

**10. CONSIDERATION OF A REIMBURSEMENT RESOLUTION
WALTER CECIL RAWLS LIBRARY
HVAC EQUIPMENT REPLACEMENT**

As you may recall, the adopted FY 2022 annual budget included up to \$52,000 to finance the engineering and construction of new HVAC equipment for the Walter Cecil Rawls Library. We engaged Pace Collaborative (Mechanical Engineers) in 2019 to assess the condition of our HVAC system and offer us their recommendations. A copy of their report is attached.

The total estimated cost for the project is \$375,000 to \$425,000. When we developed the FY 2022 budget estimate, our plan was based on a 10-year term for the financing.

We're planning to move forward in the next couple of weeks with the design engineering. I've engaged Pace Collaborative for this work as well as the construction administration and system commissioning, at a cost of slightly less than \$50,000.

Once we have an updated and finalized cost estimate for construction, we'll be asking the Virginia Local Government Financing Corporation to issue a Request for Proposals (RFP) on our behalf for the financing of the project.

Notwithstanding an exception for preliminary expenditures associated with project engineering, I'm requesting the Board to consider adopting the attached reimbursement resolution related to the project. A reimbursement resolution enables the County to reimburse itself for project-related expenses that may be incurred prior to the issuance of debt. The resolution does not obligate the County to reimburse itself from the proceeds of a borrowing; however, the County may not elect to reimburse itself from debt proceeds without having adopted a reimbursement resolution.

The attached resolution covers expenses of design, construction and commissioning of the project.

MOTION REQUIRED:

A motion is required to adopt the attached resolution declaring your intention to reimburse yourself for any expenses associated with the project that may be incurred prior to issuance of the debt.

RESOLUTION OF THE BOARD OF SUPERVISORS OF
SOUTHAMPTON COUNTY, VIRGINIA DECLARING ITS INTENTION
TO REIMBURSE ITSELF FROM THE PROCEEDS OF A FORTHCOMING
FINANCING FOR DESIGN, CONSTRUCTION AND COMMISSIONING
OF NEW HVAC EQUIPMENT AT THE WALTER CECIL RAWLS LIBRARY

The Board of Supervisors of Southampton County, Virginia (the "County") has determined that it may be necessary or desirable to advance money to pay the costs of designing, constructing and commissioning certain HVAC equipment (the "Equipment") at the Walter Cecil Rawls Library in Courtland, Virginia.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF SOUTHAMPTON COUNTY, VIRGINIA:

1. The Board of Supervisors adopts this declaration of official intent under Treasury Regulations Section 1.150-2.

2. The Board of Supervisors reasonably expects to reimburse advances made or to be made by the County to pay the costs of designing, constructing and commissioning the Equipment from the proceeds of its debt or other financings. The maximum amount of debt or other financing expected to be issued for the Equipment is \$425,000.

3. This resolution shall take effect immediately upon its adoption.

The foregoing resolution was adopted by the Board of Supervisors at its meeting on October 26, 2021 by the following roll call vote:

<u>Member</u>	<u>Vote</u>
Alan W. Edwards, M.D., Chairman	
William Hart Gillette, Vice Chairman	
Christopher D. Cornwell, Sr.	
Carl J. Faison	
Dallas O. Jones	
Lynda T. Updike	
Robert T. White	

Absent:

