

ALAMEDA COUNTY WATER DISTRICT

MEMORANDUM

DATE: August 31, 2010
TO: Board of Directors
FROM: Walt Wadlow
SUBJECT: STAFF REPORT, ACTION CALENDAR ITEMS FOR September 9, 2010

5.1* RESOLUTION HONORING STEVEN LAMBRECHT UPON HIS RETIREMENT FROM DISTRICT SERVICE

SUMMARY: Steve Lambrecht will retire effective September 10, 2010, with 23 years of service with the District. Steve is a Utility Worker Leader in the Operations Department.

RECOMMENDATION: By motion, adopt a resolution honoring Steven Lambrecht and expressing appreciation for 23 years of service.

DISCUSSION: Steve started with the District as a Utility Worker I on January 26, 1987; bringing with him his extensive expertise in welding, pipe fitting, and in the operation of construction equipment. He made an immediate impact on the organization by having a natural ability to perform each of the Utility Worker duties well and quickly became an outstanding employee. There never seemed to be a job too difficult for Steve to handle. He was the lead worker on a number major leak repairs as well as in the installation of complicated and unusual service line connections. Additionally, one could always count on Steve to respond to leak emergencies regardless of the time-of-day. In 2005, Steve and a number of his fellow employees traveled to Slidell, Louisiana, to help rebuild the Slidell water system after hurricane Katrina devastated much of utility infrastructure in the area.

Steve has always been willing to share his knowledge with others. In his last position as Utility Worker Leader, he was responsible for conducting construction management training to improve the skills of other Utility Workers. Steve's dedication to public service, high quality work, and his extensive job knowledge are acknowledged by his supervisors, fellow workers, and private contractors. Steve will be truly missed by all of us at the District.

5.2* AUTHORIZATION OF PURCHASE ORDER AMENDMENT FOR FABRICATING AND INSTALLING UTILITY TRUCK BODIES

SUMMARY: On April 13, 2010, the Board authorized a purchase order to Scelzi Enterprises, Inc. (Scelzi) for the fabrication and installation of utility truck bodies on five Ford F-650s for \$285,843.88. Because the Ford F-650 will be a new vehicle in the District's fleet, the final design of the corresponding new utility truck body extended into the fabrication phase of the utility body purchase order contract. Upon review of the shop fabrication drawings, District staff identified additional items that need to be made to the new utility truck bodies. Staff negotiated a cost of \$11,963 per truck (\$59,815 for five trucks), for the additional fabrication work. There is sufficient

funding in the budget for this expenditure.

RECOMMENDATION: By motion, authorize a purchase order amendment to Scelzi Enterprises, Inc., for the fabrication and installation of additional items on five utility truck bodies in the amount of \$59,815.

DISCUSSION: The District currently utilizes a Freightliner and Ford F-350s, 450s and 550s for its utility truck fleet. After an evaluation of various truck sizes and makes was completed last year, the Ford F-650 was selected as the truck that best meets the needs of Distribution Maintenance Division field crews. A new utility body specification needed to be developed for the Ford F-650 and subsequently, the fabrication and installation contract was bid and then awarded to Scelzi. As required by the contract, Scelzi submitted shop fabrication drawings for the new utility body design based on the specifications provided by the District. However, the District's review of the drawings revealed that several items necessary to improve worker safety and work efficiency in the field were needed. These items include the relocation of where a jackhammer is stored on the truck, installing a powered air hose reel instead of a manual hose reel, strobe caution lights for improved safety, and a tie down system to better secure the items in the truck bed. Fabrication of the utility bodies is scheduled to begin by mid-September and the delivery of the new vehicles is expected by the end of October 2010.

5.3* AUTHORIZATION OF PURCHASE ORDER FOR HARDWARE, SOFTWARE AND SERVICES RELATED TO STORAGE AREA NETWORK, SERVER VIRTUALIZATION AND NOVELL TO WINDOWS MIGRATION

SUMMARY: The recently completed Information Technology Master Plan (ITMP) identified the need to implement upgrades to the existing ACWD Computer Network. These upgrades include provisioning of hardware, software and services for the installation of Storage Area Network, Server Virtualization, and migration from Novell to Windows network environment. The IT consulting firm of ExtraTeam was identified as the best company providing the appropriate solution. There is adequate funding in the budget to implement these upgrades.

