



● **Board of Directors**
Engineering and Operations Committee

1/9/2018 Board Meeting

7-2

Subject

Adopt CEQA determination and appropriate \$1.45 million; award \$374,359 procurement contract to Flow International Corp. to furnish a waterjet cutting system; award \$332,939 procurement contract to North South Machinery to furnish a hydraulic press brake; and authorize increase of \$200,000 to an agreement with Richard Brady & Associates, for a new not-to-exceed total of \$446,000, for the La Verne Shops Upgrades (Appropriation No. 15395)

Executive Summary

This action awards two procurement contracts for fabrication equipment at Metropolitan's La Verne Shops. This action also provides funding for an additional piece of equipment that will be purchased under the General Manager's authority. The shops enable Metropolitan to refurbish critical equipment, fabricate pipe, and provide assistance to member agencies and the California Department of Water Resources (DWR). The shops are an important element of Metropolitan's emergency response capability.

Timing and Urgency

The primary construction to expand the La Verne Shops was completed in 2014. Several remaining activities are underway that must be completed in order to place the upgraded facilities into full operation. These activities include procurement and installation of new equipment, refurbishment of existing equipment, and completion of building and utility improvements. This action procures three new pieces of equipment. Staff will return to the board in early 2018 to award a procurement contract for the final equipment item to be installed, and in late 2018 to award the final construction contract to complete all remaining work in the project.

This work has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included in the System Reliability Program. Funds for this action are available within Metropolitan's capital investment plan for fiscal year 2017/18.

Details

Background

The La Verne Shops enable major mechanical equipment to be refurbished and large-diameter pipe to be fabricated to support Metropolitan's ongoing maintenance activities, capital projects, and emergency response capability. The shops also provide support to DWR and to Metropolitan's member agencies on a reimbursable basis. While most of the work performed by the shops is planned in advance, urgent support is sometimes provided on short notice. The La Verne Shops are located on the grounds of the F. E. Weymouth Water Treatment Plant and have been in service since 1941. The shops were expanded in the 1960s when larger facilities were constructed, and were expanded again in the 1980s to support a major rehabilitation of the pumps along the Colorado River Aqueduct.

The La Verne Shops have the capability to fabricate critical components for pumps, valves, and piping within a rapid time frame to respond to emergencies and shutdowns. Recently, the shops fabricated 92-inch-diameter steel

liner pipe for urgent repairs to prestressed concrete cylinder pipe (PCCP) on the Sepulveda Feeder. Use of the pipe fabrication shop expedited the repairs and was less costly than other potential sources for the pipe. Under a reimbursable agreement, the La Verne Shops also provided support to DWR recently by manufacturing new pump components for the Gianelli Pump/Generating Plant Unit No. 3, and by fabricating two 12-foot by 10-foot steel trash gates for the Oso Pumping Plant. The new gates replaced existing units that had experienced extensive corrosion damage.

Metropolitan has maintained a reimbursable agreement with DWR since the 1980s to provide shop services that support maintenance activities for the State Water Project. These services have included machining, fabrication, welding, coating, disassembly and reassembly of turbo-machinery, repair of bearings, diving services, equipment transportation, and shop engineering services. On an annual basis, the shops provide DWR up to \$5 million in contracting services.

The La Verne Shops Upgrades project was initiated in 2002 and has been executed in stages. This sequential approach was followed to enable the construction and modernization work to be completed without impacting the shops' ability to execute planned work or respond to emergencies. Following are the key elements of work:

