

Central Reservoir Replacement Project – Consultants Q&A on 10/3/2023

- **Notes and Disclaimer:**

- The information provided in response to the questions below represents the responses given on 10/03/2023 during the meetings the District held with the consultants who had expressed interest in submitting a proposal for design services for the Central Reservoir Replacement Project. However, it is imperative to note that the final RFP documents, when issued by the District, will supersede any information presented here. In the event of any discrepancies between the responses provided below and the details outlined in the upcoming official District RFP documents, the latter will take precedence. The responses shared below serve to convey the main concepts discussed during pre-RFP consultant meetings but may not reflect the precise language used during the pre-RFP consultant meetings.
- Some of the questions and answers provided here are derived from the consultants emails following the Pre-RFP consultant meetings on 10/3.
- Item No. 69 includes information received from DN Tanks on 11/2/2023, following a meeting with them on 10/24/2023.
- Some responses may be more comprehensive than what was discussed during the pre-RFP consultant meetings and there are some post-meeting updates included.
- The District's Reservoir Design Guide, provided in response to Question No. 17 below, is primarily intended for internal District use. While the Consultant will be held to the minimum requirements outlined in this design guide, it is important to note that the RFP will take precedence and supersede any guidelines and/or specifications included in the guide.
- Environmental Science Associates (ESA), referred to in Question 3, was hired by the District during the Project planning phase to provide consulting services for the preparation of the EIR.

- **Contact Information:**

- For individuals requiring access to the underlined documents, please send an email to centralreservoirreplacement@ebmud.com. Kindly cc roya.yazdani@ebmud.com in your correspondence. Include your first and last name, e-mail address, and the name of your organization. Upon receipt of this information, access will be granted accordingly.

Summary of Consultant questions and District answers:

1. **“The EIR states that the site will be “balanced”. Are the preliminary earthwork calcs available?”**

Cut and fill details are included in the [value engineering \(VE\) report](#) and the [cut/fill analysis report](#). The environmental impact report (EIR) also states that the final site elevations would be adjusted so that no soil would be imported or exported from the site. This needs to be analyzed and confirmed by the consultant. Details regarding this task will be included in the RFP.

2. **“Was a preliminary Geotechnical report completed? If so, is that report available? Is the design for CDSM columns final? Will the design team be asked to consider other foundation types?”**

It was not feasible to remove Central Reservoir from service to conduct a comprehensive subsurface investigation within the basin during project planning. The initial geotechnical analysis is based on recent geotechnical investigations which were performed on the perimeter of Central Reservoir. Geotechnical information at the center of the reservoir was limited and based on historical explorations and maps. Detailed information about the soil sampling conducted at the perimeter of the site, the soil and settlement characteristics, and preliminary engineering analyses conducted to analyze the substructure alternatives can be found in the [VE report](#). Uncertainties regarding the subsurface stratigraphy and the material properties of the underlying subgrade exist. Therefore, a comprehensive subsurface investigation needs be completed prior to the final design for the Project, to better characterize the subsurface conditions within the entire footprint of the proposed Project.

Cement deep soil mixing (CDSM) was the recommended subsurface alternative from the [VE report](#). The District is conducting an evaluation to finalize the approach. Details will be included in the RFP.

Please refer to District’s answer to Question 25, below, which describes the District’s two main delivery alternatives that should be evaluated by Consultant.

3. **“Will ESA be under contract with EBMUD for coordination during design and construction? What about other consultants involved in the planning effort for landscape architecture, traffic planning, etc.? Can we include those firms on our team as appropriate?”**

The original scope and budget in the ESA contract include the following as optional tasks:

Task 20.5 Design: Prepare Landscape and Architectural Plans and Specifications

Task 20.8 Construction: Landscape and Architectural Services

Further details will be included in the RFP.

4. **“Can we have access to the drawings for existing site piping, the reservoir itself (1961 retrofits), and the existing ACS?”**

[Drawings](#)

5. **“Beyond what is listed in the EIR, what sort of interactions with the community are expected? Any improvements to the adjacent recreational area? Will that area remain open during construction?”**

Interactions with the Redwood Day School will be handled through the District.

There will be a pre-construction meeting to inform the neighborhood about:

- Noise monitoring plan
- Hazardous materials removal plan
- Community notification procedures particularly the school in advance of demolition and disturbance of asbestos materials

The District will lead the community discussions; however, the Consultant is expected to provide support as needed, including but not limited to having the Hazamt expert present during the community meeting(s).

