



Brown & Root

P. O. Box 5521
Atlanta, GA 31107
Office: 404-377-6440
Fax: 404-377-8710

July 23, 2021

Request for Proposal - RFP#: J425-0059
Atlanta Public Schools – Long Middle School – Boiler Replacement Project

You are invited to propose at the dates and times shown herewith, your best price and time of performance to satisfactorily complete the work described herewith.

Please submit the following items with your proposal:

- **Bidder's Proposal Form (3 pages)**
- **E-Verify Affidavit**
- **Bidder's Qualifications**
- **Master Agreement**
- **Detailed Construction Schedule**
- **Detailed Schedule of Values**

Forward all questions to the undersigned.

Sincerely,
Brown & Root Industrial Services LLC

Benita Perkins
Business Manager
Benita.Perkins@brownandroot.com

Attachments: Request for Proposal Preparation Instructions
Bidder's Proposal Form
General Instructions
Scope of Work
Brown & Root General Conditions



REQUEST FOR PROPOSAL ON BEHALF OF ATLANTA PUBLIC SCHOOLS

BROWN & ROOT IS ADMINISTERING THIS RFP ON BEHALF OF APS. QUESTIONS AND/OR PROPOSALS RECEIVED BY APS WILL NOT BE CONSIDERED.

NOTICE OF OFFERING

RFP: J425-0059

DATE: July 23, 2021

TITLE: APS – Long MS – Boiler Replacement Project

SCOPE OF WORK – SUMMARY

Provide labor, materials and equipment for the Boiler Replacement Project at Long MS.

BID DUE DATE

Bids must be received by Brown & Root, 1631 La France Street, NE, Atlanta, GA 30307, no later than **12:00 p.m., Tuesday, August 24, 2021**. Bids may be emailed to benita.perkins@brownandroot.com, faxed to 404-377-6440, or hand delivered to the above address. Please phone 404-377-6440 before emailing or faxing your bid to ensure your bid remains confidential and sealed until official opening.

PREBID CONFERENCE

A pre-bid meeting and job walk will be held on August 2, 2021 at 10:00 a.m. at Long Middle School, 3200 Latona Drive, SW, Atlanta, GA 30354. All bidders are reminded that the pre-bid meeting is mandatory.

POC: Benita Perkins 404-377-6440 or Benita.Perkins@brownandroot.com for contractual questions.

POC: Curtis Jackson 404-594-0493 or Curtis.Jackson@brownandroot.com for technical questions.

The following are projected dates for essential subcontract actions:

Job Walk:	08/02/21 - 10:00 a.m.
Bid Due Date:	08/24/21 - 12:00 p.m.
RFIs Due:	08/09/21 - 12:00 p.m.
Award & Notice to Proceed:	09/13/21 - anticipated
Projected Mobilize Date:	12/17/21 anticipated

TIME OF PERFORMANCE

Currently, Brown & Root expects this work to begin on or before September 14, 2021 and complete by January 03, 2022. Brown & Root will issue a Notice to proceed after receipt of approval from the Owner.

PRICE

All bids shall be a firm fixed price amount and price should be valid for a period of one hundred eighty (180) days from receipt of bid.

SPECIFICATIONS/ DRAWINGS/ GENERAL CONDITIONS

The General Conditions for this solicitation are attached for review. Below is a link to the Proposal documents to Boiler Replacement Project @ Long Middle School.

https://brownandroot-my.sharepoint.com/:f/p/curtis_jackson/EhEO_oJV40ZBg2QICvI3kKjBriYn1JDnlv4-01dznFqMw?e=i6FYCS

MATERIAL SAFETY DATA SHEETS (MSDS)

Pursuant to OSHA Hazard Communication Standard, 29 CFR 1910.1200 and 1926.59 Subcontractor is responsible for tagging and affixing warning labels to any hazardous materials introduced on site, maintaining file copies of MSDS at the job site, and providing the General Contractor with copies of MSDS as a submittal item.

Bidder is required to advise whether hazardous materials will be introduced on site for the Work contemplated by this RFP.



BROWN & ROOT INDUSTRIAL SERVICES, LLC.

