



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

**August 27, 2025**

Please find the following addendum to the bid mentioned below.

**Addendum No.: 2**

**Bid#: 25-23-2**

**Project Name:** Justice Center Cooling Tower

**Bid Due Date:** Wednesday, September 3, 2025

### **GENERAL INFORMATION:**

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1. In Section 01-Table of Contents-Please **ADD** Section 12- Specification SECTION 23 05 93 - Testing, Adjusting, and Balancing for HVAC. (ATTACHED)
2. In Section 03-Summary of Work, I. Work to Include: The following sections, No. 2, 3, 4, & 5 have been **(REVISED)**.

I. Work to Include:

-No 2- Design Conditions, **DELETE** the following sentence: "The new cooling towers shall meet Energy Star Efficiency Requirements and Standards." And **REPLACE** with the following: "The cooling towers shall be CTI Certified".

-No. 3- Supply and Equipment Specifications: **DELETE** this section and **REPLACE** with the following:

3. New cooling towers should have the following features at a minimum:

- Fiberglass Reinforced Polyester (FRP) Casing Panels or all Type 304 Stainless Steel construction. (Stainless steel basin and galvanized upper is NOT an approved alternative)



## ST. TAMMANY PARISH

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- Ladder, safety cage, and safety railing
- Internal walkway
- Belt Drive Fan
- Vibration cutout switch

-No 4-Removal and Installation: **DELETE** this section and **REPLACE** with the following:

4. Removal and Installation: Removal and installation must be done in a phased approach, ensuring one cooling tower cell is always operational.

- a. Contractor shall be responsible for the installation of any temporary lines required to ensure that one cooling tower is always operational. Any downtime required to accommodate the temporary piping should be limited to the weekends between Friday at 4 P.M. and Monday at 8 A.M. Downtimes should last no longer than twelve (12) hours at a time. If temporary piping installation cannot accommodate the previously mentioned time period contractor shall provide temporary cooling tower with a minimum capacity of at least one existing cell. Contractor shall be responsible for all work associated with temporary tower.
- b. Contractor shall be responsible for the removal and disposal of the existing cooling tower and associated components.
- c. Contractor shall be responsible for the removal and disposal of any debris or waste related to the removal and installation of the cooling tower.
- d. Contractor shall install the new cooling tower cells on the existing base and to manufacturer's standards. Contractor shall be responsible for all modifications to existing supports and additional steel to support the new chiller. All new steel shall be hot dipped galvanized.
- e. Contractor shall install new electrical wiring from the existing electrical panel and connect it to the cooling tower.



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
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- f. Contractor shall reconnect the existing controls to the new cooling tower and ensure complete compatibility and proper working order. Contractor shall verify all existing controls sequences prior to disconnection. Any control devices removed for the installation of new piping shall be replaced with new. Field verify existing conditions.
- g. Contractor shall install new exterior piping to and from the cooling tower, which must match or be an approved alternative to the existing.
- h. Contractor shall insulate new piping in a manner that matches the existing piping and matches the existing insulation requirements.
- i. Contractor shall test all new piping, fittings, and apparatuses for proper performance.
- j. Contractor shall be responsible for replacing (3) existing 40hp centrifugal condenser water pumps with new. Contractor shall be responsible for the removal of existing pumps and installation of new, reworking of existing piping to accommodate new pumps and pump startup. Contractor shall field verify and match existing pump conditions, per the original contract documents each pump was scheduled for 1800 gpm at 60 ft head. Contractor to include preliminary Test and Balance of existing pumps to confirm existing flow conditions prior to removal, contact owner for direction if existing conditions vary greatly from that of existing plans. (See Section 12 for TAB Specs.)
- k. Contractor shall clean new cooling tower cells thoroughly from any dirt or debris
- l. Contractor shall ensure any air and debris are removed from the lines after installation.



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
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- m. Contractor shall comply with manufacturer's instructions for filling and startup of operation, including but not limited to lubrication and verification of proper fan rotation and directionality.
- n. Contractor shall return all disturbed areas impacted by project work to as good or better condition than found.

-No 5 -Training and Support **DELETE** this section and **REPLACE** with the following:

### 5. Training and Support

- a. Prior to final payment, Contractor shall provide training and a detailed walk-through with the owner's representative(s) explaining the functional components and troubleshooting techniques.
- b. Contractor's provided training shall include instruction on how to operate the new chiller and any newly installed associated equipment.
- c. Contractor shall provide the manufacturer's original installation, operation and maintenance documentation for all equipment provided and installed
- d. Copies of all warranties, including materials, equipment warranties, installation, and workmanship shall be provided to the Parish.
- e. List of contact names and numbers for 24/7 troubleshooting calls and/or on-site services for operational issues, during the warranty period.
- f. Service, repairs, and troubleshooting shall cover a 1-year period beginning on the date of final acceptance by the Parish's representative.
- g. Prior to Payment, Contractor shall provide the manufacturer's standard limited warranties covering the cooling tower and associated newly installed equipment against failure resulting from normal use.
- h. Contractor shall provide a one (1) year parts and labor warranty for their work.

