



January 6, 2020
Revised January 20, 2020

TRC Reference# 1099-18-01

Bill Garner
Facilities Manager
All Saints Church
3 Chevy Chase Circle
Chevy Chase, MD 20815

Re: Proposal for Engineering Services-Revised
HVAC System Evaluation
All Saints Church
3 Chevy Chase Circle, Chevy Chase, MD 20815

Dear Mr. Garner:

Thank you for the opportunity to submit this proposal to provide engineering services associated with the evaluation of the Heating, Ventilation, and Air Conditioning systems at the All Saints Church. We anticipate this proposal will serve the requirements of the Request for Proposal (RFP) received via email on February 1, 2018 and as we discussed during a visit to the property on February 19, 2018. This revised proposal is based on the results of our recent meeting on December 18, 2019 and replaced the previous proposal dated March 9, 2018 submitted for this project.

TRC is focused on the delivery of quality building technology services. Our only business is the development and application of building engineering and operational technologies, enabling us to provide superior expertise in the evaluation, restoration, operation and maintenance of buildings. Our expertise in investigating a wide variety of building problems gives us the specialized knowledge to objectively evaluate system designs and field conditions to determine whether they could result in problems for the owner over the long term.

Building Background

The All Saints Church building consists of four sections, each constructed at different times. These sections include the original church (now identified as Memorial Hall) constructed in 1904, the Nave constructed in 1923, the Parish House and Transepts constructed in 1953, and the new wing constructed in 2000.

The building's heating and cooling system utilizes hot water generated by two boilers for heating and chilled water generated by a single chiller for cooling. Chilled water/hot water is supplied to six air handling units and approximately 60 fan coil units provide heating and cooling to the various spaces within the church. Based on observations made during our site visit to the building, it

appears that the main air handling units serving the older areas of the building were upgraded when the new wing was added in 2000.

It is our understanding that over the past several years the facility has experienced various issues related to air flow and system control that have resulted in unsatisfactory conditions within spaces of the building. These issues include but are not necessarily limited to two (2) 100% outdoor make up air units that supply ventilation air to corridors of the new wing (AHU-2) and corridors of the office section of the Parish house. Reportedly the coil in AHU-2 froze and broke several years ago; the unit has been offline since that time. Both units are reportedly undersized to maintain adequate space conditions during times when peak heating and cooling are required. The Nave air handling unit controls are not functioning correctly and resulting in poor ventilation and temperature and humidity control within the space.

The preschool rooms located partially below grade are reportedly expediting humidity control problems when outdoor humidity levels are elevated. It appears that these spaces are not ventilated resulting in a buildup of humidity in the space due to a combination of high occupancy and infiltration of humidity from outside. These conditions have resulted in multiple instances of condensation forming on ductwork and chilled water piping causing damage to ceilings and space finishes. Reportedly a plenum exhaust fan has been added to help alleviate this condition.

It is our understanding that the foundation for a building wide Building Management System (BMS) was installed by Calvert Controls as part of the chiller installation contract, initially covering chiller and the boiler room equipment. In the future the system will be extended to provide control and monitoring of the Parish House FCUs and AHU, the Great Hall large and small AHUs. Ultimately the remaining AHUs, FCUs, and exhaust system equipment will be added to the system. TRC will review the control system settings installed to date as they relate to this project.

In general, the intent of this project is to assist All Saints Church in performing an evaluation of the building systems. The overall goal of the project is to determine the best path forward to improving control of the building systems, improve occupant comfort, reduce humidity levels during summer months and improve the overall ventilation of the building, while maximizing the operational efficiency of the system.

SCOPE OF SERVICES

1. Review existing drawings and conduct site visits to verify the configuration and condition of the existing equipment at the property including:
 - a. HVAC system controls serving the main central plant equipment and air handling units. TRC will review individual components, control valves, dampers, etc. for condition and proper operation, as well as sequences of operation.
 - b. The existing air system configurations including corridor supply air handling units and building exhaust, duct layout and sizes, equipment capacities and condition, etc. If applicable, review other systems as they relate to overall building pressurization.

