EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 6, 2025

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager CCC

FROM: Serge V. Terentieff, Director of Engineering and Construction SVT

SUBJECT: Central Reservoir Replacement Project Update – Follow-up

SUMMARY

At the February 11, 2025 meeting, the Planning Committee requested additional information regarding specific elements of the Central Reservoir Replacement Project (Project), including: (1) how open-cut reservoirs are prioritized for rehabilitation and replacement; (2) outreach on contaminated materials with neighbors, including Redwood Day School (RDS), and discussions with RDS on a possible presentation to the Parent Teacher Association (PTA); and (3) plans for the landscaped area near the bioretention basin.

DISCUSSION

Open-Cut Reservoirs Prioritization

The prioritization of rehabilitation and replacement projects for open-cut reservoirs is guided by long-term infrastructure planning efforts. Planning and prioritization for the rehabilitation of the open-cut reservoirs was first done as part of the District's 1998 Open-Cut Reservoir Master Plan (OCRMP), followed by the 2008 Distribution System Master Plan (DSMP), and further refined in the 2012 Reservoir Infrastructure Rehabilitation Plan (IRP).

The OCRMP established a systematic approach for evaluating upgrades, focusing on roof structural integrity, worker safety, operational reliability, regulatory compliance, and water quality preservation. The OCRMP used a structured decision model with nine weighted criteria: prioritizing reservoir capacity, roofing conditions, structural integrity, and regulatory compliance. The following are the nine criteria for evaluating the priority of work:

- Need of the reservoir
- Capacity of reservoir
- Safety concerns
- Roofing system/condition
- Lining system/condition
- Water Quality

- Regulatory Agencies
- Roof Seismic Capacity
- Reservoir Ventilation

The most important conclusion of the OCRMP is that significant rehabilitation work is required on a majority of the District's open-cut reservoirs.

Building on the OCRMP, the District developed additional plans to refine prioritization. The 2008 DSMP assessed rehabilitation needs and confirmed the priority for rehabilitation or replacement of open-cut reservoirs. In addition, the 2012 IRP reinforced the need for investment, highlighting that many open-cut reservoirs were outdated and had significant structural and operational issues. The 2012 IRP identified 11 of the District's 22 open-cut reservoirs as priorities for rehabilitation or replacement.

A key challenge with rehabilitating open-cut reservoirs is their large size and operational significance. Removing them from service, even temporarily, requires careful outage planning and scheduling to prevent service disruptions. To address long-term system needs, most open-cut reservoirs are planned for replacement with dual smaller-capacity tanks, to improve water quality and operational flexibility, while also meeting fire flows. The 2012 IRP is regularly updated to reflect changing infrastructure conditions and system demands, ensuring a strategic and rational approach to capital investments. The District has currently rehabilitated or replaced six open-cut reservoirs.

The District's remaining open-cut reservoir replacement projects were prioritized against other District capital improvement projects, using the District's updated prioritization process that included scoring and ranking over 300 capital projects based on a set of urgency (likelihood of failure) and importance (consequence of failure) criteria.

Community Outreach on Contaminated Materials with Neighbors and RDS

The District worked very closely with RDS during the preparation of the Project's Environmental Impact Report (EIR) and had four meetings with RDS staff. The District will continue to coordinate with RDS and request to present at a Parent Teacher Association (PTA) meeting to ensure that parents and school representatives receive information regarding the Project. In addition, the District will conduct outreach with neighboring residents to provide transparency regarding the handling of contaminated materials. This outreach will include:

- **Providing Clear Information on Contaminated Materials:** Outlining types of contaminated materials, their sources, and mitigation measures from the Final EIR to ensure safety.
- **Addressing Health and Safety Concerns:** Explaining construction management practices to prevent exposure, including dust control, air monitoring, and regulatory compliance.

- **Communicating Regulatory Oversight:** Sharing information about oversight by agencies such as the Bay Area Air District and others.
- **Facilitating Open Dialogue with the Community:** Providing a forum where residents, parents, and school representatives can voice concerns and receive fact-based responses.

The District will complete a Feasibility Assessment, during the design phase, to determine the best method for removing and disposing of the Central Reservoir's asbestos-containing transite roof panels during demolition work. At the beginning of the construction phase, once the contractor has been selected, the contractor will be required to submit detailed, site-specific plans for hazardous materials handling. The District will review and approve these plans, which will include:

- Location and layout of containment and decontamination areas
- Sequencing of work
- Equipment to be used
- Handling and disposal of materials, including identification of approved disposal sites
- Specific measures for dust and particulate containment, pollution control, and real-time air quality monitoring

The District will meet with neighbors to present these plans, obtain community input, and incorporate relevant feedback before finalizing the hazardous materials removal and disposal strategy. This meeting will also cover notification procedures throughout the Project duration, including advance notice of demolition activities.

To ensure public safety, the District will hire a hazardous materials consultant to implement a two-part air monitoring program. This program will include daily laboratory analyses to monitor for any asbestos fibers and real-time air monitors for particulates. Action levels and stop-work thresholds will be pre-established to maintain a safe environment throughout construction.

The District will work closely with the neighborhood and RDS to tailor the outreach approach, ensuring effective communication with parents, school representatives, and the community.

