

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT
2323 North Broadway
Santa Ana, CA 92706
Room #107

BOARD OF TRUSTEES (Regular Meeting)

ADDENDUM TO AGENDA

Monday, March 8, 2010

➤ **Add:**

5.0 BUSINESS OPERATIONS/FISCAL SERVICES

- 5.6 Approval of Emergency Repairs to the Main Electrical Duct Bank to the Science Center at Santiago Canyon College Action
The administration recommends approval of the emergency repairs as presented in the attached spreadsheet in the estimated amount of \$139,000.

RANCHO SANTIAGO COMMUNITY COLLEGE DISTRICT

BUSINESS OPERATIONS/FISCAL SERVICES

To:	Board of Trustees	Date: March 8, 2010
Re:	Approval of Emergency Repairs to the Main Electrical Duct Bank to the Science Center at Santiago Canyon College	
Action:	Request for Approval	

BACKGROUND:

In December of 2007, the Board awarded a contract to various multi-prime contractors to construct the new Science Building at Santiago Canyon College.

ANALYSIS:

Baker Electric was one of the primes to furnish the electrical service to the new Science Building. It was discovered the week of March 1, 2010 that water seepage was entering the electrical room through the electrical conduits that feed the main electric service to the building. It was determined that this water is causing significant damage to the electrical room and adjacent classroom. We have secured estimates from two contractors to make emergency repairs to stop the seepage of water into this area.

The two contractors that will be making the repairs are Baker Electric and Orange Coast Plumbing. Southern California Edison will be disconnecting the electrical service to the Science Building so that these repairs can be made. The estimated cost is approximately \$139,000 as described on the attached emergency repair spreadsheet. In order to complete the construction of the building and prevent the continual seepage of water, we must make these emergency repairs immediately.

RECOMMENDATION:

It is recommended that the Board of Trustees approve the emergency repairs as presented in the attached spreadsheet in the estimated amount of \$139,000.

Fiscal Impact:	\$139,000 estimated	Board Date: March 8, 2010
Prepared by:	Darryl A. Odum, Director, District Construction and Support Services	
Submitted by:	Peter J. Hardash, Vice Chancellor, Business Operations/Fiscal Services	
Recommended by:	Edward Hernandez, Jr., Ed.D., Chancellor	

Santiago Canyon College
 Rancho Santiago Community College District
Emergency Repair of Duct Bank
 Science Building
 Maintenance & Operations Building Parking Lot

Step	Description	Estimated Cost	Step	Option / Alternative Description	Estimated Cost
1	SCE Shuts down power to the Science Building transformer. Remove electrical conductors from the duct bank connecting the Science Building electrical room and SCE vault in the parking lot.	\$ 13,500	A	Replace conductor material that is damaged in the removal effort (shielding on the conductor cable is damaged and the cable cannot be reused).	\$ 15,000
2	Provide for the operation, maintenance and refueling of the emergency generator to run the Science Building while repairs on the duct bank are accomplished. Provide for 10 days at 8 hours per day. The generator consumes 65 gal. of fuel per hour under a full demand load.	\$ 30,000	B	Provide a rented 400Kva generator and fuel for 10 days at 8 hours per day. The generator consumes 30 gal. of fuel per hour. Tank is 480 gal. capacity and will require approx. seven site deliveries and refills. (Labor and Materials)	\$ 25,500
3	Clean out conduit, video scope and determine extent and location of damage x 4 five-inch conduits.	\$ 5,700	C	Reline the entire run of the duct bank: four conduits at 225 feet in length each: 900 L.F.	\$ 50,000
4	We know we have damage in three locations in the duct bank due to our investigation of the empty conduit. Assume that there is collateral damage in each of the four conduits in the same locations. Reline and repair the conduits in each of the three locations - three ten-foot linings in each of the four conduits.	\$ 20,000	D	If the conduits are crushed under the Loop Road, reline the four conduits at 2 locations at 10 feet each repair.	\$ 13,500
5	We know we have a 4 to 5 foot plug in the empty conduit located under the Loop Road. Assume that the duct bank has been crushed, excavate, uncover, repair and replace the conduit, concrete encasement, backfill and compact and repave the Loop Road.	\$ 16,800	E	Identify source of water and make requisite repairs (unknown until we excavate).	\$ 35,000
6	Pull the existing electrical conductors from the SCE vault to the Science Building electrical room and reestablish connections, QC test and restart electrical service. SCE repowers the transformer.	\$ 13,500			
	SUBTOTAL	\$ 99,500		\$	\$ 139,000
	ALTERNATES				
	TOTAL	\$ 99,500		\$	\$ 139,000