

CAPE ELIZABETH SCHOOL DEPARTMENT
Cape Elizabeth, Maine

To: Cape Elizabeth School Board
From: Meredith Nadeau, Superintendent
Date: November 16, 2015
Re: Dehumidification equipment at Donald Richards Pool

As the Board is aware, late last spring the Town of Cape Elizabeth funded a follow-up study* to review the existing heating, cooling, pumping, treatment and dehumidification systems of the Donald Richards Pool. The report was received in mid-September and reviewed by the Building and Grounds Committee. Based on the following, it is the committee's recommendation that the dehumidification (Dectron) unit be replaced:

- Existing Dectron unit is 18 years old (useful life for such equipment is typically 15-20 years).
- System coils are corroded; it is cost-prohibitive to continue repairs to the equipment at this juncture and repairs will not significantly extend the life-span of the equipment.
- Equipment failure could occur at any time rendering the space unusable for a minimum of 3-4 months while replacement equipment is ordered and installed.

The total cost of this project including engineering/design fees, equipment, demolition/installation, and soft costs is estimated to be \$544,639. A detailed cost breakdown is attached as is a budgetary estimate for fiscal years 15-16, 16-17, and 17-18.

Given the large cost associated with this project, it is the recommendation of the committee that the Board seek the Town Council's approval for a 10-year bond (see attached estimated amortization schedule) to replace the dehumidification equipment. Should the Council choose to approve this bond request, it would be the School Department's hope to begin the engineering/design phase in early 2016 in order to begin site work in June 2016 and complete the project in August of 2016 with a shut-down period for the pool occurring in July and August of 2016.

If the Board determines that it would like to move forward with the replacement of the dehumidification equipment, it is recommended that the Board Chair work with the Town Council chair to schedule a meeting at the earliest possible juncture to review the project and funding request.

*The comprehensive facilities study and Capital Improvement Plan developed in 2013 included a review of Community Services and the Donald Richards Pool.

**Administrative recommendation-
Bond all hard costs with pool shut
down date no earlier than July
and August**

Item	FY 15-16	FY 16-17	FY 17-18
Capital Improvement Plan - Pool	\$ 88,500.00	\$ 78,500.00	\$ 29,500.00
Bond Payment	\$ -	\$ 10,000.00	\$ 59,000.00
Funds Provided by Town	\$ 15,200.00	\$ -	\$ -
Soft Costs-covered by Town	\$ 11,156.68	\$ 26,030.06	\$ -
Total	\$ 114,856.68	\$ 114,530.06	\$ 88,500.00

* There is approximately \$20,000 available in the Pool-CIP account to go towards this project.

** Lease Purchase Payment for FY 15-16 to be paid by the Town.

Facilities and Transportation Department
Donald Richards Pool
Dehumidification cost projections

29-Sep-15

Hard costs			Soft costs		
Item number	Description	Projected cost	Item number	Description	Projected cost
1	Payment and performance bonds	\$ 10,200.00	1	Bond legal (1.5%)	\$ 7,611.79
2	Contractor mobilization	\$ 5,000.00	2	Hazard assessment	\$ 1,200.00
3	General design fees	\$ 28,000.00	3	Owner's risk	\$ 507.45
4	Structural assessment	\$ 3,500.00	4	Owner's contingency	\$ 25,372.62
5	General conditions	\$ 32,000.00	5	Design reimbursable	\$ 280.00
6	General Demolition	\$ 10,200.00	6	Builder's risk	\$ 1,014.90
7	Structural support changes	\$ 8,500.00	7	Permitting (waived)	\$ -
8	Roof curb installation/patching (roofing)	\$ 15,800.00	8	State Fire Marshal review	\$ 1,200.00
9	Steel framing/fire stopping/structural	\$ 18,500.00			\$ 37,186.76
10	Rigging/craning	\$ 4,500.00			
11	HVAC demolition	\$ 7,500.00			
12	Hydronic piping	\$ 12,500.00			
13	Duct work	\$ 15,000.00			
14	Duct insulation	\$ 4,500.00			
15	Piping insulation	\$ 3,500.00			
16	Dehumidification equipment	\$ 172,000.00	Projected total	\$ 544,639.16	includes soft costs
17	Condensing boiler replacement	\$ 18,500.00	Harriman Projected total	\$ 652,039.00	includes soft costs
18	Dehumidification equipment installation	\$ 31,000.00			plus P&P bond
19	Energy Management	\$ 8,500.00	Net difference	\$ 107,399.84	
20	Electrical demolition	\$ 5,000.00			
21	Electrical rework	\$ 22,500.00			
22	Electrical addition (lighting, service, recp)	\$ 8,500.00			
23	Fire detection/protection requirements	\$ 10,200.00			
24	Access control	\$ 4,800.00			
25	Testing and balancing	\$ 4,500.00			
26	Construction contingency 5%	\$ 23,235.00			
27	Estimating contingency 4%	\$ 19,517.40			
		\$ 507,452.40			

Maine Municipal Bond Bank**Estimate of Borrowing**Prepared via www.mmbb.com on: October 27, 2015

Date	Principal	Rate	Interest	Total Payment	FY Total
11/1/2016			\$4,550.00	\$4,550.00	
05/1/2017			\$4,550.00	\$4,550.00	\$9,100.00
11/1/2017	\$50,000.00	1.3000%	\$4,550.00	\$54,550.00	
05/1/2018			\$4,225.00	\$4,225.00	\$58,775.00
11/1/2018	\$50,000.00	1.4000%	\$4,225.00	\$54,225.00	
05/1/2019			\$3,875.00	\$3,875.00	\$58,100.00
11/1/2019	\$50,000.00	1.5000%	\$3,875.00	\$53,875.00	
05/1/2020			\$3,500.00	\$3,500.00	\$57,375.00
11/1/2020	\$50,000.00	1.6000%	\$3,500.00	\$53,500.00	
05/1/2021			\$3,100.00	\$3,100.00	\$56,600.00
11/1/2021	\$50,000.00	1.7000%	\$3,100.00	\$53,100.00	
05/1/2022			\$2,675.00	\$2,675.00	\$55,775.00
11/1/2022	\$50,000.00	1.8000%	\$2,675.00	\$52,675.00	
05/1/2023			\$2,225.00	\$2,225.00	\$54,900.00
11/1/2023	\$50,000.00	1.9000%	\$2,225.00	\$52,225.00	
05/1/2024			\$1,750.00	\$1,750.00	\$53,975.00
11/1/2024	\$50,000.00	2.2000%	\$1,750.00	\$51,750.00	
05/1/2025			\$1,200.00	\$1,200.00	\$52,950.00
11/1/2025	\$50,000.00	2.3000%	\$1,200.00	\$51,200.00	
05/1/2026			\$625.00	\$625.00	\$51,825.00
11/1/2026	\$50,000.00	2.5000%	\$625.00	\$50,625.00	\$50,625.00
TOTALS	\$500,000.00		\$60,000.00	\$560,000.00	

This report is an estimate only. Actual borrowing costs may vary.