None

Clerk, Board of Supervisors, Southampton County,
Virginia

BUILDING FUND
Southampton County

Category	FY 2018 Actual	FY 2019 Actual	FY 2020 Actual	FY 2021 Budget	Actual On Mar-21	Department Request	FY 2022 Projected	% Total	% Change
EXPENDITURES									
094000-3150	LEGAL SERVICES/CLOSING COSTS	3,330	0	5,000	0	0	0	0.00%	0.00%
094000-3165	WETLANDS MONITORING SVCS @TTTRA	12,565	17,073	13,477	9,488	8,404	0	0.00%	-100.00%
094000-5840	RADIO SYSTEM DEBT SERVICE	0	0	0	0	0	0	0.00%	0.00%
094000-7000	SHARED REVENUE TO FRANKLIN	0	0	0	0	0	0	0.00%	0.00%
094000-7195	COURTHOUSE PROJ - DESIGN	0	0	143,215	2,001,147	870,784	0	0.00%	-100.00%
094000-7196	FRESH START ROOF	0	0	0	50,000	34,500	0	0.00%	-100.00%
094000-7200	SCHOOLS - ROOFING PROJECTS	0	2,373,175	2,392,887	0	0	0	0.00%	0.00%
094000-7201	2019A DEBT - SCHOOLS ROOFING PR	0	0	150,429	147,560	73,780	0	0.00%	-100.00%
094000-7202	2019B DEBT - FRESHSTART ROOFING	0	0	1,349	1,106	50,661	0	0.00%	-100.00%
094000-7203	2019B DEBT - COURTHOUSE ARCHITECT	0	0	53,919	161,909	2,162,445	0	0.00%	-100.00%
094000-7204	DEBT SVC - COURTHOUSE RENOVATION	0	0	0	0	504,190	504,190	22.64%	100.00%
094000-7208	DEBT SVC - LIBRARY BOILER	0	0	0	0	52,000	52,000	2.33%	100.00%
094000-7900	RIVERDALE ELEMENTARY SCHOOL	0	0	0	0	0	0	0.00%	0.00%
094000-8100	RIVERDALE ELEM/DEBT SER/INTERE	0	0	0	0	0	0	0.00%	0.00%
094000-8105	REFUSE COLLECTION EQUIPMENT	0	0	45,072	0	0	0	0.00%	0.00%
094000-8108	LEASE PURCHASE - ROLL OFF TRASH	38,637	0	0	35,000	34,327	34,328	1.54%	-1.92%
094000-8109	SEBRELL COMPACTOR PROJECT	0	0	0	0	0	0	0.00%	0.00%
094000-8125	NEW COURTHOUSE PROJECT	72,480	7,194	7,451	0	0	0	0.00%	0.00%
094000-8130	FIRE & RESCUE CAPITAL PROJECTS	359,000	49,000	182,000	657,777	149,000	703,777	31.60%	6.99%
094000-8135	GIS	0	0	0	0	0	0	0.00%	0.00%
094000-8143	N/P COM. CAPITAL - JAIL FARM KIT	25,153	16,897	12,065	12,065	12,065	12,065	0.54%	0.00%
094000-8144	PHASE I JAIL FARM	0	0	0	5,000	0	4,000	0.18%	-20.00%
094000-8145	OTHER CAPITAL PROJECTS	0	0	0	0	0	0	0.00%	0.00%
094000-8146	ANIMAL POUND PROJECT	0	0	0	0	0	0	0.00%	0.00%
094000-8147	COURTHOUSE SECURITY PROJECT	0	0	0	0	0	0	0.00%	0.00%
094000-8148	N/P COM. CAPITAL - COURTHOUSE SE	860,762	0	0	0	0	0	0.00%	0.00%
094000-8152	PUBLIC WORKS VEHICLE/CONTAINER	19,725	3,817	164,897	4,000	553	4,000	0.18%	0.00%
094000-8165	FAIR GROUNDS AIRCONDITIONER	0	0	0	0	0	0	0.00%	0.00%
094000-8235	DEBTSVC-SHERIFFS VEHICLES-CAP	83,713	83,474	83,713	83,713	83,713	116,000	5.21%	38.57%
094000-8240	TURNER TRACT DEV/DEBT SERVICE	0	0	0	0	0	0	0.00%	0.00%
094000-8241	REFUNDING - T TRACT DEV/DEBT S	740,538	740,033	741,816	739,183	58,916	709,249	31.84%	-4.05%
094000-8250	TURNER TRACT DEVELOPMENT-NON-U	0	0	0	0	0	0	0.00%	0.00%
094000-8251	TTRACT-SEWERFORCEMAINGRANT\$70	0	0	0	0	0	0	0.00%	0.00%
094000-8252	TURNER TRACT/ROSE VALLEY ROAD	0	0	0	0	0	0	0.00%	0.00%
094000-8253	TURNER TRACT DEVELOPMENT/ENVIV	0	0	0	0	0	0	0.00%	0.00%
094000-8255	TRUSTEE FEE/REGIONS BK/COST OF	0	0	0	0	0	0	0.00%	0.00%
094000-8256	TURNER TRACT-CEMETARY RELOC-GR	0	0	0	0	0	0	0.00%	0.00%
094000-8275	DEMOLITION/DREWRYVILLE SCHOOL	0	0	0	0	0	0	0.00%	0.00%
094000-8292	MOTOR VEHICLES - SHERIFF	108,887	140,920	103,861	60,000	61,177	40,000	1.80%	-33.33%
094000-8294	MOTOR VEHICLE - ADMIN	27,243	0	0	0	0	0	0.00%	0.00%
094000-8500	ESCO WORK - BANK OF AMER - COUNTY	48,155	48,155	48,155	48,155	48,155	47,823	2.15%	-0.69%
094000-9000	DEBT ISSU. COSTS - VASNAP 2019B	0	134,853	0	0	0	0	0.00%	0.00%
094000-9200	TRANSFER OUT TO OTHER FUNDS	0	0	0	0	0	0	0.00%	0.00%
TOTAL EXPENSES		2,400,188	3,614,591	4,149,306	4,016,103	3,648,480	2,227,432	100.00%	-44.54%