### QUESTIONS & ANSWERS:

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Question #1: Are gear driven fans acceptable in lieu of the specified cooling tower belt driven fans?

**Answer #1: No gear driven, belt drive fans only.**



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

Question #2: Is the wind load rating shown in the basis of design selection the minimum allowable?

**Answer #2:** No, the wind pressures are slightly higher than what is required for our location. The required wind speed for the Justice Center location is 140 MPH for Exposure C – Risk Category IV. The provided tower must meet the 50 PSF pressure or the 140 MPH wind load.

Question #3: Is series 301 stainless steel an acceptable equal to the basis of design series 304 stainless steel?

**Answer #3:** No, 301 Stainless Steel is not allowable. Tower components shall be 304 Stainless Steel.

Question #4: In accordance with the plans and specifications, we request prior approval for the following equipment:

Equipment	Specification Section	Manufacturer
Crossflow Cooling Tower	13.16 & Section 12	Evapco
Counterflow Cooling Tower	13.16 & Section 12	Evapco

**Answer #4:** The following manufacturer, Eapco AXS 12-9P22 (Crossflow Tower), is approved for bidding. It is approved in name only, and approval does not waive any requirements of the plans and specifications. Shop drawings will be required for final review and approval of specific items under consideration.

Evapco AT 224-3N18F (Counterflow Towers) is not an approved equivalent.

Question #5: We would appreciate your consideration for prior approval for the following manufacturers:

PRODUCT: Cooling Tower MANUFACTURE: Marley NC

**Answer #5:** The following manufacturer, Marley/SPX NC, is approved for bidding. It is approved in name only, and approval does not waive



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

**any requirements of the plans and specifications. Shop drawings will be required for final review and approval of specific items under consideration.**

Question #6: Good afternoon. I have attached a note that I found in the “scope of work” section. It calls out replacing the 3 existing pumps for the condenser water. Is this to be done and if so is there any pump schedule or information of existing pumps?

- j. Contractor shall be responsible for the removal, proper installation, and startup of three (3) new 40 hp centrifugal pumps.
- k. New central pumps must match or be an approved alternative to the existing.

**Answer #6: Please refer to Section 03-Summary of Work, No. 4-Removal and Installation-j, Revised.**

Question #7: After the job walk today, we determined the way the piping is now, we cannot keep a tower online for the duration. So, we have two things we can do.

1. Move the piping from the top of the tower to the upper side of the tower.
2. Provide a rental chiller and take both towers offline at the same time
3. Why is the condenser water piping insulated, that is odd
4. What is the tonnage of the existing chillers

**Answer #7:**

- 1. Moving the piping is acceptable.**
- 2. Refer to Section 03-Summary of Work, No. 4-Removal and Installation-a, Revised.**
- 3. Unknown, please refer to Sections 03-Summary of Work, No. 4-Removal and Installation-g and h, Revised.**
- 4. The existing chillers are 600 tons.**

Question #8: Will we be allowed to work nights and weekends?



## ST. TAMMANY PARISH

MICHAEL B. COOPER  
PARISH PRESIDENT

**Answer #8: Yes, night and weekend work is permissible.**

Question #9: Who is the manufacturer for the existing pumps?

**Answer #9: Unknown, please refer to Section 03-Summary of Work, No. 4-Removal and Installation-j, Revised.**

Question #10: The existing Aurora pumps to my understanding are discontinued. Can we get a list of approved alternate pumps?

**Answer #10: Pumps as manufactured by Taco, Armstrong or B&G shall be considered approved equals. Pump specifications shall meet existing conditions and be field-verified. Please refer to Section 03-Summary of Work, No. 4-Removal and Installation-j, Revised.**

### ATTACHMENTS:

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1. Section 12- Specification SECTION 23 05 93 - Testing, Adjusting, and Balancing for HVAC.pdf

**End of Addendum No.2**

**SECTION 23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC**

**I. GENERAL**

**A. RELATED DOCUMENTS**

1. All Division 23 Specification Sections, drawings, and general provisions of the contract apply to work of this section, as do other documents referred to in this section.