**REQUEST FOR PROPOSAL
PREPARATION INSTRUCTIONS**

RFP: J425-0059

DATE: July 23, 2021

TITLE: APS – Long MS – Boiler Replacement Project

INSURANCE

Supplementing General Condition 8, Insurance, Subcontractor shall provide to Brown & Root its insurance certificate stating the name and address of its insurance carriers and certifying that its insurance coverage meets the requirements of General Condition 8.1, Insurance, with respect to type and form and that its limits meet the following minimum requirements:

1. Comprehensive or Commercial General Liability Insurance: The limit of liability for such insurance shall not be less than \$1,000,000 per occurrence for Bodily Injury, \$1,000,000 per occurrence for Property Damage, and \$2,000,000 for General Aggregate.
2. Automobile Bodily Injury and Property Damage Liability Insurance: The limit of liability for such insurance shall not be less than \$1,000,000 per occurrence for Bodily Injury and \$1,000,000 per occurrence for Property Damage.
3. Worker's Compensation Insurance: As prescribed by applicable law.

The above insurances shall be on an occurrence basis and shall include a requirement that the insurer provide Brown & Root with 30 days' written notice prior to the effective date of any cancellation or material change of the insurance. **The policy shall name Brown & Root and the Owner (Atlanta Public Schools) as Additional Insured, and contain waivers of subrogation in favor of Brown & Root and the Owner.**

The Subcontractor shall submit the required Insurance Certificates to the Contractor as soon as possible after award of a Work Release / Subcontract but in any event prior to commencing work. The Subcontractor shall insert the substance of this clause, in all lower-tier subcontracts under this Subcontract that require work on the Owner's property. Subcontractor shall maintain a copy of all lower-tier subcontractors' proofs of required insurance and shall provide copies to the General Contractor when requested.

SUBMITTALS

Successful bidders shall provide submittals specified in the attached Scope of Work. Pertinent data shall be highlighted on catalog cut sheets or manufacturer's data sheets to clearly show item being submitted. Submittals should clearly show adherence to specifications.

ITEMS FURNISHED BY OTHERS

All material removed and not marked to be reinstalled or salvaged and turned over to the Owner or Brown & Root shall become the property of the subcontractor. It shall be the responsibility of the subcontractor to remove said material/debris from the Base and dispose of properly. This statement in no way relieves the subcontractor of his/her responsibility to follow proper procedures in the disposal of hazardous material.

SCHEDULING

A schedule for performance of the Work shall be submitted by the successful Bidder when the Work is awarded. The schedule shall be consistent with the time of performance provided on the Bidder's Proposal Form and must have sufficient detail to facilitate Brown & Root's assessment of progress and to coordinate this Work with the work of others. The schedule shall also show the approximate number of personnel expected to be utilized for accomplishing the Work at any one time.

LIST OF SUBCONTRACTORS

Bidder shall submit the company name and address of all lower-tier subcontractors, to include a brief description of the work the lower-tier subcontractor shall perform.

ALTERNATE PROPOSALS

Bidder may submit alternate proposals if such will result in an improved delivery, a better, more efficient or less expensive end product or any combination of the preceding. Bidders, who submit alternate proposals, shall submit a proposal that is exactly as requested to ensure consideration. Proposed alternatives may not be acceptable.



BROWN & ROOT INDUSTRIAL SERVICES, LLC.

**REQUEST FOR PROPOSAL
PREPARATION INSTRUCTIONS**

RFP: J425-0059

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TITLE: APS – Long MS – Boiler Replacement Project

EXCEPTIONS, EXCLUSIONS, OR SPECIAL CONDITIONS

Although this solicitation permits the bidder to impose exceptions, exclusions, or special conditions, they are strongly discouraged. Further, the bidder is hereby advised that any such exception, exclusion or special condition may render the Proposal non-responsive. Any exception, exclusion or special condition the bidder wishes to include or impose must be fully and completely described in a written attachment to the Proposal Form.

SPECIAL INSTRUCTIONS

If the subcontractor fails to complete the work within the time specified in the contract, the subcontractor shall pay **Liquidated Damages** to Brown & Root as specified in the contract documents for each calendar day of delay until the work is completed or accepted. If Brown & Root terminates the subcontractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause. Subcontractor will be required to obtain a **payment and performance bond for any award over \$100K.**

E-VERIFY AFFIDAVIT

Bidders must submit a fully completed and executed E-Verify Affidavit with Bidder's proposal in accordance with Georgia law.

