



*Dedicated to
Satisfying our Community's
Water Needs*

**AGENDA
MESA WATER DISTRICT
BOARD OF DIRECTORS
Tuesday, August 21, 2018
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting**

**ENGINEERING AND OPERATIONS COMMITTEE MEETING
Tuesday, August 21, 2018 at 3:30 p.m.**

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

Items Not on the Agenda: Members of the public are invited to address the Board on items which are not on the agenda. Each speaker is limited to three minutes. The Board will set aside 30 minutes for public comments.

Items on the Agenda: 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 three minutes. The Board will set aside 60 minutes for public comments.

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
5. Water Operations Status Report

ACTION ITEMS:

None

PRESENTATION AND DISCUSSION ITEMS:

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

None

REPORTS:

6. Report of the General Manager
7. Directors' Reports and Comments



INFORMATION ITEMS:

8. Programmable Logic Controllers and Supervisory Computer System Assessment
9. Zero Usage Accounts

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 2149	1620-1644 Whittier Ave and 970 16th St	89 Single Family Homes	<p>Plans received and plan check fees paid 2/2/14. 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. Flow-thru check on 4/5/17. Meters installed on 8/21/17. Meter box placement on 10/5/17. Meters installed on 4/25/18. Meters installed 6/28/18 and again on 8/13/18. (8/13/18)</p>
MC 2196	580 Anton Ave	250 Unit Apartment Complex	<p>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. Pressure test and backflow placement on 3/6/17. Bac-t test on 3/18/17. Site visit and abandonment coordination on 10/3/17. Pressure test on 11/9/17. Bac-t on 11/16/17. Service abandonment on 12/26/17. Fireline turn-on on 1/30/18. Complex is currently under construction with an expected completion of December 2018. Concrete pad installed and Backflow tested on 7/19. Project in process of closing. (8/13/18)</p>
MC 2204	1672 Placentia	31 Single Family Homes	<p>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. Service placement on 2/16/17. Meters installed on 3/28/17. Backflows tested on 3/30/17. Meters installed and locked off on 2/20/18. Awaiting call for backflow testing to complete project. (8/13/18)</p>