**B. SCOPE OF WORK**

1. The Mechanical Contractor shall obtain the services of an independent test and balance company which specializes in the testing and balancing of heating, ventilating and air conditioning (HVAC) systems to test, adjust and balance all HVAC systems in the building(s). These services shall not be provided by the installing mechanical contractor on the project but shall be a direct subcontractor of the mechanical contractor.
  - a. Agency shall provide proof of having successfully completed at least five projects of similar size and scope. Work by this Agency shall be done under direct supervision of a qualified Heating and Ventilating Technician employed by Agency.
  - b. Instruments used by Agency shall be accurately calibrated and maintained in good working order.
  - c. If requested, conduct tests in presence of Engineer.
  - d. Agency shall be approved in writing by Engineer. Mechanical Contractor shall not be permitted to do this work. Submit qualifications for review.
2. The work included in this section consists of furnishing labor, instruments, and tools required in testing, adjusting and balancing the HVAC systems, as described in these Specifications or shown on accompanying drawings. Services shall include checking equipment performance, taking the specified measurements, and recording and reporting the results.
3. Test and Balance agency shall take preliminary readings at all pumps prior to any demolition of existing equipment. This shall be provided to the installing mechanical contractor for aid in ordering of new pumps.
4. **Test and Balance agency shall be present for factory start-up of equipment when factory startup is required.**
5. Representatives of the test and balance company shall visit the job site as needed to review the installation. After each site visit, the test and balance company shall report any items that are not installed properly, are missing

from the Contract Documents or items that are required to enable him to perform the testing and balancing of the HVAC systems as per normal standard practice. The contractor shall implement the recommendations at no additional cost to the Owner if these items were specified in the original scope of the project.

6. Upon completion of the HVAC system installation, the test and balance company shall perform all testing and balancing with the full cooperation of the contractor and his subcontractors. The contractor shall make changes and/or adjustments to the HVAC system components that are required by the test and balance company to accomplish proper balancing. The TAB agency shall not supply or install any materials or balancing devices such as pulleys, drives, belts, etc. All of this work by the contractor shall be performed at no additional cost to the Owner.
7. The Test and Balance Company shall supply copies of the final and complete report for inclusion in the Operation and Maintenance Manuals.

C. The items requiring testing, adjusting, and balancing include (but are not restricted to) the following:

1. HYDRONIC SYSTEMS:  
Pumps  
Cooling Towers

D. SCHEDULING

1. Contractor shall award test and balance contract to approved agency upon receipt of his contract to proceed to allow Agency to schedule this work in cooperation with other Sections involved and comply with completion date.

E. DEFINITIONS, REFERENCES, STANDARDS

1. All work shall be in accordance with the latest edition of the Associated Air Balance Council (AABC) National Standards or the latest standards of the National Environmental Balancing Bureau (NEBB). If these contract documents set forth more stringent requirements than the AABC National Standards or the NEBB Standards, these contract documents shall prevail.

F. QUALIFICATIONS

1. Agency Qualifications: The TAB agency shall be a current member of the AABC, NEBB or TABB.

2. Prior to working on this project, the technicians shall attend training provided by the manufacturer of the various equipment on this project on the specific aspects of balancing the equipment. Include letters or certificates from the manufacturer on attendance and satisfactory completion of the factory training. These certifications may be used for continuing education. At a minimum, the technicians shall receive training from the air distribution equipment manufacturer, air terminal unit manufacturer, air unit manufacturer, pump manufacturer, air cooled chiller manufacturer and temperature controls manufacturer. This should be done prior to any equipment start-ups.
3. Although acceptable to be bidding the project the TAB agency shall provide qualifications and certifications to provide the required services.

G. TAB PREPARATION AND COORDINATION

1. Shop drawings, submittal data, up-to-date revisions, change orders, and other data required for planning, preparation, and execution of the TAB work shall be provided when available and no later than 30 days prior to the start of TAB work.
2. System installation and equipment startup shall be witnessed by the TAB agency. The TAB Agency's final Test and Balance shall begin when all factory start-ups are complete.
3. The building control system (BCS) contractor shall provide and install the control system, including all temperature, pressure and humidity sensors. These shall be calibrated for accurate control. If applicable, the BCS contractor shall install all necessary computers and computer programs, and make these operational. Assistance shall be provided as required for reprogramming, coordination, and problem resolution. The BCS contractor shall provide all necessary software to the TAB Agency at no additional cost.
4. All test points, balancing devices, identification tags, etc., shall be accessible and clear of insulation and other obstructions that would impede TAB procedures.
5. Qualified installation or startup personnel shall be readily available for the operation and adjustment of the systems. Assistance shall be provided as required for coordination and problem resolution.
6. If, upon commencing the work, the TAB contractor finds that the systems are not ready, or if a dispute occurs as to the readiness of the systems, the TAB contractor may request an inspection to be made by the Designer's Mechanical Engineer. This inspection shall establish to the satisfaction of

the represented parties whether or not the systems meet the basic requirements for testing and balancing. Items that are determined to be not ready for testing and balancing shall be completed by the Mechanical Contractor and placed in operational readiness before TAB services are again requested.

