted on 11/19/15. Second plan check completed 12/3/16. Second plan check picked up from counter on 2/29/16. Third plan check submitted on 3/14/16. Fees paid and permit issued on 11/4/16. Pre-con held on 2/1/17. (2/10/17)
MC 2212	1499 Monrovia Ave	Fireline installation	Plans received and plan check fees paid on 9/29/15. First submittal picked up on 10/23/15. Second plan check submitted on 10/29/15. Second plan check returned on 11/13/15. Mylars delivered on 11/23/15. Fees paid and permit issued on 12/13/15. Checked status on 7/13/16, no work apparent. Project delayed until end of the calendar year. Property owner has asked for a 3 month extension of the permit. Letter sent regarding permit expiration on 2/9/17. (2/10/17)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2214	1944 Church St	2 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Final mylars and payment received and permit issued on 1/29/16. Water services installed on 8/23/16. 2 - 1 inch water meters installed on 8/26/16. Shutdown for abandonment on 11/14/16. (2/10/17)
MC 2215	119 Cecil Pl	3 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Final mylars and payment received and permit issued on 1/29/16. Attended pre-con meeting on 9/1/16. 3 - 1 inch meters and meter boxes installed on 9/29/16. Site visit on 2/6/17, homes in construction. (2/10/17)
MC 2216	320 E 18th St	4 Single Family Homes	Plans received and plan check fees paid on 10/5/15. First submittal returned on 10/26/15. Fees paid on 12/15/15. Permit issued on 1/29/16. Pre-construction meeting held on 11/15/16. Service installed on 1/3/17. Hydrant relocation on 1/24/17. (2/10/17)
MC 2230	217 Cabrillo	2 Attached Dwellings	Plans received and plan check fees paid on 12/22/15. Plan check in progress. First plan check returned on 1/25/16. Second plan check submitted on 1/26/16. Second plan check returned on 2/2/16. Fees paid and permit issued on 3/11/16. Precon held on 5/24/16. Meter and box installed on 6/8/16. Regular site visit on 12/4/16. Letter sent regarding outstanding items on 2/9/17. (2/10/17)
MC2232	189-191 Merrill Place	2 Single Family Homes	Plans received and plan check fees paid on 2/1/16. Plan check completed on 2/12/16 and picked up on 2/29/16. Second plan check received on 3/10/16. Awaiting Mylar drawings and fee payment. Owner contacted on 12/4/16 for project status. (2/10/17)
MC2233	1560 Placentia	81 Single Family Homes	Plans received and plan check fees paid on 1/20/16. Request for additional information requested on 1/28/16. Requested information submitted on 2/24/16. Plan check picked up on 4/18/16. Second plan check submitted on 5/18/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. Mainline installed on 8/24/16. Hydrant laterals installed on 8/25/16. Services installed on 9/1/16. Mainline installed on 9/20/16. Pressure and Bac-T test on 9/28/16. Laterals installed on 9/29/16 and 10/5/16. Mainline charged on 10/17/16. Angle stop adjusted on 12/6/16. Meter and meter box placement on 1/5/17. (2/10/17)

DEVELOPER PROJECT STATUS REPORT

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC2235	671 W 17th Street	177 Condos	Plans received and plan check fees paid on 1/21/16. Hydraulic model initiated 2/24/16. Second plan check submitted on 3/24/16 and picked up 4/17/16. Mylar drawings and fee payment received on 7/5/16. Permit issued on 7/11/16. Demolition of existing services on 8/16/16. Mainline installation on 12/6/16. Service laterals installed on 1/9/17. Pressure test on 2/6/17. (2/10/17)
MC2236	527-531 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 2/8/16. Plan check returned on 2/12/16. Second plan check received on 4/21/16. Fees paid and permit issued on 6/13/16. Manifold installed on 7/19/16. Regular inspection site visit on 11/4/16 with no progress to report. Site visit on 1/30/17, homes in construction. (2/10/17)
MC2237	2245 Santa Ana Avenue	Meter Upgrade	Plans received and plan check fees paid on 2/29/16. Plan check completed 3/24/16. Fees paid and permit issued on 5/16/16. Regular inspection site visit on 11/4/16 with no progress to report. (2/10/17)
MC2240	222 E 15th Street	Meter Upgrade	Plans received and plan check fees paid on 3/25/16. Plan check picked up on 4/20/16. Fees paid and permit issued on 5/10/16. Meter installed on 6/13/16. Regular inspection site visit on 11/4/16 with no progress to report. Letter sent regarding outstanding items on 2/9/17. (2/10/17)
MC2243	165-171 22nd Street	2 Single Family Homes	Plans received and plan check fees paid on 4/20/16. Plan check picked up on 5/17/16. Fees paid and permit issued on 11/18/16. Water service installed on 12/1/16. Rock base installed on 1/3/17. (2/10/17)
MC2245	522-526 Bernard Street	10 Single Family Homes	Plans received and plan check fees paid on 5/11/16. Second plan check received on 6/10/16. Second plan check returned on 6/22/16. Permit issued on 7/11/16. Manifold installed on 7/19/16. Regular inspection site visit on 11/4/16 with no progress to report. Site visit on 1/30/17, homes in construction. (2/10/17)
MC2247	1808-1810 Pomona Ave	2 Single Family Homes	Plans received and plan check fees paid on 5/20/16. Second plan check received on 6/23/16. Second plan check returned on 7/11/16. Fees paid and permit issued on 7/28/16. (2/10/17)
MC2252	1100 South Bristol Street	Ganahl Lumber	Plans received and plan check fees paid on 6/1/16. Hydrant flow test completed on 9/7/16. Final plan check completed and returned on 10/28/16. Fees paid and permit issued on 11/29/16. (2/10/17)

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C003-16-01	788 Center Street	2 Single Family Homes	Plans received and plan check fees paid on 6/28/16. Plans returned on 7/14/16. Fees paid and permit issued on 1/6/17. (2/10/17)
C004-16-01	2073-2080 Tablelands Way	8 Single Family Homes	Plans received and plan check fees paid on 6/23/16. Resubmittal received on 7/29/16. Fees paid and permit issued on 8/24/16. Manifold installed on 9/27/16. Meters and backflows installed on 11/13/16. (2/10/17)
C0005-17-01	22nd and Santa Ana	12 Single Family Homes	Plans received and plan check fees paid on 7/22/16. Plans returned on 8/3/16. Fees paid and permit issued on 9/28/16. Manifold installed on 11/2/16. Service abandonment on 12/7/16. Meter installation on 12/19/16. (2/10/17)
C0006-17-01	155 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. (2/10/17)
C0006-17-02	163 Flower Street	2 Single Family Homes	Plans received and plan check fees paid on 8/1/16. Plans returned on 8/11/16. Fees paid and permit issued on 9/22/16. (2/10/17)
C0007-17-01	1620 Orange	2 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Awaiting final fee payment and mylar drawing. (2/10/17)
C0008-17-01	410 Walnut Place	4 Single Family Homes	Plans received and plan check fees paid on 8/10/16. Plans returned on 8/24/16. Awaiting resubmittal. (2/10/17)
C0010-17-01	1053 W. Wilson	2 Single Family Homes	Plans received and plan check fees paid on 8/30/16. Plans picked up on 10/4/16. Fees paid and permit issued on 11/18/16. (2/10/17)
C0011-17-01	527 Anton	Fire Hydrant Relocation	Plans received and plan check fees paid on 9/8/16. Plans waiting to be picked up. Project placed on hold by owner. (2/10/17)
C0012-17-01	2300 Harbor Blvd	33 Detached Condos	Plans received and plan check fees paid on 9/15/16. Plans picked up on 10/18/16. Plans submitted for second plan check on 12/6/16. Awaiting final fee payment. (2/10/17)
C0012-17-02	929 Baker Street	55 Detached Condos	Plans received and plan check fees paid on 9/27/16. Plans picked up on 10/18/16. Plans submitted to the City are significantly different from those submitted to Mesa Water®, owner contact on 2/6/17. (2/10/17)
C0013-17-01	2803 Royal Palm Drive	Fire Station	Plans received and plan check fees paid on 8/25/16. Plans picked up on 10/4/16. (2/10/17)
C0014-17-01	Segerstrom Center for the Arts	Water Main Relocation	Plans received and plan check fees paid on 10/19/16. Plans picked up on 11/5/16. Plans resubmitted on 2/1/17, plan check in process. (2/10/17)
C0015-17-01	548 Victoria Street	5 Single Family Homes	Plans received and plan check fees paid on 10/26/16. Plans returned on 11/9/16. Awaiting final fee payment. (2/10/17)

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FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0016-17-01	3101 Redhill	Commercial Building	Plans received and plan check fees paid on 11/22/16. Plans returned on 11/29/16. Meeting held with owner on 1/5/17. Project on hold. (2/10/17)
C0017-17-01	166 Rochester	2 Single Family Homes	Plans received and plan check fees paid on 12/7/16. Plans returned on 12/15/16 and resubmitted on 1/5/17. Awaiting final fee payment and mylar drawing. (2/10/17)
C0018-17-01	1951 Tustin	2 Single Family Homes	Plans received and plan check fees paid on 12/6/16. Plans returned on 12/7/16. (2/10/17)
C0019-17-01	535 Anton	Water Service for Lunch Area	Plans received and plan check fees paid on 12/29/16. Plans returned on 1/12/17. Plans resubmitted on 2/1/17, plan check in progress. (2/10/17)
C0020-17-01	2136 Thurin	4 Single Family Homes	Plans received and plan check fees paid on 1/13/17. Plans returned on 1/23/17. (2/10/17)
C0021-17-01	2068 Maple Ave	4 Single Family Homes	Plans received and plan check fees paid on 1/13/17. Plans returned on 1/13/17. (2/10/17)

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT

February 2017

Project Title: MWRFF Finished Water Quality Polishing Project

File No.: M17-005

Description: Enhance finished water quality at the MWRFF via Pilot Scale test

Status: Technical memo completed 4/13. Initiated bench test on 6/24/13. Draft bench test report received 8/5/13. Next steps are to refine dosing, perform a full-scale pilot test, and estimate design and construction costs. Notice to proceed on pilot test design given on 9/17/13. Full scale pilot test plan submitted to CDPH for approval 10/15/13. CDPH approved the plan 11/7/13. Carollo Engineers finalized construction plans and conducted pre-bid meeting 11/26/2013. Bids are due 12/12/13. Only one bid received. Carollo requested bids from additional contractors. Second bid received on 1/8/14. J.R. Filanc Construction, Inc. lowest bidder. Project kick off meeting took place on 2/24/14. Installation of the SBS Addition System is to be completed 3/14/2014. The Full Scale Pilot Start Up and testing started on March 19, 2014 and completed May 27, 2014. Report to be submitted on 7/3/2014. Meeting with Trussell Technologies to discuss staff comments held on 7/30/14. Meeting to review next phase recommendations held on 8/19/14. Revised Draft Final Report submitted August 27, 2014. Staff reviewed the Report and provided comments. The re-revised Draft Report submitted 10/9/14. Staff reviewed the report and recommended for approval continued operations of the full-scale polishing pilot until a permanent full-scale system can be implemented (E&O Committee meeting 10/21/14). Request for extension of the operation of the MWRFF Water Polishing Project pilot testing past December 4, 2014 granted by DDW on November 11, 2014. Developing RFP for design of the permanent SBS addition system (2/6/15). RFP distributed 2/27/15 and proposals received 3/26/15. Selection interviews held on 4/9/15. Team Carollo/Trussell is proposed for the project. Proposal approved by E&O Committee 4/21/2015 and Board 5/14/2015. Contract with Carollo finalized 6/12/15 and the kickoff meeting held on 6/17/15. Preliminary Design Report received 8/3/15. Progress meeting and conference call with Carollo to discuss the review comments was held on 8/25/15 and 10/1/15, respectively. 60% design package submitted on 10/28/15. Review comments sent to Carollo on 11/23/15. Meeting with Carollo to discuss water chemistry and chemical dosing systems at the MWRFF held on December 7, 2015. 90% design submitted on 2/1/16. Staff reviewed the submittal, provided comments and discussed the comments and project requirements at the meeting held on 3/2/16. Design completed on 4/1/16. Project sent out to bid on 4/4/2016. Two bids received on 5/4/16. Staff recommended that the Board of Directors award a contract to the lowest bidder J.R. Filanc. E&O Committee recommended approval on 5/17/16. Board approved the project on 6/9/16. Kick-off meeting held on 6/28/16. Construction activities began at the MWRFF on 9/21/16 with demolishing for the SBS Tank pad and trenching for new piping. Up to date the contractor has installed the following:

- Supports and skid mounted SBS and Sodium Hypochlorite (SH) metering pumps
- SBS and SH double containment piping

MESA WATER® AND OTHER AGENCY PROJECTS STATUS REPORT
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- Power, control conduits, wiring and termination in the Chemical Building.
- Concrete pad for the new Clean in Place (CIP) Pump
- CIP suction and discharge piping system
- Pneumatic actuators onto the existing degasifier inlet valves
- Softened water piping including tie in to existing system, pneumatic and block and bleed valves. Completed pneumatic air system
- New SS316 piping and air-vacuum valves for the Carbonic Acid System
- SBS tank containment area
- SBS tank and appurtenances including piping, vents, pneumatic valve and level indication
- new chemical analyzers
- CIP pump
- new paving
- integration of newly installed equipment with SCADA

The contractor is working on preparing the permanent SBS system for disinfection and startup, demolishing of temporary SBS system, installation of ammonia diffuser, and painting of exterior piping.

