June 26, 2019

TO: Members of the Board of Trustees

FROM: Scott A. Jordan
Executive Vice President for Administration and Chief Financial Officer

John A. Elliott
Interim Provost and Executive Vice President for Academic Affairs

RE: Project Budget for Exigent Repair/Replacement of Steam and Condensate Piping from Vault A5 to Vault A5A – Infirmary Tunnel
(Final Phase: $2,000,000)

RECOMMENDATION:

That the Board of Trustees approve the Final Budget of $2,000,000, as detailed in the attached project budget, for the Exigent Repair/Replacement of Steam and Condensate Piping from Vault A5 to vault A5A (Infirmary Tunnel) project, for design and construction. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of $2,000,000 in UConn 2000 Bond funds and the use of exigent procedures to procure necessary services and contracts for the Exigent Repair/Replacement of Steam and Condensate Piping from Vault A5 to Vault A5A - Infirmary Tunnel project.”

BACKGROUND:

An inspection of the steam distribution and condensate return lines at the above location during the annual steam shutdown in May 2019, revealed that the condition of the steel support structures supporting the steam and condensate return pipes were in a dangerous condition due to advanced corrosion. In addition, significant corrosion of the valves and traps and a ductile iron vault drain pipe was also observed.

In 2011, under project number 901421 – “Steam Distribution System Modification, Expansion, and Repair PRV Line #6” (Infirmary), a 125 linear foot tunnel adjacent to the Williams Infirmary was constructed. The original scope of work included steam and
condensate return piping and direct buried steam and condensate return piping to service Storrs Hall and Wilbur Cross.

The tunnel portion does not currently contain a mechanical or passive ventilation system and over time, the environment in the tunnel has been conducive to corrosion of the steel pipe support system as observed and documented in the recent inspections. Extensive corrosion of the structural steel pipe support frames is visible and this presents a significant safety hazard, as failure of one or more of these supports will likely cause failure of the steam and condensate pipes.

The segment of the steam distribution system has been valved-closed pending the completion of repairs. It is necessary to complete the repairs prior to heating season in order not to impact Storrs Hall and Wilbur Cross. In the event this work cannot be completed within this time frame, temporary boilers will be rented and installed until the work is completed. The scope of work will also include the addition of mechanical ventilation in the tunnel.

The University is seeking approval to undertake the necessary work utilizing an exigent approach under the following management plan;

Design
BVH will be engaged under the existing Framework Contract to undertake the following scope of work;

- Inspect the tunnel structure and document any necessary repairs
- Inspect the insulated steam and condensate pipework by non-destructive testing
- Inspect the steel pipe support system, ancillary electrical, lighting and fire alarm systems and recommend and document all necessary repairs/replacements
- Design an appropriate tunnel ventilation system
- Prepare all necessary construction documents
- Prepare a third party estimate of construction costs based on the construction documents
- Provide Construction Administration and Closeout Services

Construction
Engage Bond Brothers as construction manager to undertake the following;

- Provide all inspection support services prior to construction
- Consult and advise BVH on issues of constructability
- Obtain subcontractor cost proposals for the work
- Develop a confirming estimate of construction costs.
- Complete all necessary construction and closeout services required by the construction documents.

Bond Brothers is currently under contract with the University as Construction Manager on the adjacent Central Utility Plant Equipment Replacement and Pumping project. Bond has significant experience in the type of work anticipated under this exigent project.
Project Management
The University will engage Gilbane who is currently under contract with the University to provide Project Management Oversight Services to manage the design, construction and closeout phases of the project.

Schedule
The Exigent Repair/Replacement of Steam and Condensate Piping from vault A5 to vault A5A – Infirmary Tunnel is currently in the Pre-Planning Phase and to be complete in Fall 2019.

The Final Budget is based on the consultant’s order of magnitude estimate of the work and will be finalized following the detailed inspection and completion of construction documents.

The Final Budget is attached for your information.

Attachment
**CAPITAL PROJECT BUDGET REPORTING FORM**

**TYPE BUDGET:** FINAL

**PROJECT NAME:** EXIGENT REPAIR/REPLACEMENT OF STEAM & CONDENSATE PIPING-INFIRMARY TUNNEL

<table>
<thead>
<tr>
<th>BUDGETED EXPENDITURES</th>
<th>APPROVED PLANNING 6/18/2019</th>
<th>PROPOSED FINAL 6/26/2019</th>
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**SOURCE OF FUNDING**

| UCONN 2000 BOND FUNDS | $400,000 | $2,000,000 |

**TOTAL BUDGETED FUNDING**

| $400,000 | $2,000,000 |

*This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.*
EXIGENT REPAIR/REPLACEMENT OF STEAM AND
CONDENSATE PIPING FROM VAULT A5 TO VAULT A5A
– INFIRMARY TUNNEL
Project Budget (Final)
June 26, 2019

Corroded Condensate piping and valves

Corroded Steel Pipe Support Structure