2. Evaluate the sequences of operation, setpoints, operating schedules, etc. for the various systems and equipment with respect to the ability of each to maintain acceptable conditions within the building sections while providing cost effective, efficient HVAC system operation.
3. Evaluate the building's existing air balance, building exhaust vs. outdoor air supply quantities, based on equipment capacity data shown on the original drawings, actual fan sizes, and preliminary air flow measurement data that may be collected during the site visit. This includes reviewing the capacity of the existing corridor make up air units to confirm units are properly sized.
4. Evaluate the configuration of the lower level school spaces in order to develop recommendations to improve ventilation in the space and control of space temperatures and humidity levels. This will include review of pipe and duct insulation within the ceiling and development of recommendations to add or improve insulation and/or provide sufficient conditioning to prevent formation of condensation on cold surfaces.
5. Provide an evaluation report documenting the findings, conclusions, and recommendations related to:
 - a. Upgrading or replacing the existing control equipment for the main HVAC system equipment including recommended modifications to sequences of operation, setpoints, operating schedules, etc. to improve occupant comfort and control of space temperature and humidity while maximizing efficiency.
 - b. Modifications to the building air handling systems and controls (may be included in a. above) to improve building pressurization.
 - c. Improving conditions within the lower level school spaces including recommendations to prevent condensation on chilled water piping during the summer months.
 - d. Modifications to the building outdoor air supply or exhaust systems as needed to maintain code required levels of ventilation and/or to maintain proper building pressurization.
 - e. General condition assessment of the boiler and recommendations to improve the operation and/or efficiency of the system.The report will include cost estimates to implement the recommended system modifications as well as potential operating costs of each recommendation.
6. Outside of pre-planned site visit time as outlined above and limited tele-conferences, if requested, TRC can attend meetings with the client to discuss the projects scope of work and/or draft or final report. However, dedicated meeting time is not included in the fee estimate shown below, and will be billed as additional services.

SCHEDULE

TRC will commence work upon receipt of a fully executed copy of the attached agreement and payment of initial project invoice. TRC will then coordinate with the All Saints Church facilities personnel to schedule the initial site visit. TRC will submit the evaluation report within 60 days of the initial site visit.

COMPENSATION

TRC will perform the above-described Scope of Services on a Time & Expense format for a *fee not to exceed \$14,360.00 without prior approval*. This fee includes the December 18, 2019 meeting time to review the scope of work and development of this proposal. Our hourly rate is \$190 per man hour.

Additional Services: If additional services not included in the original Scope of Services are requested, including dedicated meeting time outside of pre-planned site visits and limited tele-conferences, the fee for this work will be based on the billable time expended by our technical personnel in accordance with our standard hourly rate of \$190.00 per hour. Additional Services shall be performed only upon written authorization from the owner. Additional Services may include:

- Significant (more than ½ hour) revisions to previously approved work
- Additional meeting time not initially outlined
- Value engineering review
- Any services not stated in this proposal
- Delays and/or additional visits and expenses if access to areas of the building are not ready as scheduled

Reimbursable Expenses: Reimbursable expenses outside of those included to complete the original Scope of Services shall be billed at cost plus 20%. Reimbursable expenses shall include, but will not be limited to scanning of original building drawings, additional reproduction, couriers, sample analysis, and equipment rental.

Payment: Services will be billed on a weekly basis based on actual hours expended by technical personnel. Full payment is due within 30 days of the date of each invoice.

