

# ***ALAMEDA COUNTY WATER DISTRICT***

## ***MEMORANDUM***

DATE: October 7, 2010  
TO: Board of Directors  
FROM: Walt Wadlow  
SUBJECT: STAFF REPORT, ACTION CALENDAR ITEMS FOR October 14, 2010

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### 5.1\* AUTHORIZATION OF PURCHASE ORDER AMENDMENT FOR TEMPORARY LABOR SERVICES

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SUMMARY: The District has an existing purchase order with Labor Ready Branch No. 1541 to provide temporary labor services for the Distribution Maintenance Division and the General Facilities Section. A purchase order amendment is needed to cover the cost of the anticipated temporary labor services required for the balance of the fiscal year. The revised estimated cost for temporary labor services through FY10/11 is \$99,500. There is adequate funding in the budget for this expenditure.

RECOMMENDATION: By motion, authorize a purchase order amendment to Labor Ready Branch No. 1541 in an amount not to exceed \$50,000.

DISCUSSION: The Distribution Maintenance Division and the General Facilities Section periodically require the utilization of temporary workers to augment District personnel because of retirements, employee departures from District service, illnesses, workplace injuries, and unanticipated increased workloads. A purchase order in the amount of \$49,500 was issued to Labor Ready Branch No. 1541 of Fremont, California, in May 2010 by District staff for labor services through FY10/11. A purchase order amendment is now needed because of recent workload spikes (e.g., water main leaks, main flushing needs, etc.) coupled with additional temporary reductions in the availability of District personnel.

### 5.2\* AUTHORIZATION OF PURCHASE ORDERS FOR DISPOSAL OF MATERIALS TO LANDFILLS

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SUMMARY: Funds are authorized each year for the disposal of trench excavation spoils consisting primarily of rock, soil, asphalt and concrete generated by District field crews. The District's current agreements with Newby Island Landfill in Milpitas and Landfill Management, Inc. in Hayward will expire by the end of October 2010. Staff is proposing to amend the existing agreements with Newby Island Landfill and Landfill Management, Inc. to continue usage of the two sites for the balance of FY10/11. These two sites are the most economical landfill locations when cost and availability are considered. Board approval is needed to waive the District's Procurement Policy No. 1. There are adequate funds in the FY10/11 budget for these expenditures.

**RECOMMENDATION:** By motion, 1) waive Procurement Policy No. 1 requiring sealed bids for routine services; and 2) authorize purchase order amendments to Newby Island Landfill and Landfill Management, Inc. in the amounts of \$37,500 and \$10,500 respectively.

**DISCUSSION:** In July 2010, the District issued purchase orders to Newby Island Landfill and Landfill Management, Inc. in the amount of \$49,500 each for the purpose of evaluating both disposal sites. These two firms represent the only disposal sites available for the District to use in our geographic area. The factors considered in determining which landfill to utilize included: 1) the cost of disposal (price per ton); 2) transportation costs; 3) restrictions on the types of materials that are accepted; and 4) site availability during adverse weather conditions. The analysis showed that both sites need to be utilized. However, because the price of disposal at Landfill Management, Inc. is less than the price at Newby Island Landfill (\$9.11 per ton vs. \$21.52 per ton), the District will attempt to maximize the use of the Landfill Management, Inc. site. Additionally, purchase orders for both disposal sites are needed because, 1) the haul time to Landfill Management, Inc. is considerably longer than to Newby Island Landfill, especially when traveling from work sites located at the southern end of the District's service area; and 2) the Landfill Management, Inc. site is not as reliable as the Newby Island Landfill site because of limitations on the type of materials that it will accept, its history of equipment malfunctions and other operational delays, and it is closed during inclement weather. The total estimated cost of disposal at the two sites for FY10/11 is \$147,000 (\$87,000 for Newby Island Landfill and \$60,000 for Landfill Management, Inc.) based on 10,541 tons of trench spoils.

### 5.3\* AUTHORIZATION OF PURCHASE ORDER FOR DISTRICT BACKHOE

**SUMMARY:** The District utilizes backhoes manufactured by John Deere for pipeline trenching work. Backhoes are replaced periodically when they reach the end of their service life. On September 10, 2010 the District received four bids for the replacement of one John Deere backhoe. Pape Machinery of Newark, California, submitted the low bid in the amount of \$100,538. There is sufficient funding in the current budget for this purchase.

**RECOMMENDATION:** By motion, authorize a purchase order to Pape Machinery, in the amount of \$100,538 for one John Deere 410-J backhoe.