RECOMMENDATION: By motion, 1) authorize a purchase order to ExtraTeam in the amount not to exceed \$231,211 to provide hardware, software and consulting services for implementation of Storage Area Network, Server Virtualization and Novell to Windows Migration and; 2) authorize the General Manager to enter into a services agreement with ExtraTeam.

DISCUSSION: The District's adopted IT Master Plan recommends the upgrade of District Network Environment by utilizing current IT best practices that include the following technologies:

- Storage Area Network (SAN) which provides for a common storage platform for multiple physical servers thereby eliminating the need to purchase storage for each server and increasing the utilization of purchased storage.
- Server Virtualization which allows for the consolidation of multiple underutilized servers on a single physical server thereby improving memory and computer processor utilization, reducing power and cooling costs, and providing additional disaster recovery options.

- Moving from an end-of-life Novell Netware platform to a Microsoft Windows network platform. The District currently operates different hardware and software platforms and this migration will allow the District to standardize its computing platform and reduce complexity in its IT environment.

The District issued a Request for Proposal (RFP) to provide hardware, software and implementation services related to SAN, Server Virtualization and Novell to Windows migration. The proposal was sent to 17 different vendors and IT consulting firms that have experience in providing the appropriate hardware, software and implementation services. The District received five (5) written proposals for the RFP which were individually reviewed by a selection committee comprised of Information Technology staff. The proposals were ranked based on criteria that included expertise and experience in providing implementation services, project approach and professional services, and the proposed cost. The selection committee decided to invite two firms, STA, Inc and ExtraTeam for interviews.

Based on a consensus of the selection committee, ExtraTeam was found to be the best qualified firm providing the appropriate hardware, software and implementation services that would meet the needs of the District. Total cost, including hardware, software, and implementation services will not exceed \$231,211. There are sufficient funds in the budget for this project.

5.4* AUTHORIZATION OF PURCHASE ORDER FOR CONSULTING SERVICES FOR SCADA SYSTEMS DEVELOPMENT WORK

SUMMARY: The District uses consulting services to assist District staff with the development and support of its Supervisory Control and Data Acquisition (SCADA) software and computer databases on an annual basis. The current contract with Steven K. Schaffer to provide technical computer software related services will expire at the end of September 2010 and a new purchase order is now needed to continue these services for FY10/11. There is adequate funding in the budget for this expenditure.

RECOMMENDATION: By motion, 1) authorize a purchase order to Steven K. Schaffer, in an amount not to exceed \$98,350 for consulting services for SCADA system and computer database development and support; and 2) authorize the General Manager to execute a services agreement.

DISCUSSION: The District uses individual SCADA systems to monitor and control four water treatment facilities, watershed and groundwater recharge facilities, and the distribution system. A prerequisite for these systems in performing monitoring and automated control functions is the requirement for these systems to collect and store data from on-line treatment and distribution system instruments (e.g., analyzers, sensors, probes, etc.), as well as data manually entered by Water Treatment Plant Operators. The scope of work for the needed consultant services includes troubleshooting various SCADA system and database problems and assistance with modifications and upgrades to SCADA systems to provide SCADA control to new facilities and improve SCADA control to existing ones. Services are also needed to assist with modifications to databases that are periodically necessary to meet required regulatory reporting changes, upgrades to improve security and upgrades to improve the database replication system to provide adequate backup.

Mr. Schaffer has been an integral part of the development of most of the District's SCADA systems and associated databases. This means he is intimately familiar with our SCADA system standards and protocols. This familiarity allows him to be cost effective in troubleshooting existing control and database system problems and to have a short learning curve on new projects and tasks. Additionally, Mr. Schaffer's hourly rates are considerably lower than the rates from either our SCADA system software publisher or qualified consulting firms who could provide similar technical support services. The consultant services will be performed on a time-and-materials basis as directed by the District. Mr. Schaffer's proposal for this year's scope of work has been reviewed by staff and the cost for these services has been determined to be fair and reasonable.

5.5* AUTHORIZATION OF ENGINEERING SERVICES FOR LOX CONVERSION PILOT TESTING AT WATER TREATMENT PLANT NO. 2

SUMMARY: The modification project to convert from the use of air-fed to liquid oxygen (LOX)-fed ozone generation at Water Treatment Plant No. 2 (WTP2) is included in the District's Capital Improvement Program. The purpose of the project is to minimize operational costs (primarily energy and maintenance costs) and increase the reliability of the ozone generation system. However, a pilot study is needed to evaluate the potential impact of the LOX conversion on bromate formation control techniques. District staff has determined that Water Quality & Treatment Solutions, Inc. (WQTS) is the engineering consultant best suited to provide the pilot testing services. Adequate funds are currently available in the LOX conversion project budget to cover this expense.