The Project does not require the construction or expansion of recreational facilities. Construction would not result in closure of the Central Reservoir Recreation Area and construction activities would be primarily confined to the reservoir site and to the 25th Avenue/East 29th Street intersection. Therefore, no impacts are anticipated.

6. **“How will the system function during construction? Can the Central Reservoir Service Area operate without this storage? Is temporary storage required?”**

Model simulations demonstrate that the removal of storage from the outage of Central Reservoir can be mitigated by the addition of storage at the southern basin of Dunsmuir Reservoir. Further details can be found in the [outage plan](#).

7. **“How certain are you of the 50 MG new capacity? Should we consider leaving space for a future tank?”**

The Central Reservoir Replacement Project includes replacement of the existing 154-MG, open-cut Central Reservoir with three new 14-MG concrete tanks within the existing reservoir basin, which accounts for projected demand growth in the Central Reservoir service area.

All tanks may not be placed in service from the beginning; the empty tank(s) will be rotated due to settlement concerns.

8. **“Is the site plan confirmed? Will you ask the design engineer to re-consider the site plan?”**

The tanks diameter would change as the EIR shows 17-MG tanks and that has changed to 14-MG tanks. It is expected that the site plan follows the general look of that included in the EIR.

9. **“Are the tanks going to be new prestressed tanks? Are you looking for an analysis of alternatives such as cast-in-place concrete and steel? Or is that decision made?”**

Tanks will be pre-stressed concrete tanks. Refer to the [VE report](#) for the alternative analysis.

10. **“Have you done any yard piping pre-design? It seems the preliminary design would require pipe to be installed through the pier grid for the new foundation.”**

Yard-piping will be completed as part of design.

11. **“What skills would your ideal PM have? Are you looking for a technical PM or more of a team leader?”**

It's important to have a PM that possesses a balance of technical knowledge and strong team leadership skills. This ensures that they can effectively communicate and coordinate with the technical experts while also managing the project's overall execution, timeline, and resources.

The PM should balance the team's strengths and weaknesses and the ideal PM for the team will be considered by evaluating the team as a whole.

In general, it is expected that the PE provides the technical skills and the PM mainly focuses on the leadership skills.

12. **“The DEIR Project Description describes the tank foundation as CDSM columns overlain by a 30-foot-thick layer of lime or cement-treated soil. Is this approach a design decision that's already been made, or will the selected consultant develop the foundation design?”**

CDSM was the recommended subsurface alternative from the [VE report](#). The District is conducting an evaluation to finalize the approach. The details will be included in the RFP.

- 13. “Can EBMUD share any site-specific geotechnical data from dam safety investigations or maybe construction of I-580? From original reservoir construction?”**

See response to question 2.

- 14. “Can EBMUD share as-built drawings of the existing reservoir and associated distribution infrastructure? Or as-built drawings associated with the storm drain system discharging to Sausal Creek?”**

[Drawings](#)

- 15. “Will extensive modification of the City’s portion of the storm drain system be required?”**

The EIR does not state any required modifications to the City's portion of the storm drain system.

- 16. “Can EBMUD share the *Central Reservoir Replacement Value Engineering Project Final Report, (AECOM, 2017)*, referenced in Chapter 4 of the DEIR?”**

[VE report](#)

- 17. “Can EBMUD share *EBMUD Reservoir Design Guide (EMBUD 2017e)*, referenced in Chapter 2 of the DEIR?”**

[Reservoir Design Guide](#)

- 18. “Maintaining service to customers during reservoir demolition and construction is obviously critical. Can you describe your vision regarding the roles and responsibilities of the Replacement design team, the construction contractor(s) and EBMUD?”**

The District’s intent is to retain the services from the same Consultant that completed the design for the Project to also provide Engineering Services During Construction (ESDC), under a separate future contract.

Refer to the [outage plan](#) for the roles and responsibilities during the outage. Detailed roles and responsibilities will be defined in the specifications and discussed during the pre-construction meeting.

- 19. “We understand that a separate specialty firm will design and construct the tanks. How do you envision coordination occurring between the Replacement design team and tank designers? Will the tank designers be integrated into our team? Will they be under contract to EBMUD during site design?”**

Details will be included in the RFP.

- 20. “Similar question regarding coordination during construction – will both Replacement project contractor and tank construction contractor be on site at the same time? Will Replacement project contractor be required to have a specialty tank contractor as a subcontractor?”**

Details will be included in the RFP.

