



- **Board of Directors**  
***Engineering, Operations, and Technology Committee***

10/8/2024 Board Meeting

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8-2

## Subject

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Authorize on-call agreements with Black & Veatch Corporation, Burns & McDonnell Western Enterprises Inc., HDR Inc., and Stantec Consulting Services Inc., in amounts not to exceed \$3 million each, for a maximum of three years, for engineering services to support zero-emission vehicle infrastructure upgrades at Metropolitan facilities; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

## Executive Summary

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In May 2022, Metropolitan adopted a Climate Action Plan (CAP) to reduce Metropolitan's carbon footprint in the face of climate change and to offset greenhouse gas (GHG) emissions from future Metropolitan projects. Consistent with the CAP, Metropolitan has begun transitioning its vehicle fleet to a zero-emissions vehicle (ZEV) fleet to reduce carbon emissions. Recent regulations adopted by the California Air Resource Board's (CARB) Advanced Clean Fleets (ACF) requires that 50 percent of Metropolitan's new medium and heavy-duty vehicle purchases be ZEV after January 1, 2024, accelerating the need to procure and install infrastructure that supports the deployment of the ZEV fleet.

This action authorizes three-year on-call professional services agreements with Black & Veatch Corporation, Burns & McDonnell Western Enterprises Inc., HDR Inc., and Stantec Consulting Services Inc., in an amount not to exceed \$3 million each for the design and support services for ZEV-related infrastructure upgrades at various Metropolitan field sites. See **Attachment 1** for the List of Subconsultants.

## Proposed Action(s)/Recommendation(s) and Options

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### Staff Recommendation: Option #1

#### Option #1

Authorize on-call agreements with Black & Veatch Corporation, Burns & McDonnell Western Enterprises Inc., HDR Inc., and Stantec Consulting Services Inc., in an amount not to exceed \$3 million each, for a maximum period of three years, to provide design and support services related to the ZEV infrastructure upgrades at Metropolitan facilities.

**Fiscal Impact:** Expenditure of \$12 million in capital funds. Approximately \$6 million will be incurred in the current biennium and has been previously authorized. The remaining funds from this action will be accounted for and appropriated under the next biennial budget.

**Business Analysis:** Contracting with multiple firms provides flexibility and efficient means to complete design of the required infrastructure upgrades for ZEV in a timely manner, meet Metropolitan's CAP goals, and comply with all local, state, and federal regulations.

#### Option #2

Do not authorize the consulting agreements at this time.

**Fiscal Impact:** None

**Business Analysis:** Under this option, staff will continue design efforts for the infrastructure upgrades required for ZEV without support of specialized consultants, which will substantially delay the implementation of the upgrades, fleet transition, and compliance with state mandates.

### **Alternatives Considered**

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Metropolitan's staffing strategy for utilizing consultants and in-house Metropolitan staff has been: (1) to assess current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) utilize consultants for long-term rehabilitation projects when resource needs exceed available in-house staffing or require specialized technical expertise.

After assessing the current workload for in-house staff, required expertise, and the relative priority of this project, staff has determined that insufficient electrical engineering staff is available to ensure completion of the work by state-mandated timelines. Staff recommends utilizing a hybrid effort of consultants and Metropolitan staff for performance of this work. The consultants will perform the majority of the design work while Metropolitan staff will provide needed site support and perform control system design, project reviews, and oversight. This approach will allow for the completion of not only the ZEV infrastructure upgrades at various field sites simultaneously, but also other budgeted capital projects within their current schedules and ensure the work is conducted efficiently. Under these agreements, work assignments will be issued to consultants through task orders on a facility-by-facility basis.

### **Applicable Policy**

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Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

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

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By Minute Item 52823, dated May 10, 2022, the Board adopted the CAP.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of \$636.5 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26.

### **California Environmental Quality Act (CEQA)**

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#### **CEQA determination for Option #1:**

The proposed action is not defined as a project under CEQA because it will not result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. (State CEQA Guidelines Section 15378(a)).