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
MC 2233	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. Services adjusted to grade on 3/2/17. Meter installation on 5/3/17. Site coordination meeting on 7/26/17. Service placement on 9/6/17. Meter box placement on 2/9/18. Meters installed and locked off on 5/21/18. Meters installed 6/28/18, 7/13/18 and again on 8/8/18. (8/13/18)
MC 2235	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. Bac-t test on 2/15/17. Bedding and service line placement on 4/3/17. Meter box placement on 5/8/17. Follow-up site visit on 5/17/17. Service abandonment on 8/30/17. Valve cans raised on 9/22/17. Meter box placement on 10/19/17. Gravel base on 12/5/17. Meter box placement on 2/14/18. Meters installed and locked off on 6/1/18, 7/17/18, and again on 8/1/18. (8/13/18)
MC 2236	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. Meter placement on 5/18/17. Meter boxes cleared of construction debris on 10/30/17. Site visit on 5/2/18. Homes currently under construction. Awaiting call for backflow testing to complete project. (8/13/18)
MC 2245	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 5/2/18. Homes currently under construction. Meters installed on 6/14/18. (8/13/18)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
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. Pre-con held on 1/16/18. Service installed on 3/8/18. Meters installed and locked on 3/13/18. Awaiting call for backflow testing to complete project. (8/13/18)
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 on 2/22/17. Plans returned on 3/6/17. Fees paid and permit issued on 3/21/17. Precon held on 6/1/17. Services installed on 8/31/17. Mainline turned on 9/14/17. Meters installed and locked on 2/26/18. Awaiting call for backflow testing to complete project. Meters installed and locked on 8/6/18. (8/13/18)
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. Plans resubmitted on 3/1/17. Fees paid and permit issued on 5/5/17. Bedding and service line placement on 2/6/18. Fireline installed on 2/23/18. Backflow test on 3/28/18. Shutdown to cut-in tee on 7/12/18. Service abandonment and concrete pad placed on 7/16/18. Meter box placed on 7/27/18. (8/13/18)
C0024-17-01	1989 Orange	Meter Upgrade	Plans received and plan check fees paid on 3/27/17. Fees paid and permit issued on 4/25/17. Site visit on 10/30/17, and again on 5/30/18; homes currently under construction. Meter installed on 6/21/18. Flow thru check on 7/12/18. Project in process of closing. (8/13/18)
C0027-17-01	231 Flower Street	Meter Upgrade	Plans received and plan check fees paid on 3/23/17. Fees paid and permit issued on 4/21/17. Site visit on 10/30/17, and again on 5/30/18; no progress to report. Project to be voided due to inactivity and expiration of permit. (8/13/18)
C0029-17-01	127 23rd St.	4 Single Family Homes	Plans received and plan check fees paid on 5/12/17. Fees paid and permit issued on 8/3/17. Awaiting call for initial inspections. Service installed on 2/8/18. Meters installed and locked on 2/15/18. Awaiting call for backflow testing to complete project. (8/13/18)
C0030-17-01	208 Camella Lane	New Home	Plans received and plan check fees paid on 5/12/17. Fees paid and permit issued on 5/25/17. Service installation on 6/8/17. Meter box placement on 9/8/17. Awaiting call for inspection of flow thru tests; planning for October completion. (8/13/18)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0033-18-01	353 E 18th Street	4 Single Family Homes	Plans received and plan check fees paid on 7/5/17. Fees paid and permit issued on 7/27/17. Meter placed on 5/9/18. Mainline turn on 5/4/18. Irrigation backflow scheduled for testing and flowthru checks on all four homes on 8/16/18. (8/14/18)
C0035-18-01	146 18th Street	2 Single Family Homes	Plans received and plan check fees paid on 8/8/17. Fees paid and permit issued on 9/21/17. Meters installed and locked on 10/20/17. Site visit on 1/9/18; Awaiting call for backflow testing to complete project. (8/13/18)
C0037-18-01	2850 Mesa Verde Drive East	11 Single Family Homes	Plans received and plan check fees paid on 8/17/17. Fees paid and permit issued on 10/18/17. Manifold installation on 12/6/17. Meters installed on 12/29/17. Irrigation meter installed on 3/28/18. Backflow test on 4/18/18. Meters placed and locked on 5/31/18. Awaiting call for backflow testing to complete project. (8/13/18)
C0039-18-01	172/174 Costa Mesa Street	2 Single Family Homes	Plans received and plan check fees paid on 8/22/17. Fees paid and permit issued on 8/29/17. Awaiting call for initial inspections. Construction to start in October. (8/13/18)
C0040-18-01	365 Costa Mesa Street	Meter Upgrade	Plans received and plan check fees paid on 8/22/17. Awaiting final fee payment. (8/13/18)
C0041-18-01	160 & 162 E. 18th ST.	2 Single Family Homes	Plans received and plan check fees paid on 9/27/17. Fees paid and permit issued on 11/2/17. Meters installed and locked on 3/26/18. Meters installed and locked on 6/28/18. Homes currently under construction. (8/13/18)
C0042-18-01	335 & 337 16th Place	2 Single Family Homes	Plans received and plan check fees paid on 10/26/17. Awaiting final fee payment. (8/13/18)
C0044-18-01	276 E 19th Street	Meter Upgrade	Plans received and plan check fees paid on 1/21/18. Awaiting final fee payment. (8/13/18)
C0047-18-01	3505 Cadillac Ave	Commercial Building	Plans received and plan check fees paid on 1/22/18. Fees paid and permit issued on 4/10/18. Services placed on 5/2/18. Thrustblocks placed on 6/6/18. Pressure test performed on 7/9/18. Construction still in progress. (8/13/18)
C0048-18-01	235 Baker	Commercial Building	Plans received and plan check fees paid on 2/15/18. Fees paid and permit issued on 4/13/18. (8/13/18)
C0049-18-01	428 E 17th	Restaurant	Plans received and plan check fees paid on 1/26/18. Fees paid and permit issued on 5/4/18. Pressure test on 5/25/18. Shutdown for tee cut-in on 6/5/18. One fire service is active, the other is stubbed to property. Awaiting call for fireline pressure test and samples. Water service manifold stubbed to property. (8/13/18)

