

MASSACHUSETTS WATER RESOURCES AUTHORITY

Meeting of the Board of Directors

July 24, 2024

A meeting of the Massachusetts Water Resources Authority (“MWRA”) Board of Directors was held on July 24, 2024 at MWRA’s Administration Facility in Chelsea, and via remote participation.

Chair Tepper presided from the Chelsea Administration Facility. Board Members Flanagan, Foti, Pappastergion, Peña, and Taverna also participated from the Chelsea Administration Facility. Board Members Vitale, Patrick Walsh, and Wolowicz participated remotely. Board Members Jack Walsh and White-Hammond were absent.

MWRA Executive Director Frederick Laskey; General Counsel Carolyn Francisco Murphy; Chief Operating Officer David Coppes; Deputy Chief Operating Officer Rebecca Weidman; Director of Finance Thomas Durkin; Director of Administration Michele Gillen; MIS Director Paula Weadick; Deer Island Treatment Plant Director David Duest; Deer Island Engineering Services Manager Rick Adams; Chief Engineer Brian Kubaska; Wastewater Director Stephen Cullen; Deer Island Treatment Plant Deputy Director Chad Whiting; MWRA Deputy Director of Waterworks Lisa Bina; Director of Metropolitan Operations Mike McCarthy; Director of Planning and Sustainability Stephen Estes-Smargiassi; Human Resources Director Wendy Chu; Asset Management Analyst Michael Curtis; Chief of Staff Katie Ronan; Associate General Counsels Kristen Schuller-Scammon and Kimberley McMahan; and, Assistant Secretary Kristin MacDougall attended at MWRA’s Administration Facility in Chelsea. Associate General Counsels Michael Altieri and Angela Atchue attended remotely.

Vandana Rao, EEA, and Matt Romero, MWRA Advisory Board (“Advisory Board”), also attended at the Chelsea Administration Facility.

Chair Tepper called the meeting to order at 1:02pm.

ROLL CALL

MWRA General Counsel Francisco Murphy took roll call of Board Members in attendance and announced that Board Members Vitale and Patrick Walsh were participating remotely. The Chair announced that the meeting was being held at MWRA’s Chelsea Administration Facility and virtually, via a link posted on MWRA’s website. She added that the meeting would be recorded, and that the agenda and meeting materials were available on MWRA’s website.

APPROVAL OF JUNE 26, 2024 MINUTES

A motion was duly made and seconded to approve the minutes of the Board of Directors’ meeting of June 26, 2024.

Chair Tepper asked if there was any discussion or questions from the Board. Hearing none, she

requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		

P. Walsh

(ref. I)

REPORT OF THE EXECUTIVE DIRECTOR

MWRA Executive Director Fred Laskey announced that Governor Healey would conduct a swearing in ceremony for City of Boston Board appointee Brian Swett and for MWRA Advisory Board appointee Andrew Pappastergion on July 25.

He then reported that staff are monitoring a number of policy matters currently before the House and Senate, including legislation pertaining to drought, combined sewer overflow (CSO) control and rivers, PFAS, and non-flushable wipes labeling. He noted that the Housing Bond Bill, which could potentially include up to \$1 billion in funding for MWRA system expansion, may have significant impacts on MWRA operations, and that staff will update Board Members on any developments.

Finally, Mr. Laskey noted that a Board of Directors' meeting is usually not held in August, and invited Board Members to attend the MWRA Advisory Board's annual tour of the Pellet Plant and Nut Island on August 22, 2024. There was brief, general discussion, with no objections.

(Board Member Wolowicz joined the meeting during the Report.) (ref. III)

EXECUTIVE SESSION

Chair Tepper requested that the Board move into Executive Session to discuss Litigation and Collective Bargaining since discussing such in Open Session could have a detrimental effect on the litigating and negotiating positions of the Authority, and to discuss Security. She announced that the planned topics for Executive Session were Litigation Strategy; *City and County of San Francisco vs. EPA*, US Supreme Court Case No.23-753; U.S. District Court, South Carolina, MDL No. 2:18-mn-2873-RMG, PFAS Class Action Settlements with Tyco Fire Products and BASF; Collective bargaining, all Units; and Security Update and Strategy, and that the Board would return to Open Session after the conclusion of Executive Session.

A motion was duly made and seconded to enter Executive Session for these purposes, and to resume Open Session after Executive Session adjournment.

General Counsel Francisco Murphy reminded Board members that under the Open Meeting Law members who were participating remotely in Executive Session must state that no other person is present or able to hear the discussion at their remote location. A response of “yes” to the Roll Call to enter Executive Session when their name was called would also be deemed their statement that no other person was present or able to hear the Executive Session discussion.