- Stage 1 included refurbishment and replacement of 12 pieces of equipment in the existing machine and fabrication shop buildings, which was completed in 2006.
- Stage 2 included replacement of the existing machine shop roof, retrofit of the existing fabrication shop building to meet current seismic codes, and upgrade of the bridge cranes in the machine and fabrication shops to improve safety and handling of materials and equipment. This work was completed in 2011.
- Stage 3 included expansion of the existing coating shop buildings, which was completed in 2013.
- Stage 4 includes integration of the fabrication and machine shop functions within a single larger building, building and utility upgrades, refurbishment of existing equipment, and installation of new equipment. The building expansion was completed in 2014. The remaining work will be executed under a single "completion" contract that has the following components:
 - Building and utility upgrades – The work includes water line extensions, installation of a new electrical circuit and unit power center, addition of an air compressor and compressed air lines, shop heaters, and safety enhancements such as walkways and roof access ladders.
 - Equipment refurbishment - The equipment to be refurbished includes an existing medium-sized floor mill that is used to refurbish gates and valves, and a blast booth. The floor mill refurbishment includes replacement of electrical wiring, electric drive motors, and instruments and controls. The blast booth refurbishment includes the replacement of floor grating, doors, air intake manifold, and controls.
 - Installation of new equipment – The work includes installation of new equipment that is being procured under Stage 5. Each manufacturer's configuration for its equipment is unique. As a result, the specific requirements for each equipment item, such as foundation and access pits, electrical load, and mechanical support utilities, will be custom-designed and incorporated into the stage 4 completion contract.
- The fifth and final stage focuses on the procurement of fabrication and machine shop equipment, including a hydraulic shear, hydraulic press brake, waterjet cutting system, and vertical milling center. This new equipment will replace existing equipment that is between 25 to 35 years old and is not viable to refurbish. The subject action completes procurement of the hydraulic shear, hydraulic press brake, and waterjet cutting system. Staff will return to the Board in early 2018 for award of a procurement contract for the vertical milling center. All of these equipment items will be installed under the completion contract included in Stage 4.

Final design of the Stage 4 work is currently underway, and staff will return the Board in late 2018 for award of the construction contract. The total estimated cost to complete the La Verne Shop Upgrades, including the

amount appropriated to date, current funds requested, and future procurement and construction costs, is anticipated to range from \$50 million to \$53 million.

La Verne Shops Upgrades, Stage 5 – Procurement of Shop Equipment (\$1,250,000)

Procurement specifications for the hydraulic shear, water jet cutting system, and hydraulic press brake were completed in September 2017, and competitive bids have been received. Staff recommends award of the procurement contracts at this time.

Specifications No. 1919 for furnishing a hydraulic shear was advertised on October 2, 2017. As shown in **Attachment 2**, two bids were received and opened on November 4, 2017. The low bid from Landmark Solutions, LLC in the amount of \$146,925 complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the state of California. The budgetary estimate for this equipment, based on a survey of vendors, ranged from \$100,000 to \$150,000.

Specifications No. 1920 for furnishing a waterjet cutting system was advertised on October 2, 2017. As shown in **Attachment 2**, five bids were received and opened on November 4, 2017. The low bid was deemed to be non-responsive. The second low bid from Flow International Corp. in the amount of \$374,359 complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the state of California. The budgetary estimate for this equipment, based on a survey of vendors, ranged from \$300,000 to \$400,000.

Specifications No. 1921 for furnishing a hydraulic press brake was advertised on October 2, 2017. As shown in **Attachment 2**, two bids were received and opened on November 4, 2017. The low bid from North South Machinery in the amount of \$332,939 complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the state of California. The budgetary estimate for this equipment, based on a survey of vendors, ranged from \$300,000 to \$400,000.

For bid evaluation purposes on each of these three specifications, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets SBE or DVBE criteria and the RBE criteria. As procurement contracts, there are no subcontracting opportunities.

This action appropriates \$1.45 million; awards a \$374,359 procurement contract to Flow International Corp. for the waterjet cutting system, and awards a \$332,939 procurement contract to North South Machinery for the hydraulic press brake. The procurement contract for the hydraulic shear, in the amount of \$146,925, is planned to be awarded under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. In addition to the amount of the procurement contracts, the appropriated funds include: \$200,000 for design to integrate the new equipment into the Stage 4 completion contract, which will be performed by Richard Brady & Associates, as described below; \$38,000 for fabrication inspection and functional testing of the equipment; \$27,000 for review of submittals and responding to technical requests for information; \$39,000 for contract administration and project management; and \$291,777 for remaining budget. All factory fabrication inspection activities will be performed by Metropolitan staff.

Engineering Design Services (Richard Brady & Associates) – Amendment to Agreement

Final design of the remaining building and utility upgrades under Stage 4 of the La Verne Shops Upgrades is currently underway, and is being performed by Richard Brady & Associates under a board authorized agreement. Due to its extensive experience in the design of electrical and shop building-related improvements, Richard Brady & Associates is recommended to perform final design to integrate the custom-built equipment into the Stage 4 completion contract.

The planned scope includes: design to modify the original fabrication shop buildings' concrete floor area for the installation of each new machine, and electrical and mechanical support systems based on their specific configuration and utility requirements. The original fabrication shop building floor was designed in accordance

with the building code in place in the early 1980's. The floor design must be updated to support the new machines and meet current building code requirements. Final design activities will include: (1) preparation of drawings and specifications and (2) development of a construction cost estimate. The estimated cost to perform this work is \$200,000. For this agreement, Metropolitan established an SBE participation level of 20 percent. Richard Brady & Associates has agreed to meet this level of participation. The planned subconsultants under this agreement are P2S and Structural Integrity Associates.