DEVELOPER PROJECT STATUS REPORT

PROJECT STATUS - DEVELOPER PROJECTS			
FILE NO.	PROJECT ADDRESS	PROJECT DESCRIPTION	PROJECT NOTES/STATUS
C0050-18-01	920 W 20th Street	Single Family Home	Plans received and plan check fees paid on 2/15/18. Fees paid and permit issued on 3/28/18. Meters placed on 4/6/18. Backflow tested 4/16/18. (8/13/18)
C0051-18-01	1650 Monrovia	Senior Living Complex	Plans received and plan check fees paid on 2/15/18. Comments returned on 3/12/18. Revised submittal received on 4/24/18. Project to undergo hydraulic model analysis. Second plan check complete. Awaiting notification of easements being recorded. (8/13/18)
C0052-18-01	302 Cabrillo	2 Single Family Homes	Plans received and plan check fees paid on 2/26/18. Fees paid and permit issued on 5/7/18. Awaiting call for initial inspections. (8/13/18)
C0053-18-01	1908 Tustin	Single Family Home	Plans received and plan check fees paid on 3/8/18. Fees paid and permit issued on 3/13/18. Awaiting call for initial inspections. (8/13/18)
C0014-18-01	1585 MacArthur	Commercial Building	Plans received and plan check fees paid on 3/27/18. Comments returned on 4/5/18. Awaiting resubmittal. (8/13/18)
C0054-18-01	3503 Cadillac Unit 101	Commercial Building	Plans received and plan check fees paid on 5/7/18. Fees paid and permit issued on 5/22/18. Awaiting call for initial inspections. (8/13/18)
C0055-18-01	1661 Superior	Meter Upgrade	Plans received and plan check fees paid on 5/17/18. Awaiting final fee payment. Final fees paid on 5/17/18. Meter upgraded on 6/28/18. Inspector is verifying the type of fire protection system associated with the project. (8/13/18)
C0056-18-01	2033 Republic Ave	Single Family Home Service & Meter Upgrade	Plans received and plan check fees paid on 6/19/18. Comments returned for second plan check review on 7/26/18. (8/13/18)
C0057-18-01	1618 Ohms Way	Commercial Building New Fire Line & Irrigation Service	Plans received and plan check fees paid on 6/21/18. Awaiting final fee payment and mylars. Final fees paid on 7/9/18. (8/13/18)
C0059-18-01	365 Esther St	Single Family Home Meter Upgrade	Plans received and plan check fees paid on 8/2/18. Currently in plan check. (8/13/18)
C0060-19-01	365 Esther St	Single Family Home Meter Upgrade	Plans received and plan check fees paid on 7/23/18. Currently in plan check. (8/13/18)

MESA WATER AND OTHER AGENCY PROJECTS STATUS REPORT

August 2018

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

File No.: M 2034

Description: Evaluate potential repair and replacement options

Status: 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 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. MBI is working on finalizing the HMMP and construction plans and will submit them to CCC. Staff met with MBI on 5/1/17 and discussed comments after reviewing the draft final HMMP. New proposed mitigation criteria received from CCC on 7/5/17 reducing mitigation requirements from 1.6 acres to 0.66 acres. Coastal Development Permit for Construction is anticipated in December, 2017. The project re-start meeting was held on 9/7/17. On 10/30/17 met with City of Newport Beach and City of HB to discuss permit requirements and project access. Met w/Fletcher Jones, Skender Construction, City of HB, MBI to discuss access to the site and scheduling on November 21, 2017. Reviewing the 100% Design Plans & Specs (received on 11/28/17) along with the Pipeline Design Schedule, Construction Monitoring Treatment Plan (CMTP), and proposal for Natural Resources/Regulatory Services during construction activities. Bid solicitation is scheduled for late January 2018. Project sent out to bid on January 30, 2018. Pre-bid meeting held on 2/15/18. Construction bid solicitation was cancelled due to ongoing coordination issues for the final Coastal Development permit. Project was deferred to FY20. On 8/1/18 Orange County Public Works issued a one-year extension to the previously issued Encroachment Permit. The Caltrans Encroachment Permit extension application is under review as of 8/13/18. The CCC extended the permit a year without hearing. MBI moved forward with the amendment to reduce mitigation. The updated information was forwarded by MBI to CCC in the week of August 6, 2018. The CCC hearing is expected in September/October 2018. (8/14/18)