Project Title: OC-44 Replacement and Rehabilitation Evaluation and Cathodic Protection Study

File No.: M 2034

Description: Evaluate potential repair and replacement options

Status: Contract awarded to RBF Consulting 2/12/13. Kick-off meeting held on 2/21/13. TM 1, 2 and 3 reviewed by Mesa Water® and City of Huntington Beach. Revised TM 1 and 3 submitted 6/12/13. Final study report due 7/31/13. Staff requested RBF to perform hydraulic modeling and habitat assessment to supplement original SOW. A meeting with MWDOC, MET and RBF to analyze possible new service connections on the OC Feeder held on 6/25/13. Workshop to discuss TM's held on 7/2/13. Meeting to discuss PDR, permitting, work plan and design concerns held on 7/16/13. Draft PDR and final design scope proposal received 8/6/13. Hydraulic studies "Evaluation of MWD Water Supply Facilities" and "Analysis of Emergency Supply from OC-44 and OCF" received 8/8/13. Staff reviewed the PDR and Hydraulic Study reports and submitted comments to RBF 9/12/13. Received proposal for design of OC-44 Pipeline Rehabilitation Project 9/24/13. Proposal approved by E&O Committee 11/19/13 and by Board on 12/12/13. Staff prepared change order to RBF. Kick-off meeting held on 01/22/14. Project on progress. Outreach coordination meetings with project stakeholders took place on 2/14/2014. RBF is working with City of Newport Beach, County of Orange, and Irvine Company on receiving permits for surveying and geotechnical boring work. Orange County Health Care Permit issued 3/24/2014. Geotechnical boring conducted on 3/28/14. The county of Orange permit was issued April 7, 2014. Biological and Topographic Survey started

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in mid-April and will continue through the end of July. Scour analysis completed on May 29, 2014. Jurisdictional Delineation completed on 6/30/2014. Project progress meeting with RBF and City of Huntington Beach held on 7/2/14 to review environmental assessment and pre-design requirements. The design of the pipeline rehabilitation started on 7/8/2014. 60% plans and specifications submitted for review 9/8/2014. Staff is coordinating with City of Huntington Beach and finalizing review of the design package. Initial Study and Mitigated Negative Declaration submitted 11/2/14. Staff is reviewing the submittal (11/6/14). 60% review meeting with City of Huntington Beach and RBF held on 12/1/14. 90% design submittal received on 2/5/15. Notice of Intent (NOI) posted at County Clerk and State Clearinghouse on 1/29/15. Initial Study/Mitigated Negative Declaration (IS/MND) posted on Mesa Water® website and distributed to agencies/parties identified on distribution list on 1/29/15. Permit applications submitted to the regulatory agencies, legal notice posted in the Daily Pilot, and hard copy of IS/MND posted at front counter on 1/29/15 for public review. The review period concluded 2/27/15. Three comment letters received. Prepared written responses to the comments and held public hearing at the Board Meeting on 4/9/15. 90% design submittal comments sent back to RBF on 3/26/15. Additional questions from RBF analyzed in coordination with the City of Huntington Beach and comments provided to RBF on 6/1/15. Progress meeting with RBF and City of Huntington Beach held 7/1/15. RBF is working with the regulatory agencies on obtaining encroachment permits and/or certifications. On 7/16/15 the consultant is scheduled to meet with the US Army Corps of Engineers (USACE) to discuss initial comments and obtain additional directions. Due to USACE staff shortage the permit is anticipated to be issued in March 2016. RBF is working with Regional Water Quality Control Board (RWQCB) on drafting the 401 Water Quality Certification for the project. The 401 Water Quality Certification was issued on 9/29/15. Comments to the California Department of Fish and Wildlife (CDFW) draft agreement were sent by RBF on 7/17/15. The CDFW permit is predicted to be issued in late October, 2015. In mid-June, 2015 RBF provided response to the California Coastal Commission's (CCC) comments. The comments from CCC were received in the late July, 2015 and the permit is expected to be issued in mid-November, 2015. Permit from Caltrans obtained on August 17, 2015. 100% design package submitted on 7/21/15. Scour protection evaluation and recommendations submitted on 11/5/15. The CDFW should be issued by 12/18/15. The USACE has indicated that their permit should be issued in mid-January 2016. The Habitat Mitigation and Monitoring Plan (HMMP) has been updated by Michael Baker (former RBF) to reflect the USACE's process and submitted to Mesa Water® for review on 1/8/16. Once the HMMP is revised and approved (1/19/16) it will be forward to all agencies, including Coastal Commission. Draft 1602 Streambed Permit obtained on 12/18/15. Final 1602 Streambed Permit pending CDFW will be issued while HMMP is accepted. U.S. Army Corps of Engineers' 404 permit received on 2/10/16. Revised HMMP sent to CCC for review and approval. Project is pending CCC's approval at an upcoming hearing. On 2/29/16 a meeting with Fletcher Jones Motorcars, City of Newport Beach, MBI (former RBF), and City of Huntington Beach was held to discuss issues associated with proposed construction activities. Traffic

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Plan prepared and submitted to the City of Newport Beach for approval on 6/29/16. Per request of CCC a dewatering plan was prepared and submitted for approval. Mesa Water® staff, MBI and CCC met on 10/6/16 and discussed mitigation conditions. Project approved at CCC Public Hearing on 12/7/16. Coastal Development Permit for Construction anticipated in late February, 2017. Final bid set will be completed once all permits are issued. Project in progress.

Project Title: Well Automation and Rehabilitation

File No.: MC 2101

Description: Rehabilitate all clear water wells and add remote control SCADA capabilities

Status: Design: RFP for Design Services released on 7/1/2014. Pre-proposal meeting held on 7/9/2014. 6 proposals received on 7/28/2014; interviewed 3 shortlisted firms on 8/6/2014. Recommendation to award contract to Carollo Engineers approved by E&O on 8/19/2014; Board approval requested on 9/11/2014. Project kickoff meeting held on 10/1/2014. Draft Permit plan received for review on 11/3/14. . Well Standardization workshop held on 11/21/14 to align on site layouts, chemical tank sizing, and instrumentation. Draft Preliminary Design Report received on 1/12/2015, and reviewed in workshops on January 21, 2015 and February 3, 2015, and March 3, 2015. 60% received on April 13, 2015. Meeting to resolve review comments scheduled for April 27, 2015.

Construction Management (CM) Services: Released and RFP for CM services on December 30, 2014 Preproposal meeting held on January 12, 2015. Four (4) proposals were received on January 26, 2015. Three proposers were interviewed on February 4, 2015, and the recommended Contract with RBF was approved by the Board on March 12, 2015.

60% design received on April 13, 2015. General 60% Design Review workshop held on April 27, 2015 and electrical/instrumentation review workshop held on May 11, 2015. Working on optimizing construction sequence. Electrical design workshop scheduled for June 25, 2015. 90% design submittal received on July 15, 2015. Engineer's Estimate of probable cost at 90% is approximately \$10.1. Workshop to review and address 90% comments held on July 29, 2015. Contractor prequalification package sent to eight (8) General Contractors on July 18, 2015. Four prequalification applications were received on August 17, 2015. 100% Design received on September 16, 2015. Notice Inviting Sealed Bids was released to four prequalified contractors on October 5, 2015. Job Walks were conducted on October 13, 2015 for prequalified Prime Contractors and on November 3, 2015. Addenda and clarifications in response to bidder's questions have been issued. Bid opening was extended to January 7, 2016 to allow for recent changes for new Well 9 layout. Four bids were received on January 7, 2016. An action item to award a contract to the lowest bidder was approved by the Engineering and Operations Committee on January 16, 2016 and by the full Board on

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February 11, 2016. Notice to proceed was sent on April 4, 2016. Preconstruction meeting held on April 12, 2016. The project is in the pre-construction submittal phase with several Requests for Information and equipment submittals received from the Contractor by the Construction Manager, and reviewed and responded to by the Design Engineer. Construction activities began at Well 5 on October 3, 2016 with demolition and well rehabilitation beginning in the first week. Video of Well 5 showed scale on the louvers, and potential failure of an unused sounding tube and a small area of the louvers potentially requiring swage patches. Repair completed on November 29, 2016. Well 5 rehabilitation resumed on December 3, 2016. Well 5 chemical facility pad has been constructed and is awaiting a weather forecast of 8 days with no predicted rain to apply the chemical-resistant coatings to the concrete. Well 5 pumping development began on January 4, 2017, and produced fine sand at pumping rates above 1100 gpm. The cause of the sand is being investigated. Construction of the Well 7 chemical facility is also in progress while Well 7 remains in operation. Contractor preparing to install chemical facilities at Well 3.

Project Title: Two New Wells

File No.: MC 2158

Description: New wells and real estate services to identify and acquire property

Status: Change Order to Well Rehabilitation and Automation approved at January 20, 2015 E&O to retain Carollo and subconsultant Geotechnical Consultants Inc. (GTC) to provide typical well site layout and hydrogeological investigation to identify promising locations for two new 2,000-gpm clear wells. Met with Real Estate Professionals on February 2, 2015, to discuss scope of work for well site property identification and acquisition. Met with OCWD Chief Hydrogeologist on March 24, 2015, to identify study area for new well sites. Gave Notice to Proceed to Real Estate company on May 4, 2015, and provided consultant report on preferred well site property characteristics. Real Estate consultant developed an advertisement postcard to describe the type of property needed, and sent it to over 1,000 commercial and industrial property owners in the study area. Three sites have been presented for evaluation. Also met with the Laguna Beach County Water District (LBCWD) Manager of Engineering and Operations on October 13, 2015, to discuss development of a jointly-owned well on property in Fountain Valley owned by LBCWD. An offer to purchase one site was presented to the property owner on November 16, 2016. The owner has not responded, and the offer time frame has expired. An offer for a different property was prepared and presented on January 6, 2016. Owner has decided to lease the property rather than selling. A third property is being evaluated by staff and OCWD for potential interference from the OCWD mid-basin injection. Travel time analysis results from OCWD showed that the property is inside the six month travel time window. A meeting was held on February 22, 2016, with OCWD and DDW to discuss the travel time analysis, and DDW determined that it would not issue a permit for a drinking water well at the site. A meeting with the City of Santa Ana Water Department was held to discuss

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the possibility of a jointly-owned well on a City of Santa Ana-owned site. An offer to purchase was presented to a property owner for an underutilized portion of a property on May 4, 2016. The offer was rejected. A revised offer was submitted on June 7, 2016. The owner has decided not to sell the property. Staff is working with Voit Real Estate to identify and evaluate underutilized sites in the vicinity of the study area. One underutilized site on Sunflower Boulevard was considered but rejected for being only 200 feet from the current Well 9B site, which would add significantly to pumping costs at both sites. Another site near Bristol and St. Gertrude was considered, but rejected due to the cost of the property, its location adjacent to a residential area, and the cost of construction of two miles of pipeline to Mesa Water's service area. A purchase agreement for an industrial site in Santa Ana is being negotiated. The purchase agreement includes a 45 day contingency period, escrow close date of March 31, 2017, and 18 month leaseback to the seller. Notice to proceed with a Phase 1 Environmental Site Assessment and Property Condition Assessment was initiated on February 13, 2017.

Project Title: Well 9B

File No.: MC 2229

Description: Replacement of Well 9

Status: Kickoff meeting was held on January 22, 2016. Well design criteria for depth, expected screen intervals, and expected pumping rate were established. Well design decisions include a continuous diameter of 18 inches with stainless steel casing and wire wrapped screen. Detailed design is in process. Draft bid documents reviewed and returned on March 25, 2016. Bid documents were released on April 22, 2016. The pre-bid site meeting was held on May 18, 2016 and attended by four bidders. Three bids were received by the deadline of June 7, 2016. The low bid from Weber Water Resources is approximately 30% below the Engineer's Estimate. Notice to Proceed was issued to the contractor on July 19, 2016. Destruction of the existing well began on August 4, 2016 and was completed on August 19, 2016. The drilling of Well 9B began on August 29, 2016 and is currently in progress. The 304L Stainless Steel Casing is scheduled to arrive on site on September 14, 2016. Initial test pumping yielded a specific capacity of 13 gpm/ft, much lower than the 17-20 gpm/ft expected. As a result the test pump was removed and the well underwent further chemical development. Pump platform has been constructed and the contractor is currently running power to the new location. Pipework and fit-out is expected to be completed this week. OC Flood Control completed its project in the Banning Channel on 12/29/16. The Contractor installed the well pump, paved the site, prepped the pipework, and completed the necessary water sample tests. The State Water Resources Control Board completed their site visit on January 17, 2016 and issued the well permit on February 3, 2017. Well 9B is pumping at approximately 2,000 gpm. Awaiting final invoice for project closure.