**DISCUSSION:** Requests for quotations were sent to six John Deere dealers and four bids were received. The low bidder, Pape Machinery, has been in business under its present name for 70 years and has previously furnished backhoes to the District. A bid summary is attached. The new backhoe is replacing an existing backhoe that meets established District criteria for equipment replacement (i.e., has over 4,000 hours of operation or a history of high maintenance costs). Additionally, the new backhoe will be equipped with an electronically controlled two-lever system (e.g., joy sticks or pilot controls); instead of the older hydraulically controlled lever system. The new electronically controlled system provides multiple advantages including enhanced safety modes of operation.

### 5.4\* AUTHORIZATION OF PURCHASE ORDER FOR DISTRICT DUMP TRUCKS

**SUMMARY:** The District utilizes dump trucks manufactured by Freightliner for transporting backfill materials and trench spoils to and from work sites within the service area. Dump trucks are replaced periodically when they reach the end of their service life. On September 13, 2010 the

District received one bid from Golden Gate Truck Center of Oakland, California in the amount of \$272,588.15 for the replacement of two Freightliner dump trucks. There is sufficient funding in the budget for this purchase.

**RECOMMENDATION:** By motion, authorize a purchase order to Golden Gate Truck Center, in the amount of \$272,588.15 for two Freightliner dump trucks.

**DISCUSSION:** Requests for quotations were sent to five Freightliner dealers, but only one bid was received. In previous years, the District has received sealed bids from multiple dealers. However, beginning with this bid, Freightliner dealers located outside of the sales territory covered by Golden Gate Truck Center did not submit a bid. Golden Gate Truck Center was also last year's low bidder for a similar purchase. This year's bid represents a 2% increase in price over last year's bid. The new dump trucks are replacing existing trucks that meet established District criteria for truck replacement (i.e., more than 10 years old or mileage is over 100,000). Additionally, the dump trucks being replaced will not meet California Air Resources Board's On-Road Public Fleet Rule for diesel particulate matter emissions after 2011.

The District utilizes Freightliners for large trucks with gross vehicle weights over 35,000 pounds. This weight class includes District dump trucks and boom trucks. Currently, there are twelve Freightliners in the District's fleet consisting of nine 10-wheeled dump trucks, two boom trucks and one large service utility truck. The District's practice of utilizing Freightliner trucks has multiple benefits including driver familiarity with similar vehicles resulting in increased workplace safety, and improved maintenance efficiencies due to reduced spare parts inventory and mechanic familiarity of equipment resulting in reduced trouble-shooting and repair time.

#### 5.5\* AUTHORIZATION OF ACCEPTANCE OF COMPLETION OF ASPHALT REPAIR WORK AT DISTRICT WATER STORAGE FACILITIES

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**SUMMARY:** On July 8, 2010 the Board authorized a purchase order to Galedrige Construction, Inc. for asphalt repair work at four District water storage facilities in the amount of \$124,928 and a contingency amount of \$12,500 for unforeseen additional repair work potentially needed during the project. Additional needed repair work was identified at Patterson Reservoir and was performed at a cost of \$4,000. The total cost of the asphalt repair project was \$128,928 and the work was substantially completed on September 17, 2010.

**RECOMMENDATION:** By motion, accept completion of the purchase order agreement for asphalt repair work at District water storage facilities.

**DISCUSSION:** The water storage facilities needing asphalt paving repairs were Patterson and Decoto Reservoirs, and Appian and Vineyard Heights Tanks. The additional paving work at Patterson Reservoir consisted of one additional repair location totaling 1,000 square feet.

5.6\* AUTHORIZATION OF PURCHASE ORDER AMENDMENT AND ACCEPTANCE OF COMPLETION OF ASPHALT REPAIR WORK AT DISTRICT HEADQUARTERS

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SUMMARY: On May 13, 2010 the Board authorized a purchase order to Galedrige Construction, Inc. for asphalt repair work at the District's corporation yard in the amount of \$68,455 and a contingency amount of \$10,000 for unforeseen additional repair work potentially needed during the project. Because the additional work needed to satisfactorily complete the asphalt repairs cost \$23,278, Board authorization of a purchase order amendment in the amount of \$13,278 (\$23,278 less \$10,000) is required. The total cost of the asphalt repair project was \$91,733 and the work was substantially completed on September 11, 2010. There is sufficient funding in the budget for this expenditure.

RECOMMENDATION: By motion, 1) authorize a purchase order amendment to Galedrige Construction, Inc. for additional asphalt repairs in the amount of \$13,278; and 2) accept completion of the purchase order agreement for asphalt repair work at District headquarters.