MESA WATER AND OTHER AGENCY PROJECTS STATUS REPORT

August 2018

Project Title: Well Automation and Rehabilitation

File No.: MC 2101

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

Status: 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. Repairs were made to Well 5, and test pumping performed in February showed acceptable well production over 2500 gpm with manageable sand. Construction is substantially complete at the Well 5 site. A start up planning meeting was held on March 29, 2017. Well 5 is running as needed and producing good quality water. Well 7 rehabilitation is complete, The Well 7 pump was installed the week of August 28, 2017, and Well 7 is operational and good quality water. Construction of the Well 3 chemical facilities was begun in July 2017. The concrete for the Well 3 chemical facilities is cured and coated, and the chemical tanks and canopy are currently being installed. Well 3 rehabilitation is complete and test pumping achieved over 1600 gpm. Construction at Well 9 began in October with relocation of the backup generator and chemical facilities construction. Coating of the Well 9 chemical facilities was completed in December, and the chemical tanks and canopy are installed. Witness testing for the new pumps for Wells 3 and 9 was completed January 2018, and pumps were installed the week of June 4. Construction at Well 3 and Well 9 is substantially complete. Flushing and chlorination of Well 3 and Well 9 were conducted during in July 2018. Well 3 initial startup was on July 17, 2018. Well 9 initial startup was on July 30, 2018. Well 3 and Well 9 have completed their seven-day tests. Work at Well 1 began on August 13, 2018.

Project Title: Pipeline Testing Program

File No.: MC 2141

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: Extraction of six sections of ACP and two sections of CIP are in process for 2017 destructive testing. ACP samples were sent to WSP Canada for destructive testing. Results were received on August 1, 2017. CIP samples will be sent to McWane

MESA WATER AND OTHER AGENCY PROJECTS STATUS REPORT

August 2018

Ductile's lab in Ohio for destructive testing. Results were received on June 30, 2017. A Request for Qualifications for consulting services for the Pipeline Integrity Testing Program was released in May 2017. Four Statements of Qualifications were received and a recommendation for contract award to HDR was approved by the Committee on July 20, 2017. ACP test results were received on July 31, 2017. Results have been analyzed, and were presented at the November Committee meeting. Average ACP total useful life is expected to be approximately 142 years. A process for determining when a pipeline has reached the end of its useful life and how much of the pipeline to replace was implemented. One 8" ACP line in Harbor Boulevard from Wilson to 19th Street was recommended for replacement. Kickoff meeting for a close interval survey of the 12" Cast Iron Pipe in 19th Street was held on December 28, 2017, and the Consultant has completed the field work. The report is expected in April 2018. Operations staff has collected four ACP pipe samples during valve replacement projects, and one during an AC mainline repair. The samples have been sent to a laboratory for remaining wall thickness measurements, and the reports show that while they have lost structural thickness, the remaining useful life is still 35 - 53 years. The mainline break sample showed the smallest remaining useful life and shortest total useful life of any AC sample. Additional AC pipe samples from valve replacements are being collected. Echologics performed three miles of non-destructive wall thickness measurements during the week of February 12, 2018. A report of the results was received in March 2018. All non-destructive and destructive test data were added to GIS in April and May 2018. The mainline break map in GIS is currently being updated. A comprehensive review of cathodic protection test stations was performed in April and May 2018. The report and recommendations was received on June 20, 2018, and recommendations are being reviewed. Five AC pipe samples and nine soil samples collected during valve replacements in 2018 were delivered by the contractor and sent to labs for pipe wall thickness measurements and soil corrosivity analysis. Results are expected by August 10, 2018.

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.

MESA WATER AND OTHER AGENCY PROJECTS STATUS REPORT

August 2018

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. 90% design drawings and specifications were submitted for Mesa Water® review on March 10, 2017. Mesa Water managers met with the Consultant to discuss construction phasing. Roof design is currently being reviewed by Mesa Water® and the consultant. Bid set documents are being finalized (8/9/18)

Project Title: Croddy and Chandler Wells and Pipeline Project

File No.: M18-113

Description: Design, documentation, and permitting for two new wells located on Chandler Avenue and Croddy Way in the City of Santa Ana and the distribution pipeline connecting the wells to Mesa Water's supply system.