- 21. “The DEIR states that no import or export of soil will be required; grades will be adjusted such that cut and fill balance. Has a study been conducted to confirm that all project objectives can be met without import or export?”**

See response to question 1.

- 22. “Does EBMUD have standard specifications that cover all anticipated technical aspects of the project? Will the design team need to originate any technical specifications?”**

District has standard specifications that cover many technical aspects of the project; specific technical sections may need to be generated by the Consultant.

- 23. “Can you describe your vision regarding the Replacement design team’s roles and responsibilities regarding public outreach and working with the project’s neighbors to increase safety and reduce disturbance during construction?”**

See response to question 5.

- 24. “Have there been any significant changes to the project that are not reflected on the documents posted to EBMUD’s website?”**

Three 17-MG tanks have changed to three 14-MG tanks, which reduces the inner diameter to 250-feet for each tank. The vertical dimensions have not changed. No other known changes at this time.

- 25. “Will all the project elements be designed and constructed as one project? Or will they be grouped into more than one project?”**

A key consideration will be to determine when and how additional geotechnical subsurface investigations can be performed, in particular, for verifying design assumptions and subsurface conditions, and for obtaining representative subsurface samples for bench-scale laboratory testing on lime/cement/fly ash stabilization and CDSM cement treatment factors. There are two alternatives currently being considered by the District for project sequencing and construction. The two alternatives are as follows:

- i. Alternative 1: This alternative will require preparation of two separate sets of bid documents and construction contracts resulting in a phased approach as follows:
 - a. *Phase 1* includes preparation of a demolition bid set and issuance of the first construction contract for the demolition of the existing reservoir coinciding with an approved outage period for Central Reservoir. This phase includes completing the Consultant shall complete a detailed geotechnical subsurface investigation within and around the reservoir either:
 - At the start of the outage and prior to demolition,
 - Concurrent with demolition,
 - After completion of the demolition work.This phase also includes identifying opportunities for accelerating collection of subsurface data to meet the overall project schedule.
 - b. *Phase 2* includes the completion of the 100% bid package documents for the Project and issuance of a second construction contract for the construction of the three 14-MG prestressed concrete tanks, the substructure (earthwork, site grading, soil treatment, and ground improvement), and related work (paving, detention basins, vegetation, etc.) as described in the District's EIR.

The Design efforts for Phase 1 and Phase 2 will be allowed to proceed concurrently. Phase 2 bid documents would be placed on hold at or near 50% design-level until completion in Phase 1 of the additional geotechnical subsurface investigations required to finalize the design.
- ii. Alternative 2: This alternative requires one set of bid documents and a single construction contract. Under this alternative, the Consultant shall proceed with preparing a single bid package that encompasses both demolition and all elements of construction of the new tanks, which would be awarded to one prime contractor. The construction documents would be at least a 90% design-level with the understanding that minor adjustments to the final substructure design may be required pending the results of any additional geotechnical subsurface investigations. As with Alternative 1, the geotechnical subsurface investigations could occur at the start of the outage and prior to demolition, concurrent with demolition, or after completion of the demolition. The Consultant shall finalize the design prior to Contractor mobilization for construction efforts. Construction contract addendum/addenda and/or change order may be required if the 100%-design documents differ from the 90%-design documents.

Additional details will be included in the RFP.

26. “For EBMUD, what are the primary factors for this project to be considered a success?”

Some factors include: Keeping the Project’s total costs, including design and construction, within the negotiated contract amount; issuing high quality bid documents that result in multiple competitive bids for the District; maintaining the Project on schedule; minimizing impacts to neighbors and the public during construction, via implementation of successful MMRPs during construction and ensuring the design conforms to design criteria from the Architectural Design Report (Appendix C of the EIR); maintaining good working relationships with key project stakeholders (for example the private school located adjacent to the site, that requested construction – as part of our project – for a separate ingress/egress), by engaging them during both the design phase and construction phases of the project, for example by completing – if feasible – the landscaping improvements and other visual mitigation measures identified in the district EIR as an early phase of construction; successful completion of construction, with minimal change orders due to unforeseen conditions and/or design errors and omissions, and successful commissioning and long-term performance of the three new 14-MG concrete tanks.

27. “Who are other stakeholder agencies which may have a significant say in the project?”