September 17, 2021

Southampton County
P.O. Box 400
Courtland, VA 23837

Attention: Michael W. Johnson
County Administrator

Reference: Walter C. Rawls Library
Courtland, VA
HVAC System Upgrades
Fee Proposal

Dear Mike:

We are pleased to offer you our fee proposal to provide Engineering Services for the above referenced project. The project can be generally described as the replacement of the existing air handling system. Existing ductwork systems within the library, outside of the mechanical room, will remain.

The MEP design scope is anticipated to include:

- Field investigation
- Development of demolition drawings
- HVAC load calculations.
- HVAC system design. Replace existing split system DX constant volume air handling unit with a new unit with hot water heating coil. The existing steam boiler will be removed. Temporary air conditioning will be required. The existing AHU currently lacks any provision for outside air so new louvers and/or roof hoods will be required to introduce fresh air. An architect and structural engineer will be engaged to detail the new wall and/or roof openings.
- Electrical design to support the HVAC replacement only

Design and other engineering efforts not anticipated or currently included in the MEP scope of work are as follows:

- Life safety/code consulting (i.e. egress calculations, determination of fire ratings, etc.)
- Participation in presentations
- Participation in the Commissioning process other than to respond to questions generated by the commissioning agent relative to MEP design intent



- Participating in BIM Coordination meetings during construction
- Development of a record BIM model
- Record drawings
- Cost estimating
- Record drawings
- Printing and reproduction
- Any efforts or registration fees associated with obtaining green building certifications such as LEED, Green Globes, EarthCraft, etc.

All design meetings will occur virtually.

In-office CA services will be invoiced uniformly over the duration of the construction schedule.

This proposal assumes the County will handle project bidding. Attendance at a pre-bid/pre-construction meeting and construction phase site visits have not been included at this time but can be billed on an hourly basis if required. We have included one (1) visit only for the structural engineer to inspect any new steel that needs to be installed.

Drawings and specifications will be provided in PDF format.

Therefore, our fee for this work is as follows:

Field Investigation.....	\$ 3,300.00
Construction Documents.....	\$ 28,300.00
Subtotal Design Phase Services.....	\$ 31,600.00
Bidding Assistance.....	\$ 450.00
Shop Drawing Review	\$ 1,850.00
In-office CA (RFI response, etc.).....	\$ 7,300.00
Construction Administration (on site).....	\$ 520.00
Subtotal Construction Phase Services.....	\$ 10,120.00
Commissioning	\$ 6,500.00
Subtotal Additional Services	\$ 6,500.00

HVAC system commissioning is a requirement of the 2018 Virginia Energy Conservation Code for any buildings where the total installed mechanical cooling equipment capacity is over 40 tons. Commissioning will be required for this facility, and we have included an optional services proposal for this work.



We anticipate that our contract would be in the form of an AIA C401.

