

**COUNTY OF SONOMA  
AGENDA ITEM  
SUMMARY REPORT**

**Clerk of the Board Use Only**  
**Meeting Date**                      **Held Until**  
 /   /                                      /   /  
**Agenda Item No:**                      **Agenda Item No:**  
 \_\_\_\_\_

**Department:** General Services

**4/5 Vote Required**

**Contact:**  
Rob Kambak

**Phone:**  
565-3211

**Board Date:**  
05/12/09

**Deadline for Board Action:**

**AGENDA SHORT TITLE:**

**Isd Data Center Cooling And Ten-Year Plan**

**REQUESTED BOARD ACTION:**

Adopt a resolution authorizing a budgetary adjustment to FY 2008/09 Final Budget for the ISD Data Center Cooling project, in the amount of \$80,000.

**CURRENT FISCAL YEAR FINANCIAL IMPACT**

<u>EXPENDITURES</u>		<u>ADD'L FUNDS REQUIRING BOARD</u>	
<b>Estimated Cost</b>	\$571,000	<b>Contingencies</b>	\$
		(Fund Name:)	
<b>Amount Budgeted</b>	173000	<b>Unanticipated Revenue</b>	\$
		(Source:)	
<b>Other Avail Approp.</b>	318,000	<b>Other Transfer(s)</b>	\$ 80,000
(Explain below)		(Source:) #207316-8562	
<b>Additional Requested:</b>	80,000	<b>Add'l Funds Requested:</b>	\$ 80,000

**Explanation (if required):** The \$318,000 funding is from the CEP for the energy-related portion of the project.

**Prior Board Action(s):**

02/24/09 - Authorize the Chair to execute a contract in the amount of \$139,700 with California Data Center Design Group for ISD Data Center and Ten-Year Plan

**Alternatives - Results of Non-Approval:**

The project will not receive the funds necessary to complete it.

**Background:**

**Purpose**

Funding for the ISD Data Center Cooling and Ten-Year Plan is currently provided from three sources: the Capital Project Budget, the Comprehensive Energy Project, and the ISD Operating Budget. This project will extend beyond the end of this fiscal year and the funding from the ISD Operating Budget will not be available after the end of the fiscal year. The purpose of this Board item is to request Board authorization to transfer the funds from the ISD Operating Budget (Index #207316) that have been set aside to fund this effort to the Capital Project Budget (Index #109959) so that those funds will be available next fiscal year.

**Background**

The County of Sonoma's Information Systems Department (ISD) Data Center is a 3,050 square foot facility that provides essential and critical computer system operations for all County offices. Built in 1973, the Data Center currently houses 220 servers and the County's mainframe computer system. The Center's equipment operates critical law enforcement and justice systems, such as the County-wide 911 dispatch system and Sheriff Department records. It also operates County business functions such as payroll, purchasing, and human resources processing, and it stores the business software products used by different departments on the County computer network servers. Payments for Human Services Economic Assistance as well as County employee paychecks are also generated at the Data Center.

The number of computer systems supported by the Data Center has grown over the past several years. This growth has put increased demands on the electrical and HVAC systems in the building. The number of servers supported by the Data Center is expected to double in the next five years. The electrical systems and Uninterrupted Power Supply (UPS) serving the Center are nearing capacity and the 14-year-old cooling system is nearing the end of its useful life. Though ISD has taken advantage of new and lower heat generating hardware technologies, the Center's HVAC system has experienced difficulty in maintaining proper cooling for the computer equipment located in the center, especially during hot weather days, creating an increasing chance for failure of the computer systems.

**Attachments:**

Resolution Budgetary Adjustment

**On File With Clerk:**

**Board Action** (If other than "Requested")

**Vote:**

**Background: (Continued)**

Proper cooling of the Data Center needs to be provided to minimize the risk of system failures; Due to the age of the facility and the projected growth of system demand, Information Systems staff has determined that a ten-year master plan needs to be developed to identify its future needs. Staff will work to develop a strategic, effective, and efficient approach to meeting all of the needs of the Center, including the replacement and/or expansion of the supporting systems and infrastructure.

**Project Description:**

To address the above concerns, the General Services Architecture Division has retained a data center consultant, California Data Center Design Group (CDCDG), through the Request for Qualifications (RFQ) process. CDCDG will address the immediate need for a replacement cooling system and develop a ten-year major systems repair and replacement plan (MR&R) to identify future needs in line with the projected growth of the Center. These two tasks will be addressed simultaneously by the consultant:

**Immediate Data Center Cooling System Improvements:**

The first effort is to design and install a new cooling system for the Data Center that will be in alignment with both the short and long term cooling needs of the Center. Energy efficiency and sustainable design will be a fundamental objective. This portion of the project includes the preparation of construction drawings and specifications for the replacement of the existing Data Center cooling system and the preparation of cost estimates for the improvements. The consultant's scope of work will also include assisting the County with bidding, construction administration, and commissioning of the new system.

**Development of Ten-Year Plan:**

In conjunction with the above cooling system design as requested by ISD, the consultant will develop a ten-year MR&R Plan to more adequately project the growth of the Center and identify the improvements to the Center's infrastructure to support that growth. This plan will include:

- An energy audit and estimate of the power upgrades necessary for the building for the next ten years;
- Development of a space utilization plan for the Center to provide for energy efficient growth of the Center;
- Evaluation of the UPS system and determination of upgrades necessary to support future loads;
- Evaluation of the backup power system for the building and recommendations to support the future growth of the Center;
- Investigation into the feasibility of relocating the telephone switch equipment from the Agriculture Building to the ISD Building to improve efficiencies in the operations of the County's data and telephone systems; and
- Preparation of cost estimates for recommended improvements in line with the growth of the Center.

**Background:** (Continued)

**Funding**

The funding for this project is currently provided from three sources as follows:

<b>Scope of work</b>	<b>Funding Source</b>	<b>Amount</b>
<b>Cooling System Replacement</b>	Capital Project Budget Index #109959	\$173,000
	Comprehensive Energy Project Index #109587	\$318,000
<b>Data Center Ten-Year-Plan</b>	Information Systems Department Index #207316	\$ 80,000
<b>Total Funding</b>		\$571,000

Preparation of the Ten-Year Plan is funded from the ISD operating budget; however, the preparation of the plan is expected to continue into the next Fiscal Year. Staff requests that the \$80,000 provided by the ISD operating budget be transferred from the ISD Index #207316 to the Capital Projects Budget Index #109959.

**Schedule**

The replacement of the existing cooling system has been assigned priority. The construction bid documents for the new cooling system will be completed and be ready for posting in May 2009. Construction will commence immediately upon award of the contract. Preparation of the Data Center Ten-Year Plan has been assigned lower priority and is expected to be completed by Fall 2009.

**Requested Board Actions:**

Adopt a resolution authorizing a budgetary adjustment to FY 2008/09 Final Budget for the ISD Data Center Cooling project, in the amount of \$80,000.