List of agencies identified in the EIR:

Agency/Stakeholder	Type of Jurisdiction	Type of Approval
City of Oakland	Local	Encroachment permit for construction within city streets, sidewalk, and Central Reservoir Recreation Area. Approval for use of storm drains and/or sewer lines for dewatering activities. Approval for Redwood Day School driveway, which is proposed as a design option. <i>Redwood Day School (not the District) would be required to obtain permit.</i>
Division of Safety of Dams (DSOD)	State	Review and approval of plans for removal of the Central Reservoir embankment and monitoring wells.
California Department of Toxic Substances Control (DTSC)	State	Approval of location for hazardous materials and hazardous waste disposal in California.
California Air Resources Board (CARB) and Bay Area Air Quality Management District (BAAQMD)	State	Permit for portable equipment registration.
San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)	State and Federal	National Pollutant Discharge Elimination System (NPDES) Construction General Permit and Waste Discharge Requirements for dewatering and work within the bed and banks of waters of the U.S. and state.
Alameda County Public Works	Local	Permit for abandonment of the monitoring wells.
State Water Resources Control Board (SWRCB)	State	Amended water supply permit in accordance with 22 CCR §64556.

28. “What is the approximate timing for the release of the RFP?”

The RFP will be issued early 2024.

29. “What will be the minimum experience qualifications requirements for the Project Team and/or Key Team members?”

Minimum experience requirements will be described in the RFP.

30. “Which design firms have you worked with in the past on water distribution system projects?”

The District has worked with a wide range of engineering firms on several large and complex water treatment plant improvement projects, but has traditionally completed a majority of its water distribution system improvement projects with its own design staff.

31. “Would the project require performing a site-specific seismic study?”

Site-specific studies requirement will be specified in the RFP.

32. “What are your biggest concerns about the project?”

Community’s biggest concerns have been noise and hazmat, which have all been fully addressed through the EIR mitigation measures identified. It is key to follow through the measures identified to make sure the project will be a success.

33. “What does the ideal consultant team look like? What kind of PM are you looking for and how big/small of a team do you see being involved? Is a 100% local team critical or will you be open to using a locally led and staffed team with a few national subject matter experts who may not be located nearby?”

Selection criteria and relevant details will be included in the RFP.

District strongly prefers consultants with a local presence, as this facilitates effective communication, collaboration, and on-sites support when required. The key consultant team members should be available to meet in person with District representatives as needed for project discussions, updates, and progress reports. These meetings may occur periodically. The consultant is expected to be available during normal business hours to ensure timely responsiveness to District inquiries, emails, and project-related activities. Normal business hours are defined as 8:00 am – 5:00 pm, Monday through Friday, excluding District holidays.

Staff’s geotechnical and civil/structural expertise as well as continuity and availability throughout the project is also key.

It is crucial to understand that if there are staffing changes throughout the project, the cost associated with onboarding new staff members to familiarize them with the project is the responsibility of the consultant and shall be born by them.

34. “Do you prefer one large firm with some subconsultants, or are you open to a team consisting of a couple of large firms if it makes for a stronger team?”

District is open to a joint venture team consisting of consultants that meet the evaluation criteria laid out in the upcoming RFP, including those listed under the Contract Equity Program. Key factors for the joint venture team will be increased technical expertise and seamless leadership.

35. “Will there be specific requisites for the firms or individuals on the team and if so, what will those be?”

Specific requisites for the firms or individuals on the team will be listed in the RFP.

36. “What will the selection criteria be and how will the procurement process work. What is the timing of each step?”

Selection criteria and procurement process details will be listed in the RFP.

37. “Have other firms expressed interest? Who?”

Yes. The following firms (in alphabetical order) have expressed interest in the project as of 10/3/2023: Arup, Black & Veatch, Brown & Caldwell, CDM, HDR, Lee + Ro, S2S

38. “Will community meetings be scheduled during the design phase to discuss how construction access will occur, hours of operation, sequencing, heavy noise and traffic periods and get general input to the site layout and configuration etc.?”

See response to question 5.

39. “Is the facility configuration, performance requirements and preliminary design criteria established? Is there an opportunity to provide input/innovative ideas to the project or are the basic requirements set and established through the CEQA process”

There will be three 14-MG prestressed concrete tanks with the site plan provided. Basic requirements have been established during the planning phase, which are discussed in the Project’s [EIR](#). Details will be included in the RFP.

40. “What is the CIP budget for this project? For the design consultant?”

The Consultant will develop the initial cost estimate at 30% design.