REJECTION OF BIDS

Brown & Root reserves the right to reject any and all proposals and may award all work separately or jointly.

CORRESPONDENCE

Bidder may direct any questions or correspondence to Curtis Jackson, Project Manager, or Benita Perkins, Business Manager.

Office	(404) 377-6440
Curtis's cell	(404) 594-0493
Fax	(404) 377-8710

Upon Award

Before an award is made the following documents will be forwarded to you to complete prior to a Brown & Root contract being issued:

Subcontractor Questionnaire	List of CSI Specialties
Owner General Conditions	Subcontract General Conditions
W-9 – Vendor Form	Subcontractor Loss Prevention Requirements
Back Charge Procedures & Agreement	Illegal Drug & Alcohol Policy
BR Subcontractor HSE Standards	HSE Pre-Qualification Questionnaire
Insurance Sample	Supplier Add Form

GRATUITIES

Responding to this request for proposal certifies that no gratuities were offered by the supplier or solicited by any Brown & Root employee.

CONTRACT REQUIREMENTS

Brown and Root anticipates that Brown & Root and the selected subcontractor will execute separate agreements substantially in the form referenced hereto as Brown & Root - Subcontract Agreement (the "Agreements"), which will obligate the selected supplier to all commitments contained in the selected supplier's proposal.



BROWN & ROOT INDUSTRIAL SERVICES, LLC.

BIDDER'S PROPOSAL FORM

RFP: J425-0059

DATE: July 23, 2021

TITLE: APS – Long MS – Boiler Replacement Project

Company Name: _____

A. **SCOPE OF WORK:** Bidder proposes to furnish all labor, equipment, material, permits, supervision, and all others items necessary to perform the sublet work described in the attached Scope of Work.

B. **TIME OF PERFORMANCE:** Based on the projected Notice to Proceed, should a contract be awarded, bidder hereby proposes to:

Start work _____ calendar days after notice to proceed.

Mobilize on-site _____ calendar days after notice to proceed.

Complete work and demobilize from job site _____ calendar days after notice to proceed.

C. **PRICE:** Bidder proposes to accomplish the sublet work for the **all-inclusive firm fixed price of:** \$ _____

	<u>Price</u>			<u>Price</u>
Base Bid	\$			\$
	\$			\$
	\$			\$
	\$			\$
	\$			\$
	\$			
	\$			
	\$			
	\$			

D. **SCHEDULE:** (check one)

___ Bidder's proposed schedule for work is attached.

___ Bidder's proposed schedule for work is not attached.

E. **EXCEPTIONS, EXCLUSIONS OR SPECIAL CONDITIONS:** (check one)

___ Bidder has no exceptions, exclusions or special conditions.

___ Exceptions, exclusions or special conditions are attached.

F. **ALTERNATE PROPOSAL:** (check one)

___ Bidder has no alternate proposal

___ Alternate proposal is attached.

G. **SUBCONTRACTORS:** (check one)

___ Bidder proposes to use no lower-tier subcontractors.

___ List of proposed lower-tier subcontractors is attached.

H. **HAZARDOUS MATERIALS:** (Check one)

___ Hazardous materials will be introduced on site.

___ Hazardous materials will not be introduced on site.

I. **AMENDMENTS:** (if applicable)

___ Received Amendment # ____.

J. **INSURANCE:**

___ Subcontractor can meet all insurance requirements as specified in the Subcontract Agreement, including Waiver of Subrogation and Additional Insured.

___ Subcontractor cannot meet all insurance requirements. (Attach list of all exceptions)

K. **BUSINESS SIZE:** (Check all that apply)

___ Small Business

___ Minority Owned Business

___ Women Owned Business

___ HUB Zones

___ Veteran Owned Business

L. PAYMENT AND PERFORMANCE BOND: (Check all that apply)

____ Project over \$100K – Price of Bond included in bid.

____ Project less than \$100K – No bond needed.

This proposal is submitted by:

Company Address: _____

Phone #: _____ Fax #: _____ Cell Phone #: _____

Email Address: _____

Authorized Rep. Submitting Proposal: Signature: _____

Printed Name: _____ Title: _____

GENERAL INFORMATION

A pre-construction meeting will be held after award, and prior to any work being performed. Allow at least 1 hour for this informal meeting.