RECOMMENDATION: By motion, 1) authorize a purchase order to Water Quality & Treatment Solutions, Inc. for engineering services to conduct a pilot study in an amount not to exceed \$92,810; and 2) authorize the General Manager to execute a services agreement.

DISCUSSION: Bromate is a regulated disinfection byproduct formed when bromide in the raw source water reacts with the ozone used for disinfection at WTP2. In late 2009, District staff with the assistance of WQTS, completed a 2-year study of bromate formation control techniques. A key finding of the study was that a small chloramine addition ahead of ozonation (or pre-chloramination) results in a significant reduction in bromate formation at considerably lower cost than conventional pH suppression. However, the results of bench scale and full plant scale testing were all based on the use of air-fed ozone generation equipment. Because ozone concentration, mixing and contact time are the important factors that affect bromate formation, the planned conversion to LOX-fed ozone generation may affect the current bromate control techniques. A pilot study is now needed before the LOX conversion project proceeds to determine whether the pre-chloramination technique needs to be modified and will still work.

At the District's request, WQTS has submitted a proposal to perform LOX vs. air-fed generated ozone pilot testing to evaluate the effectiveness of the bromate control techniques that have already been proven using WTP2's present air-fed ozonation system. Based on the firm's familiarity with WTP2 and its recently completed bromate formation control study, WQTS was determined as being the firm best suited to perform the pilot study. WQTS's estimate for this work is \$92,810 and includes a 10% contingency. The consultant services will be performed on a time-and-materials basis as directed by the District. WQTS staff will provide the labor to operate the pilot plant to minimize the impact on District staff. The proposal from WQTS has been reviewed by staff and the scope of work, technical approach, schedule and level of effort are reasonable.

5.6* RESOLUTION APPROVING AND AUTHORIZING THE DESIGNATION OF CERTAIN PRODUCTS BY SPECIFIED BRAND OR TRADE NAME

SUMMARY: Annually, District staff prepares a list of standardized components for public works projects planned for the up-coming fiscal year. The specifying of standardized components allows the opportunity for substantial cost savings in reduced spare parts inventory and staff training on the operation and repair of equipment.

RECOMMENDATION: By motion, adopt a resolution finding that the identified instrument and control equipment will be designated by specific manufacturer or make/model for public works projects advertised during FY 10/11.

DISCUSSION: Public Contract Code Section 3400 allows the District to procure equipment by designating the specific make or model by making a finding that is included in the invitation for bids for the particular material or piece of equipment for any of the following purposes:

1. To test a product to determine its suitability for future use.
2. To match other products in use (i.e., standardize) on a public improvement either completed or proposed.
3. To obtain a necessary item that is only available from one source.
4. To respond to an emergency declared by the local agency.

For FY 10/11, there are several capital projects that include instrument and control equipment that District staff desires to standardize. These projects include, for example, instrument or PLC hardware upgrade replacements at multiple District facilities (e.g., Rubber Dam 3, Water Treatment Plant No. 2, Mission San Jose Water Treatment Plant, and at the Peralta-Tyson Blending Facility).

Attached to the Resolution proposed to be adopted to implement staff's recommendation, is a table listing the instruments and control devices that District staff desires to standardize. The table lists the instrument and control devices, the manufacturer, makes and/or models, and the justification for standardizing (e.g., matches other products or test for future use). The changes made to last year's list are shown in bold italics.

All of the materials and equipment listed have been previously evaluated as best meeting the District's needs based on equipment performance (i.e., accuracy, repeatability), reliability, purchase and maintenance costs, parts and service availability, and function applicability.

5.7* RESOLUTION SETTING AMOUNT TO BE COLLECTED FOR CERTAIN FISCAL YEAR 10/11 PROPERTY TAXES

SUMMARY: Beginning in Fiscal Year 78/79 and each year thereafter, the Board of Directors has levied a tax for payment of the groundwater portion of the District's State Water Contract Costs.

RECOMMENDATION: By motion, adopt a resolution setting the amount of taxes to be collected for FY 10/11 to pay the State Water Contract costs at \$2,803,000.

DISCUSSION: The amount of funding required this fiscal year to fund the groundwater portion of

the State Water Contract cost is \$2,803,000. This amount must be reported to the Alameda County Auditor so that it can be collected on the FY 10/11 property tax rolls. The amount required is based upon cost projections provided by the State of California Department of Water Resources and is less than the \$3,389,000 amount estimated in the FY 10/11 budget due to adjustments for actual tax collections during FY 09/10 and the actual State Water Contract cost payments in FY 09/10.