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Project Title: MWRF Parking Project

File No.: M 2052

Description: Conduct parking layout design

Status: Parking study prepared by Onward Engineering in November 2013. The Board approved alternative # 3 Parking Along the MWRF Frontage on Gisler Ave. on 3/15/2014. RFP for the parking design in consultants' review (11/6/14). RFP sent out to consultants 11/25/14. Proposals due 12/19/14. Interview with three consultants held on 1/7/15. Recommendation brought to January E and O for consideration of approval and will be brought to the Board on 2/12/15 for approval. Project approved 2/12/15. Kick-off meeting held on 2/19/15. Design in progress. 30% design submittal submitted 3/23/15. Staff met with C.J. Segerstrom and discussed concept and details of the proposed parking layout. Segerstrom verbally approved the project. City of Costa Mesa approved the concept and currently consultant is evaluating the landscape requirements with the City of Costa Mesa. E and O Committee accepted the conceptual design and provided comments on 5/19/15. The condition approval from Segerstrom received on 6/29/15. Staff is working with the designer (CivilSource), Mesa Water's attorney, and City of Costa Mesa on addressing Segerstrom's comments. Staff is reviewing the Initial Study/Summary of Findings Report received on 8/3/15. Staff has addressed all Segerstrom's requests included in their 6/29/15 letter and prepared a response letter. Approved construction plans were received from the City of Costa Mesa on 12/29/15. The final bid package completed 3/15/16. Encroachment Permit Application submitted to the City on 3/6/16. Hold Harmless Agreement for the Installation of Off-Site Parking Improvements within Public Right-of-Way received on 5/4/16. Staff reviewed the Agreement and sent comments to the City of Costa Mesa on 5/27/16. City approved all revisions as proposed by Mesa Water® and sent the agreement for signature on 6/24/16. The Engineering and Operations Committee reviewed the Agreement at July 19, 2016 meeting and recommended Board approval. Board approval obtained on August 11, 2016. Agreement sent to the City for execution and recording on 9/7/16. Recorded Agreement received from the City on 10/19/16.

Project Title: Reservoir 1 and 2 Improvements

File No.: M17-102

Description: Installation of gas flow meters at Reservoir 1 and Reservoir 2,

Status: Staff prepared Scope of Work and sent a request for quote to on-call Engineering consultant (As-Needed Design Consultant) to provide:

Design and specifications for installation of gas meters for Res 1, Res 2, and Well 5. Evaluation and design of Res 1 Air Vent Covers and Roof Membrane, and design for replacement of Res 1 silencers. Request for quote sent out 3/5/15. Brady Engineers selected for the project. Kickoff meeting held on 4/7/15. 30% design package submitted 5/27/15. Designer is working on addressing the review comments and

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continuing the design (7/10/15). Well 5 gas meter moved into the well automation and rehabilitation project scope of work. 100% Design Package received on 8/4/15. Meeting with the designer to discuss reviewers' comments held on 8/10/15. The designer is revising the design and final bid package is anticipated to be submitted on 9/4/15. The final bid package submitted on 10/12/15. Staff has reviewed the submittal (11/5/15). Project advertised for bid on April 6, 2016. Pre-Bid meeting held on 4/20/16. Bids opened on 5/17/16. Two bids received for \$516,000 and \$556,600. Staff reviewed the bids and recommended E&O Committee to approve the lower bid. E&O Committee recommended approval of the project on 6/21/16. Kick-off meeting was held on 8/3/16. Construction began on 9/12/16. To date the contractor has installed the following:

- roof membrane at Reservoir 1
- skylights and silencers at the Pump House of Reservoir 1
- gas meters for Waukesha engines at Reservoirs 1 and 2,
- roof membrane at the Pump House of Reservoir 1, and
- Repaired and painted air vent covers at Reservoir 1

The contractor is working on addressing a few "Punch List" items. Project in progress.

Project Title: Pipeline Testing Program

File No.: MC 2112

Description: Implement Resolution No. 1442 Replacement of Assets to annually perform non-destructive testing of 1% of the distribution system, and destructive testing of segments that are shown to have less than 70% of original wall thickness by non-destructive testing.

Status: Identifying segments for FY 2015 non-destructive testing and arranging for excavation and removal of segments that tested below 70% remaining wall thickness in FY2014 non-destructive testing. Released a Request for Proposal for a consultant to administer the program and develop standard operating processes on February 6, 2015. Three proposals were received on February 26, 2015, and interviews conducted on March 4, 2015. A contract with RBF was approved by the Board on April 9, 2015. Kickoff meeting held on April 21, 2015. Project status meeting held on June 8, 2015. Draft deliverable of prioritization of asbestos concrete pipe (ACP) for non-destructive testing received on June 26, 2015; updated draft received on August 7, 2015. Draft deliverable with recommendations for non-destructive testing technologies for metallic pipe received on August 7, 2015. Draft evaluation of destructive testing laboratories and tests received on August 21, 2015; final report received on September 16, 2015. Echologics performed non-destructive testing of 3 miles of ACP from July 13-17, 2015. Draft report received on August 14, 2015; final report received on September 1, 2015. Based on the Echologics reports from 2013 and 2015, ten ACP segments were selected for sampling and destructive testing. Three ferrous material pipelines with a history of repairs were also selected for field sampling and destructive testing. Draft bid documents for field sampling received on October 16, 2015. Final bid documents were

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released to three on-call contractors on November 23, 2015, for bids. Pre-bid meeting was held on December 7, 2015 and attended by all three of the bidders. Three bids were received on December 16, 2015. All bids exceeded the budget and the General Manager's signing authority. An action item to approve a contract with the low bidder was approved by the Engineering and Operations Committee on January 19, 2016, and by the Board on February 11, 2016. Notice to Proceed with field sampling was given on March 7, 2016. An encroachment permit from the City of Costa Mesa was received on April 25, 2016. Field sampling began on May 16, 2016 and completed on June 28, 2016. Samples were shipped to MEIC Lab in Portland, Oregon, for destructive testing on July 7, 2016. Samples were received at MEIC on July 11, 2016. Lab results, including estimates of remaining useful life, were received on October 24, 2016. Non-destructive testing of the next 3 miles of ACP was completed on September 16, 2016, and the draft report was received October 1, 2016. All of the ACP and Cast Iron Pipe (CIP) showed less than 70% remaining wall thickness compared to its assumed original thickness. Sampling six sections of ACP and two sections of CIP is planned in February and March 2017.

Project Title: MWRF Outreach Center

File No.: MC 2147

Description: Report on the feasibility of reconfiguring and potentially expanding the functional uses of the MWRF Operations and Administration Building to include a multi-purpose room and educational forum.

Status: Mesa Water® is coordinating with IBI Group (designer) on the feasibility of implementing an education and outreach center at the MWRF. Kick-off meeting was held on 6/1/2015. Program Requirement Questionnaire meetings were held on 6/9/2015 and 6/17/15. Program Report delivered to Mesa Water® for review on 7/7/2015. 60% design concepts are scheduled for submittal on 08/14/15. 100% concept design received on 09/29/15. Virtual rendering received on 10/6/15. Concept designs presented at the October Board Workshop. A follow-up planning session was held at the November Engineering and Operations Committee Meeting to capture the Board's input on evaluating reduced cost options and to revisit the existing Boardroom improvements. Board directed staff to develop a scope of work to evaluate scaled down layouts of the MWRF Outreach Center and revisit expanded layouts of the main Boardroom. Engineering and Operations Committee approved a contract amendment with IBI Group to reflect the revised scope of work. Item was approved by the Board February 11, 2016. IBI Group performed an inspection of the existing Boardroom on February 25, 2016 and are in the process of developing conceptual layouts. Staff review and meeting occurred on April 11, 2016. Conceptual layout work has been completed and awaiting Board direction.

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Project Title: Mesa Water® Main Office HVAC Study

File No.: MC 2171

Description: Evaluate the existing HVAC system and provide recommendations for improved efficiency and operations of the system.

Status: Mesa Water® has contracted with Goss Engineering Inc. to perform this study. Kick off meeting was held January 13, 2016. Goss Engineering performed a field survey of both main campus buildings over the course of three days. Draft report with results and recommendations was reviewed by staff. The final report was delivered on June 30, 2016 and was reviewed by staff for completeness. Staff presented the findings and recommendation to the Board of Directors at the July E&O Committee Meeting. Board approved contract to move forward with the design of a complete Variable Refrigerant Flow system. Contract has been executed and returned to Goss Engineering. Project kick-off and notice to proceed was issued on November 30, 2016. 50% drawings have been delivered for review and comments returned. Stakeholder meeting was held on February 2, 2017 to provide comments for the new VRF system 50% design.

Project Title: Reservoirs 1 & 2 Pumps, Controls, and Chemical System Assessment Project

File No.: MC 2173

Description: Evaluate the existing Pumps, Controls, and Chemical Systems at Reservoirs 1 & 2. The project includes lab testing of pump efficiency, physical assessment of pumps and pipework, assessment of the existing control system, and preliminary design of a chemical dosing system. Recommendations for improved efficiency and operations of the system will be included in a final report.

Status: Mesa Water® has contracted with Hazen & Sawyer to perform this study. Kick off meeting was held September 30, 2015. The consultant performed a field survey of both Reservoirs 1 & 2 over two days. A preliminary outline of technical memo 1 was provided on December 11, 2015. Initial data requests were responded to by December 7, 2015, with follow up responses provided on January 7, 2016 (SCADA Data) and February 9, 2016 (Jockey Pump Data). Pump testing scope of work has been reviewed by Mesa Water® and returned to the Consultant for revision. TM-1 has been reviewed by staff and returned to the consultant. Pump extraction plan and bid documents are currently being reviewed by staff. The Consultant has begun the preliminary design of a chemical dosing system. Request for bids for the pump extraction will be released in August 2016. Bids for the pump extraction were submitted and reviewed. The item was presented to the Engineering and Operations Committee at the September 20, 2016 meeting. Contract has been executed. Field assessment was completed on October 19, 2016. Factory pump testing scheduled in early January

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2017. Further field tests conducted on December 2, 2016. Pump 2 from Reservoir 1 was removed and sent to the factory test facility on January 3, 2017. Factory testing was completed on February 27, 2017 with results aligning with the results obtained in the field. The pump is currently undergoing a physical assessment. The motor control system technical memo is currently under review.

Project Title: Other Agency Project Coordination

File No.:

Description: Median construction in Placentia Ave. between Wilson St. and Adams Ave.

Status: Mesa Water® 16" main runs 5' East of the street center line. Mesa Water® is coordinating with designer and City on design of necessary protection and root barrier for the water main. 85% design plans received on (12/22/14). Plan review in progress 1/8/15. Plan review comments sent to the City 2/6/15. Mesa Water® provided update comments to landscaping plans on 6/17/15. Mesa Water® continuing to coordinate with the City, Stivers and Associates, Inc., and City Designer on layout of project. Revised final plans submitted for Mesa Water® review on 11/19/15. Staff reviewed the submittal in cooperation with Mesa Water® landscape consultant (Stivers Associates) and submitted comments to the City Designer on 12/28/15. The comments have been accepted by the Designer and Final Plans were submitted on 2/9/16. New comments sent to the designer on 2/18/16. The revised final plans received on 3/21/16 and approved by Mesa Water® on 3/31/16. City of Costa Mesa awaiting state funding for the project.

Project Title: Other Agency Project Coordination

File No.: M 2106

Description: Water main relocation in New Hampshire Dr. due to Greenville-Banning Channel Improvements by County of Orange.

Status: Relocation of 12" water main is required due to enlarged box culvert on Greenville-Banning Channel. Task Order No. RBF-2 issued to RBF Consulting on June 24, 2014 for design of the relocation. Mesa Water® is coordinating with County of Orange and RBF. Design in progress. Hydraulic analysis received from RBF 9/12/14 indicated that taking the New Hampshire pipeline out of service during construction of the Greenville-Banning Channel will have no adverse impacts on the distribution system (8/9/14). Mesa Water® is working with OCFCD on finalizing the cooperative agreement. E&O Committee approved the agreement 11/18/14. Pipeline relocation design package submitted to Mesa Water® on 1/31/15. Mesa Water® is coordinating with OCFCD and consultant to address final comments. Plans and specifications for the pipeline relocation completed 3/3/15 and forwarded to OCFCD on 3/5/15. Project was delayed until Spring of 2016. Attended the pre-construction meeting on 7/21/15. Construction meeting with OCFCD's contractor Sukut Construction (Sukut) held on

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4/7/16. Staff is coordinating with OCFCD and Sukut on project schedule. Two new 12-inch valves installed by Mesa Water® on New Hampshire Dr. at Idaho Ave. on 7/7/16 and air-vac valve relocated on 7/18/16. Approx. 110 ft. long section of existing 12" water main removed and existing box culvert demolished on 7/25/16. Construction of the new box culvert and water main replacement were completed in September, 2016. Completion of the Channel Improvements Project is scheduled for mid-February, 2017. Awaiting invoice for the water main replacement.