<u>Plans for the Landscaped Basin Area Near the Bioretention Basin</u>

The Project will transform the Central Reservoir site by removing approximately 12 acres of impervious surfaces (i.e., existing open cut roof and perimeter pavement areas), replacing the existing reservoir with three prestressed concrete tanks, and incorporating a bioretention area to manage stormwater. The space near the bioretention basin will be landscaped with mulch, native ground cover, and tree plantings, enhancing site aesthetics while protecting stormwater treatment and ecological benefits.

The landscaped space near the bioretention basin needs to be maintained for stormwater management, habitat enhancement, and operational flexibility. The use of this space, which

provides environmental benefits and ensures security and infrastructure reliability, is not compatible with public access, whether as open space or via a public trail.

The landscaped and bioretention areas include relatively steep slopes surrounding the basin area. Along with reducing impervious surfaces, the bioretention area will improve water quality before it enters Sausal Creek. It will also help mitigate peak stormwater runoff and reduce erosion. The landscaped space needs to be maintained to protect stormwater management and operational flexibility. Consistent with the District's policies at other critical infrastructure sites, public access will not be allowed through or adjacent to the property.

Public recreation opportunities remain available adjacent to the site. A portion of the Central Reservoir property was previously sold to the City of Oakland and developed as the Central Reservoir Park, which remains open to the public (as shown in Figure 1).

CCC:SVT

Attachment: Figure 1 – Central Reservoir Park Location

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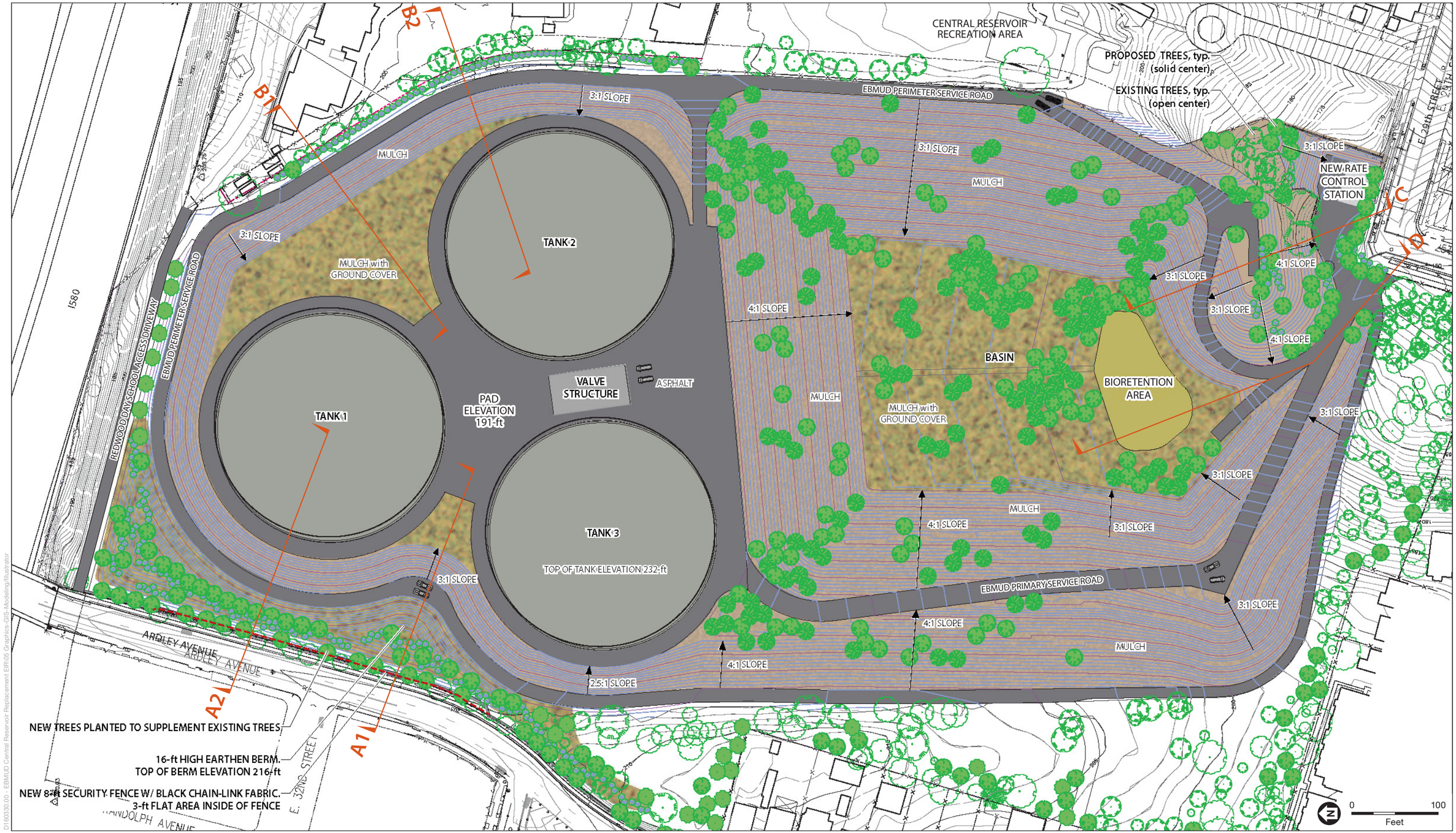

D1603300.00 - EBMUD Central Reservoir Replacement EIR\05 Graphics-GIS-Modeling\Illustrator

SOURCE: EBMUD, 2018; Dillingham Associates, 2018

EBMUD Central Reservoir Replacement Project

Figure ES-1
Proposed Site Plan

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