- 41. “How do you want to work and collaborate with your consultant? Who will comprise the District’s internal team and how will they engage the procurement and design process?”**

District staff will act as checkers only.

I (Roya Yazdani) will be the Design PM and there will be a civil/structural PE who will act as a reviewer. We will have other design disciplines (e.g. Electrical, Process, Mechanical, Geotechnical, Pipeline) act as reviewers as well. The District, however, expects the Consultant to complete its own QA/QC of all design deliverables, that should be performed by experienced design discipline engineers prior to submitting documents to District staff for review and comments. Details will be included in the RFP.

- 42. “Have you developed a preliminary risk management process and identified risks that need to be eliminated/mitigated. Will risk management be a part of the design consultants scope? Do you have a standardized Risk Register/Management approach you like to follow or will we use our own?”**

See response to question 32. Risk management (RM) will be part of the design Consultant scope. The Consultant will develop the RM approach and the District RM team will review and provide feedback.

- 43. “What are your Boards biggest issues associated with this project. Do you have Board members who’s jurisdiction overlaps the project site?”**

Equity was discussed in previous board meetings. The project is in ward 6 under Director Patterson.

- 44. “Can we review the contract you will propose for the project?”**

The tasks will be included in the RFP.

- 45. “Are you open to propriety meetings?”**

We can take this into consideration upon request.

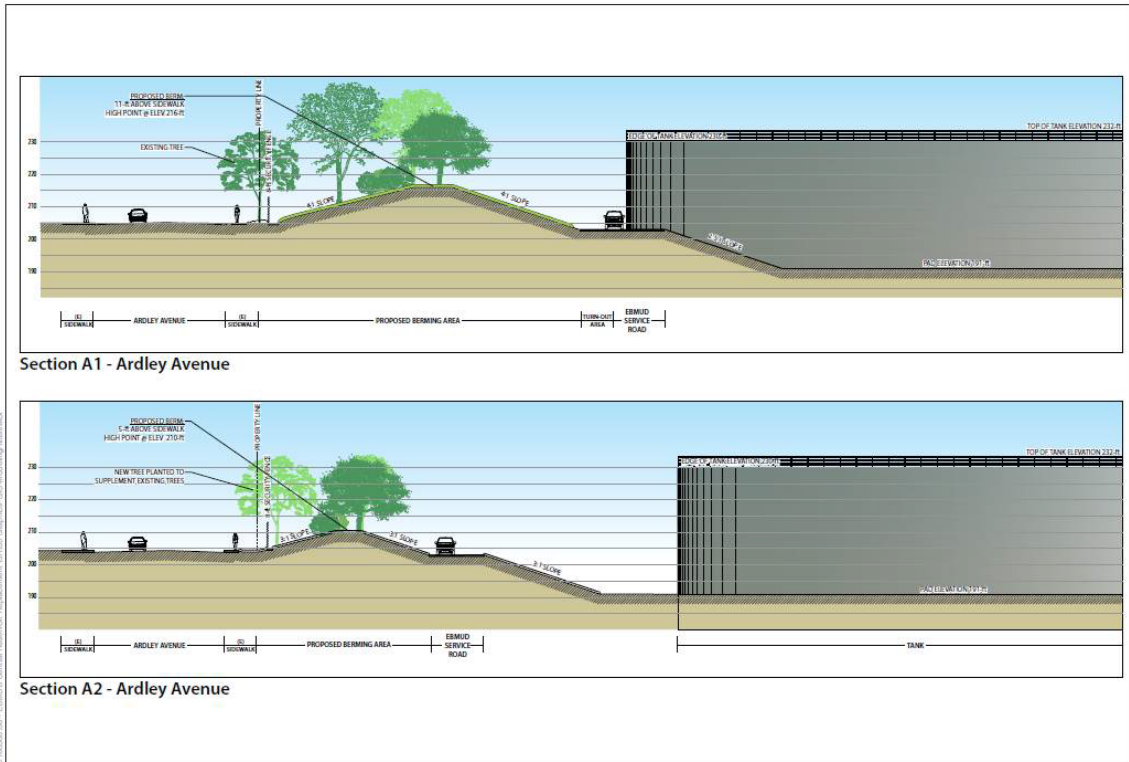
- 46. “Do you have a design budget in mind?”**

We would like the Consultant to deliver a high-quality product that reflects District standards and take the project complications into account. It is expected to be lower than 15% of the construction cost.