Upon a motion duly made and seconded, a roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
(Wolowicz – no response)		

Voted: to enter Executive Session, and to resume Open Session after Executive Session adjournment.

*** EXECUTIVE SESSION ***

The meeting entered Executive Session at 1:09pm and adjourned at 2:18pm.

*** CONTINUATION OF OPEN SESSION ***

WASTEWATER POLICY AND OVERSIGHT

Contract Awards

Deer Island Treatment Plant Combined Heat and Power System: Design, Bidding and Engineering Services During Construction, Burns & McDonnell Engineering Co., Inc., Contract 6730

A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to award Contract 6730, Deer Island Treatment Plant Combined Heat and Power System – Design, Bidding and Engineering Services During Construction, to Burns & McDonnell Engineering Co., Inc., and to authorize the Executive Director, on behalf of the

Authority, to execute said contract in an amount not to exceed \$18,377,091 for a contract term of 100 months from the Notice to Proceed.

David Duest, MWRA Deer Island Treatment Plant Director, presented an overview of a proposed contract for design, bidding and engineering services during construction contract for a new Deer Island Treatment Plant (“DITP”) combined heat and power (“CHP”) system. He summarized the project’s scope and benefits, including cost savings and improved use of digester gas for green energy. He noted that the planned CHP updates are expected to significantly improve system efficiency.

Mr. Duest then explained that the current CHP system is approximately 60% off the grid, and that the new facilities are expected to increase onsite energy output by approximately 15%.

Next, he presented a schematic of the new CHP system, and described its heat and power generation processes. He discussed some benefits of the new system, including a 78% reduction in fuel oil use, and a 12,800 metric ton reduction in greenhouse gasses.

Finally, Mr. Duest discussed the procurement process for the proposed contract. He reported that one bid was received from Burns & McDonnell Engineering Co., Inc., and that it came in at approximately 10% over the Engineer’s Estimate. He explained that the bid price is offset by a proposed level of effort that is approximately 9.5% higher than anticipated. He noted that Burns & McDonnell had proposed a strong team that offers extensive CHP design experience and strong familiarity with DITP operations.

Board Member Flanagan requested more information about where the new CHP facilities would be located. Mr. Duest explained that multiple sites are being considered, including a potential new building, or a split solution with the boilers placed to maximize heat use.

There was brief, general discussion about the contract’s duration, and Burns & McDonnell’s proposed work hours versus the Engineer’s Estimate. Board Member Foti requested the reason for the proposal’s 9.5% increase in work hours. Rick Adams, MWRA Deer Island Engineering Services Manager, explained that the difference is mainly attributable to an increased level of effort for project administration and preliminary design. There was general discussion about Burns & McDonnell’s project team, which includes CDM Smith, Green International and JK Muir, and the team’s past experience on comparable projects for organizations such as Harvard University and the Greater Lawrence Sanitary District.

In response to a question from Vice-Chair Pappastergion, there was general discussion about the preparation of the Engineer’s Estimate, the contract procurement process, and Burns & McDonnell’s full understanding of the project’s requirements. There was also discussion about the CHP project’s complexity, including permit requirements, and Burns & McDonnell’s

commitment to meeting MWRA's MBE/WBE participation goals.

Chair Tepper asked if the proposed contract includes legal permitting. Mr. Duest affirmed that the contract includes air permitting, and that some site permitting may be conducted in-house.

Board Member Taverna asked if the proposed design team is confident that they can commit resources for the duration of the contract. Mr. Duest explained that the team has committed to this project, and has demonstrated success and reliability on numerous long-term MWRA projects. Mr. Taverna requested more information about the proposed contract's terms. Mr. Duest explained that it is a not-to-exceed contract.

(Ms. Wolowicz temporarily left the meeting during the discussion)

Chair Tepper asked if there was further discussion or questions from the Board. Hearing none, she requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
(Wolowicz – no response)		

(ref. V A.1)

Design, Engineering Services During Construction and Resident Engineering Services for Cottage Farm CSO Facility PCB Abatement: Weston & Sampson Engineers, Inc., Contract 7392

A motion was duly made and seconded to approve the recommendation of the Consultant Selection Committee to select Weston & Sampson Engineers, Inc. to provide Design, Engineering Services During Construction and Resident Engineering Services for Cottage Farm CSO Facility PCB Abatement under Contract 7392, and to authorize the Executive Director, on behalf of the Authority, to execute said contract in the amount not to exceed \$3,757,000.41 for a contract term of 52 months from the Notice to Proceed.