Status: Tetra Tech has been contracted to complete the design, documentation, and permitting for the Croddy and Chandler Wells and Pipeline Project. Initial data request sent to Tetra Tech on September 7, 2017. Met with Division of Drinking Water regarding well locations on September 20, 2017. Preliminary hydrological evaluation received on September 29, 2017. Board approved demolition of existing structures and dedicated well facility with option to evaluate long-term lease potential as market conditions dictate at both sites at November 2017 E&O. Butier Engineering has been contracted to provide Construction Management Services. Preliminary Design Report (PDR) for the distribution pipeline was reviewed and returned on March 6, 2018. Well site layouts were presented to the Board in May. DDW waiver for 50-foot control zone is currently being drafted. The revised PDR for the pipeline and the well sites was received in June 2018. A workshop to discuss review comments was held on August 14, 2018.

Project Title: Santa Ana Pressure Reducing Station Refurbishment Project

File No.: M17-002A

Description: The work will involve replacement of three (3) butterfly valves, one (1) existing pressure relief valve, precast concrete discharge structure, reconfiguring four (4) Cla-Val control valves, general refurbishments to the vault interior, and site work.

Status: Mesa Water® has contracted with Michael Baker International to perform the design of the project. The design was completed in late January 2018 and the bid package was sent out to bid on February 8, 2018. Pre-bid meetings and site walk were held on 2/20/18 and 3/6/18, respectively. Three bids were received on March 13, 2018. Staff has recommended that the construction contract be awarded to J.R. Filanc, Inc., as the lowest bidder. E&O Committee recommended awarding contract to J.R. Filanc, Inc. on March 20, 2018 and Board approved it on April 12, 2018. The contract was finalized (5/1/18) and signed on 5/3/18. The kick-off meeting was held on May 21, 2018. Project in progress. (8/9/18)

MESA WATER AND OTHER AGENCY PROJECTS STATUS REPORT
August 2018

Project Title: Meter Technology Evaluation

File No: MC 2248

Description: The lifespan of a water meter is approximately 15 years. As a meter ages the accuracy drops off due to wear. In preparation for its annual water meter replacement staff has been reviewing water meter technology determining what water meter and reading solutions would be the best fit for Mesa Water's aging register technology. With today's technology there are several types of meters and meter reading solutions available. The most common are as follows: Fixed Network, Automatic Meter Reading (AMR) System, Handheld or Touch Technology, and Advanced Metering Analytics - Cellular Endpoint.

Status: Mesa Water® is preparing a Technical Memo which would include information of the existing aging metering technology in comparison with proposed new meter reading solutions. (8/14/18)

Water Quality Call Report

July 2018

Date: 7/3/2018
Source: Phone
Address: 445 Lenwood Drive
Description: Customer inquired for hardness level in the water and if there have been recent changes because he noticed his dishes having film/residue after dishwasher cycle. Customer has not changed detergents.

Outcome: Explained to customer that the hardness level varies from one source to another and operation of the sources depend on demand and availability. Provided customer with the average and range of hardness levels. Customer will call back if he has further questions/concerns.

Date: 7/11/2018
Source: Phone
Address: 461 Costa Mesa Street
Description: Customer inquired about getting her water tested and wants to know if softened water is ok for her baby.

Outcome: Explained to customer that the water meets all drinking water standards and she should consult with her doctor regarding feeding softened water to her baby. Also explained the water quality report to customer and sent her a copy.

Date: 7/16/2018
Source: Phone
Address: 426 E. 19th Street
Description: Customer reported odor coming from the kitchen sink when the water is turned on.

Outcome: Explained the steps for customer to verify whether or not the odor is not coming from the water. Customer checked the water and confirmed there is no odor in the water. Also explained to customer about the P-trap and how the wastewater in the drain can off gas when the water is first turned on. Customer will disinfect and flush the kitchen drain and call a plumber if odor continues.

Date: 7/25/2018
Source: Phone/Visit
Address: 2829 San Juan Lane
Description: Customer described the water as being cloudy and does not clear up.