- 47. "Is there a height limit for the new reservoirs? Appears to be driven by hydraulics however, freeboard requirements will drive the final heights of the reservoir. Generally higher than expected."**

See below for Figure 2-5 of the EIR. This figure is also in the architectural design report (Appendix C of the EIR). The max elevation is to be 232 feet in the center (not including the safety railing) and 230 feet at the wall of the tank (not including the safety railing) after accounting for roof slope. The 232 feet elevation accounts for freeboard, roof thickness and roof slope which is why it is 9 feet higher than the overflow elevation of 223 feet and 10 feet higher than the maximum operating level of 223 feet.

The top of the floor of the tanks at the wall must be at the elevation of 183-feet. The tanks will be partially buried such that the elevation of the pad surrounding the tanks will be 191-feet, 8-feet above the tank floor. The elevation of the top of the tank roof will be approximately 230-feet at the outer edge of the tank, increasing to a high point of approximately 232-feet at the center of the tank. The roof will have a 42-inch high guard rail around the perimeter. Typical railing consists of 1.5-inch posts spaced every 5-feet and 6 stainless steel cables spaced approximately every 6-inches.



SOURCE: EBMUD, 2018; Dillingham Associates, 2018

EBMUD Central Reservoir Replacement Project

Figure 2-5
Cross-Sections of Proposed Site Plan at Ardley Avenue



See schematics below. 223' is the overflow elevation and 222' is the Maximum Operating Level. 183' is the interior tank bottom at the wall and 184' is the Minimum Operating Level.

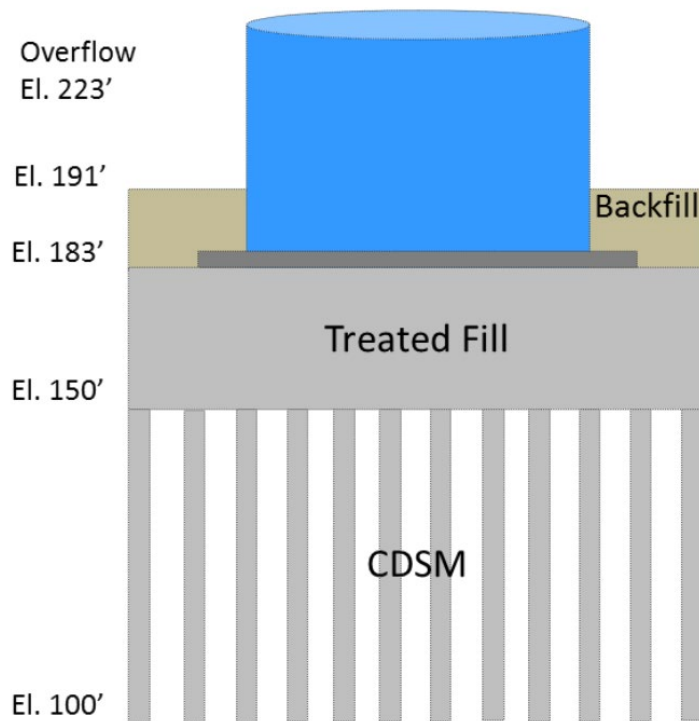
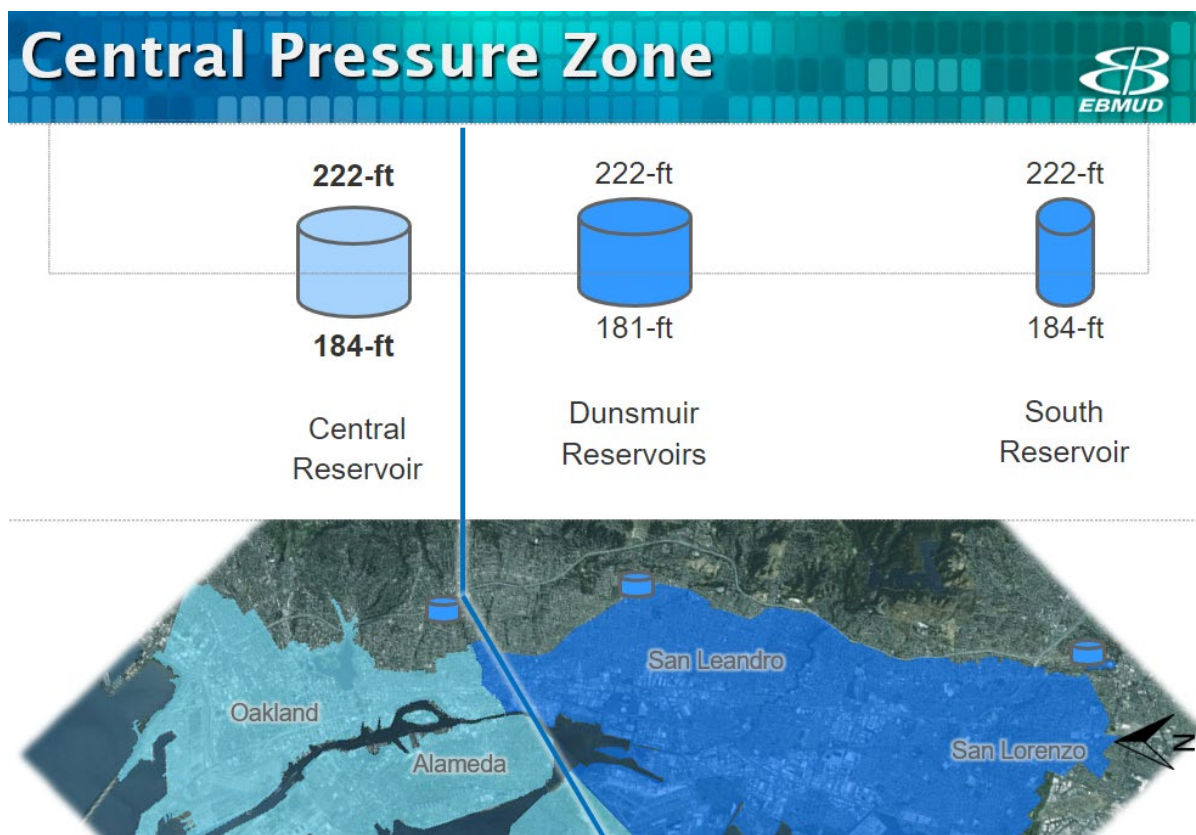