SAFETY IS THE NUMBER ONE PRIORITY FOR ALL BROWN & ROOT PROJECTS.

- Weekly safety meetings are required and shall be documented on the Daily Construction Report.
- Daily Construction Reports are required and shall be submitted to the Brown & Root representative prior to commencement of work. Accident / Safety Prevention Plan are required and shall be submitted to the Brown & Root representative.
- Subcontractor shall prepare a Work Plan for each definable feature of this project. The Work Plan shall be based on implementing at a minimum, the project requirements, and shall include a detailed list of definable features and schedule for project implementation.
- Subcontractor shall perform this project in accordance with the approved final work plan, the contract, drawings, and the Scope of Work (SOW) and keep and maintain the project Scope of Work and Specifications at the job site at all times. If conditions are uncovered or created that would be detrimental to the specified work, immediately notify Brown & Root of such conditions for determination of treatment.
- Subcontractors shall check designated scales on drawings with definable features on drawings to ensure scales are in fact appropriate before proceeding with proposed bid work on this project. Errors in indicated scales should be reported to Brown & Root immediately.
- Before any welding or use of any flammable apparatus, daily clearance shall be obtained by Brown & Root Superintendent / Safety representative.
- Subcontractor shall keep and maintain a working red-line set of as- built drawings at the job site at all times and available for inspection by Brown & Root.
- Subcontractor shall furnish all labor, materials, supervision, equipment, insurance, all sales and use and all other taxes, overhead, and all other items of expense or services necessary to complete the scope of work.
- Subcontractor is reminded that the subcontractor's contract is with Brown & Root, not the Owner. All issues, questions shall be directed to Brown & Root, not the Owner. Only Brown & Root personnel can change the Scope of Work.
- Subcontractor shall provide all required permits. A copy of all permits shall be provided to the Brown & Root Project Office prior to the start of work.
- Neither Brown & Root nor the Owner provides any material and/or services to the subcontractor unless specifically stated in the scope of work. Neither Brown & Root nor the Owner provides dumpsters at the construction site for use by subcontractor. Dumping and/or burning of waste are not permitted on OWNER property. Waste receptacles and waste disposal is the responsibility of the subcontractor. All waste shall be disposed of in accordance with federal, state, and or local laws.
- Subcontractor employees shall be courteous to all OWNER personnel and other occupants in the work area. Direct contact with personnel is strictly prohibited.
- Smoking, weapons, and use of profanity is strictly prohibited on OWNER property.
- Subcontractor's employees shall wear a shirt, long pants, and appropriate footwear when working on OWNER Property. Offensive attire and logo T-shirts are not permitted on the OWNER property.
- All work shall be warranted for a period of one (1) year following acceptance of the completed work by Brown & Root and the Owner, unless specified otherwise in the contract documents.
- Barricades shall be constructed and signage visible as to protect and safeguard OWNER staff and other occupants.
- Subcontractor shall coordinate the use of toilet facilities with the Owner or the personnel where work is being performed. Uses of the students' toilet facilities are strictly prohibited.
- Damage to OWNER property shall be repaired and/or replaced at the subcontractor's expense and to the satisfaction of Brown & Root. OWNER property shall be protected from dust and any other debris from job start to job completion. Furnished materials and/or equipment shall be covered and stored to protect them from the elements and/or construction dust until installation is complete and accepted. Subcontractor is responsible for securing their materials and/or equipment. Subcontractor shall schedule and coordinate required inspections and shall be present for required inspections. Subcontractor shall provide sufficient notice to Brown & Root on scheduled inspections.
- Daily clean-up of the job site is mandatory. Subcontractors are expected to follow Brown & Root housekeeping procedures and basic requirements.
- Subcontractor and all others working on the building/site will be required to complete a OWNER background check for badging. The cost is \$45 and must be obtained before starting work. Badges are required to be worn at all times while on the OWNER property.
- Subcontractor must submit an E-Verify Affidavit to Brown & Root with their proposal, along with a list of lower tied subcontractors before work starts.