DISCUSSION: The paving work associated with this purchase order amendment consisted of twelve additional repair locations totaling 2,400 square feet. The contractor performed the additional work at the same unit cost as the bid price. Staff reviewed the cost of the change order and determined it was fair and reasonable.

5.7\* AUTHORIZATION OF PURCHASE ORDER FOR ENGINEERING SERVICES FOR THE APPIAN TANK SEISMIC UPGRADE PROJECT

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SUMMARY: The purpose of the Appian Tank Seismic Upgrade Project is to improve the reliability of potable water storage and conveyance after a major seismic event. Engineering services are required for the evaluation and design of structural upgrades to the tank, pipeline, and associated site improvements (includes the access road, electrical power, instrumentation/controls, and security systems). There is adequate funding in the budget for this expenditure.

RECOMMENDATION: By motion, 1) authorize a purchase order to Carollo Engineers for engineering services in an amount not to exceed \$195,662; and 2) authorize the General Manager to execute a services agreement with Carollo Engineers for this work, Job 6435.

DISCUSSION: The Appian Tank and pipeline were installed in the late 1960's. The tank's seismic vulnerabilities include uplift, overturning, and shell overstress. The tank, which is located on an undeveloped hillside in northeast Fremont, is connected to the distribution system by approximately 3,500 feet of 16-inch diameter steel piping. This relatively thin-walled steel pipe has experienced several leaks over the years.

Due to the tank's remote location, the site lacks electrical power and the monitoring and controls equipment which are typical at other District storage facilities. The gravel access road to the tank is vulnerable to erosion during the winter season. In addition to addressing these issues, staff plans to confirm and implement site security and associated communication improvement measures.

Five qualified consultants were invited to submit proposals for the evaluation and preliminary design of the tank, piping, and site improvements and the District received four proposals. Based on a comprehensive evaluation of the proposals, Carollo Engineers was the firm determined to have the qualifications, staff, and proposed approach that best meets the District's needs. Carollo Engineers' estimated cost based on a time and expense basis for the work is \$195,662. Staff has reviewed the costs and has determined that they are fair and reasonable.

#### 5.8 RESOLUTION ADOPTING THE OCTOBER 2010 WATER SUPPLY ASSESSMENT FOR THE DUMBARTON TRANSIT ORIENTED DEVELOPMENT PROJECT

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**SUMMARY:** The City of Newark has requested a Water Supply Assessment for the Dumbarton Transit Oriented Development Project ("Project") pursuant to California Water Code Section §10910. Staff has determined the Project to be consistent with the demand forecast and is included in current water supply planning assumptions.

**RECOMMENDATION:** By motion, 1) adopt a Resolution adopting the October 2010 Water Supply Assessment for the Dumbarton Transit Oriented Development Project; and 2) authorize and direct the General Manager to submit the October 2010 Water Supply Assessment for the Dumbarton Transit Oriented Development Project to the City of Newark.

**DISCUSSION:** The Project will change the land-use zoning to allow for up to 2,500 high density housing units, 230,000 sq ft of commercial / retail building area and 17 acres of open space. The Project site covers 207 acres located adjacent to the proposed Dumbarton Commuter Rail Line in Newark. Former planning anticipated the area to be developed as High Tech Industrial with limited residential. Staff estimates that the total water demand on site will be approximately 780 AF/yr. No schedule for actual development of the Project site has been provided by the City of Newark; District staff assumes development pace of the Project to be consistent with general residential build out assumptions.

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 Project is consistent with ABAG assumptions and therefore consistent with current planning and will not result in increased shortages from those 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 1) the Project be constructed with the latest technology on water conservation measures and 2) the Project accommodate a future recycle water source for non-potable (e.g. landscape irrigation) water uses.

This item was reviewed at the August 2010 Water Resources Planning Committee meeting.

#### 5.9 AUTHORIZATION OF PURCHASE ORDER FOR CUSTOMER INFORMATION SYSTEM CONSULTING SERVICES

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**SUMMARY:** The consulting firm of EMA, Inc. has been retained by ACWD since December 2009 to provide services related to the development of a Request for Proposal (RFP) and subsequent

selection of a new Customer Information System (CIS). Staff is pleased with the performance of EMA, Inc. on the current phase (Phase II) of this project and is proposing to enter into a new agreement with EMA, Inc. to provide consulting services for Phase III of this project, which involves assistance with implementation of the selected CIS. The total cost of the consulting service is \$135,113. There are sufficient funds in the FY10/11 budget for these expenditures.

