



Engineering, Operations, and Technology Committee

7/13/2026 Committee Meeting

6a

Subject

Update on Alternative Project Delivery Methods

Executive Summary

In addition to traditional design-bid-build (DBB) project delivery methodology, Metropolitan has the authority to utilize alternative project delivery methods for eligible public works projects. Recent California legislation has expanded Metropolitan's authority as a local agency to use these additional methods for water and related infrastructure projects. When compared to the traditional DBB process, these alternative methods, which include progressive design-build (PDB), Construction Manager/General Contractor (CM/GC), and design-build (DB), provide the opportunities for better project collaboration, greater contracting flexibility, and early contractor involvement during the design of a project. PDB and CM/GC are collaborative delivery methods that can accelerate project schedules, improve cost certainty, and mitigate risks compared to DBB delivery. Staff is providing an overview of each delivery method, the applicable legislative authorities, and the status of existing and upcoming Metropolitan projects that will use these alternative delivery methods.

Fiscal Impact

None

Applicable Policy

Not applicable

Related Board Action(s)/Future Action(s)

August 2026 – Authorize Phase 2B amendment to the PDB contract for the Sepulveda Feeder Pump Stations project

August 2026 – Authorize Phase 1 PDB agreement for the Lake Mathews Pressure Control Structure and Electrical Upgrades Project

Early 2027 – Authorize Phase 1 PDB for the Mills Plant Control System Upgrade

Early 2027 – Authorize a CM/GC alternative project delivery agreement for Pure Water Southern California's (PWSC) Direct Potable Reuse Testing Facility

Details and Background

Background

Historically, Metropolitan's most prevalent approach to delivering projects within the Capital Investment Plan is the DBB model. Under DBB, Metropolitan designs a project (either with in-house staff, or with consultants, or a combination of resources), solicits competitive bids, and awards a construction contract to the lowest responsive and responsible bidder. This traditional process has been used successfully for decades at Metropolitan to deliver virtually all of its infrastructure projects. While DBB is well understood, staff recognizes that time-sensitive, risk-

oriented, or specialized construction projects can benefit from an alternative project delivery approach. Alternative delivery approaches have the opportunity to enhance innovation and engender better collaboration with the contractor. Examples of such projects at Metropolitan include Sepulveda Feeder Pump Stations, Lake Mathews Pressure Control Structure and Electrical Upgrades, Pure Water Southern California, and Mills Plant Control System Upgrade.

As provided in recent state legislation, Metropolitan is permitted to use alternative project delivery methods, including PDB, CM/GC, and DB. Using these methods, Metropolitan solicits and selects a firm using a qualification-based selection process. A summary of the different alternative project delivery methods is outlined below.

- **Progressive Design-Build** – The PDB method facilitates a collaborative relationship between Metropolitan and the design-build entity (DBE). Under this approach, Metropolitan selects a DBE based on qualifications through an RFQ process and enter into a PDB contract that prices design work with a not-to-exceed design-phase contract amount. Metropolitan collaborates with the DBE to develop a project scope, budget, and schedule that meets Metropolitan’s requirements. Once the DBE has sufficiently advanced project design, it must propose a guaranteed maximum price (GMP) for construction. Metropolitan typically negotiates with the DBE on the GMP. Once the parties agree to a GMP, they will, with the Board’s approval, amend the PDB contract to include the construction cost. The DBE will then complete the remaining design and construction activities. The DBE will not be paid for costs in excess of the GMP, absent an agreement to share these proceeds. If the parties cannot agree on a GMP, Metropolitan may require the DBE to finish the design work so that Metropolitan can bid the work using DBB; award a contract to another DBE to finish design and construction; or complete some or all of the remaining work with its own forces.
- **Construction Manager/General Contractor** – The CM/GC method differs from PDB in that the CM/GC firm provides project construction activities but not design. Metropolitan will lead the project design, either using its own staff or contracting with a consultant. The CM/GC contractor provides design advice through constructability inputs and reviews, value engineering, construction cost estimates, and other construction-related recommendations as design progresses. CM/GC also enables a general contractor (GC) to expedite project delivery by allowing the GC to serve as a construction manager and perform preconstruction activities, such as early procurement of equipment and materials before the construction phase commences. Selection of the CM/GC for contract award is also qualifications-based through an RFQ process. Once preconstruction activities are completed and Metropolitan opts to proceed with the project, Metropolitan will negotiate a GMP or fixed price for construction activities. If the parties cannot agree to a GMP or fixed-price contract, Metropolitan will either bid out the construction work as DBB or perform the work with its own forces.
- **Design-Build** – The DB method is distinct from PDB and CM/GC in that the selection process results in a contract with a fixed price for design, preconstruction, and construction services. In the simplest terms, it merges the design and construction components of a project, which are typically performed by unrelated entities under separate contracts. The DB method allows for very little collaboration, and often the DBE undertakes design and construction with limited input from the owner. Fixed-price DB is usually targeted for projects with basic, standardized requirements in a low-risk setting with minimal constraints. The procurement process involves Metropolitan’s release of project-related information sufficient to enable a DBE to respond to both an RFQ, which results in a shortlist of prequalified DBEs, and a Request For Proposal, which results in a fixed-price contract award. Metropolitan may select a DBE based on either low bid or best value.