## II. INSTRUMENTATION

- A. All instruments used for measurements shall be accurate and calibrated. Calibration and maintenance of all instruments shall be in accordance with the requirements of AABC or NEBB National Standards.

## III. EXECUTION

### A. GENERAL

1. Mechanical Contractor shall put heating, ventilating, and cooling systems and equipment into full operation and continue their operation during each working day of testing and balancing.
2. Air Balance and Testing Agency shall perform tests specified, compile test data, and submit four (4) copies of complete test data to contractor for forwarding to Engineer for evaluation and approval.
  - a. Approved copies of report shall be bound in Operations and Maintenance manuals.
3. System shall be completely balanced and all reports submitted prior to prefinal inspection.
4. The specified systems shall be reviewed and inspected for conformance to design documents. Testing, adjusting and balancing on each identified system shall be performed. The accuracy of measurements shall be in accordance with AABC or NEBB National Standards. Adjustment tolerances shall be + or -10 percent unless otherwise stated.
5. Equipment settings, including manual damper quadrant positions, valve indicators, fan speed control levers, and similar controls and devices shall be marked to show final settings.
6. All information necessary to complete a proper TAB project and report shall be per AABC or NEBB standards unless otherwise noted. The descriptions of work required, as listed in this section, are a guide to the minimum information needed.

7. TAB contractor shall cut insulation and piping for installation of test probes to the minimum extent necessary to allow adequate performance of procedures. Upon completion, patch insulation, materials, etc. using materials identical to those removed. Seal insulation to reestablish integrity of the vapor barrier.
8. TAB work shall include additional inspection and adjustment of components during the season following the initial balance to include re-balance of any items influenced by seasonal changes or as directed by the Owner.

B. HYDRONIC SYSTEMS

1. The TAB agency shall, as applicable, verify that all hydronic equipment, piping and coils have been filled and purged; that strainers have been cleaned; and that all balancing valves (except bypass valves) are set full open. As applicable, it shall check air vents and expansion or compression tank for proper operation. The TAB agency shall perform the following testing and balancing functions in accordance with the AABC or NEBB National Standards:
  - a. Pumps:
    - 1) Test and adjust chilled water, hot water, and condenser water pumps to meet design gpm requirements. Check pumps for proper operation. Pumps shall be free of vibration and cavitation. Record appropriate gauge readings for final TDH and Block-Off/Dead head calculations.
    - 2) Current and Voltage--Test and record motor voltage and amperage and compare data with the nameplate limits to ensure pump motor is not in or above the service factor.
  - b. Cooling Towers:
    - 1) Verify that cooling towers have been filled and started by others and are in operation.
    - 2) Current and Voltage--Test and record motor voltage and amperage and compare data with the nameplate limits to ensure cooling tower fan motor is not in or above the service factor.
    - 3) Test and adjust water flows to balance tower cells and flows between towers.
    - 4) Test and record temperature profiles for water and air side operation.

C. HYDRONIC SYSTEM EXECUTION

## 1. PREPARATION OF SYSTEM - PHASE I

- a. Open valves to full position including coil stop valves, close bypass valves, and return line balancing cocks.
- b. Remove and clean strainers.
- c. Examine water in system to determine if it has been treated and is clean.
- d. Check expansion tanks to make sure they are not air bound and system is full of water.
- e. Check air vents at high points of water systems to make sure they are installed properly and are operating freely. Make certain air is removed from circulating system.
- f. Perform air balance before beginning water balance.

## 2. PERFORMANCE OF TESTING AND BALANCING - PHASE II

- a. Adjust pumps to gpm delivery.
- b. Upon completion of flow readings and coil adjustments, mark settings and record data.

## 3. PERFORMANCE OF TESTING AND BALANCING - PHASE III

- a. After making adjustments, recheck settings at pumps. Readjust if required.
- b. Check and record the following items at each unit.
  - 1) Inlet water and air temperatures.
  - 2) Leaving water and air temperatures.
  - 3) Pressure drop of each coil.
  - 4) Pump operating suction and discharge pressures and final TDH before and after.
  - 5) Rated and actual running amperage of pump motor before and after.
- c. The following minimum information shall be included in the finished report:
  - 1) Water Pumps:  
Service, manufacturer, model number, serial number, specified and test GPM, specified and operating head (feet), suction and discharge pressures (psi), minimum and test N.P.S.H., required and test differential (feet) with discharge valve closed (to verify impeller trim), motor manufacturer, specified and/or rated and test data for following: HP, RPM, voltage, amps. Pumps to be tested and adjusted with control valves opened and adjusted for full required flow through system.

END OF SECTION 23 05 93