RECOMMENDATION: By motion, 1) authorize a purchase order to EMA, Inc. in the amount not to exceed \$135,113 to provide consulting services for Phase III of the Customer Information System project; and 2) authorize the General Manager to enter into a services agreement with EMA, Inc. for CIS implementation and post implementation project management and oversight.

DISCUSSION: The District's existing legacy Utility Billing system was designed over 20 years ago and while it has served our needs very well, it is in need of replacement with a more modern, commercial CIS that can handle increasingly complex billing-related needs of a utility. The existing software has been modified many times and it is becoming cumbersome to maintain and modify to meet our current needs. Implementing major changes will only cause the system to become more difficult to maintain functionality. In addition, continuing use of the system is dependent on limited staff. A loss of staff and their knowledge of the system would make modifying our current system extremely difficult.

The District divided the CIS project into the following three phases:

Phase I: Business analysis and needs assessment, development of functional and technical requirements, product/vendor selection criteria and RFP development (Completed)

Phase II: Vendor selection and contract development ( In-progress)

Phase III: Implementation and Post Implementation Project Management and Oversight

The District issued an RFP to provide consulting services related to all phases of the project and selected EMA, Inc. to provide services for Phase I and Phase II of this project presented in the Staff Reports at the December 10, 2009 and May 5, 2010 Board meetings.

During Phase I, EMA conducted several business analysis workshops and developed a detailed list of requirements specific to ACWD for inclusion in the RFP. The RFP for CIS was released to major CIS vendors on April 26, 2010. During Phase II, EMA, Inc. worked with ACWD to evaluate proposals and vendor responses, validate vendors' claim of functionality as related to ACWD requirements, assisted ACWD staff in demonstration script development, led workshops for product demonstration by two vendors, led a workshop to facilitate development of a short list of the top two vendors, and assisted ACWD in preparing for site visits and final selection of a CIS. Finally, as part of Phase II, EMA will participate in the contract negotiations with the recommended CIS vendor, Cayenta.

In the implementation phase (Phase III), EMA will participate in business process discovery and fit analysis, provide support for configuration, testing, and system "go-live", and will provide project and quality management support to the ACWD project manager.

## 5.10 AUTHORIZATION OF PURCHASE ORDER FOR CUSTOMER INFORMATION SYSTEM

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**SUMMARY:** The selection process to implement a new Customer Information System (CIS) has been completed. Staff is recommending the selection of Cayenta, a division of N. Harris Computer Corporation, and proposing to enter into negotiations to provide software and professional services for the implementation of a CIS. The total cost of the software, support and maintenance for 5 years, and professional services is not to exceed \$2,028,768. This recommendation was reviewed with the Administrative & Finance Committee on September 28, 2010. There are funds in the current fiscal year and additional funds are planned in the next budget for these expenditures.

**RECOMMENDATION:** By motion, 1) authorize the General Manager to execute a Contract for Professional Services and Software License and Support and Maintenance Agreements with Cayenta for the implementation of the new CIS; and 2) authorize purchase orders to Cayenta in the amount not to exceed \$2,028,768 for services, expenses, software license fees, and maintenance and support fees.

**DISCUSSION:** The District issued an RFP on April 26, 2010, and solicited proposals for a new CIS and related services. Proposals from the following four (4) CIS vendors were received:

Cogsdale, Charlottetown, Canada

Advanced Utility Systems (division of N. Harris Computer Corporation), Toronto, Canada

Cayenta (division of N. Harris Computer Corporation), Burnaby, Canada

NorthStar (division of N. Harris Computer Corporation), Ottawa, Canada

The cost (including implementation services and 5-year support and maintenance) breakdown for the four (4) proposals is as follows:

Advanced Utility Systems	\$2,466,367
Cayenta	\$2,028,768
Cogsdale	\$1,853,860
NorthStar	\$1,776,501

A nine (9) member evaluation team including the Customer Service Supervisor, Customer Account Representative, Development Services Manager, Distribution Maintenance Manager, Operations Office Supervisor, Laboratory Supervisor, Senior Water Resources Engineer, Senior Information Systems Analyst, and Information Technology Manager evaluated and scored the proposals based on the following criteria:

Functionality (40%)

Expertise and Experience (30%)

Project Approach and Professional Services (30%)

The evaluation team and EMA, Inc. (District's CIS consultant) decided to invite all four responders for on-site demonstrations. Each vendor was on-site for three (3) days to demonstrate scripted CIS functionality of their product and allow hands-on use of the software by the evaluation team.