Legislative Authority

Three legislative authorities codified under the California Public Contract Code (PCC) currently govern Metropolitan’s use of alternative project delivery methods:

1. PCC Chapter 1.5, Article 121.1 – Metropolitan Water District of Southern California-Alternative Project Delivery Program (AB 1845): Authorizes PDB, CM/GC, or DB for regional recycled water projects or other water infrastructure projects to address water supply shortages attributable to drought or climate

change. The statute is effective January 1, 2023, through January 1, 2028, for up to 15 total combined projects. Projects do not need to be completed within the statutory timeframe, and Metropolitan may continue using the delivery method provided that the PDB, CM/GC, or DB agreement is executed before the sunset date.

2. PCC Chapter 4.1 – Local Agency Progressive Design-Build Contracting (SB 991): Authorizes PDB for local agencies for projects exceeding \$5 million involving production, storage, supply, treatment, or distribution of water from any source. The statute is effective January 1, 2023, through January 1, 2029, for up to 15 projects. Projects do not need to be completed within the timeframe, and Metropolitan may continue using this delivery method, provided the PDB agreement is executed before the sunset date.
3. PCC Chapter 4.7 – Local Agency Design-Build Contracting (SB 706): Authorizes PDB for any projects exceeding \$5 million, excluding state-owned or state-operated facilities. The statute is effective from January 1, 2024, through January 1, 2030, for up to 10 projects.

Staff will investigate extending the sunset dates for alternative project delivery methods through future legislative efforts.

Existing Alternative Project Delivery Efforts to Date

Sepulveda Feeder Pump Stations (PDB)

As a result of the historically low State Water Project (SWP) water supplies during the 2020-2022 drought, SWP-dependent service area agencies were under mandatory conservation due to the inability to access available Colorado River Aqueduct and Diamond Valley Lake supplies. This project will construct two pump stations to reverse flows in the Sepulveda Feeder and deliver 30 cubic feet per second (cfs) of alternative supply from the Common Pool area to provide access to available supplies, with provisions for future expansion to 160 cfs.

PDB was selected as the delivery model, authorized under AB 1845, to enable early contractor involvement and collaborative design development. The DBE of J.F. Shea Construction Inc./Tetra Tech was selected in September 2023 under a qualifications-based RFQ process, which authorized Phase 1 design activities. Board-authorized amendments in 2024 enabled the procurement of additional long-lead equipment to expedite the project schedule. GMP No. 1 was authorized in July 2025 for completion of design at both sites, full construction at the Venice site pump station, and demolition work at the Sepulveda Canyon site.

Metropolitan is currently in final negotiations with the selected DBE and plans to return to the Board in August 2026 to recommend approval of GMP No. 2, covering slope remediation and construction at the Sepulveda site pump station. The total program cost for the Sepulveda Feeder Pump Stations is estimated at \$250–\$300 million. Carollo Engineers Inc., acting as the owner’s advisor, and Parametrix Inc., acting as Metropolitan’s independent cost estimator, are supporting the project. The project is expected to be completed by mid-2030.

Lake Mathews Pressure Control Structure and Electrical Upgrades (PDB)

The Lake Mathews facility, constructed in the 1930s, houses aging pressure-control infrastructure, including 10 32-inch Howell-Bunger valves, five 54-inch butterfly valves, and four outlet tower slide gates, all of which exhibit deterioration, including cracked concrete, corroded steel reinforcement, and degraded valves. The electrical distribution system, expanded in the 1960s, is similarly at capacity and requires replacement. Because the facility operates continuously with limited ability to schedule lengthy shutdowns, conventional rehabilitation approaches are not feasible.