5.8 RESOLUTION ADOPTING THE SEPTEMBER 2010 WATER SUPPLY ASSESSMENT FOR THE MIDTOWN COMMUNITY PLAN PROJECT

SUMMARY: The City of Fremont has requested a Water Supply Assessment for the Midtown Community Plan Project (“Project”) pursuant to California Water Code Section §10910. Staff has determined the Project to consistent with the demand forecast and is included in current water supply planning assumptions.

RECOMMENDATION: By motion, 1) adopt a Resolution adopting the September 2010 Water Supply Assessment for the Midtown Community Plan Project; and 2) authorize and direct the General Manager to submit the September 2010 Water Supply Assessment for the Midtown Community Plan Project to the City of Fremont.

DISCUSSION: The Project involves a combination of in-fill and redevelopment with mixed uses. The site is presently developed with a substantial amount of commercial activity. The Project will change the land-use zoning to allow for up to 2,500 high density housing units, 2.0M sq. ft. of office and 443,000 sq. ft. retail building area, and 280,000 sq. ft. of civic-use building area with 2.3 acres of open space, including a performing arts venue and plazas. The Project site covers approximately 110-acres and is located in Central Fremont, bounded by Paseo Padre Pkwy, Fremont Blvd, Walnut Ave, and Mowry Ave. Actual development of the site will be by individual private parties and the schedule will be dictated by market demand for such development. Staff estimates that the total water demand on site will increase from the current level of 165 AF/yr by approximately 745 AF/yr to a total of 910 AF/yr.

The water supply assessment provides a comparison of ACWD water supplies and projected future demands. This Project is within an area identified in the Association of Bay Area Government (ABAG) publication *Projections and Priorities 2009* as a Priority Development Area for increased density. ACWD demand forecasting and water supply planning includes all ABAG projections. Staff concludes that the type and level of development proposed in the Project are consistent with the ABAG figures and is therefore consistent with current planning and will not result in increased shortages from that which are already factored into ACWD’s planning. However, in order to minimize the additional demands on ACWD’s potable water system, the water supply assessment requires that the City include in the project description the Project be constructed with the latest technology on water conservation measures.

5.9 RESOLUTION FINDING THE PERALTA-TYSON WELLFIELD UPGRADE PROJECT CATEGORICALLY EXEMPT FROM CEQA AND APPROVING THE PROJECT

SUMMARY: The scope of the Peralta-Tyson Wellfield Upgrade Project (Project) includes new line-shaft pumping equipment, two new pump enclosure buildings, minor piping modifications, and new concrete pump pedestals and building slabs. The Project is subject to the California Environmental

Quality Act (CEQA).

RECOMMENDATION: By motion, adopt a resolution that 1) finds the Peralta-Tyson Wellfield Upgrade Project to be categorically exempt from CEQA, and 2) approve the Project, Job 6464.

DISCUSSION: The existing eight wells at the District's Peralta-Tyson (PT) Wellfield are equipped with three submersible and five line shaft pumping units. The existing submersible pumping equipment installed within PT Wells 2 and 7 has reached the end of its serviceable life. The five existing PT line-shaft pumps have required less maintenance than the submersible units and have also provided extended years of reliable service. Accordingly, the Capital Improvement Program includes funding to gradually replace the submersible pumping units with line-shaft pumps. To protect the pumping equipment, new enclosure buildings are required.

The Project is categorically exempt from CEQA because it falls within one or more of the following Categorical Exemptions: (1) Class 1 Exemption under Section 15301, alteration of existing facilities; (2) Class 2 Exemption under Section 15302, replacement or reconstruction of existing facilities; or (3) Class 3 Exemption under Section 15303, new construction or conversion of small structures.

The replacement and construction of pumping equipment, piping, accessory buildings and building pads will not constitute an expansion of the existing use, nor increase the capacity of the existing facilities, and are therefore categorically exempt.

Funds for the Project were allocated in the FY 10/11 adopted budget. The project bid period is planned to begin in October 2010 and award of the project is anticipated to occur at the December 2010 Board Meeting.