Project Title: Well 8 Demolishing Project

File No.: M 2219

Description: Prepare Well 8 demolishing plans and remove above-ground portions of the well and onsite facilities at the well facility to the scope and extent acceptable to the land owner Interinsurance Exchange of the Automobile Club of Southern California (the "Exchange") to return the site to its near original condition.

Status: Prepare Well 8 demolishing plans and remove above-ground portions of the well and onsite facilities at the well facility to the scope and extent acceptable to the land owner Interinsurance Exchange of the Automobile Club of Southern California (the "Exchange") to return the site to its near original condition.

Status: The Consultant has performed the required site Investigation and final design Services. The Consultant provided a 90% design which is being reviewed by Mesa Water. On February 6, 2017, Mesa Water® staff met with the Exchange personnel and discussed the 90% plan review comments. The comments will be incorporated into the 100% design. In November 2016, the property owner assigned a project manager to work with Mesa Water® to move the project forward. Well 8 demolition is scheduled for early June and should take approximately 60 calendar days to complete.

Water Quality Call Report

January 2017

Date: 1/5/2017
Source: Phone
Address: 1041 ½ W. Wilson St.
Description: Customer inquired about getting her water tested, for lead in particular. She wants to compare the water she bought from the water store to the tap water that she filtered through a Brita Filter.
Outcome: Assured customer that the tap water meets all drinking water standards. Explained to customer that Mesa Water does not provide special testing from point-of-use devices and provided her a list of state certified laboratories she can contact for her testing needs. Customer was also provided with the state's website on certified residential treatment devices.

Date: 1/9/2017
Source: Phone
Address: 2040 Monrovia
Description: Customer noticed water became milky/cloudy after plumbing repairs were done at the residence.
Outcome: Suggested that customer flush the service line a few minutes to get rid of any air that may be trapped in the line.

Date: 1/10/2017
Source: Phone
Address: Declined
Description: Customer wanted to know what chemicals Mesa Water® adds to the water. When it was explained to customer that the water is disinfected with chloramine, the customer wanted to know how long we've been chloraminating the water. He has noticed "burning eyes" for the last 4 years and is looking to see if it's because of the chloramines.
Outcome: Explained to customer that Mesa Water® has been chloraminating since 1999, and that Metropolitan Water District has been chloraminating for more than 30 years.

Date: 1/10/2017
Source: Phone/visit
Address: 1635 Latitude South
Description: Customer concerned that the water is making towels smell. Water appears milky and smells like hydrogen sulfide.

Outcome: Customer was not present during site visit. Took sample from outside hose bib, water was clear, no odor detected, and field analyses for chlorine, pH, and temperature are all within normal range. Called customer and explained to her that the water observed had no odor and was clear. The milky appearance internally is likely due to air in the lines.

Date: 1/10/2017
Source: Phone/visit
Address: 2700 Bristol
Description: Manager of a dog day care reported health issues with the dogs and suspects it's from the water.

Outcome: Visited the site and spoke with the manager. Samples were collected from two hose bibs closest to the meter for field analyses of pH, temperature, and chlorine. All readings were within normal range. Staff collected bacteriological samples from one of the spigot used for the dogs and one representative of the water in the main. Results for both samples came back negative for coliform and the owner was informed. Spoke to the manager and provided him with the WQ report and explained about the water quality monitoring and data. Manager will relay information to the owner. Later spoke to owner who said that the dogs have access to water in puddles on site and access to the pool maintained by a pool company. She will look into other possible causes.

Date: 1/23/2017
Source: Phone/Visit
Address: 897 Center #17
Description: Customer lives in an apartment complex and reported having sand from the hot water and has noticed it for a week.

Outcome: During site visit, water sample was taken from the hot bathtub spigot and particles were observed. Also took cold water sample from the outside hose bib as well as the kitchen sink and both samples were clear. Advised customer to have landlord flush and maintain the water heater.

**MESA WATER DISTRICT
COMMITTEE POLICY & RESOLUTION
REVIEW OR DEVELOPMENT**

ENGINEERING & OPERATIONS COMMITTEE

Policy Assignments for 2017

Policy Name	Resolution	Date Adopted	Revision Schedule	Next Review
Rules and Regulations for Water Services (will include review of meter capacity charges and easement procedures)	Resolution No. 1470	02/09/16	Review and update as needed	TBD
Standard Specifications and Drawings	Resolution No. 1449	01/12/17	Review and update as needed	TBD

Water Operations Status Report
July 1, 2016 -January 31, 2017

Operations Department Status Report	Wk Unit	Plan Days	Act Days	Plan Qty	Act Qty	Plan Cost	Actual Cost
01 - HYDRANTS							
WD-0101 - HYDRANT MAINTENANCE	HYDRANTS	98	136	1962	2588	\$77,734	\$91,518
WD-0102 - HYDRANT PAINTING	HYDRANTS	9	2	245	46	\$7,938	\$821
Program 01 TOTAL		107	138			\$85,672	\$92,339
02 - VALVES							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	65	100	1395	1871	\$52,479	\$68,420
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	8	1	82	12	\$6,453	\$321
Program 02 TOTAL		73	101			\$58,932	\$68,741
03 - METERS							
WD-0301 - NEW METER INSTALLATION	METERS	11	6	69	51	\$19,582	\$20,308
WD-0302 - RAISE REPLACE METER BOX	BOXES	13	8	59	18	\$13,344	\$5,402
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	39	59	78	113	\$37,778	\$36,744
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	10	10	68	51	\$7,879	\$6,608
Program 03 TOTAL		73	83			\$78,583	\$69,062
04 - MAIN LINES							
WD-0400 - MAIN LINE REPAIR	REPAIRS	69	100	12	17	\$61,592	\$75,374
WD-0402 - AIR VAC MAINTENANCE/REPAIR	REPAIRS	15	14	92	90	\$12,111	\$8,789
Program 04 TOTAL		84	114			\$73,703	\$84,163
05 - SERVICE LINES							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	27	49	12	16	\$18,818	\$31,588
Program 05 TOTAL		27	49			\$18,818	\$31,588
06 - CAPITAL							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	2	3	3	2	\$1,198	\$1,654
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	3	0	1	0	\$3,219	\$0
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	81	56	12	12	\$93,985	\$59,417
CAP LM - CAPITAL LARGE METERS	METERS	7	11	29	36	\$26,511	\$25,180
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	52	108	10	17	\$65,478	\$86,604
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	15	6	6	3	\$12,742	\$3,996
CAP SM - CAPITAL SMALL METERS	METERS	70	61	697	713	\$90,814	\$101,042
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	5	4	5	9	\$4,187	\$2,932
Program 06 TOTAL		235	249			\$298,134	\$280,825
VACANT POSITIONS			7				\$4,949
TOTAL						\$613,842	\$631,667



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: February 21, 2017
SUBJECT: Municipal Water District of Orange County Activities Update

RECOMMENDATION

This report is for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Municipal Water District of Orange County (MWDOC) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's MWDOC Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at MWDOC in order to provide direction to staff and its MWDOC representatives in a timely manner, if required.

ON-GOING ISSUES

Update on Orange County Flood Control District (OCFCD) Encroachment Process

MWDOC and several member agencies have continued to weigh in on the OCFCD's proposed Right of Entry and Use Agreement, which would impose an annual use fee for utility facilities that cross or encroach upon OCFCD property. MWDOC's legal counsel, along with legal counsel from several other agencies, has communicated with County Counsel about OCFCD's proposal to impose a use fee and they believe that OCFCD lacks the legal authority to impose it.

Legal counsel has advised staff that member agencies have state-granted franchise rights that authorize them to construct, operate, and maintain water pipes and related facilities over, under and along canals, ditches, flumes and watercourses. These statutory franchise rights may allow for reasonable encroachment permitting, but they do not permit the conditioning of the right by assessment of a use fee or allow OCFCD to raise revenues that are not directly related to the cost and impacts of the encroachment.



OCFCD has not provided an explanation of the nexus between the charge being imposed and the on-going costs associated with a pipeline being constructed under their property or along flood control channels. OCFCD appears to be taking the position that a charge can be assessed; there does not need to be a nexus cost basis for an on-going charge after a pipeline has been constructed under or along flood control property, including a flood control channel. An encroachment fee has not been assessed anytime during the last 35 years and OCFCD has respected the statutory franchise rights.

MWDOC's recommendation is to continue to take a stance opposing OCFCD's attempt to impose a use fee to cross or encroach on OCFCD flood control channels and request the Board of Supervisors to table this issue.

Carson Recycling Project

Background: This is a collaboration project between MWD and the Sanitation Districts of Los Angeles County. This new regional water source would generate up to 150 MGD of recharge and storage into multiple groundwater basins and increase regional storage reserves.

The Feasibility Study Found; 1) A potential 150-mgd program is feasible, 2) The Project provides significant regional benefits, 3) costs and benefits are consistent with the 2015 Integrated Resources Plan (IRP) Update and 4) The project is adaptable to future Direct Potable Reuse regulations, if needed.

Next Steps: 1) Complete design, construction, start-up and operation of Demonstration Plant, 2) Proceed with facility planning & optimization, engineering and additional groundwater modeling, 3) Finalize agreements with Sanitation Districts, 4) Develop institutional and financial arrangements as needed, and 5) Initiate public outreach effort focused on Demonstration Plant.

Poseidon Desalination Project

Orange County Water District (OCWD) is currently working on preparation of the California Environmental Quality Act (CEQA) documentation for the Poseidon Project integration work. Work continues on the project integration into the water distribution for Orange County. Poseidon is working with the State Lands Commission, the Santa Ana Regional Water Quality Control Board and then the California Coastal Commission on their permitting process. It is estimated that it will take about a year to get through all of the permitting processes.

LAST MONTH'S ISSUES

Board Elections

Wayne Osborne was elected President of the MWDOC Board and Brett Barbre was elected Vice-President.



Water Supply Update and Orange County Performance Report

For the month of November 2016, Orange County saved 14.56% (compared to the historical average for November 2013-2014), exceeding the MWDOC goal of 10%. 2) Since December 2015, Orange County cumulative water savings have totaled 21.11%. 3) Orange County has saved 183,000 AF compared to CY 2013.

The Northern California accumulated precipitation (8-Station Index) is reporting **53.2 inches or 214% of normal as of January 25, 2017**. In just the month of January accumulated precipitation reached 23.6 inches which is 14 inches – above normal compared to the historical average.

As of January 2017, 61% of California is still in drought conditions and 2% is still in “extreme” drought conditions. This is still an extremely high number but considerably better than November 2015 when 99% of California was in a drought.

UPCOMING ISSUES

- MWDOC Reserve Policy
- OC Reliability Study TM-4

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: February 21, 2017
SUBJECT: Orange County Water District Activities Update

RECOMMENDATION

This report is for information only.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

None.

DISCUSSION

This report on Orange County Water District (OCWD) issues is intended to brief the Committee and Board on activities relevant to Mesa Water District (Mesa Water®). The first section, "On-Going Issues", is a status update on current studies, reports, and/or policy work groups that staff are involved with. The second section, "Last Month's Issues", is a report on noteworthy items that were covered at the last month's OCWD Board and Committee meetings. The last section, "Upcoming Issues", is a preview of new and forthcoming issues important to Mesa Water®. This format is intended to keep the Committee and Board informed about current and future items at OCWD in order to provide direction to staff and its OCWD representatives in a timely manner, if required.

ON-GOING ISSUES

Report on Field Headquarters (FHQ) and Prado Dam

- FHQ recharge basins are full
- Both diversion dams are inflated
- Prado Dam release stands at 700 AF/day – adjusted to match recharge rate
- 15.76 inches rainfall to date at FHQ
- OCWD Groundwater Basin Accumulated Overdraft stands at 379,000 acre-feet

Public Hearing to Consider City of Orange Well #27 Petition for Exemption of Replenishment Assessment and Basin Equity Assessment

The City of Orange recently constructed their Well #27 at 140 South Jamison Street. The well is located approximately 0.5 mile north of Santiago Creek. During well construction the City had to "pump to waste" about 954 acre-feet of water until the bacteriological count met



acceptable standards. This water traveled in a storm drain south to Santiago Creek where it was recharged back into the groundwater basin. The City coordinated with District Field Headquarters staff to verify this water was recharged back into the groundwater basin. This pumping occurred between July and October 2016. After sufficient flushing, the quality of the well water eventually improved and stabilized, and the well is now providing potable water to City of Orange residents. The cost of this groundwater at the current RA of \$402/acre-foot is \$383,508. The District Act requires that the RA and BEA be paid for all groundwater pumped, and only the Board of Directors via a Public Hearing process can waive these assessments after making certain findings. Staff believes the petition provides adequate information supporting the City position that this water may be exempted from the RA and BEA in accordance with Section 38.1 of the District Act, which governs this process. In summary, to exempt this water from payment of the RA and BEA, the Board of Directors would need to find that:

“Water produced . . . is unsuitable for domestic or agricultural purposes,

AND

. . . production of such unsuitable water will have no adverse effects on the groundwater supplies of the District . . .”