Figure 5: Preferred Substructure Design⁵



- 48. “Are the new proposed reservoirs considered a visual impact on the community? A significant amount of landscape screening emphasis appears to be applied to conceptual planning and community meetings.”**

The site plan has been developed with landscaping and berms to minimize potential visual impacts, and their effectiveness were confirmed through photorealistic visual simulations and the EIR analysis.

- 49. “Will an inundation study be required due to the close proximity of the Redwood Day School? Will this be a design consultant scope item?”**

No inundation study is required during design of this project. The last inundation study was conducted by District in 2021, and the next one is not due until 2031.

- 50. “Has a preliminary geotechnical investigation been completed? If completed, can they be made available?”**

See response to question 2.

- 51. “What condition are the existing pipes and what is the scope of replacement and/or repairs?”**

All pipes on site will be replaced/abandoned. An approximate 100-foot section of the existing transmission pipeline in East 29th Street will be upsized from a 24-inch pipeline to a 30-inch pipeline. The existing I/O pipeline located on site will be filled with cellular concrete and abandoned in place. A portion of the I/O pipeline in the vicinity of the existing valve structure (near the 25th Avenue/East 29th Street entrance) will be demolished and removed to make way for the new I/O pipeline and new RCS. The existing valve structure, which is approximately 12-feet in diameter and extends from elevation 160-feet down to 145-feet, will also be demolished. You can find more info in the EIR and other documents provided.

- 52. “Are any pipe condition assessments to share?”**

No.

- 53. “Will the current consultants (ESA, Muller & Caulfield, Dillingham) be able to be on other teams?”**

See response to question 3.

- 54. “L+R has experience with PS tanks, is the intent to have the structural design completed by the consultant or will the tank contractor be required to perform the tank design? There are pros and cons to both methods.”**

See response to question 19.

55. “Demolition, earthwork, and haul will be a significant effort, has a proposed landfill or other place to send excess materials been identified?”

Disposal locations were not identified during the planning phase. As soil and concrete will be reused on site, minimal off haul was expected during the planning phase. The items that were expected to be off hauled were hazardous materials and sheet metal on the roof (which may have hazardous materials on it) and mechanical equipment on the site. This needs to be analyzed and confirmed by the consultant. Details regarding this task will be included in the RFP.