5.10 RESOLUTION ACCEPTING COMPLETION OF CONTRACT WITH R.J. GORDON FOR WATER MAIN RELOCATIONS TO ACCOMMODATE THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION BAY DIVISION PIPELINE NO. 5 PROJECT

SUMMARY: The Board previously awarded three separate construction contracts to two different contractors to perform the pipeline relocation work required to accommodate the San Francisco Public Utilities Commission (SFPUC) Bay Division Pipeline (BDPL) No. 5 Project. The contractors' work supplements the relocation work being performed by District forces. One of the contracts (Agreement No. 3674A) was awarded to R.J. Gordon Construction (R.J. Gordon).

A portion of R.J. Gordon's final paving work will be performed under an existing yearly District purchase order with another contractor, Dun-Rite Excavating, Inc. (Dun-Rite). Therefore, staff negotiated a credit with R.J. Gordon to delete the final paving requirements. Change Order No. 3 has been prepared in the credit amount of \$8,666.75. All other contract work is complete.

RECOMMENDATION: By motion, adopt a resolution accepting completion of the contract with R. J. Gordon for Water Main Relocations to Accommodate the San Francisco Public Utilities Commission Bay Division Pipeline No. 5 Project, Jobs 6409, 6397 and 6395.

DISCUSSION: On January 14, 2010, the Board awarded a construction contract to R.J. Gordon in the amount of \$254,450. Change Order Nos. 1 and 2 were previously authorized by the Board in the amounts of \$18,047.38 and \$173,335.00, respectively.

On June 29, 2010, all of the required water main relocation work by R.J. Gordon was completed. However, at one location (Farwell Drive near Flamingo Court), other contractors were working in the area, which prevented R.J. Gordon from completing the final paving work until a later date. Because the District already has an annual contract with Dun-Rite to perform miscellaneous asphalt replacement work, staff negotiated a credit of \$8,666.75 to delete the final paving work from R.J. Gordon's contractual scope of work. This resulted in an overall cost savings for the District because Dun-Rite's unit price for paving work is less than the amount bid by R.J. Gordon. The total contract cost, including all change orders is \$437,165.63.

5.11 RESOLUTION AWARDING CONTRACT FOR THE KATO ROAD GRADE SEPARATION MAIN REPLACEMENT PROJECT

SUMMARY: The Kato Road Grade Separation Main Replacement Project includes the relocation of 18-inch and 12-inch pipelines and the installation of new hydrants at various locations on Kato Road in Fremont. This work is needed to accommodate the City of Fremont's (City's) Kato Road Grade Separation Project. The project was advertised for construction and the District received and opened four (4) bid proposals.

J & M, Inc. of Livermore, California submitted the lowest bid in the amount of \$260,675. References were checked, and it was confirmed that the contractor has the necessary qualifications and experience to perform the work. There is adequate funding in the current budget for this work.

RECOMMENDATION: By motion, adopt a resolution to award the contract for the Kato Road Grade Separation Main Replacement Project to J & M, Inc., in the amount of \$260,675, which is the total of the unit price and lump sum payment items, Jobs 6431 and 6433.

DISCUSSION: The Kato Road Grade Separation Main Replacement Project consists of the installation of approximately 194 linear feet of new 12-inch, 22 linear feet of new 18-inch, 35 linear feet of new 8-inch, and 73 linear feet of new 6-inch water main and appurtenances, and miscellaneous pipe abandonment work. The purpose of the project is to relocate existing water mains to accommodate the Kato Road Grade Separation Project. The grade separation project will vertically separate the railroad crossing from Kato Road by constructing a new railroad bridge structure over Kato Road. The District main relocation work needs to be completed prior to the start of the grade separation project, which is scheduled to begin construction during the summer of 2011.

City staff has conceptually agreed that the design and construction-related costs associated with the relocation of the water mains that are currently located within District easements or private properties, and certain costs associated with fire hydrants, will be paid for by the City and its funding partner, the Santa Clara Valley Transportation Authority. Similar to cost sharing agreements developed in the past, the District's share of the costs would generally be limited to the relocation of water mains currently located within the City right of way under permitted conditions. The estimated District share of the total construction cost is approximately 40% of the total, based

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on the low bid and the actual final quantities. Staff plans to request approval of a cost sharing agreement with the City at a future Board meeting.

J & M, Inc. submitted the lowest bid in the amount of \$260,675. The bid was checked arithmetically and for compliance with the bidding requirements. J & M, Inc. has been in the contracting business under its present business name and license for approximately 52 years doing work similar to that required by the contract documents. The engineer's estimate was \$341,240. A summary of the bids is attached.

Attachments

cc: Executive Staff