BROWN & ROOT INDUSTRIAL SERVICES, LLC.
Atlanta Public Schools
J425-0059
LONG MIDDLE SCHOOL – BOILER REPLACEMENT PROJECT

DETAILED SCOPE OF WORK

Long Middle School

3200 Latona Dr. SW

Atlanta, GA 30354

Summary

Provide labor, material and equipment for replacement of boilers and associated work. All in accordance with the scope, drawings, specifications, State, Federal and local building codes. The scope below is just to highlight important items and pricing break out, not to include all scope of work.

SCOPE OF WORK

In accordance with the general contractor's instructions, subcontractor shall furnish all labor, material, supervision, equipment, insurance, taxes, overhead, and all other services necessary to complete the "Boiler Replacement Project" as per this scope of work and APS specifications at Long Middle School, 3200 Latona Dr. SW, Atlanta, Georgia 30354.

Replacement of (2) existing gas-fired non-condensing boilers and pumps with (2) new, equally sized gas-fired condensing boilers and pumps, high and low voltage wiring, controls and gas service. Project Duration shall be from Sept 14th, 2021, substantially complete prior to January 3rd, 2021.

GENERAL NOTES:

- 1.0.1 APS Specifications & Guidelines shall be attached to the Request for Proposals.
- 1.0.2 The contractor shall submit a complete progress schedule and a schedule of values to Atlanta Public Schools at least (7) seven days prior to the commencement of any work.
- 1.0.3 Contractor shall provide submittals to the within (7) seven days after Notice to Proceed.
- 1.0.4 Contractor shall submit a written safety plan, prior to mobilizing on site, for approval by ATLANTA PUBLIC SCHOOLS Project Manager. Safety plans shall consider all possible work activities and appropriate safety considerations. Include COVID 19 procedures shall be included.
- 1.0.5 Contractor shall obtain all necessary building permits prior to commencement of any work. All permits shall be posted in an obvious location throughout the construction period.
- 1.0.6 Upon the discovery of, or the suspicion of, any hazardous materials in the construction zone, the contractor shall immediately stop all work, leave the area, and notify ATLANTA PUBLIC SCHOOLS. Examples of hazardous materials are asbestos (in floor tile, ceiling tile, adhesives, insulation, etc.), lead-based paint, possible toxic fumes, or a chemical spill of an unknown substance. Abatement of these materials is NOT included in this scope of services. Any hazardous material abatement required shall be performed by OTHERS prior to resuming work activities in the affected area.

- 1.0.7 Contractor shall restore the surrounding area/grounds, interior and exterior, at the subcontractor's expense, which may have been damaged during the construction period in the performance of the required work.
- 1.0.8 Contractor shall cover, protect, and/or relocate any furniture, fixtures, and/or equipment, which is, or could be, affected by the construction project. Damage to any items during construction will be repaired at contractor[s] expense. Existing damage should be documented and brought to the attention of ATLANTA PUBLIC SCHOOLS personnel prior to the beginning of construction.
- 1.0.9 APS/ATLANTA PUBLIC SCHOOLS is not responsible for tools, equipment, and/or material left on the job site.
- 1.0.10 Contractor shall follow all OSHA and ATLANTA PUBLIC SCHOOLS safety regulations. Always have an emergency contact list available on site.
- 1.0.11 Contractor shall provide a daily report for each activity on the job site provide to ATLANTA PUBLIC SCHOOLS at the beginning of the following day.
- 1.0.12 Contractor shall provide a complete listing of all other subcontractors and trades utilized for this project to ATLANTA PUBLIC SCHOOLS prior to commencement of any work. All contractor[s] shall be badged.
- 1.0.13 All work shall be coordinated with ATLANTA PUBLIC SCHOOLS as to not interfere with, or disrupt, any school activities.
- 1.0.14 Contractor shall provide portable restroom facilities for all construction personnel before school is officially closed for the summer break. The Subcontractor may use one school restroom on each level during the summer break. The Subcontractor is responsible for all paper products and daily cleaning. Damage to the restrooms will be repaired at the Contractor's expense.
- 1.0.15 Trash and debris from construction and demolition become the property of the Contractor, unless otherwise specified. Clean up and removal of construction debris shall be done on a daily basis. All debris is to be disposed in contractor containers and dumpsters. APS equipment, facilities, cleaning supplies, dumpsters, etc. are not to be used. Full dumpsters shall be promptly emptied and area surrounding dumpsters shall be cleaned up daily.
- 1.0.16 Contractor shall field verify all dimensions prior to fabrication and installation of new material throughout.
- 1.0.17 All Subcontractors and those that will be working on the building will be required to complete an APS background check for badging. There will be no exceptions. A \$45.00 money order is required for everyone receiving a back-ground check.