#### **CEQA determination for Option #2:**

Not applicable

### **Details and Background**

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#### **Background**

Metropolitan owns and operates pump stations along the Colorado River Aqueduct, five regional water treatment plants, and a conveyance and distribution system that delivers water throughout Southern California. To operate these facilities and continue providing water to its customers, Metropolitan currently operates a fossil-fuel-based fleet of vehicles utilized by operators, technicians, and other Metropolitan staff for operations and maintenance activities. The fleet includes passenger; light-, medium- and heavy-duty on-road vehicles; off-road construction vehicles/equipment; forklifts; and rideshare vehicles.

In May 2022, Metropolitan adopted a CAP, which identifies ZEV fleet transition as a key measure to reduce GHG emissions. The ACF regulation adopted by the CARB, which became effective on January 1, 2024, has accelerated Metropolitan's ZEV transition. The ACF regulation mandates that 50 percent of all new fleet purchases of medium and heavy-duty vehicles, defined as vehicles weighing more than 8,500 pounds, occurring after January 1, 2024, be ZEVs. However, after January 1, 2027, the regulations require 100 percent of new on-road medium- and heavy-duty fleet vehicle purchases to be ZEVs.

Installing charging infrastructure is a key component of Metropolitan's ZEV transition and is required to support the ZEV fleet. Over 18 transportation hubs within the Metropolitan's facilities have been identified as potential charging locations, including water treatment plants and other field sites within Metropolitan's conveyance and distribution system. The fleet assets at these locations include approximately 380 light-duty vehicles, 350 medium-duty vehicles, 180 heavy-duty vehicles, and 70 construction vehicles. The provision of ZEV infrastructure upgrades at Metropolitan facilities will require engineering services beyond what can be supported by in-house staff or current engineering services on-call agreements over the next several fiscal years to meet the regulation timeline.

Four specialized on-call engineering service agreements are recommended for authorization to support the design of the ZEV infrastructure upgrades. On-call agreements are multi-year with not-to-exceed amounts and provide a high degree of flexibility to respond to schedule or scope adjustments, allow quicker delivery times, and lower administrative costs for both Metropolitan and the consultants. For these types of agreements, consultants are assigned work only after specific tasks are identified by staff, up to the not-to-exceed amounts of the contracts.

#### **Zero Emission Vehicle Infrastructure Upgrades – Design**

Planned upgrades include the procurement and installation of multiple new substations, addition of underground infrastructure to distribute power to the charging stations, and implementation of backup generation systems and utility service improvements to support zero-emission fleet vehicles.

Planned activities for the design of the ZEV infrastructure upgrades include: (1) detailed field inspections; (2) evaluation of industry standards and characteristics of recommended assemblies and equipment; (3) development of design criteria; (4) conceptual, preliminary, and final design activities and (5) development of construction cost estimates and schedules for the upgraded infrastructure at each site. These activities will be performed by four specialized on-call engineering service agreements, as discussed below. Metropolitan staff will perform overall project management, conduct surveys, compile record drawings, provide technical oversight, and review the consultant's work.

The total cost of districtwide ZEV infrastructure upgrades at Metropolitan facilities will be evaluated during the performance of the activities described above.

#### **Engineering Support for ZEV Infrastructure Upgrades (Black & Veatch Corporation, Burns & McDonnell Western Enterprises Inc., HDR Inc., and Stantec Consulting Services Inc.) – New Agreements**

Request for Qualifications (RFQ) 1368 was issued in March 2024 to establish a pool of qualified firms to provide engineering services related to the zero-emission vehicle infrastructure upgrades at Metropolitan's facilities. The RFQ covered services in three categories: ZEV infrastructure assessment and improvements, hydrogen fueling systems, and enterprise visualization analytics. The consultants submitted Statements of Qualifications (SOQs) for one or more of these three categories. Five firms submitted SOQs, which were then evaluated based on the expertise of the firm's staff, technical approach, proposed methodology, and capability for the planned work. Due to the large number of Metropolitan facilities and systems that would require ZEV infrastructure upgrades and to ensure that the work is completed in a timely manner, four firms are recommended to perform the work.