Staff believes these conditions have been met and recommends the Board authorize exemption from payment of the Replenishment Assessment and Basin Equity Assessment for 954 acre-feet of groundwater production from City of Orange Well #27 during FY 2016-17. The Board approved the recommendation 10-0.

LAST MONTH'S ISSUES

Public Hearing to Consider Increasing Directors' Compensation

This motion was only to consider increasing the per day compensation, not to enact any pay raise. The motion was to consider increasing the Directors' compensation from \$250 to \$275 per day of service, up to a maximum of ten days per month, commencing 60 days from the adoption of the Ordinance (April 2, 2017). Motion and second to approve this motion was approved 6-2. Director Flory and Director Vanderbilt opposed.

Department of Water Resources Update

- Department of Water Resources increased its estimate for this year's State Water Project supply from 45% to 60% of most requests. That works out to a delivery of 2,536,267 acre-feet of water.
- As of January 18: Lake Oroville was at 79% capacity, Shasta Lake was at 80%, Folsom Lake was at 50%, San Luis Reservoir was at 73% capacity.
- DWR expects that with future rain and snow in the forecast, it will be able to increase the allocation further.



Alamitos Seawater Barrier 2017-18 Operations and Maintenance Budget

RECOMMENDATION: Approve the Alamitos Barrier 2017-18 total Operations & Maintenance budget in the amount of \$2,560,000 and authorize payment of the District's share not-to-exceed \$871,990 payable to the Los Angeles County Department of Public Works after receipt and review of invoices:

Annual O&M Budget for this coming year is \$2.56M, of which OCWD's share is \$871,990K. LA County funds 65% and OCWD funds near 35%. The O&M budget only covers O&M, not the cost of water that is supplied from MWD for 75% of the demand and recycled for the remaining 25%. The Board approved this item 10-0.

UPCOMING ISSUES

- GAP Study
- Poseidon Project
- IRWD Lawsuit
- North & South County Groundwater Clean-up

FINANCIAL IMPACT

None.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: February 21, 2017
SUBJECT: Reservoirs 1 and 2 Improvements

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice Continuous Infrastructure Renewal and Improvement
Goal #6: Provide outstanding customer service.

PRIOR BOARD ACTION

On July 14, 2016, the Board of Directors awarded a construction contract to Schuler Constructors for construction of the Reservoirs 1 and 2 Improvements Project.

BACKGROUND

Mesa Water's 2014 Master Plan recommended several improvements to Reservoirs 1 and 2 as part of the condition assessment. The following findings and recommendations were provided:

1. **Silencer Replacement:** The Reservoir 1 Pump Station consists of three engine driven pumps and two backup generators. To reduce the noise produced by the engines the exhaust of each engine is equipped with a silencer. The Master Plan assessment recommended that the silencers are in need of replacement due to corrosion and deterioration (installed in 1990).
2. **Roof Membrane Replacement:** The thermoplastic polyolefin (TPO) roofing membrane revealed that the membrane is well past the end of its useful service life. The assessment recommended replacing the existing roof membrane, flashings, and cracked and deteriorated skylights.
3. **Gas Meters:** The addition of gas meters on each natural gas engine of Reservoirs 1 and 2 will allow automated data collection of the total flow and quantity of natural gas used. Installation of these new meters will provide compliance with the South Coast Air Quality Management District (SCAQMD) permit monitoring requirements and routine reporting of natural gas quantities used.
4. **Air Vent Repairs:** The air vent covers on Reservoir 1 exhibit signs of moderate corrosion and deterioration. The evaluation of the covers indicated that new covers are not necessary at this time. However, the existing 4 air vent covers will be removed, localized corrosion repaired, and reconditioned to meet Division of Drinking Water (DDW) criteria.

After completing the submittal approval process and receiving all necessary parts, the contractor mobilized on the site on September 12, 2016. Construction started with replacement of the deteriorated TPO roofing membrane with a new membrane on the roof of Reservoir 1. Work continued at Reservoirs 1 and 2 with implementation of the following improvements:



Reservoir 1

- Removal and replacement of existing exhaust silencers,
- Installation of 3 automated gas meters on each natural gas engine including new associated valves and bypass lines,
- Installation of 2 automated gas meters on the backup generators including new associated valves and bypass lines,
- Integration of the new gas meters with SCADA system;
- Removal and replacement of the TPO roofing membrane, counter flashing, and skylights on the pump house building and reservoir; and
- Repair and coating of the deteriorating vent covers.

Reservoir 2

- Replacement of 5 automated gas meters on the natural gas engines and backup generator including new associated valves and bypass lines.; and
- Integration of the new gas meters with SCADA system.

Construction was completed on February 2, 2017. The contractor is finalizing work of punch list items. A presentation of the project construction will be provided at the February 21, 2017 Engineering & Operations Committee Meeting.

FINANCIAL IMPACT

\$618,000 is budgeted in fiscal year 2017. \$451,402 has been spent to date.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: February 21, 2017
SUBJECT: Capital Projects Update – Fiscal Year 2017

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

The Engineering and Operations Committee is provided a monthly summary report on the status of Mesa Water's Capital Improvement Project (CIP) and other agency projects.

DISCUSSION

Mesa Water is in its third year of its five-year and \$35 million CIP that was defined by the completion of the 2014 Master Plan update. As part of this five-year CIP, Mesa Water's Board of Directors adopted a CIP 2017 budget of \$8,420,049 with a vision to carry out the Board's Strategic Plan Goals. Mesa Water's Engineering Department has initiated the planning, design, and construction of several key projects. The following is a summary of the Fiscal Year (FY) 2017 Capital Projects' scopes of work and project status:

- 1. Well Automation Project:** This project modernizes Mesa Water's five clear groundwater well sites. This work includes the construction of permanent chemical management facilities, well rehabilitation to increase production capacity, upgrades outdated electrical equipment, and provides remote well starting/stopping and monitoring capabilities. The Well Automation contract characteristics are as follows:

Contractor/Contract Amount: Pacific Hydrotech Inc./\$10,488,000

Design Support/Contract Amount: Carollo Engineers/\$791,836

Construction Management: Michael Baker International/\$778,270

Contractor Notice to Proceed: April 9, 2016

FY 2017 Budget: \$2,510,213

FY17 Project Amount Paid-to-Date: \$1,450,882

Total Project Amount Paid-to-Date: \$2,209,408

Contract Duration: 785 Calendar Days

Scheduled Completion: May 2018

Approved Change Orders: (\$18,324.93)

Project Status: The Contractor started work at Well 5 in early fall of 2016. Work completed to date includes site demolition, chemical facilities foundation construction, new natural gas



engine installation, site electrical work, and well rehabilitation (currently ongoing). Well 5 remaining work includes site piping, well casing repair, well pump installation and test pumping, chemical facility roof canopy construction, installation of chemical feed systems, SCADA signal integration, and facility start-up. The Contractor is concurrently working at Wells 3 and 7 constructing the chemical facilities structures while maintaining operations of these wells. The project is approximately 45 calendar days behind schedule due to the Well 5 casing repair work and rain delays.

- 2. New Well 9B:** This project replaces the existing Well 9 with a new 18-inch diameter 304 stainless-steel well. Mesa Water's design consultant evaluated the options for repairing and rehabilitating existing Mario Durante Well 9, including the associated costs of implementation, and the likelihood of success. Due to the high costs of repair and the uncertainty of ensuring a reliable water source, it was recommended that the existing Mario Durante Well 9 be abandoned and a new well be constructed. New Well 9B contract characteristics are as follows:

Contractor/Contract Amount: Weber Water Resources/\$834,941

Design Support/Contract Amount: Carollo Engineers/\$165,240

Contractor Notice to Proceed: July 19, 2016

FY17 Budget: \$1,560,000

FY17 Project Amount Paid-to-Date: \$689,855

Total Project Amount Paid-to-Date: \$766,178

Contract Duration: 120 Calendar Days

Scheduled Completion: November 15, 2016

Approved Change Orders: \$65,887

Project Status: Mesa Water and Weber Water Resources held a kick-off meeting on July 15, 2016 with mobilization starting on July 28, 2016. The existing Well 9 was demolished and the site was readied for the drilling of Well 9B. Drilling of Well 9B and installation of the casing was completed on October 14, 2016. The test pump was installed on October 21, 2016, and well development commenced with the well producing a specific capacity of 13 gpm/ft. Well 9A had a specific capacity of approximately 20 gpm/ft after its construction in 1994. Based on prior performance history, it was determined that further development of the new well was required to obtain a higher specific capacity. Following the second round of well development the pump pad was poured, the pump installed, and the pipework reconnected. The Division of Drinking Water issued the permit to operate the well on February 3, 2017. The Contractor is developing the final invoice to close out the project.

- 3. Operations Routine Capital:** A summary of Mesa Water's Operations Routine Capital can be reviewed in the Engineering and Operations Committee packet.
- 4. Mesa Water Reliability Facility (MWRf) Improvements:** This project included design of permanent water quality polishing facilities, addition of a degasifier cleaning system, improvements to the pH adjustment system, and the addition of water quality monitoring instrumentation equipment. The MWRf Improvements contract characteristics are as follows:



Contractor/Contract Amount: Filanc Inc./\$795,424
Design Support/Contract Amount: Carollo Engineers/\$227,399
Contractor Notice to Proceed: June 28, 2016
FY17 Budget: \$618,000
FY17 Project Amount Paid-to-Date: \$599,770
Total Project Amount Paid-to-Date: \$757,118
Contract Duration: 180 Calendar Days
Scheduled Completion: December 31, 2016
Approved Change Orders: \$74,897

Project Status: The Contractor started work at the MWRF in early fall of 2016. Work completed to date includes installation of permanent SBS injection system, construction of Clean in Place (CIP) degasifier cleaning system, installation of improvements to the pH adjustment system and addition of APA5500 water quality monitoring analyzers. MWRF Improvements' remaining work includes demolishing of the temporary SBS injection pilot system and installation of anti-siphoning and vacuum release valves at the SBS Tank. As a safety precaution, a new ammonia injection diffuser in the location away from chlorine injection quill was added to the scope of work. The total cost of this task, including integration with SCADA system, is \$64,483. This task is scheduled to be completed on February 28, 2017.

- 5. Reservoirs 1 & 2 Improvements:** This project replaces five deteriorated silencers at the Reservoir 1 Pump House, thermoplastic polyolefin (TPO) roofing membrane, counter flashing and cracked skylights on the Pump House building and Reservoir 1, repair and reconditioning of the deteriorating Reservoir 1 air vent covers, and addition of 10 automated gas meters to each natural gas engine in Reservoirs 1 and 2. The contract characteristics are as follows:

Contractor/Contract Amount: Schuler Constructors, Inc. /\$516,000
Contractor Notice to Proceed: August 3, 2016
FY17 Budget: \$548,000
FY17 Project Amount Paid-to Date: \$451,402
Total Project Amount Paid-to Date: \$451,402
Contract Duration: 184 Calendar Days
Scheduled Completion: February 2, 2017
Approved Change Orders: \$12,587

Project Status: The contractor has completed the project with installation of the roof membrane at the Reservoir 1 Pump House. The Consultant performed sound testing of the new silencers on February 9, 2017.

- 6. On-Call Services (Design & Construction Management):** The On-Call Professional Services contracts continue to be effective mechanisms for delivering small projects. The contract characteristics are as follows:

Consultants: Brady, MWHC, Michael Baker International, Civil Source Inc.
Contractor Notice to Proceed: June 2016
Contract Amount: \$250,000 per Consultant per year (Not-to-exceed \$250k per year in total)



FY17 Contracts Amount Paid-to Date: \$149,060

- **Brady:** \$12,411

- **MWHC:** \$111,324

- **Michael Baker International:** \$25,325

- **Civil Source:** \$0

Contract Duration: 3 years

Scheduled Completion: Varies

Approved Change Orders: \$100,000

Project Status: In the first half of FY 2017, 10 task orders have been issued for a total of \$239,026. These tasks orders were assigned to perform engineering services for the OC44 Meter Replacement Project, standardization of Plan Check submittals, Reservoirs 1 and Reservoir 2 Improvements; and construction management services for Well 9B, Reservoir 1 and 2 Improvements, and MWRF Improvements. The average engineering task order was \$4,400; the average construction management task order was \$51,500.