Summary

This action appropriates \$1.45 million, awards two procurement contracts for shop equipment, provides funding for a third procurement contract to be awarded under the General Manager's authority, and authorizes an amendment to an agreement for design support. This work has been evaluated and recommended by Metropolitan's CIP evaluation team, and funds are available within the fiscal year 2017/18 capital expenditure plan. See **Attachment 1** for the Financial Statement, **Attachment 2** for the Abstracts of Bids, and **Attachment 3** for the Location Map.

This project is included within capital Appropriation No. 15395, the La Verne Shops Facilities Upgrades, which was initiated in fiscal year 2002/03. With the present action, the total funding for Appropriation No. 15395 will increase from \$40.75 million to \$42.2 million. The total estimated cost to complete the upgrades, including the amount appropriated to date, current funds requested, and future procurement and construction costs, is anticipated to range from \$50 million to \$53 million.

Project Milestones

October 2018 – Completion of design of remaining building and utility upgrades under Stage 4 of the La Verne Shops Upgrades

February 2019 – Delivery of the hydraulic shear, hydraulic press brake, and water jet cutting system

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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

By Minute Item 50321, dated December 8, 2015, the Board authorized design to complete Stage 4 and Stage 5 of the La Verne Shops Upgrades.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The environmental effects from the La Verne Shops Upgrades project were evaluated in the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program Final Environmental Impact Report (Final EIR), which was certified by the Board on April 12, 2005. The Board also approved the Findings of Fact (findings), the Statement of Overriding Considerations (SOC), the Mitigation Monitoring and Reporting Program (MMRP), and the project itself. The current action is solely based on authorizing procurement of three equipment items and not on any changes to the approved project itself. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action has been previously addressed in the certified Final EIR, findings, SOC, and MMRP, and that no further environmental analysis or documentation is required, and

- a. Appropriate \$1.45 million;
- b. Award \$332,939 procurement contract to North South Machinery to furnish a hydraulic press brake;
- c. Award \$374,359 procurement contract to Flow International Corp. to furnish a water jet cutting system; and
- d. Authorize increase of \$200,000 to an agreement with Richard Brady & Associates, for a new not-to-exceed total of \$446,000, for the La Verne Shops Upgrades.

Fiscal Impact: \$1.45 million in capital funds under Appropriation No. 15395

Business Analysis: This option will provide critical shop equipment that will be used for urgent repairs and routine maintenance within Metropolitan's distribution system.

Option #2

Do not award the procurement contracts or authorize the professional services agreement.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to replace critical shop equipment and complete the planned upgrades to the La Verne Shops, which may impact Metropolitan's ability to perform urgent repairs or respond to emergencies.

Staff Recommendation

Option #1


 _____ 12/20/2017
 Gordon Johnson
 Manager/Chief Engineer
 Engineering Services
 Date


 _____ 12/21/2017
 Jeffrey Kightlinger
 General Manager
 Date

Attachment 1 – Financial Statement

Attachment 2 – Abstracts of Bids

Attachment 3 – Location Map

Financial Statement for the La Verne Shops Facilities Upgrades Appropriation

A breakdown of Board Action No. 9 for Appropriation No. 15395¹ is as follows:

	Previous Total Appropriated Amount (May 2016)	Current Board Action No. 9 (Jan. 2018)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 197,000	\$ -	\$ 197,000
Final Design	2,285,931	-	2,285,931
Owner Costs (Program mgmt., contract admin.)	1,762,000	39,000	1,801,000
Submittals Review & Record Drwgs.	632,000	27,000	659,000
Construction Inspection and Support	3,723,151	19,000	3,742,151
Metropolitan Force Construction	570,000	19,000	589,000
Materials & Supplies	1,306,673	-	1,306,673
Landmark Solutions, LLC	-	146,925	146,925
Flow International Corp.	-	374,359	374,359
North South Machinery	-	332,939	332,939
Incidental Expenses	83,300	-	83,300
Professional/Technical Services	3,168,900	-	3,168,900
Richard Brady & Associates	821,000	200,000	1,021,000
Equipment Use	15,000	-	15,000
Contracts	26,094,468	-	26,094,468
Remaining Budget	90,577 ²	291,777	382,354
Total	\$ 40,750,000	\$ 1,450,000	\$ 42,200,000

Funding Request

Appropriation Name:	La Verne Shops Facilities Upgrades		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15395	Board Action No.:	9
Requested Amount:	\$ 1,450,000	Budget Page No.:	241
Total Appropriated Amount:	\$ 42,200,000	Total Appropriation Estimate:	\$ 60,900,000

¹ The total amount expended to date on the La Verne Shops is approximately \$40.5 million. The total estimated cost to complete the upgrades, including the amount appropriated to date, current funds requested, and future equipment procurement and construction costs, is anticipated to range from \$50 to \$53 million.