Per the EIR, pursuant to state and local regulations, as well as the District Standard Construction Specification 02 82 13, a site-specific Hazard Control Plan would be prepared by the contractor. Wastes from abatement and demolition activities would be transported to and disposed of at a Class I or a certified Class II landfill permitted to accept such waste. An appendix will be included in the contract documents that has the list of District Approved Disposal Recycling Locations.

56. “According to the community meetings the projected schedule is behind. Will there be a compressed design schedule due to funding deadlines or other reasons? EIR shows a different timeline. “

A compressed design schedule is not required or anticipated at this time.

57. For the new tanks, does it need to be raised up to the same elevation as Dunsmuir and South tanks?

See response to question 47.

58. “Permits – Any anticipated Caltrans encroachment or DSOD permit vacations? Has the District started discussions with the permitting agencies? “

See response to question 27.

59. “Can the Dunsmuir and South tanks handle the domestic water needs of the zone while Central is rebuilt?”

See response to question 6.

60. “Has hydraulic modeling been completed? Will the design consultant need to confirm system hydraulics?”

Hydraulic modeling has been completed by the District and system hydraulics will not need to be confirmed by the design consultant.

61. “Do the tanks need to be phased in instead of constructing all three and then commissioning all three at once?”

See response to question 25.

62. “Is the outage plan available for review?”

[Outage plan](#)

63. “What is the updated construction cost of the reservoir project?”

The first construction cost estimate would be a 30% deliverable. The construction cost estimate from the planning phase (2016 \$) was \$138,800,000.

64. “Will the design consultant be required to provide easement vacations? Looks like there is at least one for the City of Oakland.”

See response to question 27.

65. “Will the consultant selection committee be done by EBMUD staff only?”

Yes

66. “Was a surge analysis done?”

A [Surge analysis](#) was completed to evaluate hydraulic transients during the Central Reservoir Outage.

67. “Has there been any considerations in making the roof bomb-proof?”

No.

68. “For hazardous materials sampling, does EBMUD intend to complete the sampling/report through internal on-call contracts, or would you like the consultant to hire a sub to complete the sampling/report?”

My suggestion would be to ask the consultant to do it. In my experience it is very important to provide a comprehensive analysis of existing conditions, because an incomplete report can lead to costly change orders. Also, the nature of the report should coincide with the hazardous materials specification and mitigation requirements that will be part of the bid documents prepared by the consultant.

I understand that EBMUD is currently procuring an RFP for “Industrial Hygiene & Environmental Sampling Services” (RFP # IHESS-2024). If you do intend to use this contract to do the work, maybe ask the consultant to provide feedback on the scope of work.”

The intent at this point is not to use any on-call contracts. We would have the consultant work with a sub to follow the requirements laid out in the EIR.

69. Info received from DN tanks on 11/2/2023:

“For the most standard approach the differential settlement requirements for subgrade improvements below AWWA D110 Type I Prestressed Concrete Tanks is a maximum differential of $\frac{1}{4}$ ” over 50ft for a typical non-structural membrane concrete floor. If a structural floor is required the design of the floor can be altered to increase the floors cross sectional thickness while adding of steel rebar to allow for the water/tank loads to be taken by the structural floor if some type of deep foundation is intended to be used. The floor can also act as a pile cap if required.

Seismic code information has likely changed since the planning phase has been completed due to codes updating. Some things to evaluate would be global stability for the tank and subgrade during a seismic event, as well as updating the freeboard. An AWWA D110 Type I Prestressed Concrete Tank can be designed to handle the current seismic codes, including the sloshing wave and potentially keep the freeboard at or similar to the planning information, to keep the overall tank height similar to what is planned now.

When planning for balancing of the site soils a buried application can be evaluated. AWWA D110 Type I Prestressed Concrete Tanks can be uniformly or differentially buried to allow the site to be most efficient when balancing the soils.”

70. “Will there be any Contract Equity Program (e.g. LBE, SBE) requirements or bonus points for the proposal scoring for this project? And if so, would they apply to the prime consultant only or could they be applied to subconsultants as well?”

Contract Equity Program would be listed as an evaluation criterion. Here’s the RFP language:

Contract Equity Program:

Proposer shall be eligible for SBE or DVBE preference points if they are a certified small business entity, as described in the guidelines contained in Exhibit A-Contract Equity Program, and they check the appropriate box, requesting preference, in Exhibit A-Proposer Information and Acceptance. Qualified DVBEs and/or SBEs will receive an additional 10 points to their total score.

Also most of the points awarded apply to Prime, we do however award Small Business points for subcontractor participation.