7. **Pipeline Integrity Testing:** This program provides for non-destructive testing of 1% pipeline infrastructure annually, and destructive testing of pipeline segments predicted by non-destructive testing to have a remaining wall thickness of less than 70%. The purpose of the testing is to estimate the remaining useful life of the pipelines tested. The contract characteristics are as follows:

Contractors/Consultants: Michael Baker International, Echologics, MEIC Labs

Contractor Notice to Proceed: April 13, 2015

Project Contracts Amount: \$884,302

Consulting Contract Amount (MBI): \$337,302

Nondestructive testing Contract Amount (Echologics): \$190,000 (two years, six miles)

Pipeline Sampling Contractor Amount: \$239,000

Destructive Testing Lab Contract Amount: \$118,000

FY17 Budget: \$395,000

FY17 Project Amount Paid-to-Date: \$280,258

Total Project Amount Paid-to Date: \$767,267

Project Duration: Annual recurring work

Approved Change Orders: (\$31,034)

Project Status:

Non-Destructive Testing:

Non-destructive testing thus far has focused on Asbestos Cement Pipe (ACP), which makes up approximately 74% of Mesa Water's distribution system. In addition, two aging Cast Iron Pipelines (CIP) were also tested. Approximately eight miles of pipeline have been tested to date. This represents all of the testable ACP and CIP, 6" in diameter and greater, that was installed in 1953 and earlier. The age-based useful life of ACP is 75 years; ACP non-destructive testing should be considered for pipeline installed more than 65 years ago, or before 1951. The age-based useful life of CIP is 65 years; CIP non-destructive testing should be considered for pipelines installed more than 55 years ago, or before 1961. The non-destructive testing in the pipeline integrity program is therefore 1-2 years ahead of schedule for these materials.



Destructive Testing:

Following nondestructive testing in 2013 and 2015, ten ACP segments representing 10,814 feet of pipeline, were selected for sampling and destructive testing. In addition to the ACP segments, three segments of ferrous pipeline were also selected for destructive testing. Two of these segments were selected for their known history of failures. The third is a cast iron pipeline in 19th street that was installed prior to 1951 and has reached its age-based useful life estimate of 65 years. Destructive testing of these segments showed that 11 of the 13 samples have more than a decade of remaining life. Two samples are being evaluated again in the FY 2017 destructive testing program to define the extent of pipeline replacement limits. FY 2016 test results indicated that Mesa Water's CIP pipeline replacement program has resulted in an additional 11 years of additional useful life for ACP and 27 years for CIP. This results in a long-term program savings of approximately \$110M over 30 years.

FY 2017 Testing Program:

Three miles of nondestructive testing was performed in September 2016 and all of the tested segments showed less than 70% remaining wall thickness. Five representative sections of ACP and one section of CIP were selected for destructive testing. Staff has received a proposal for testing the ACP segments and is expecting a proposal for CIP testing. Pipeline sampling by Mesa Water's on-call contractors is anticipated in February and March 2017, and destructive testing is anticipated in March and April 2017. Destructive testing reports are expected by the end of the fiscal year. Program results will be presented to the Engineering and Operations Committee in early fall of 2017.

- 8. Reservoir Pump Controls & Chemical Systems Project:** This project was initiated to determine if: 1) reservoir pumps are efficiently operating and if rehabilitation or replacement is necessary, 2) provide associated cost impact and cost/benefit analysis for each option, 3) evaluate long-term viability of engine control systems, and 4) enhance reservoirs chemical management system. The contract characteristics are as follows:

Consultant/Contract Amount: Hazen & Sawyer/\$418,018

Contractor/Contract Amount: General Pump/\$85,100

Consultant Notice to Proceed: September 25, 2015

FY17 Budget: \$275,000

FY17 Project Amount Paid-to-Date: \$66,356

Total Project Amount Paid-to-Date: \$167,652

Contract Duration: 270 Calendar Days

Scheduled Completion: June 21, 2016

Approved Change Orders: \$0

Project Status: The consultant has delivered 2 of the 4 technical memorandums specified in the scope of work.

- TM-1: Developed scope of work for pump removal and testing. Requested bids from qualified contractors and coordinated work;
- TM-2: Summary of pump test results is currently being developed based on December 2016 field test and January 2017 factory test;
- TM-3: Review and recommendation of operational controls is currently being reviewed by Mesa Water staff; and



- **TM-4/Preliminary Design Report:** This report will provide the preliminary design recommendations for the installation of a permanent chemical management system. Delivery of this report is scheduled for late February 2017.

Project completion has been delayed due to operational requirements restricting downtime and progress issues with the pump removal/testing contractor. The project is scheduled for completion by late April 2017.

- 9. Operations Capital (Fleet & Facilities):** This project includes procurement of new equipment and replacement fleet vehicles as well as upgrades to the existing Emergency Operations Center (EOC).

Contractors: Various

Budget Amount: \$172,000

Actual Project Amount Completed to Date: \$72,696

Project Status: The EOC room has been enhanced with new chairs and modular tables, updated wall maps, and replacement white boards to improve functionality. A new trailer mounted vacuum excavator has been received and will be put into service soon. Two replacement service vehicles have been ordered. One F-450 and one F-350 will replace two 12 and 15 year old F-450 vehicles with over 80,000 service miles each. Delivery of these vehicles is expected in late May 2017.

- 10. Other Agency Projects (TB):** The following projects have been undertaken by the following agencies on behalf of Mesa Water:

City of Costa Mesa:

- **Bristol Street and Storm Drain Improvements:** Median, storm drain, and irrigation improvements on Bristol Street between Paularino and Campus
- **Arlington Street Improvements:** New library and public space renovations to be completed at the address of the current library on Park Avenue, south of 19th Street
- **17th Street Improvements:** Median, storm drain, and irrigation improvements on 17th Street between Placentia and Superior

OCTA:

- **405 Widening Project:** OCTA in cooperation with The California Department of Transportation (Caltrans) is widening the San Diego Freeway (I-405) between State Route 73 (SR-73) and Interstate 605 (I-605). This \$1.9 billion project includes adding one regular lane in each direction from Euclid Street to I-605 and two toll lanes in each direction from SR-73 to I-605.

Contractor: City of Costa Mesa; OCTA

Budget Amount: \$145,000

Actual Amount Completed to Date: 405 Widening - \$15,000 (to be reimbursed through Preliminary Engineering Agreement)



Project Status: Several City of Costa Mesa projects are in the planning phase. Mesa Water has attended meetings regarding the projects. Finalized documents will be reviewed by Mesa Water and a line item for water improvements will be requested as part of the City's bid process. Construction will be inspected by Mesa Water, providing oversight of cost and infrastructure installation.

Mesa Water has entered into a Preliminary Engineering Agreement with OCTA in order to recoup costs associated with preliminary design. Mesa Water does not have prior rights to the Fairview Road water line crossing. It is estimated that the Fairview Pipeline relocation will cost approximately \$1.2M based on the tentative bridge alignments provided to Mesa Water. OCTA expects that the initial design work for the I-405 Widening Project will be completed by May 2017 with a notice-to-proceed for construction to follow shortly thereafter. Construction of the Fairview Bridge portion of the project is expected to be completed by fall of 2018. Mesa Water is continuing to work with OCTA on the cost impacts to Mesa Water for the design and construction activities.

- 11. Human Resources Information System:** This project will provide a Human Resources Information System that will automate the manual tracking of employee data that is currently performed. This project has been deferred to also evaluate the potential of integrating Mesa Water's payroll process into the same system platform. This project will be considered for selection and implementation as part of the FY 2018 budget process.
- 12. OC-44 Pipeline Rehabilitation & Replacement Study:** The proposed project will rehabilitate approximately 1,700 linear feet of the 42" OC-44 Pipeline where it traverses the San Diego Creek by inserting a new pipeline inside the existing pipeline. The project proposes to slip line the existing 42-inch pipeline with a new 30-inch Ductile Iron Pipe (DIP). As part of the design scope of work, Mesa Water's Design Consultant prepared an Initial Study/Mitigated Negative Declaration (IS/MND) for the OC-44 project in accordance with the California Environmental Quality Act (CEQA). The location where the OC-44 Pipeline crosses the San Diego Creek is an environmentally sensitive area and is subject to the jurisdiction of four regulatory agencies. The agencies are: the U.S. Army Corps of Engineers (Corps); the California Department of Fish and Wildlife (CDFW); the Regional Water Quality Control Board (RWQCB); and the California Coastal Commission (CCC). 90% of the Pipeline Rehabilitation design has been completed. 100% design will include the final regulatory requirements. The contract characteristics are as follows:

Consultant/Contract Amount: Michael Baker International/\$198,827

Consultant Notice to Proceed: February 21, 2013

FY17 Project Amount Paid-to-Date: \$5,190

Total Project Amount Paid-to Date: \$481,595

Contract Duration: 1,810 Calendar Days

Scheduled Completion: May 31, 2018

Approved Change Orders: \$541,803

Project Status: On December 31 2016, Mesa Water received approval of the last remaining permit from the California Coastal Commission. It is expected the Coastal Development Permit will be issued in February 2017. This will complete the regulatory requirements



necessary to start the project. This project has been delayed due to the time required to obtain the necessary regulatory permits and coordination required with the area stakeholders (i.e. City of Newport Beach, businesses, etc.). Funding for construction will be considered in a future fiscal year.

13. Well 8 Demolition: Well 8 was drilled in 1990 on a small piece of land owned by the Interinsurance Exchange of the Automobile Club of Southern California (the “Exchange”). Well 8 has been taken out of service due to failure of the well casing and the subsequent production of sand. The scope of this project will include the demolition of the well, on-site monitoring wells (owned by OCWD), and removal of the above ground portions and all onsite facilities at the well site. The contract characteristics are as follows:

Consultant/Contract Amount: Dudek & Associates/\$74,510

Consultant Notice to Proceed: July 6, 2015

FY17 Budget: \$0

FY17 Project Amount Paid-to-Date: \$0

Total Project Amount Paid-to Date: \$46,759

Contract Duration: 180 Calendar Days

Scheduled Completion: January 2, 2016

Approved Change Orders: None

Project Status: The Consultant has performed the required site investigation and final design services. The Consultant provided a 90% design which is being reviewed by Mesa Water and the Exchange. On February 6, 2017, Mesa Water staff met with the Exchange personnel and discussed the 90% plan review comments. The comments will be incorporated into the 100% design. The project is several months behind schedule due to the lack of responsiveness from the property owner to provide feedback on the demolition of the well site. In November 2016, the property owner assigned a project manager to work with Mesa Water to move the project forward. Well 8 demolition is scheduled for early June 2017 and should take approximately 60 calendar days to complete.

14. MWRP Parking: Parking at the MWRP is currently limited to approximately 20 unofficial spaces that are accommodated using the gravel landscaping that surrounds Mesa Water’s treatment and storage facilities onsite at the MWRP (i.e., high lift reservoir, carbon dioxide storage vessel, chemical handling facilities, electric switchgear, etc.). Spaces are unmarked and require a staff person onsite dedicated to directing traffic flow and ensuring visitors find their way to the tour events. The Board has previously discussed the MWRP Parking Design concept and adopted Option 3 (Gisler Parking Design) at the March 15, 2014 Board Workshop. At the February 12, 2015 Board Meeting, the Board awarded a contract to CivilSource, Inc. for the MWRP Parking Design. The scope of work of the MWRP Parking design includes providing professional engineering services to prepare final plans, specifications, permitting, preparing the bid package and cost estimates, and providing bid and construction support services for implementation. The contract characteristics are as follows:

Consultant/Contract Amount: Civil Source/\$65,845

Consultant Notice to Proceed: February 19, 2015

FY17 Project Amount Paid-to-Date: \$2,505



Total Project Amount Paid-to Date: \$38,950
Contract Duration: 128 Calendar Days
Scheduled Completion: June 27, 2015
Approved Change Orders: None

Project Status: Project design was initiated on February 12, 2015. The final design and city permits have been completed including coordination with Southern California Edison and collecting the necessary permits from the City of Costa Mesa. Construction of the project is on hold pending funding approval from Mesa Water's Board of Directors.