NOTE: These General Terms and Conditions are written for the protection of all parties involved in this construction project. These terms are not negotiable and are the guidelines by which all work will be completed.

Work is to include, but is not limited to, the following.

1.0 PURPOSE

- 1.1** The Facilities Department invites qualified vendors to submit a proposal/bid for the replacement of boilers at Long Middle School.
- 1.2** In using this method for solicitation, we are requesting your best effort in seeking the best value for our requirements. To be eligible for consideration, sealed proposals shall be presented in accordance with the instructions of this solicitation and within the timeframe specified. It shall be the responsibility of the selected Offeror to meet all specifications and guidelines set forth herein. Atlanta Public Schools, at its discretion, determines the criteria and process whereby proposals are evaluated and awarded. No damages shall be recoverable by any challenger as a result of these determinations or decisions by Atlanta Public Schools.

2.0 SCOPE OF WORK /SPECIFICATIONS

- 2.1** The Contractor's services shall include all things necessary for replacement of (2) existing gas-fired non-condensing boilers and pumps with (2) new, equally sized gas-fired condensing boilers and pumps at the Long Middle School, 3200 Latona Dr SW, Atlanta, GA 30354.
- 2.2** The Contractor's services shall include all personnel, labor, materials, overhead, equipment, licenses, permits, all costs (direct and indirect), administrative costs (postage, printing, copying, plotting, deliveries), research, recommendations, studies, written documents, designs, specifications, details, drawings, issuance of certificates for payment, review of documents, inspections, supervision, and approval of work as necessary to accomplish the Project Scope.
- 2.3 Services:**
 - 2.3.1** Visit the project site and become familiar with conditions that may affect the work. Before commencing Work, the Contractor and the Commissioning Agent shall inspect the site.
 - 2.3.2** Provide a written estimate and proposed project schedule for approval by appropriate APS personnel before the project begins.
 - 2.3.3** Provide the following items for the project and to perform in accordance with the contract conditions of this RFP:
 - 2.3.4** Perform all work in accordance with Local and State Building and Fire Safety codes.
 - Labor, materials, equipment, and services required to complete the work.
 - Supervision and coordination of the work project.
 - Estimate of total project costs as a guaranteed maximum amount prior to commencing work on the project.
 - Required insurance and certificates.
 - Permits, licenses, inspection fees, etc.
 - Administration, financial and safety aspects.
 - Product and equipment shop drawings and submittal data samples submitted in a timely manner for approval.
 - Work completed by the agreed upon completion date. A completion schedule shall be submitted showing all tasks and durations and completion dates by the date required.
 - Completion close-out documents (e.g., warranties, lien waivers, completion certificates, as-built drawings, O&M data, inspection certificates, etc.).

2.4 Documents:

2.4.1 Provide one (1) set of stamped engineering plans and specifications for use on the project. Additional sets shall be provided for project permitting as required by the local authority and for the Commissioning Agent. A PDF and CAD version shall be provided by the contractor for review and approval and for as-built close out documents.

2.5 Licenses:

2.5.1 Contractor must submit with proposal a current State of Georgia General Contractor's License. When necessary, Contractor must submit with the project quote a license for the following areas: (a) Current Georgia State Electrical Contractor's Non-Restricted License, (b) Current Georgia State Plumbing Contractor's License, (c) Current Georgia State Low Voltage Non-Restricted License, and (d) Current Georgia State Non-Restricted Conditioned Air License

- Permits.