The evaluation team scored the demonstrations and discussed the advantages and disadvantages of the top two CIS products. As a result of the demonstration scores, Cayenta was the top ranked proposal and Advanced Utility System proposal was ranked number two. The evaluation team conducted telephone reference checks of five customers who have implemented or are implementing systems from Cayenta or Advanced Utility Systems. Following the reference checks, the team conducted a site visit to the City of Milpitas which uses Cayenta Utilities (product software). Based on the demonstrations and reference checks, the team determined that although either of the top two CIS products can meet the District's need, Cayenta Utilities offers greater flexibility and adaptability. Therefore, staff recommends the selection Cayenta to provide the CIS.

#### 5.11 AUTHORIZATION OF CHANGE ORDER NO. 3 AND RESOLUTION ACCEPTING COMPLETION OF THE NEWARK BRACKISH WATER DESALINATION FACILITY EXPANSION PROJECT

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**SUMMARY:** The Board previously awarded the construction contract for the Newark Brackish Water Desalination Facility Expansion Project to C. Overaa & Company (Overaa). The plant is fully operational and the work is substantially complete. Change Order No. 3 has been prepared to address additional required work, compensation for the recent increase in the state sales tax, and a contract time extension. There is adequate funding in the budget for this expenditure.

**RECOMMENDATION:** By motion, 1) approve Change Order No. 3 in the amount of \$154,889.87 to C. Overaa & Company; and 2) adopt a resolution accepting the completion of the Newark Brackish Water Desalination Facility Expansion Project, Job 6350.

**DISCUSSION:** On February 12, 2009, the Board awarded the construction contract to expand the production capacity of the desalination facility to Overaa in the amount of \$7,895,000.00. Two change orders totaling \$103,135.95 have been previously authorized by the Board.

Change Order No. 3 in the amount of \$154,889.87 includes the following three components: 1) an increase in compensation due to additional required work; 2) an increase in compensation due to an increase in state sales and use taxes imposed after the execution of the contract; and 3) a contract time extension due to additional work, unforeseen conditions, and District requested changes. Each component is discussed further below:

1. **Additional Required Work.** The following additional work items were requested or agreed to by the District and the addition or subtraction to the contractor's compensation are shown in parenthesis: 1) perform corrosion repair of existing stainless steel feed water piping (\$58,833.62); 2) modify the reverse osmosis feed pump suction and discharge stainless steel piping (\$27,752.80); 3) perform dechlorination and field monitoring of plant startup water discharges to the existing flood control channel (\$5,631.56); 4) apply additional secondary containment coatings (\$3,840.90); 5) install coil guards for the new condenser units (\$2,032.44); 6) install addressable modules in the HVAC smoke detectors (\$1,932.58); 7) relocate an existing flowmeter in the sodium hypochlorite chemical bay (\$349.10); and 8) a credit to delete a harmonic study (-\$1,440.00). The total increase in compensation is \$98,933.00. Staff has reviewed the costs for the additional and subtracted work and has determined that they are fair and reasonable.

2. State Sales and Use Tax Increase. Bids for the Newark Brackish Water Desalination Facility Expansion Project were opened in mid-January 2009 and the project was awarded to Overaa in February 2009. Subsequently, the state legislature approved a 1% increase in the sales and use tax which went into effect on April 1, 2009. Fixed price contracts entered into prior to April 1, such as the Newark Brackish Water Desalination Facility Expansion Project, are not exempt from the tax increase. There are limited provisions in the contract to address this unforeseen change. Overaa requested reimbursement of \$55,956.87 for the additional unforeseen sales tax due to the cost magnitude of the desalination equipment purchase required. Staff evaluated this request and has determined that it is fair and reasonable to reimburse Overaa for this unforeseen expense.
3. Contract Time Extension. Change Order No. 3 will provide a time extension of ninety-six (96) calendar days due to both District-caused and contractor-caused delays that occurred concurrently. The requested delays can be grouped into four major categories: 1) address corrosion issues – this includes repairing the welds in the reverse osmosis (RO) feed water line, the existing cartridge filter welds, and the cartridge filter pipe header to the RO feed pumps; 2) install new RO feed pump concrete pads; 3) address bacteriological issues that were exacerbated by pipe corrosion; and 4) perform District-requested changes in the PLC programming.

The total of all change orders, including the additional sales tax reimbursement, is \$258,025.82, which is 3.3% of the awarded contract price. The total project cost, including all change orders and adjustment for final quantities, is \$8,153,025.82.

On July 27, 2006, the District executed an agreement with the California Department of Water Resources (DWR) for a Proposition 50 Water Desalination Grant in the amount of \$2,800,000.00. To date, \$2,143,744.00 of DWR grant funding has been received. The balance due will be issued by DWR upon receipt of final billing by the District.

Attachments

cc: Executive Staff