We hope this meets your understanding and approval. Should you have any questions or concerns regarding this proposal, please do not hesitate to contact us. If this proposal is satisfactory to you, please sign and return a copy of this agreement for our records.

If this proposal is satisfactory to you, please sign and return a copy of this agreement for our records.

Respectfully,

PACE Collaborative, PC

Brandon E. Wood, PE, LEED AP BD+C
Mechanical Engineer/Vice President

Agreed – Southampton County

10-27-2021

Date

Attachment: Standard Agreement for Provision of Engineering Services

STANDARD AGREEMENT FOR PROVISION OF ENGINEERING SERVICES

I. SCOPE AND FEE

The scope of services and associated fees are identified in the attached proposal.

II. GOVERNING LAW

This agreement is to be governed by the laws of the Commonwealth of Virginia. Any informal Agreements presented for additional services relating to the project will be held to the terms and guidelines outlined within this Agreement.

III. PAYMENT POLICY

PACE Collaborative will invoice for services rendered up to that time, and payment in full is due upon receipt of invoice. All invoices not paid within 90 days are subject to a service charge of 1% per month. In the unlikely event that collection of the fee becomes a legal issue, the associated costs for collection, such as attorney fees and/or court costs will be added to the outstanding balance. Should a problem arise concerning your account, please immediately contact our Accounting Department at 757-499-7223.

IV. TERMINATION OF AGREEMENT

The obligation to provide services under this Agreement (to include any informal Agreements stating additional services) may be terminated by either party upon seven (7) days of written notice. In the event of any termination, PACE Collaborative will be paid for all services rendered and reimbursable expenses incurred to the date of termination and, in addition, all reimbursable expenses directly attributable to termination.

V. NON-BINDING MEDIATION

Prior to the initiation of any legal proceedings, the parties to the Agreement agree to submit all claims, disputes or controversies arising out of or in relation to the interpretation, application or enforcement of this Agreement to non-binding mediation. Such mediation shall be conducted under the auspices of the American Arbitration Association or such other mediation service or mediator upon which the parties agree.

VI. LIABILITY

The Engineer's services are performed in a manner consistent with the standard of care applicable to similarly situated design professionals performing similar services on projects of comparable complexity. To the fullest extent permitted by law, the total liability of PACE Collaborative, to client or anyone claiming through client, for any and all losses, claims, damages, expenses, or costs whatsoever, shall not exceed the total amount of the fee that is a part of this agreement, or the total amount of PACE Collaborative's per claim professional liability insurance coverage, whichever is lower. Such causes include, but are not limited to, negligence, errors, omissions, strict liability, or breach of contract or warranty.

VII. OWNERSHIP

All documents and electronic files prepared or furnished by PACE Collaborative (PACE Collaborative includes independent professional associates and consultants) pursuant to this Agreement are instruments of service and PACE Collaborative shall retain an Ownership and property interest therein. These documents may not be reused without the written consent of PACE Collaborative. Native format drawing and model files shall not be re-transmitted or transferred without express written consent, including but not limited to *.dwg and *.rvt files. Uneditable *.pdf and *.nwd files will be made available for re-transmission.

PACE Collaborative was tasked to perform a building HVAC System assessment and to provide recommendations for repairs and replacement. During the site visit, PACE visually inspected all of the MEP equipment and documented observed issues. Below are the visual observations and recommendations.

Propane Gas Service

The building has an underground propane storage tank at the northwest corner of the rear parking lot. The 2" propane service enters the building at the northwest corner. The gas serves the steam boiler. It appears to be in good condition. Some of the piping is rusted and should be cleaned and painted to limit the possibility of a leak.

Propane Gas Service



HVAC General Description

The library is served by a TRANE modular air handler with a DX cooling and a steam heating coil. The DX coil is served by an outdoor air-cooled condensing unit. The heating coil is served by a steam boiler. Supply air is distributed through various branch ducts connected to the main sheet metal ductwork to diffusers. The main return air duct in the mechanical room penetrates a wall but it is unknown if the space above the ceiling is being used as a plenum ceiling return. There are no ceiling level return air registers or grilles in the building. The unit is controlled by a wall-mounted thermostat in the main library.

