



TO: Joseph N. Davis
Timothy Dimond

FROM: William L. Mason 

DATE: April 11, 2022

SUBJECT: Change Request #1/Pump Repairs & Replacements/Juvenile Justice Center BAS Controls, Chillers and AHUs Project

INTEROFFICE MEMORANDUM

As we recently discussed, our investigation into the three (3) Primary and two (2) Secondary Chiller Pumps during the Juvenile Justice Center BAS Controls, Chillers & AHUs Project we discovered extensive, unexpected damaged and deteriorating components requiring repair and/or replacement to return to operating condition. The photographs below show some of these deficiencies. This work goes beyond the project scope and will incur additional costs depleting the original project contingency and exceeding the Contract Sum.

These Pumps supply chilled water from the Chillers to building AHUs and return it from the Cooling Tower. Their function is essential to the successful operation of the HVAC system and the delivery of conditioned air throughout the facility.

The overall Project is approximately 68% complete with three (3) new Chillers installed and the AHUs refurbishments 90% finished. Work has begun connecting the BAS Controls to the Terminal Unit Boxes and Network Controllers.

Accordingly, I am requesting your authorization to submit to the Board of Commissioners a recommendation for approval of Change Request #1 in the amount of **\$123,073.00** representing seven (7%) percent of the original Contract Sum of **\$1,802,591.00** and increasing the amended Contract Sum to **\$1,925,663.40**.

Details of the Pumps existing conditions, costs to repair/replace, and expected completion are shown as follows.

PUMPS	CONDITION	COMPLETION	COSTS
Primary P-1	Damaged impeller and shaft from bearing failure.	2Q22	\$25,222
Primary P-2*	Damaged impeller and shaft from bearing failure.	3Q22	\$25,222
Primary P-3	Leaking grease. Idle for many years. Likely bearing failure.	2Q22	\$31,860
Secondary SP-1	Bearing failure resulted in damaged impeller, sleeve, and shaft.	2Q22	\$14,790
Secondary SP-2*	Bearing failure resulted in damaged impeller, sleeve, and shaft.	3Q22	\$14,790
Contingency (10%)			\$11,189
TOTAL			\$123,073

*Currently operating. Cost estimates based upon repairs in comparable pumps.

These Primary and Secondary Chiller Pumps are approximately twenty (20) years old and original to the building. Deferred maintenance and repair have shortened their useful life and now requires this additional capital investment to make the Pumps fully operational once again. Major repairs and replacements of the Pumps are not part of the project scope of work. Coupled with rising construction pricing, scarcity of replacement parts, and scheduling impacts, we believe this Change Request #1 is merited.

As part of this Change Request #1, the Contract term is proposed to be extended by an additional four (4) months and all work should be completed by October 31st, 2022. This extension is solely attributable to the availability and delivery of necessary replacements parts which can be up to sixteen (16) weeks in today's marketplace.

Funds are provided by the FCURA Urban Redevelopment Bonds in Funding Line # 532 520 5200 K008.

Please contact me if you need any additional information.

Thank you.



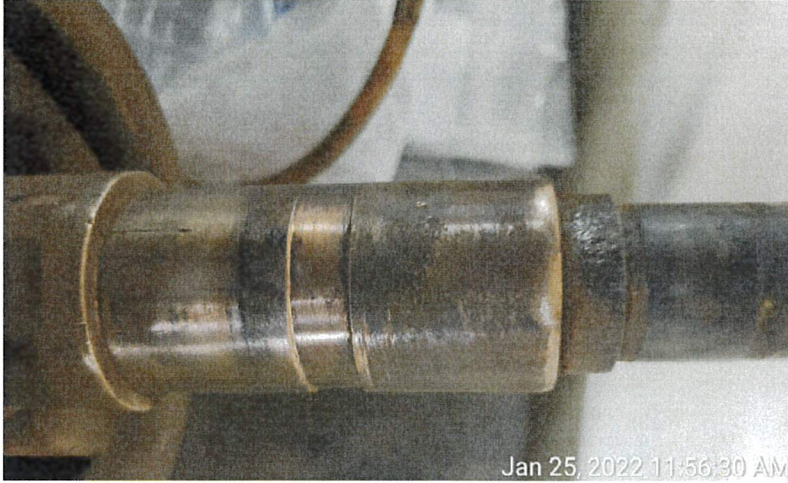
SECONDARY PUMP SP-1



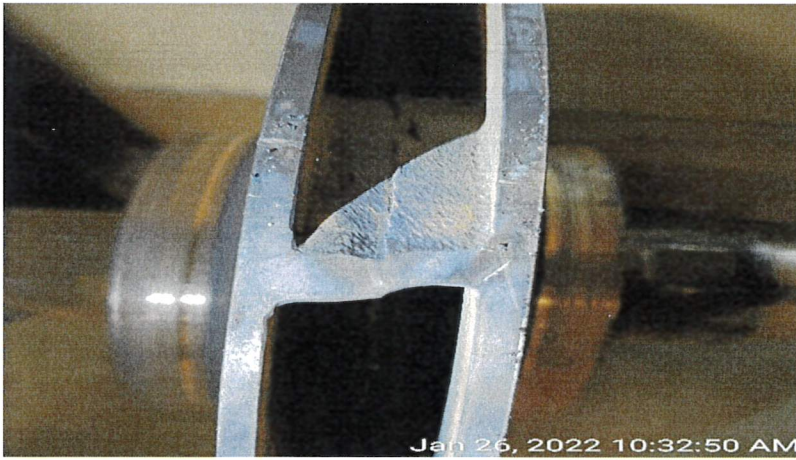
DAMAGED SHAFT



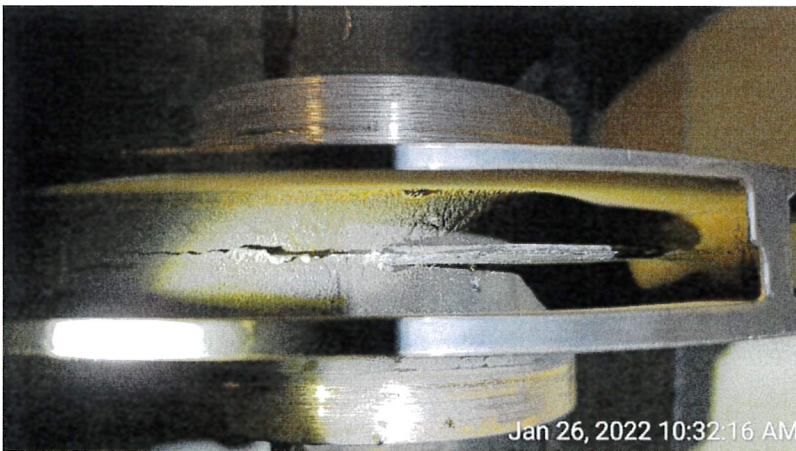
FAILED BEARINGS



DAMAGED SLEEVE SECONDARY PUMP SP-1



PRIMARY PUMP P-1 DAMAGED IMPELLER



PRIMARY PUMP P-1