Outcome: Water sample from the front hose bib was clear and pH, temperature and chlorine residual were within normal range. Entrained air was present on the hot water in the kitchen and bathroom faucets. Customer recently had water heater replaced. Advised customer to flush the system and if the entrained air persists, to contact a plumber.

Date: 7/30/2018
Source: Phone
Address: 903 W. 17th Street, #88
Description: Customer lives in the mobile home park at Monrovia and 17th Street. He received a report showing the presence of TCE and PCE in the groundwater and soil underneath his home and neighbors' homes. Customer is concerned that TCE and PCE may get into the water pipes from the soil and wants to know if Mesa Water will test the water for contaminants.

Outcome: Explained to customer that the wells serving Mesa Water District's service area are located far from his home and have no detections of TCE or PCE. The wells, reservoirs, treatment facility, and distribution system have been, and continue to be, monitored per Division of Drinking Water requirements. Mesa Water is in compliance with all drinking water monitoring requirements and regulatory limits.



COMMITTEE POLICY & RESOLUTION REVIEW

ENGINEERING & OPERATIONS COMMITTEE

Policy Assignments for 2018

Policy Name	Resolution No.	Date Adopted	Revision Schedule	Last Reviewed
Rules and Regulations for Water Service	1514	07/12/18	Review and update as needed	07/12/18
Standard Specifications and Standard Drawings		05/03/18	Review and update as needed	05/03/18
Urban Water Management Plan	1477	06/09/16	Review and update as required every 5 years	06/09/16

Water Operations Status Report
July 1, 2018 - July 31, 2018

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	15	3	305	57	\$6,151	\$1,263
WD-0102 - HYDRANT PAINTING	HYDRANTS	1	0	38	0	\$508	\$0
WD-0103 - HYDRANT REPAIR	HYDRANTS	4	0	5	0	\$1,351	\$0
Program 01 TOTAL		20	3			\$8,010	\$1,263
02 - VALVES							
WD-0201 - DISTRIBUTION VALVE MAINTENANCE	VALVES	10	11	217	230	\$4,447	\$4,631
WD-0202 - NIGHT VALVE MAINTENANCE	VALVES	0	0	0	0	\$0	\$0
Program 02 TOTAL		10	11			\$4,447	\$4,631
03 - METERS							
WD-0301 - NEW METER INSTALLATION	METERS	2	2	17	14	\$5,479	\$6,244
WD-0302 - RAISE REPLACE METER BOX	BOXES	1	0	5	1	\$859	\$135
WD-0303 - METER LEAK INVESTIGATION/REPAIR	INV/REP	3	4	26	25	\$963	\$1,684
WD-0305 - ANGLE STOP/BALL VALVE REPLACE	REPLACE	7	8	13	15	\$3,812	\$3,063
WD-0306 - LARGE METER TEST/REPAIR - C	TESTS	2	0	11	3	\$875	\$230
Program 03 TOTAL		15	14			\$11,988	\$11,356
04 - MAIN LINES							
WD-0401 - MAIN LINE REPAIR	REPAIRS	11	0	2	0	\$4,929	\$0
WD-0402 - AIR VAC MAINTENANCE/REPAIR	REPAIRS	2	0	14	1	\$902	\$84
WD-0403 - UNIDIRECTIONAL FLUSHING	FEET	0	0	30788	0	\$0	\$0
Program 04 TOTAL		13	0			\$5,831	\$84
05 - SERVICE LINES							
WD-0501 - SERVICE LINE REPAIR	REPAIRS	5	1	2	1	\$2,060	\$354
Program 05 TOTAL		5	1			\$2,060	\$354
06 - CAPITAL							
CAP AV - CAPITAL AIR VACUUM REPLACE	AIR VACS	0	0	0	0	\$0	\$0
CAP BI - CAPITAL BYPASS & METER INSTALL	REPLACE	0	1	0	1	\$0	\$253
CAP FH - CAPITAL HYDRANT UPGRADE	HYDRANTS	12	5	2	1	\$9,866	\$5,520
CAP LM - CAPITAL LARGE METERS	METERS	5	1	13	3	\$15,003	\$1,944
CAP MV - CAPITAL MAINLINE VALVE REPLACE	VALVES	10	25	2	5	\$7,618	\$11,506
CAP SL - CAPITAL SERVICE LINE REPLACE	SERVICES	3	0	1	0	\$1,697	\$0
CAP SM - CAPITAL SMALL METERS	METERS	11	2	131	31	\$12,536	\$4,025
CAP SS - CAPITAL SAMPLE STATION REPLACE	STATIONS	0	0	0	0	\$0	\$0
Program 06 TOTAL		41	34			\$46,720	\$23,248
VACANT POSITIONS							\$0
TOTAL						\$79,056	\$40,936