Brian Kubaska, MWRA Chief Engineer, presented a summary of a proposed contract for design, engineering services during construction and resident engineering services for a PCB abatement project at the Cottage Farm Combined Sewer Overflow ("CSO") Facility. He provided an overview of the facility's location, structural layout, history, and functions for screening,

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disinfecting, detaining and pumping flows before discharge into the Charles River. He noted that Cottage Farm is one of MWRA's four wet weather facilities and that it activates approximately twice a year on average.

Next, Mr. Kubaska discussed the scope of the proposed professional services contract. He explained that Phase 1, abatement of PCBs in all accessible areas of the facility's main building, is expected to achieve a PCB abatement level of 81-90%. He noted that no PCBs have been found in the facility's newer chemical building. He further explained that the remaining PCBs are expected to be captured during Phase 2, when abatement of non-accessible areas and facility rehabilitation work will take place. Mr. Kubaska noted that the Cottage Farm facility will need to remain online during the abatement efforts.

Mr. Kubaska then summarized the contract's procurement process. He reported that two proposals were received, and that staff recommend award to the lowest bidder, Weston & Sampson Engineers, Inc. He noted that Weston & Sampson's bid was 20.3 % higher than the Engineer's Estimate, attributable to salaries that were higher than anticipated, and that the proposed level of effort was in line with MWRA's estimate. Finally, Mr. Kubaska provided a brief overview of the project's 52-month schedule.

(Ms. Wolowicz returned to the meeting during the presentation.)

Board Member Peña asked how staff manage sodium hypochlorite storage. Mr. Kubaska explained that staff track the concentrations of on-site hypochlorite. Stephen Cullen, MWRA Wastewater Director, provided further details on staff's procedures for sampling, tracking and managing sodium hypochlorite and sodium bisulfite.

Hearing no further discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. V A.2)

Oxygen Generation Facility Services, Deer Island Treatment Plant: Solutionwerks Inc., Contract S619

A motion was duly made and seconded to approve the award of Contract S619, Oxygen Generation Facility Services, Deer Island Treatment Plant, to the lowest responsive and eligible bidder, Solutionwerks Inc., in the amount of \$3,512,500, for the contract term of 1095 calendar days from the Notice to Proceed.

Chad Whiting, MWRA Deer Island Treatment Plant Deputy Director, discussed a proposed contract for oxygen generation facility services at DITP. He described the functions of the DITP cryogenic oxygen generation (“cryo”) facility, noting that it is critical to NPDES permit compliance. He noted that maintaining and operating the cryo facility requires specialized expertise and instrumentation.

Mr. Whiting then presented an overview of the cryo facility and its process for generating up to 200-300 tons of gaseous oxygen per day, total. He noted that oxygen that is not needed for daily DITP operations is stored on site.

Next, Mr. Whiting provided background on the procurement of proposed Contract S619. He noted that in 2022, the incumbent contractor (Solutionwerks, Inc.) had informed MWRA that it would be unable to bid on future contracts due to the planned retirement of key staff. He explained that MWRA staff subsequently developed a new Chapter 149 contract that included capital repairs in addition cryo facility maintenance services; this contract was advertised February 2024, and resulted in a single bid that was 366% over the Engineer’s Estimate.

Mr. Whiting further explained that staff then re-examined and revised the project’s scope and transferred capital repair tasks to a separate contract for future procurement and re-advertised the maintenance tasks as non-professional services maintenance Contract S619. He reported one bid of \$3,512,500 from Solutionwerks was received, noting that staff considered this cost to be reasonable.

Finally, Mr. Whiting recommended the award of Contract S619 to Solutionwerks. He explained that since 2022 employees had taken over management of the company; that key personnel had not fully retired; and that new technicians capable of performing the work had been hired and successfully trained.

Mr. Taverna asked if staff were confident in Solutionwerks stability and capacity. Mr. Whiting responded in the affirmative, and explained that the original owner continues to work for the company as a consultant; that the new owner is a family member who has been working successfully onsite at DITP for a number of years; and, that the company is growing.

Hearing no further discussion or questions from the Board, Chair Tepper requested a roll call

vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. V A.3)

WATER POLICY AND OVERSIGHT

Information

Overview of Water Pipeline Maintenance Leak Repairs at MWRA

Staff presented a summary of how MWRA staff identify and repair leaks in MWRA's Metropolitan Water System. Lisa Bina, MWRA Deputy Director of Waterworks, provided a brief summary of the Metropolitan Water System's location and pressure zones, as well as the MWRA facilities that serve the system, including pipelines, valves, water storage facilities and pump stations. She noted that the system is operated and maintained by MWRA's in-house pipeline, valve and inspection crews, and described their job responsibilities.