Black & Veatch Corporation, Burns & McDonnell Western Enterprises Inc., HDR Inc., and Stantec Consulting Services, Inc. are recommended for the engineering services detailed below based on their extensive expertise in ZEV infrastructure upgrades. In addition, their all-around experience will facilitate the assessment and analysis of Metropolitan's complex electrical systems, coordination with the utilities, and permitting with the cities.

Planned engineering services to be provided under the resulting agreements were identified in the RFQ and include conceptual, preliminary, and final design support for new facilities and rehabilitation of existing facilities; field investigations; utility and hazardous materials survey; planning studies; specialized technical analyses and reviews; cost estimating; engineering support during bidding; and other project support tasks such as permitting and providing relevant content to support grant/incentive applications and subsequent compliance reporting.

This action authorizes four specialized on-call agreements, each for a not-to-exceed total of \$3 million, for ZEV infrastructure upgrades at various Metropolitan field sites. For these agreements, Metropolitan has established a Small Business Enterprise participation level of 25 percent.

***Project Milestone***

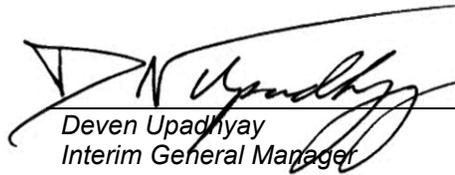
November 2027 – Completion of design activities for ZEV infrastructure upgrades



Mai M. Hattar  
Interim Chief Engineer  
Engineering Services

9/23/2024

Date



Deven Upadhyay  
Interim General Manager

9/25/2024

Date

**Attachment 1 – List of Subconsultants**

Ref# es12697330

**The Metropolitan Water District of Southern California**  
**Subconsultants for Agreement with Black & Veatch Corporation**

<b>Subconsultant and Location</b>	<b>Service Category; Specialty</b>
Ninyo & Moore Geotechnical & Environmental Sciences Consultants Los Angeles, CA	Geotechnical & Environmental Services
Converse Consultants Monrovia, CA	Geotechnical Services
Helix Environmental Planning Irvine, CA	Environmental Services
Aurora Industrial Hygiene South Pasadena, CA	Certified Asbestos Consultant Services
DRP Engineering Inc. Monterey Park, CA	Drafting/General Civil
MWA Architects Los Angeles, CA	Architectural

**The Metropolitan Water District of Southern California**

**Subconsultants for Agreement with Burns & McDonnell Western Enterprises Inc.**

<b>Subconsultant and Location</b>	<b>Service Category; Specialty</b>
Aurora Industrial Hygiene South Pasadena, CA	Certified Asbestos Consultant Services

**The Metropolitan Water District of Southern California**

**Subconsultants for Agreement with HDR Inc.**

<b>Subconsultant and Location</b>	<b>Service Category; Specialty</b>
Budlong & Associates Glendale, CA	Electrical / I&C
TJC & Associates (TJCAA) Oakland, CA	Electrical / I&C
DRP Engineering (DRP) Monterey Park, CA	Drafting
Guida, Inc. Irvine, CA	Subsurface Utility Locating
Diaz Yourman & Associates Santa Ana, CA	Geotechnical
Gregg Drilling LLC Signal Hill, CA	Geotechnical
Jacobus & Yuang Inc. Los Angeles, CA	Cost Estimating
J. Stanley Consulting Inc. Oakland, CA	Certified Asbestos Inspection

**The Metropolitan Water District of Southern California**  
**Subconsultants for Agreement with Stantec Consulting Services Inc.**

<b>Subconsultant and Location</b>	<b>Service Category; Specialty</b>
Power Systems Testing Co. Santa Ana, CA	Electrical
MWA Architects Los Angeles, CA	Architectural
Converse Consultants Monrovia, CA	Geotechnical
DRP Engineering Inc. Monterey Park, CA	Engineering Design & Drafting
Project Line Technical Services Inc. Rancho Palos Verdes, CA	Engineering Design & Drafting
T2 Utility Engineering Huntington Beach, CA	Utility Locating
Towill Inc. Orange, CA	Surveying