15. New Well Sites: The purpose of this project is to acquire property for two new well sites to meet the goal of supplying 115% of maximum day demand with groundwater. The contract characteristics are as follows:

Consultant/Contract Amount: Voit Real Estate Services/\$25,000
Consultant/Contract Amount: Carollo Engineers/\$150,447
Consultant Notice to Proceed: May 5, 2015
FY17 Budget: \$0
FY17 Project Amount Paid-to-Date: \$10,981
Total Project Amounts Paid-to Date: \$50,642
Contract Duration: On-going
Scheduled Completion: On-going
Approved Change Orders: \$50,000 (Voit)

Project Status: Escrow for one property in the target study area was opened on January 24, 2017, with an anticipated closing date of March 31, 2017. Property purchase price is \$2.15M. A Phase 1 Environmental Site Assessment, property condition assessment, property purchase CEQA assessment and filing, and ALTA Survey are currently in process during the 45 day contingency period. The terms of sale included a leaseback to the seller for up to 18 months. During that time, staff will retain consultants for design of the well, well operating facilities, and pipeline from the site to Mesa Water's service area. Well drilling is anticipated to begin in fall of 2018 (FY 2019) once the lease has expired. The real estate consultant is continuing to look for two additional properties in the surrounding area to take advantage of the distribution pipeline that will be constructed.

16. HVAC Improvements: Mesa Water's heating, ventilation, and air conditioning (HVAC) system has provided 23 years of service. The HVAC system is a roof top mounted fan-coil type system that has seven units placed among the Operations and Administration Buildings. The system has been periodically maintained throughout the years and various repairs made to accommodate changing office configurations. With an increasing frequency in repairs, a need for more systematic control to address varying thermal conditions within the office environment, changing code compliance requirements, and the age of the current system, Mesa Water District engaged Goss Engineering Inc. (GEI) in July 2015 to perform an assessment of Mesa Water's HVAC system. Based on the Consultant's recommendations, the Board of Directors approved an amendment to the Consultant contract in August 2016 to complete the design of a new Variable Refrigerant Flow HVAC system. The contract characteristics are as follows:



Consultant/Contract Amount: Goss Engineering, Inc. /\$29,980
Consultant Notice to Proceed: October 17, 2016 (Design Phase)
FY17 Budget: \$0
FY17 Project Amount Paid-to-Date: \$0
Total Project Amount Paid-to Date: \$29,980
Contract Duration: 300 Calendar Days
Scheduled Completion: August 13, 2017
Approved Change Orders: \$72,620

Project Status: Design drawings and specifications have undergone 50% design review. The Consultant is currently working on 90% drawings and specifications. Final plans and specifications are expected in late May 2017. The project will be included in the FY 2018 budget with construction expected to start in late fall 2017.

17. Administration Building Improvements: Phase 3 of the Building Improvements Project was initiated to modernize Mesa Water's main campus office facilities. The Administration building was last updated in 1993 during the addition of the 2nd floor. Many of the building's interior surfaces, equipment, and furniture have reached the end of useful life. This project will provide new carpeting, office furniture, painting, and equipment as necessary. The work is being phased by office areas over three fiscal years so as not to disrupt daily operations and to allow budget planning. The contract characteristics are as follows:

Contractors: Culver-Newlin, Certa Pro Painters, Carpet Land, and Grani Installation
Contractor Notice-to-Proceed: March 21, 2016
FY17 Project Amount Paid-to-Date: \$235,422
FY17 Budget: \$0
Total Project Amount Paid-to-Date: \$513,047
Contract Duration: 180 Calendar Days
Scheduled Completion: August 2017
Approved Change Orders: \$0

Project Status: The remaining downstairs Administration Building and the supervisor office in the operations building was completed in July 2017. Phase 4 of the Building Improvements Project will include the upstairs portion of the Administration Building and will be considered in the FY 2018 budget process.

18. MWRF Education Outreach Facility: This project includes preliminary design concepts including three levels of interior and exterior design recommendations and structural modifications to transform the existing MWRF Operations and Administration Facility into a public meeting and event space capable of accommodating Board meetings, District events, and public tours. The contract characteristics are as follows:

Consultant/Contract Amount: IBI Architecture/\$231,331
Consultant Notice-to-Proceed: June 4, 2015
FY17 Budget: \$38,038
FY17 Project Amount Paid-to-Date: \$50,913



Total Project Amount Paid-to-Date: \$193,293
Contract Duration: 360 Calendar Days
Scheduled Completion: June 4, 2016
Approved Change Orders: \$43,632

Project Status: IBI Group presented the design and functionality of three design concepts for Board input at the October 2015 Board Workshop. The Board directed staff to revisit and include previous design improvement concepts for the existing Boardroom improvements as part of the MWRF Education Outreach Facility. A comprehensive history of the MWRF Outreach Center and improvements to the existing Boardroom was provided at the November 2015 Engineering and Operations Committee meeting and the Board directed staff to proceed with obtaining an amendment to the MWRF Outreach Center and Building Improvements Contract for IBI Group to provide 3 conceptual designs for the existing Boardroom as well as reduced versions of Concepts 1 & 2 for the MWRF Outreach Center. The revised design concepts have been completed and the project has been deferred, pending Board direction.

19. MWRF Sound System: This project will provide for a permanent yet flexible sound system for the multi-purpose room, courtyard, and pavilion at the MWRF. The contract characteristics are as follows:

Consultant/Contract Amount: Sound Image/\$9,745
Consultant Notice-to-Proceed: September 6, 2016
FY17 Budget: \$0
FY17 Project Amount Paid-to-Date: \$4,220
Total Project Amount Paid-to Date: \$4,220
Scheduled Completion: June 30, 2017
Approved Change Orders: \$0

Project Status: Design and bidding of the sound system installation was completed on February 2, 2017, and a construction contract execution with the selected bidder for \$75,000 is in progress. The sound system installation is scheduled to be completed by May 31, 2017.

20. MWRF Storage: The purpose of this project is to provide layout options and cost estimates for construction of a storage building at the MWRF site for the forklift, spare parts, operations equipment, and chemical storage. The contract characteristics are as follows:

Consultant/Contract Amount: IBI Group/\$9,937
Consultant Notice-to-Proceed: July 6, 2016
FY17 Budget: \$0
FY17 Project Amount Paid-to-Date: \$0
Total Project Amount Paid-to Date: \$0
Scheduled Completion: December 31, 2016
Approved Change Orders: \$0

Project Status: IBI Group provided two options for Mesa Water's evaluation. Option A is a single building south of Well 11 that will partially meet the storage needs for approximately \$600,000. Option B includes the building in Option A and adds a second building for chemical



storage between the SCADA tower and the Well 11 Raw Water transmission pipeline for approximately \$800,000 for both buildings. Both options are being evaluated and the selected option will be included in the FY 2018 budget for consideration.

21. OC-44 Meters Replacement: The purpose of this project is to replace the six outdated production meters along the OC-44 Pipeline. The OC-44 Pipeline conveys imported water to Mesa Water's service area from the Metropolitan Water District's East Orange County Feeder No. 2. The OC-44 pipeline has three existing turnout metering stations (TO-2, TO-4, and TO-5) in addition to a pressure reducing station (Santa Ana Station). Additionally, the project will update all system controls, piping, valves, and electrical components. The contract characteristics are as follows:

Contractor/Contract Amount: Jamison Engineering, Inc./\$402,533

Contractor Notice-to-Proceed: August 14, 2015

FY17 Budget: \$0

FY17 Contract Amount Paid-to Date: \$0

Total Project Amount Paid-to-Date: \$343,770

Contract Duration: 487 Calendar Days

Scheduled Completion: April 12, 2016

Approved Change Orders: (\$10,390)

Project Status: The contractor mobilized onsite on April 4, 2016. Construction started with replacement of the faulty 16" butterfly valve in Santa Ana Pressure Reducing Station with a new valve and continued with work in turnouts TO-2, TO-4, and TO-5 to replace and install the isolation valves, magnetic flow meters, control valve pilot systems, pressure gauges, pressure transmitters, instrumentation, flow meter readouts, and SCADA integration. Construction has been completed and all meters have been calibrated and tested.

22. Santa Ana Vault Controller Upgrade: Mesa Water's Santa Ana Station is a pressure reducing station located southwest of the intersection of Santa Ana Avenue and Bristol Street in the City of Costa Mesa. Built in 1964, the Station provides pressure control for the imported water transported from the East Orange County Feeder No. 2 (EOCF No. 2) to the OC-44 turnouts used by Mesa Water and the City of Huntington Beach to provide water into their respective distribution systems. The Station consists of six pressure relief valves. All equipment is located in an underground confined space vault. In September 2016, an operational malfunction of the existing control system occurred and resulted in a determination to modernize the control system that has reached the end of its useful life. The contract characteristics are as follows:

Consultant/Contract Amount: To be Determined/\$TBD

Notice-to-Proceed: April 2017

FY17 Budget: \$0

FY17 Amount Paid-to Date: None

Project Status: Mesa Water staff is currently developing a Request for Proposals document to be sent to qualified design consultants.



FINANCIAL IMPACT

Mesa Water is delivering numerous capital improvement projects critical to ensure reliable water supplies and service to its customers. Year-to-date expenditures (through 12/31/16) for Fiscal Year 2017 total \$4,907,391. Forecasted expenditures for the remaining Fiscal Year 2017 are \$7,482,000 for a total estimated Fiscal Year expenditure of approximately \$12,389,391. This estimated expenditure is approximately \$3,970,000 over the Fiscal Year Capital Budget of \$8,420,049. The additional Fiscal Year 2017 expenditures are primarily a result of the following:

- New well site property purchase (\$2,150,000);
- Well Automation accelerated work sequence (~\$1,500,000 - Contractor driven);
- MWRF Improvements (~\$325,000 more than budget);
- Additional Other Agency project work (~\$138,000 more than budget); and
- Additional unforeseen capital projects not budgeted.

Mesa Water did recognize an offset cost savings of approximately \$550,000 to its Fiscal Year 2017 Capital Budget line item as a result of receiving aggressive competitive bids for the construction of new Well 9B. This savings is already reflected in the aforementioned capital budget forecast.

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Kurt Lind, District Business Administrator
DATE: February 21, 2017
SUBJECT: Great Plains and Cogsdale CSM Support

RECOMMENDATION

Recommend that the Board of Directors approve a one year extension to Sophos Solutions for a not to exceed amount of \$110,000 and direct staff to competitively solicit proposals for the next contract term.

STRATEGIC PLAN

Goal #3: Be financially responsible and transparent
Goal #6: Provide outstanding customer service

PRIOR BOARD ACTION/DISCUSSION

At its Board of Directors' meeting on June 11, 2015, the Board approved a contract in the amount of \$187,000.

At its Board of Directors' meeting on September 10, 2015, the Board approved a change order in the amount of \$80,000 for an added task for the reconfiguration of the Cogsdale Customer Management System (Cogsdale CSM).

BACKGROUND

Mesa Water® uses the Great Plains/Cogsdale CSM system for finance accounting/budgeting and customer service/billing management. Previously, two separate vendor contracts supported Great Plains and Cogsdale CSM. Staff determined that a team approach between Mesa Water departments and a unified Great Plains/Cogsdale support team would benefit the organization and improve system functionality. Mesa Water would then have one point of contact that would provide guidance and planning for Great Plains/Cogsdale CSM system upgrades, process/performance improvements, and configurations.

DISCUSSION

Mesa Water competitively solicited proposals from seven qualified firms for Great Plains/Cogsdale CSM Support Services and Business Process Implementation in June 2015. Sophos Solutions was selected to assist with these efforts and has provided excellent support with Great Plains/Cogsdale CSM systems, process improvements, and developing and implementing Mesa Water's new chart of accounts.

Mesa Water has operated with a unified Great Plains/Cogsdale team for support and business improvement process implementation for the past eighteen months. The results have been very positive in regards to utilizing the unified team approach to ensure that both systems are re-established and are set up/configured in a manner that meets the improved business workflow/process.



The following work has been accomplished:

- Chart of accounts simplified, developed, and implemented
- Project accounting simplified, automated and implemented
- Payroll accounting simplified, automated, and implemented
- Great Plains/Cogsdale software upgraded to current version and implemented
- Water Operations key performance indicators developed and implemented
- Conservation reporting developed and implemented
- Customized financial reports developed and implemented

Mesa Water will continue to need system, technical, and process support services for the following tasks:

1. Great Plains/Cogsdale System General Support Services

At the direction of Mesa Water staff, general support services provided as requested. This work would include, but not be limited to, system upgrades, data clean-up, customized system reporting, smartlist report development, and other general tasks to keep the systems functional.

2. Business Process Improvement Support

- Procurement Process Improvement Support
- Payroll/HRIS System Selection/Technical Support
- Plan Check Process Technical Support

The support consultant will be providing expert insight related to the improved workflow design functionality compared to the current system configuration and establishing the technical functionality within Great Plains and Cogsdale.

3. As Directed Services

Provide additional consulting and special project services at the direction of the Project Manager. These services will be provided on a time and material basis.

Sophos Solutions' approach is the most comprehensive given their expertise in Great Plains/Cogsdale CSM systems, financial and customer related processes, and a strong background in information technology, business, and financial accounting.



FINANCIAL IMPACT

In Fiscal Year 2017, \$100,000 is budgeted; \$46,255 has been spent to date. The requested funding will come from Cash on Hand.