Next, Ms. Bina discussed the MWRA Leak Detection Program. She explained that dedicated staff use specialized equipment to "walk the lines" at night, listening for potential underground leaks, noting that the crew walked approximately 140 miles and identified seven leaks in 2023. She described the crew's procedures for marking and reporting leaks.

Ms. Bina then presented examples of surface leaks, which typically present as puddles that are reported by service communities, or as geysers. She noted that surface leaks are usually reported directly to MWRA's Operations Control Center ("OCC") by constituents or community officials, and that that geyser leaks often set off the OCC's low-pressure alarms. She explained that surface leaks are not isolated immediately in order to avoid negative impacts to water system pressure.

Next, Ms. Bina described MWRA's response protocol for surface leaks. She also discussed the importance of operations plans, which are developed for MWRA's valve crews by engineers, and include such information as sequencing instructions; valve turn counts; and detailed records of facilities in the impacted area.

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Mike McCarthy, MWRA Director of Metropolitan Operations, then outlined MWRA's response to a challenging leak on MWRA's Section 84 pipeline in Malden. The presentation highlighted the labor-intensive work performed by rotating crews over extended hours, including leak location; testing and conditions evaluation; pipe isolation; removal and installation of concrete encasements; the coordination of utility pole support; installation of new valves and a restraint; leak repair; pipeline disinfection and activation; and road restoration. Mr. McCarthy noted that crews performed this complex work, which took place from December 2022 through April, 2023, without disrupting water service to customers.

Chair Tepper thanked staff for their interesting presentation. There was brief, general discussion about work site flaggers.

Board Member Vitale asked if MWRA uses asset maintenance systems to track and prioritize when pipes may need to be replaced. Mr. Vitale also requested more information about MWRA's accounting procedures for leaks and unaccounted-for water. Stephen Estes-Smargiassi, MWRA Director of Planning and Sustainability, explained that staff monitor data and trends to determine which pipes may need replacement or inspection. Mr. Estes-Smargiassi then described how MWRA tracks metering data at multiple locations to determine water system use. He noted that approximately 1% of water is categorized as unaccounted-for annually, and that MWRA's customer communities are not billed for unaccounted-for water. Mr. Vitale asked how MWRA's unaccounted-for water metrics compare to those of other wholesale water utilities. Mr. Estes-Smargiassi explained that MWRA's metrics are comparable, and highlighted MWRA's aggressive leak detection program. There was brief, general discussion about challenges related to water systems with large diameter water tunnels.

Hearing no further discussion or questions from the Board, Committee Chair Vitale moved to Contract Amendments/Change Orders.

(Chair Tepper briefly left and returned to the meeting, and Mr. Taverna temporarily left the meeting during the discussion.) (ref. VI A.1)

Contract Amendments/Change Orders

Carroll Water Treatment Plant SCADA System Improvements: LeVangie Electric Company, Inc. Contract 7582, Change Order 14

A motion was duly made and seconded to authorize the Executive Director, on behalf of the Authority, to approve Change Order 14 to Contract 7582, Carroll Water Treatment Plant SCADA System Improvements, with LeVangie Electric Company, Inc., for an amount not-to-exceed \$120,000, increasing the contract amount from \$13,526,674.07 to \$13,646,674.07, and extending the contract term by 548 calendar days from October 2, 2024 to April 3, 2026.

Further, a motion was duly made and seconded to authorize the Executive Director to approve additional change orders as may be needed to Contract 7582 in an amount not-to-exceed the aggregate of \$1,000,000 and 180 days in accordance with the Management Policies and Procedures of the Board of Directors.

Martin McGowan, MWRA Construction Director, presented a summary of the reasons and scope of a proposed change order for the Carroll Water Treatment Plant SCADA System Improvements Project (“SCADA Project”) with LeVangie Electric Company, Inc. He noted the complexity of the project, presented a schematic of the Plant’s SCADA system, and highlighted the 17 control panels that are being replaced under the contract.

Mr. McGowan then presented a photo of a typical replacement control panel. He explained that the SCADA Project was significantly impacted by recent supply chain issues with some key panel components delayed by months, and in some cases over a year, which in turn delayed panel construction and cutover (transition from old to new facilities). Mr. McGowan then requested a 12-month time extension at no cost due to supply chain delays.

Next, Mr. McGowan discussed some prior compensable change orders to the SCADA Project contract, including cybersecurity improvements; and a project modification to reduce the risk of impacts to the Carroll Plant by installing backplane subpanels within existing panels. He briefly described the complexity of rewiring the panels.

Mr. McGowan then reported that panel installation is nearing completion, and that staff are preparing for the cutover process in fall 2022, with expected completion in spring 2026.