The project will construct a new pressure control structure (PCS) alongside the existing forebay, allowing maintenance shutdowns and eliminating a single point of failure at this critical node. The new PCS and facility-wide electrical upgrades have been combined into a single contract to avoid conflicts between separate contractors, leverage early procurement advantages, and expedite the overall schedule. Planned work includes large-diameter control and isolation valves, a new building with mechanical and electrical systems, a bypass pipeline requiring tunneling and open-cut tie-ins, replacement of electrical distribution lines, and new/upgraded unit power centers.

PDB was selected as the delivery model for this project, authorized under SB 991, to enable early contractor involvement and collaborative design development. Metropolitan is currently in negotiations with the selected DBE and plans to return to the Board in August 2026 to recommend approval of Phase 1 design activities. The total program cost is estimated at \$300–\$350 million. Carollo Engineers Inc., acting as the owner’s advisor, and Parametrix Inc., acting as Metropolitan’s independent cost estimator, are supporting the project. The project is expected to be completed by 2033.

Pure Water Southern California (PDB and CM/GC)

At full buildout, PWSC would purify up to 150 million gallons per day (mgd). Implementation of PWSC would provide regional benefits by: (1) reducing reliance on imported water; (2) diversifying locally available supplies; (3) improving resilience to climate change and other water supply stressors; and (4) enhancing operational reliability and flexibility.

PWSC comprises several distinct projects, including the Advanced Water Purification Facility in Carson, 39 miles of backbone conveyance pipeline (divided into multiple reaches), several pump stations, various direct potable reuse treatment and conveyance facilities, and groundwater recharge facilities. While some of these projects, such as cut-and-cover pipeline reaches, may still be best suited for traditional DBB delivery, complex projects like the Advanced Water Purification Facility and Reaches 1 and 2 are well suited for PDB or CM/GC delivery under AB 1845. Pending the CAMP4W evaluation process and subsequent board decisions on program implementation, staff plan to release several qualifications-based solicitations for PDB and CM/GC firms. The tentative solicitation schedules for near-term PWSC work activities are listed below, with dates for the second and third bullets below being tied to Board deliberations of the PWSC project through the CAMP4W process:

- Release of Direct Potable Reuse Testing Facility CM/GC solicitation – summer 2026
- Release of the Advanced Water Purification Facility PDB solicitation – late 2026
- Release of Conveyance Reaches 1 and 2 CM/GC solicitations – late 2026

Mills Plant Control System Upgrade (PDB)

Metropolitan’s control system is used to operate, monitor, and collect critical information from Metropolitan facilities throughout Southern California. The existing system is nearing the end of its service life and needs to be upgraded to enhance the reliability and operating efficiency of Metropolitan’s core facilities. A comprehensive upgrade of the entire control system is needed to maintain reliable water deliveries over the long term. Replacement of the control system at the Henry J. Mills Water Treatment Plant is the first step in a planned upgrade of Metropolitan’s entire control system spanning the Colorado River Aqueduct, the five water treatment plants, and the entire conveyance and distribution system.

The planned work includes replacing computer servers, distributed field computers, input/output devices, software, and communication equipment at the Mills plant and Metropolitan’s chemical unloading facility. The control system upgrades will adopt industry-standard technology, programming, and modern architecture.

PDB was selected as the delivery model, authorized under SB 991, to enable collaborative design development, early contractor involvement, and procurement of specialized equipment by a DBE with established vendor relationships. Metropolitan is currently developing an RFQ and plans to return to the Board in early 2027 to recommend approval of Phase 1 design activities. The total cost for the Mills Plant Control System Upgrade is estimated at \$30–\$35 million. The project is expected to be completed by 2029.

Summary

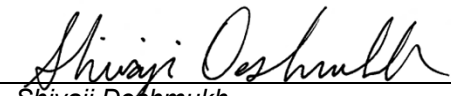
Alternative project delivery is proving to be a valuable tool for Metropolitan in delivering time-sensitive, risk-oriented, and complex projects such as those described above. Since the PDB implementation in 2023, the Sepulveda Feeder Pump Stations project has benefited from better collaboration and cost control/forecasting with Metropolitan and the DBE. The attributing factors include opportunities to lock in prices and delivery schedules for critical long-lead equipment, financial flexibility during the design and construction process through open-book accounting, risk-based allowances, and contingencies negotiated between the parties, and the ability to modify the work scope to address unforeseen conditions.



Mai M. Hattar
Chief Engineer
Engineering Services

6/22/2026

Date



Shivaji Deshmukh
General Manager

6/22/2026

Date

Ref# es12708124