	<u>Project Estimate Amounts</u>	<u>Project Cost Amounts</u>
Initial Project Estimate (FY 2015)	\$ 200,000	
Original Contracts		\$ 187,000
Change Orders #1		80,000
Requested Funding (Change Order #2)		<u>110,000</u>
Revised Contracts		<u>\$ 377,000</u>
Actual Spent to Date		\$ 200,538
Revised Project Estimate	\$ 377,000	

ATTACHMENTS

Attachment A: Sophos Solutions' Proposal

February 13, 2017

Kurt Lind
District Business Administrator
Mesa Water District
1965 Placentia Ave
Costa Mesa, CA 92627

Re: Contract Change Order for Great Plains/Cogsdale and Business Process Support

Dear Kurt:

Thank you for allowing Sophos to work with Mesa Water District over the past 18 months on the Great Plains/Cogsdale and Business Process Support project. We discussed Sophos providing extended support for these initiatives through the end of fiscal 2018.

This contract change order is to provide additional support services to the District for the continued support of your Great Plains/Cogsdale system and to further assist you with your Business Process Improvement initiatives. In addition, we have include additional As-Directed services to cover items not specifically identified in the scope of work.

I have attached a proposal covering this extension for your review. We would be pleased to discuss with you any modifications you might wish to make to this proposal. We estimate the additional scope of work to be \$110,000 including all travel and direct expenses.

Please call me at (916)-804-6774 or email jeff.ott@sophosllc.com so we can discuss the specifics of this proposal.

Regards,



Jeff Ott
Chief Operating Officer

Scope of Work

Area of Need 1 MGP/Cogsdale System Support

Dynamics MGP (MGP) and Cogsdale System General Support Services

At the direction of Mesa Water, general support services as requested. This work would include but is not limited to system upgrades, data clean-up, reporting, smartlist development, and other general tasks to keep the system functional.

Responsibility of Sophos Solutions and Value Added Reseller

Value Added Reseller

System issues/errors; problems with the software; fixing code

Sophos Solutions

Use of MGP/Cogsdale; system upgrades; standard reports; custom reports; system customization (data tables); smartlist; smartlist builder

Area of Need 1: Schedule and Deliverable

The schedule will vary for each task assigned to the Support Consultant. The Project Manager will work directly with the Support Consultant with each task schedule, end product deliverables, and expectations.

Area of Need 1: Hours and Cost

Sophos estimates that it will require 350 hours to support the Dynamics MGP and Cogsdale CSM systems. The estimate cost for this Area of Need is \$59,500.00 for labor and \$3,000 for travel related costs. Total estimate cost for this Area of Need is \$62,500.00

Area of Need 2 Business Process Improvement Support

The overarching goal of the Business Process Improvement Support is to integrate systems and establish proper setup of systems within MGP and Cogsdale that match the designed workflow and process. The Support Consultant will work in collaboration with the Project Manager (Mesa Water's Business Administrator) and Lead Consultant (LA Consulting) during this implementation effort.

Mesa Water and the Lead Consultant have assessed the current workflows for Payroll/HRIS, Procurement, and Plan Check Process and have documented each of these processes in detail. They have outlined and re-engineered the workflow reducing and eliminating unnecessary steps within the process.

The Support Consultant will be responsible for understanding the gap between Mesa Water's proposed/improved work flow and process compared to the current system configuration within MGP and Cogsdale. The Support Consultant will be providing expert insight related to the improved workflow design functionality compared to the current system configuration. The Support Consultant work would include but is not limited to the following:

- Review proposed/improved work flow and process
- Provide suggestions and recommendations of work flow and processes
- Design/Configure MGP/Cogsdale systems to match the desired work flow
- Running Proposed Configurations within MGP/Cogsdale systems in testing environments
- Member of Implementation Team
- Quality assurance and quality control of configurations
- Advice/Feedback of system improvements

The Support Consultant will work directly with the Project Manager and Lead Consultant. The Project Manager will have a general discussion directly with the Support Consultant who will then be tasked with developing a specific scope of work for the assignment and submit to the Project Manager for approval. Below are general descriptions of the business processes where Mesa Water will require support assistance

A. Payroll/Timecard Support

The purpose of this support is to provide technical system and process recommendations with modifying Mesa Water's three week payroll reporting period to a two week payroll reporting period and transition from two payroll systems into a single payroll system.

This work includes reviewing the improved Payroll/Timecard process and reviewing the MGP and Cogsdale systems as potential timekeeping systems. Mesa Water® utilizes a third party payroll provider for payroll processing and desires to keep this function outsourced. This process is in conjunction with the HRIS Process.

B. Human Resource Information System (HRIS) Process Support

The purpose of this support is to assist the Project Manager and Lead Consultant with Mesa Water's Human Resources to investigate all opportunities to centralize and automate the Mesa Water's Human Resources system. Mesa Water's current approach with managing the Human Resource information is utilizing multiple spreadsheets. The Support Consultant will review the current process and system of spreadsheets used for HR functions.

In this effort, the Support Consultant will assist with investigating potential tools and functionality that exists within the MGP system and potential third party HRIS to meet the needs of Mesa Water. The Support Consultant will provide their expertise and recommend improvements related to Human Resources' ability for simplification and automation of HR related information. The Support Consultant would be expected to assist Mesa Water in the event that it is determined to enter into a competitive selection process and implementation for an HRIS that will meet Mesa Water's business needs.

C. Procurement Process Support

The purpose of this support is to assist the Project Manager and Lead Consultant with the proposed improved procurement process and work flow to be used by all departments in the procurement of goods and services. Mesa Water is currently utilizing the purchase order functionality in MGP in combination with manual forms and spreadsheets.

This work effort will involve reconfiguring the Purchasing module to enable full utilization and automation of the procurement process. The Support Consultant will review the improved process and advise of the capabilities of MGP for automation and configure the MGP system to best match the process.

Mesa Water and the Lead Consultant have developed a simplified, standardized, and automated process for the purchasing of Goods and Professional Services/Construction. Included within the documented work flow are established measures for creating additional accountability and to provide the ability to monitor adherence to the re-engineered process.

Area of Need 2: Schedule and Deliverable

The schedule will vary for each task assigned to the Support Consultant. The Project Manager will work directly with the Support Consultant with each task schedule, end product deliverables, and expectations.

Area of Need 2: Hours and Cost

Sophos estimates that it will require 100 hours to support the Business Process Improvement initiatives listed above. The estimate cost for this Area of Need is \$17,000.00 for labor and \$3,000 for travel related costs. Total estimate cost for this Area of Need is \$20,000.00

Area of Need 3

As Directed Services

Provide additional consulting and special project services at the direction of the Project Manager. These services will be provided on a time and material basis.

Area of Need 3: Schedule and Deliverable

The schedule will vary for each task assigned to the Support Consultant. The Project Manager will work directly with the Support Consultant with each task schedule, end product deliverables, and expectations.

Area of Need 3: Hours and Cost

Sophos will allocate 144 hours to support any as-directed services required by the District. The estimate cost for this Area of Need is \$24,480.00 for labor and \$3,020 for travel related costs. Total estimate cost for this Area of Need is \$27,500.00

Subcontractor:

Consultant requests the ability to subcontract any or all of this scope of work to Glenn Wolf. By signing this agreement, Mesa Water authorizes Consultant to subcontract any or all of this scope of work to Glenn Wolf.

Schedule of Consulting Rates and Fees

2016 Standard Rates:

- Consultant 120 per hour
- Senior Consultant 145 per hour
- Principal Consultant 170 per hour

Reimbursable expenses and other indirect expenses billed at actual cost with no markup. Expenses may include travel costs from Northern California to Southern California.

Rates will remain in effect until changed. Any new rates will be approved and authorized by Mesa Water and incorporated as an amendment to the contract.

Cost:

Sophos estimates that it will require 594 hours to support Mesa Water as outlined in the above scope of work. Sophos will bill the District on a time and materials not to exceed basis at a rate of \$170.00 per hour. In addition, any direct incidental expenses will be billed at actual cost with no markup. Sophos estimates that it will incur \$9,020.00 in direct incidental expenses relating to travel. The total cost of this Change Order is \$110,000.00 comprising \$100,980.00 for labor and \$9,020.00 for travel.

REPORTS:

11. REPORT OF THE GENERAL MANAGER:

REPORTS:

12. DIRECTORS' REPORTS AND COMMENTS:



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, P.E., Engineering and Operations Manager
DATE: February 21, 2017
SUBJECT: Well 8 Demolition Project Design

RECOMMENDATION

This item is provided for information only.

STRATEGIC PLAN

Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

At its Board of Directors' meeting on June 11, 2015, the Board approved awarding a contract to Dudek & Associates for providing services for the Well 8 Demolishing Project Design.

At the April 21, 2015 Engineering and Operations Committee Meeting, the project was presented to the Board as an information item.

BACKGROUND

In 1990, Well 8 was drilled on a small piece of land owned by the Interinsurance Exchange of the Automobile Club of Southern California (the "Exchange"). The land is located on a triangular-shaped parcel along the north side of South Coast Drive, approximately 2000 feet east of Harbor Boulevard in the City of Costa Mesa. Mesa Water® and the Exchange created a lease agreement to utilize the land. Well 8 has experienced several water quality challenges (i.e., high color, high iron and manganese levels, increasing total dissolved solids, sanding etc.). The Board approved the concept of demolishing Well 8 as part of the recent adoption of the Master Plan Update.

Well 8 is currently out of service. The scope of this project includes the demolition of the well, on-site monitoring wells (owned by OCWD), the removal of the above-ground portions of the well and all onsite facilities in order to return the site to its near original condition.

DISCUSSION

The Consultant has performed the required site investigation and final design services. The Consultant provided a 90% design which is being reviewed by Mesa Water. On February 6, 2017, Mesa Water staff met with the Exchange personnel and discussed the 90% plan review comments. The comments will be incorporated into the 100% design. Mesa Water will be soliciting bids for well demolition construction in March 2017. Well 8 demolition is scheduled for early June and should take approximately 60 calendar days to complete. Bids will be brought back to a future Engineering & Operations Committee meeting for consideration.



FINANCIAL IMPACT

In Fiscal Year 2017, no funds were budgeted; the requested funding will come from Cash on Hand.

	Scenario 2	
	Project Estimate <u>Amounts</u>	Project Cost <u>Amounts</u>
Initial Project Estimate (FY 2016)	\$ 74,510	
Original Contracts		\$ 74,510
Requested funding		<u>0</u>
Revised Contracts		<u>\$ 74,510</u>
Actual spent to date		\$ 46,759
Revised Project Estimate	\$ 74,510	

ATTACHMENTS

None.



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MEMORANDUM

TO: Engineering and Operations Committee
FROM: Stacie Sheek, Customer Services Manager
DATE: February 21, 2017
SUBJECT: California Urban Water Conservation Council Update

RECOMMENDATION

This item is provided for information only.

STRATEGIC PLAN

- Goal #1: Provide a safe, abundant, and reliable water supply.
- Goal #3: Be financially responsible and transparent.
- Goal #4: Increase public awareness about Mesa Water and about water.
- Goal #6: Provide outstanding customer service.
- Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

Mesa Water District has been a member of the California Urban Water Conservation Council since June 30, 1994.

DISCUSSION

In 1991, over 100 urban water suppliers, public advocacy organizations, and other interested groups formed the California Urban Water Conservation Council (CUWCC), and crafted a Memorandum of Understanding Regarding Urban Water Conservation in California (MOU). The MOU was developed after months of fact-finding and negotiations. Water suppliers committed themselves to good faith implementation of water conservation programs comprised of leading-edge efforts known as Best Management Practices (BMPs).

The purpose behind the MOU was to shelter water suppliers from mandatory cutbacks in water supplies as a result of the State Water Resources Control Board water rights decision regarding the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay/Delta) and various public advocacy organization-sponsored lawsuits regarding water suppliers taking of water through the Bay/Delta.

However, the value of the MOU and BMPs came into question after SBx7-7 (20x2020) effectively mandated water conservation programs. Additionally, as the State Water Resources Control Board mandated statewide reductions for water suppliers in May 2015, it was confirmed that reporting on BMP implementation was no longer useful or productive.

As California focuses on shifting towards long-term investments and improvements in water use efficiency, per Governor Brown's Executive Order B-37-16, the role of the CUWCC as an advocate for cost-effective water use efficiency programs and economically strong communities has become more important than ever. This prompted the organization to reevaluate its current activities and future purpose.



In December 2016, the CUWCC Board and Membership voted to restructure the organization into a member-services organization, rather than a quasi-regulatory organization. The organization will be changing its name, modernizing its leadership organization, and updating its focus.

Mesa Water District's Resource Efficiency Specialist, Justin Finch, has recently been appointed to the organization's board for a one-year term.

FINANCIAL IMPACT

In Fiscal Year 2017, \$2,500 is budgeted for CUWCC membership dues; no funds have been spent to date.

ATTACHMENTS

None.