Mr. Vitale asked why Delegated Authority Report Item C-8: *John J. Carroll Water Treatment Plant SCADA System Improvements* (ref. VIII A.1) was procured under delegated authority rather than included in this proposed Change Order. Mr. McGowan explained that Item C-8 was awarded under delegated authority to expedite the implementation of necessary additional testing, in preparation for the upcoming cutover.

Mr. Pappastergion requested more information about staff’s request for authorization of the Executive Director to approve additional change orders as needed in an amount not to exceed \$1 million. Mr. McGowan explained that staff are requesting the \$1 million delegation to cover any issues that may arise during the critical cutover phase, noting that the SCADA Project is 88% complete. Mr. Pappastergion questioned the \$1 million delegation for future changes orders and the Board not partaking in the change order approval process. Mr. McGowan noted that approximately \$100,000 in change orders are currently under negotiation.

General Counsel Francisco Murphy advised that the Policies of the MWRA Board of Directors permit the addition of further delegation at the Board’s discretion. Mr. Coppes noted that the

Board had approved an increase to the Executive Director's delegation level for construction change orders to \$1 million in 2022 (ref. VII B.2, February 16, 2022). There was general discussion about the reasons for the delegated level increase, and MWRA's continued transparency with respect to delegated authority. There was further discussion about staff's delegated authority request to support the critical cutover phase in the SCADA Project. Mr. Pappastergion requested more information about how MWRA reports delegated authority expenditures for construction projects to Board members. Mr. Coppes explained that they are reported in MWRA's Delegated Authority Reports to the Board, and indicated with asterisks in Board Staff Summaries.

(Mr. Taverna returned to the meeting during the discussion.)

Hearing no further discussion or questions from the Board. Chair Tepper requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. VI B.1)

PERSONNEL AND COMPENSATION

Approvals

July 2024 PCR Amendments

A motion was duly made and seconded to approve amendments to the Position Control Register (PCR) as presented and filed with the records of this meeting.

Wendy Chu, MWRA Human Resources Director, invited Board members' questions on the July 2024 PCR Amendments.

Hearing no discussion or questions from the Board, Chair Tepper requested a roll call vote in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. VII A.1)

ADMINISTRATION, FINANCE AND AUDIT

Delegated Authority Report –June 2024

Committee Chair Foti invited Board Members' questions on the Delegated Authority Report.

Mr. Vitale requested the average rate per hour for engineers under Item C-10: *Top of Shaft 5 Interim Improvements Resident Engineering Services*. Mr. Coppes explained that the average rate is \$172 per hour.

Hearing no further discussion or questions from the Board, Chair Tepper moved to adjournment. (ref. VIII A.1)

ADJOURNMENT

A motion was duly made and seconded to adjourn the meeting.

A roll call vote was taken in which the members were recorded as follows:

<u>Yes</u>	<u>No</u>	<u>Abstain</u>
Tepper		
Flanagan		
Foti		
Pappastergion		
Peña		
Taverna		
Vitale		
P. Walsh		
Wolowicz		

(ref. IX)

The meeting adjourned at 3:17pm.

Approved: September 11, 2024

Attest:

 for

Brian Peña, Secretary

LIST OF DOCUMENTS AND EXHIBITS USED

- Draft Minutes of the June 26, 2024 MWRA Board of Directors' Meeting (ref. I)
- July 24, 2024 Staff Summary and Presentation – Deer Island Treatment Plant Combined Heat and Power System Design, Bidding and Engineering Services During Construction: Burns & McDonnell Engineering Co., Inc., Contract 6730 (ref. V A.1)
- July 24, 2024 Staff Summary and Presentation – Design, Engineering Services During Construction and Resident Engineering Services for Cottage Farm CSO Facility PCB Abatement: Weston & Sampson Engineers, Inc., Contract 7392 (ref. V A.2)
- July 24, 2024 Staff Summary and Presentation – Oxygen Generation Facility Services, Deer Island Treatment Plant: Solutionwerks Inc., Contract S619 (ref. V A.3)
- July 24, 2024 Staff Summary and Presentation – Overview of Water Pipeline Maintenance Leak Repairs at MWRA (ref. VI A.1)
- July 24, 2024 Staff Summary and Presentation – Carroll Water Treatment Plant SCADA System Improvements: LeVangie Electric Company, Inc., Contract 7582, Change Order 14 (ref. VI B.1)
- July 24, 2024 Staff Summary – July 2024 PCR Amendments (ref. VII A.1)
- July 24, 2024 Staff Summary – Delegated Authority Report – April 2024 (ref. VIII A.1)