Additional Pricing Considerations

1. Client shall be responsible for providing access to all areas of the building and existing equipment necessary to complete our services during our pre-planned site visits;
2. Client shall be responsible for opening up equipment access panels and electrical panels as requested by TRC and shall furnish all tools, ladders, etc. required to gain access for inspection;
3. If requested, client shall provide copies of up to two years of utilities bills for use in evaluating equipment; a detailed analysis of the facilities utility bills is not included as part of this project, and;
4. The Client shall furnish TRC with copies of all available structural, electrical, mechanical, and plumbing drawings for use off site;
5. TRC will provide replacement chiller options on the size and configuration of the existing equipment; detailed cooling load calculations for use in sizing a new chiller will not be performed and detailed design of a new chiller installation is not included.
6. Review of electrical systems (other than those needed to support the new chiller), fire and life safety systems, plumbing systems and general building structure is not included.
7. This proposal is valid for a period of 60 days after receipt by All Saints Church.

8. Scope of services excludes any environmental issues, such as asbestos identification.

We trust this proposal is responsive to your needs. A copy of our standard contract agreement is included at the end of this proposal. If our proposal is acceptable please indicate approval for us to proceed with this work by having the agreement signed by an authorized representative of All Saints Church. Please return the signed copy by email to dbenson@tedrossconsulting.com or fax to 301-869-8376. TRC will sign the agreement and return a copy to you for your records.

Thank you again for the opportunity to work with you on this project. If you would like to discuss any aspect of this proposal please do not hesitate to call me at (301) 869-6446.

Sincerely,

TED ROSS CONSULTING, LLC



Charles Kirk, P.E.
Senior Mechanical Engineer

TRC Reference# 1099-18-01

CONTRACT AGREEMENT

This agreement, made this _____ day of _____, 2020 by and between **Ted Ross Consulting, LLC** (hereinafter as "**Consultant**") and our customer to wit, **All Saints Church**, whose address is **3 Chevy Chase Circle, Chevy Chase, MD 20815** (hereinafter as "**Client**"), is made in consideration of our mutual promises to each other. This agreement shall commence from the date of the customer's signature and continue until terminated.

I. SCOPE OF SERVICES

The scope of work for **Ted Ross Consulting, LLC** will consist of those services set forth in the Proposal dated **January 20, 2020** and titled **Proposal for Engineering Services, HVAC System Evaluation, All Saints Church, 3 Chevy Chase Circle, Chevy Chase, MD 20815** which proposal is attached hereto and incorporated as Exhibit A, and made a part of this Agreement. Any services not specifically identified in the Proposal, or which are to be provided on a task-by-task basis, shall be provided at the hourly rate of **\$190.00**.

II. TERM AND PAYMENT

This agreement shall commence from the date of the customer's signature and continue until terminated. *The hourly rates charged by the Consultant under this Agreement are subject to adjustment upon the mutual agreement of the Client and Consultant, but at a minimum upon the yearly anniversary of this contract. In the event of such increases, and upon submission of a 30 day written notice establishing the extent of the increase, the contract amount will be equitably adjusted.* Either party may terminate this agreement by giving thirty (30) days written notice.

In consideration of the performance of Consultant of the Services required by the Scope of this Agreement, Client agrees to pay Consultant as defined in the attached proposal, Exhibit A, or on a time and expense basis not to exceed **\$225.00** per man hour for work performed in accordance with this agreement, with the cost of work being invoiced on a weekly basis. In addition, a **\$ NA down payment** is due and payable prior to the start of work. Time spent or expenses incurred in clarifying, supporting, redefining or defending the Consultant's services under this Agreement will be paid on time and expense. Payments for undisputed amounts shall be made at Client's office within thirty (30) days of the invoice date.

Failure to pay the invoice by the thirtieth (30th) day after the billing date will result in the imposition of a late charge of 1.5% per month on the unpaid balance. In the event the account is sent for collection, client agrees to pay all costs and expenses of collection, including all court costs and attorney's fees paid and /or incurred by Consultant in seeking to collect payments due hereunder.

It is further agreed that in the case of failure of Client to make the above mentioned payments, Consultant may at its own option declare the agreement terminated for default, and be entitled to the sums due for performances rendered, together with any accrued interest or attorneys' fees for collection per the terms of this Agreement.