Air Handling Unit (AHU-1)

AHU-1 is a TRANE "Climate Changer" modular series unit, DX cooling coil, and a steam heating coil. The AHU unit is model is MCCA021CAH0BAD0A and is a 10,500 cfm capacity. The DX coil is served by an outdoor air cooled condensing unit ACCU-1. Air handler was manufactured in 1997.



Observations:

1. During the site visit, the air handler was operating.
2. The AHU appears to be in fair operating and physical condition.
3. The AHU has a return air duct that penetrates a wall in the mechanical room but there was no visible indications of how the return is being returned to the unit. The main library, corridors and most offices have a drywall ceiling with no return air grilles.
4. It is unknown if the AHU has an outdoor air intake. Looking up from inside the return air plenum at the unit there is a sheet metal damper installed but access to the top of the return air duct and under the roof deck is limited.
5. The fibrous insulation panels inside the return air plenum are falling away from the sheet metal and need to be repaired.

Recommendations:

1. The expected service life for this type of equipment is approximately 20 years. The AHU is 22 years old and has exceeded its expected service life. Plans should be made to replace this equipment in the near future.
2. Replacement unit should include vibration isolation to minimize noise and vibration.

3. Install an outdoor air connection with damper.
4. Replacement unit should include a heating coil for dehumidification.

Air Cooled Condensing Unit (ACCU-1)

ACCU-1 is a TRANE air-cooled condensing unit, model RAUCC40FBP13DFH, with nominal rating of 40 tons. The refrigerant is R-22. Based on manufacturer nameplate data, it was manufactured in 1997.

ACCU-1



Observations:

1. During the site visit, the ACCU was not operating because the unit was in heating mode.
2. The ACCU appears to be in a fair physical condition.
3. The external insulation on some of the refrigerant pipe is either missing or falling apart.
5. The AHU DX coil and ACCU contains R-22 refrigerant. As of 2010, this type of refrigerant was discontinued for use in new air conditioning systems and will be phased out completely in January, 2020. The cost of having to service the compressors and the refrigerant system has increased due to the phase out of R-22 and the increase in its cost per pound.

Recommendations:

1. The expected service life for this type of equipment is 20 years. The ACCU is 22 years old and has exceeded its expected service life. Although the unit is in fair physical

condition PACE was not able to determine the operating condition (since the building was in heating mode). Plans should be made to replace this equipment in the near future.

Steam Boiler, Condensate Pump and Receiver

The steam boiler manufactured by Weil-McClain is a model 588. The output rating is 1084 mbh and gas input is 1357 mbh. Although the nameplate data on the boiler did not indicate a manufacturing date, Hart Council (Director of Public Works) indicated that it was installed at the same time as the AHU and ACCU. It provides steam for the AHU heating coil.

Steam Boiler



Observations:

1. The boiler was operating during the site visit.
2. The boiler is leaking water and it appears that it has been for some time.
3. There is water accumulation on the concrete floor in the vicinity of the condensate receiver and condensate pump but PACE was unable to determine if the water is from the components, pipes or residual from the leaking boiler.



4. The concrete curb that the boiler is situated on and the surrounding surface on the concrete floor is disintegrating into large fragments.

Concrete disintegrating



Condensate Receiver and Pump



Recommendations:

1. The expected service life for the steam boiler is approximately 24 years. The boiler is 22 years old and is nearing its expected service life.
2. Considering the age and the fact that it is already leaking through internal components, PACE recommends replacing the boiler. In addition, the condensate pump and receiver should also be replaced.
3. The concrete curb (48"Wx48"Hx4"D) should either be repaired or replaced.

Replacement Options:

Replace AHU in kind and add a reheat coil for dehumidification. Change the heating system to hot water heating in lieu of steam. Replace ACCU in kind. Replace existing steam boiler, condensate pumps and accessories with a new propane fired hot water boiler. New boiler should be of condensing type, which should provide 10% saving in gas usage. Add outdoor air duct. Anticipated construction cost is \$300,000. To condition the building during

construction, temporary air handler(s) during construction would be needed. Recommend budgeting \$30,000 for three months.