² Reflects transfer of \$403,423 from Remaining Budget to Final Design for completing design of the new unit power center, roof drain, and air compressor system, and developing a procurement specification for a vertical milling center.

The Metropolitan Water District of Southern California

Abstract of Bids Received on November 4, 2017 at 2:00 P.M.

Specifications No. 1919

Furnishing Hydraulic Shear for the La Verne Maintenance Shops

The work includes the fabrication and delivery of a hydraulic shear.

Estimated range of cost: \$100,000 to \$150,000

Bidder and Location	Base Bid Price Total ¹	Small Business or Disabled Veteran Business (Y/N)	Regional Business (Y/N)	Bid Price Reduction for SBE/DVBE and/or RBE ²	Equalization Factor for Inspection ²	Total Evaluated Bid Price
Landmark Solutions, LLC Tustin, CA	\$146,925	Y	Y	(\$14,270)	\$4,560	\$137,215
North South Machinery Brea, CA	\$142,705	N	Y	(\$7,135)	\$4,560	\$140,130

¹ Includes sales and use taxes of 7.5 percent imposed by the state of California.

² For bid evaluation purposes, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets the SBE or DVBE criteria and the RBE criteria. An additional bid-price adjustment was included for inspection costs based on the location of manufacturer.

The Metropolitan Water District of Southern California

Abstract of Bids Received on November 4, 2017 at 2:00 P.M.

Specifications No. 1920

Furnishing Water Jet Cutting System for the La Verne Maintenance Shops

The work includes the fabrication and delivery of a water jet cutting system.

Estimated range of cost: \$300,000 to \$400,000

Bidder and Location	Base Bid Price Total ¹	Small Business or Disabled Veteran Business (Y/N)	Regional Business (Y/N)	Bid Price Reduction for SBE/DVBE and/or RBE ²	Equalization Factor for Inspection ³	Total Evaluated Bid Price
Tornquist Machinery Brea, CA ³	\$373,787	Y	Y	(\$25,000)	\$4,560	\$353,347
Flow International Corp. Orange, CA	\$374,359	N	N	-	\$3,360	\$377,719
Semyx, LLC Dalton, GA	\$406,480	Y	N	(\$12,500)	\$7,170	\$401,150
Landmark Solutions Tustin, CA	\$424,419	Y	Y	(\$25,000)	\$7,170	\$406,589
Manufactures Credit Solutions Coto De Caza, CA ³	\$421,895	N	N	-	\$3,360	\$425,255

¹ Includes sales and use taxes of 7.5 percent imposed by the state of California.

² For bid evaluation purposes, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets the SBE or DVBE criteria and the RBE criteria. An additional bid-price adjustment was included for inspection costs based on the location of manufacturer.

³ Bid was deemed to be non-responsive.

The Metropolitan Water District of Southern California

Abstract of Bids Received on November 4, 2017 at 2:00 P.M.

**Specifications No. 1921
Furnishing Hydraulic Press Brake for the La Verne Maintenance Shops**

The work includes the fabrication and delivery of a press brake.

Estimated range of cost: \$300,000 to \$400,000

Bidder and Location	Base Bid Price Total ¹	Small Business or Disabled Veteran Business (Y/N)	Regional Business (Y/N)	Bid Price Reduction for SBE/DVBE and/or RBE ²	Equalization Factor for Inspection ³	Total Evaluated Bid Price
North South Machinery Brea, CA	\$332,939	Y	N	(\$12,500)	\$4,560	\$324,999
Landmark Solutions, LLC Tustin, CA	\$543,851	Y	Y	(\$25,000)	\$4,560	\$523,411

¹ Includes sales and use taxes of 7.5 percent imposed by the state of California.

² For bid evaluation purposes, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets the SBE or DVBE criteria and the RBE criteria. An additional bid-price adjustment was included for inspection costs based on the location of manufacturer.