III. STANDARD of CARE

Each Party will perform services under this Agreement, consistent with that level of care and skill ordinarily exercised by members of the Party's profession, practicing on Projects of similar scope, complexity and value, and under similar circumstances, and in the same or similar locality in the same period of time. It is expressly agreed and understood that neither Party provides any guaranty or warranty with respect to any services provided pursuant to an Agreement.

IV. USE of DOCUMENTS

- A. Documents prepared by the Consultant such as proposals, programming documents, schematic designs, contract documents, etc. are Instruments of Service for use solely with respect to the Client's project. The Consultant shall be deemed the "author" of the Instruments of Service as such, shall retain all common law, statutory and other reserved rights, including the copyright thereto. Notwithstanding these provisions, the Consultant hereby provides a limited license to the Client in the Instruments of Service for the purposes of utilizing them with respect to the Client's specific project.
- B. Provided the Client is not in default under this Agreement, the Client may retain copies of the Instruments of Service solely for information and reference in connection with occupancy and maintenance of the Project. However, such documents are not intended or represented to be suitable for use by any person other than with the Consultant's participation and involvement on extensions of the Project, for completion or implementation of the Project by others, or any other project. In the event the Instruments of Services are utilized for additional construction projects, the Client agrees to indemnify, defend and hold the Consultant harmless from any claims or damages resulting or relating in any way from unauthorized changes or use of the Instruments of Service or completion of the Project without the Consultant's involvement.

V. MEDIATION/ LITIGATION

- A. As a condition precedent to litigation, unless mutually agreed otherwise, the parties shall endeavor to settle claims or disputes by non-binding mediation, in accordance with the Construction Industry Mediation Rules of the American Arbitration Association then in effect. Mediation shall be conducted in Montgomery County, Maryland.
- B. If mediation fails to resolve the claims or disputes, then all claims, disputes and any other matters in question arising out of or related to this Agreement shall be determined by the court of appropriate jurisdiction for Montgomery County, Maryland or the United States District Court for the District of Maryland.

VI. HIDDEN CONDITIONS

The Services contemplated by this Agreement are based upon observable conditions. A condition is hidden if it is concealed by existing finishes or cannot be investigated by reasonable visual observation. Discovery of hidden conditions could result in compensation to a Party as Additional Services.

VII. WAIVER of CONSEQUENTIAL DAMAGES

The Parties recognize and agree that there are a variety of risks which potentially affect the Parties to this Agreement. Accordingly, to the extent permitted by applicable law, the Parties agree that, in order for Client to obtain the benefit of a fee which does not need to account for unlimited risks, the Parties agree that no director, officer, shareholder, employee, representative or agent of the Consultant shall have any individual liability to the other, except for intentional acts or fraudulent conduct. Further, each party hereby waives consequential damages for claims, disputes or other matters in question arising out of relating to this Agreement. Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, any other person.

In addition to the forgoing waiver, Consultant and Client agree that if due to Consultant's breach of the standard of care, any required item or component of the Project is omitted from construction drawings prepared by the Consultant, then Consultant's liability, if any, shall be limited to the actual damages sustained by the Client, and in such event, the Consultant shall not be liable for the cost of any item or component to the extent that such item or component would not have been otherwise necessary to the Project or otherwise adds value, betterment, upgrade, enhancement of the Project if the error or omission had not occurred.

VIII. COMPLETE AGREEMENT

This instrument embodies the whole agreement of the parties. There are no promises, terms, conditions or obligations other than those contained herein; and this agreement shall supersede all previous communication, representations, contracts, agreements either verbal or written between the parties hereto.

In witness whereof, the parties have executed the Agreement.

Client: All Saints Church

By: _____
Signature

Printed Name
Title: _____
Date: _____

Consultant: Ted Ross Consulting, LLC

By: _____
Title: _____
Date: _____