REPORTS:

6. REPORT OF THE GENERAL MANAGER:

REPORTS:

7. DIRECTORS' REPORTS AND COMMENTS:



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Phil Lauri, PE, Assistant General Manager
DATE: August 21, 2018
SUBJECT: Programmable Logic Controllers and Supervisory Computer System Assessment

RECOMMENDATION

This item is provided for information only.

STRATEGIC PLAN

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

PRIOR BOARD ACTION/DISCUSSION

None.

BACKGROUND

Mesa Water District's (Mesa Water®) supervisory computer system was installed in 2012/2013. The supervisory computer system consists of 37 sites at the Mesa Water Reliability Facility (MWRF), wells, reservoirs, import stations, and pressure stations that send operational and control data via radio to three data concentrator sites located at Mesa Water's main headquarters building, the MWRF, and Reservoir 2. The three data concentrators are the backbone of the system and are connected by three radio antennae. The supervisory computer system includes several servers for control programming, software application functionality, data historian's management (located in the Emergency Operations Center as well as at the MWRF), three radio antennae, and numerous programmable logic controllers (PLCs) and Remote Terminal Units (RTUs). Like all computer equipment, the electronic components have a finite life expectancy and require on-going assessment and replacement as end-of-life is reached.

Mesa Water received a notice from Schneider Electric that its Modicon Quantum PLCs and Input/Output (I/O) modules will no longer be supported nor available for purchase from Schneider Electric. The Mesa Water Reliability Facility (MWRF) has three PLCs installed around the year 2000 for the original Colored Water Treatment Facility that used this now obsolete Modicon Quantum hardware. In order to maintain the overall viability of the supervisory computer system as its components reach end-of-life, a complete assessment of the supervisory computer system is needed.

DISCUSSION

A Request for Proposal (RFP) for a PLC and Supervisory Computer System Assessment to systematically plan for end of life of all Mesa Water supervisory computer system and radio system components was developed to initiate a replacement plan and schedule for those systems. Key tasks include:

- 1) Inventory Mesa Water's supervisory computer system main components (i.e., Servers, PLCs, Central Processing Units (CPUs), RTUs, data concentrators, etc.);



- 2) Inventory the radio system hardware components;
- 3) Identify critical hardware components and supporting software;
- 4) Develop an end-of-life replacement plan; and
- 5) Develop a network architecture diagram.

Results of the RFP will be brought to a future Engineering and Operations Committee meeting for consideration and approval.

FINANCIAL IMPACT

In Fiscal Year 2019, \$100,000 is budgeted for the Mesa Water Reliability Facility PLC Replacement Study; no funds have been spent to date.

ATTACHMENTS

None.



*Dedicated to
Satisfying our Community's
Water Needs*

MEMORANDUM

TO: Engineering and Operations Committee
FROM: Stacie Sheek, Customer Services Manager
DATE: August 21, 2018
SUBJECT: Zero Usage Accounts

RECOMMENDATION

This item is provided for information only.

STRATEGIC PLAN

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

PRIOR BOARD ACTION/DISCUSSION

At its July 15, 2014 meeting, the Engineering and Operations Committee requested this report be provided on an annual basis.

DISCUSSION

To complete this annual report, staff extracted from the billing system the following:

- Installation dates greater than one-year
- Meter reads equal to zero
- Consumption equal to zero
- Accounts that are active

As of June 30, 2018, there are two accounts that meet the above criteria. The date range for the two accounts is from 2002 to 2018. During this time, the meters were regularly checked for proper functionality. As a standard Customer Services policy, these customers will be contacted to notify them of their zero consumption on the meter. Previous communication with zero usage account customers has determined that they are aware of the non-usage on the active meter and have typically elected to maintain the account as active. Staff will continue to provide annual updates to the Board regarding accounts having zero usage.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.