2.5.2 The Contractor shall be responsible for the procurement and payment of all permits required by all agencies having jurisdiction over the project.

2.6 Work Times:

2.6.1 All work on site shall be accomplished during normal business hours which are 8:00 A.M. to 5:00 P.M. unless otherwise agreed upon with APS. If access to the building is required at other times, arrangements must be made at least 48 hours in advance with the APS Representative. It is understood that the awarded project may require some level of expected work beyond "normal business hours". Overtime and/or weekend work cost will only be considered if the scope of the project cannot be "substantially completed" during normal business hours.

2.7 Property Protection:

2.7.1 Contractor shall protect all existing furniture, equipment, structures, trees, shrubbery, landscaping, and grass from damage. Contractor shall be responsible for satisfactory replacement or repair of any damage that occurs because of this contracted work. Contractor shall clean up all work debris and legally dispose of all debris off-site and must "broom clean" at the end of the workday.

2.8 Security & Safety:

2.8.1 All employees of the Contractor shall be required to wear (prominently display) an APS identification badge while on APS property. The contractor shall be required to pass a background check processed by Atlanta Public Schools. A fee payment of \$45.00 for each background check. All employees of the Contractor will sign-in (date & time) at the front desk on APS property, notifying appropriate personnel. Upon leaving the project, all employees must sign-out (date & time). Contractor is solely responsible for the safety of all workers; APS personnel and students present during the execution of the work. Extreme caution shall be exercised by all workers to ensure that all possible precautions are taken to prevent injury to APS staff and students. Contractor shall not leave ladders, tools, or equipment unattended. Contractor shall prevent school children from entering the work area while work is in progress.

2.9 Workmanship:

2.9.1 All work shall be performed in a professional manner. Work must follow all governing Federal, State, City of Atlanta, electrical, plumbing, HVAC, including Life Safety Codes. All work requiring licensed mechanics by code or regulation shall be done only by the employees having such licenses. Unless otherwise specified, all work will follow Local and State Building and Fire Safety codes.

2.10 Hazardous Material:

2.10.1 Building materials which are scheduled to be incorporated into the work under this agreement shall first either be certified by the manufacturer to be asbestos free or to be inspected by accredited parties and certified to be free of asbestos content in accordance with EPA, AHERA and 1982 School Rules. Contractor shall furnish APS with an affidavit to the above criteria.

2.11 Inspections:

2.11.1 Any inspection of the work by any representative of APS shall in no way affect these responsibilities and undertakings of the Contractor. The failure of any representative of APS to discover or bring to the attention of the Contractor for existence of any work obligation of the Contractor does not relieve the Contractor from fulfilling his responsibilities under the contract documents. A Contractor's representative shall attend the final inspection. A walk-thru with appropriate APS personnel is required.

2.12 Commissioning:

2.12.1 The Commissioning Agent has the role of field representative and technical advisor for the Atlanta Public School System (APS) and will work directly with the Contractor to accomplish the work.

2.12.2 APS is committed to applying the Commissioning process to new work done in the school's system wide.

2.12.3 Specific requirements of the Commissioning process and responsibilities, duties, and obligations of the Commissioning Authority (CxA) team are described herein.

1. (1) Owner's Project Requirements document to assist in project scope development
2. (2) site visits with reports during the installation process
3. (1) functional performance test of new hot water system plus (1) additional retest, if necessary
4. (1) functional performance test of new chilled water system plus (1) additional retest, if necessary
5. (1) maintenance of a Construction Issues Log to document any deficiencies discovered in the installation and testing of the replacement boilers
6. (1) trend analysis and report on boiler operation
7. (1) meeting with the APS HVAC Service Manager
8. (1) summary report of all commissioning activities delivered to the APS HVAC Service Manager upon project completion.

2.13 Scope of Work:

2.13.1 New work shall comply with Design Criteria as appropriate in APS Standards for HVAC Systems, Equipment, and Controls dated December 16, 2020.

2.14 Hot Water System:

2.14.1 Equipment Replace (2) existing, 1600 MBH, Laars RHCH, gas-fired, non-condensing boilers with (2) new, 1500 MBH, Patterson Kelly, SC-1500 SONIC water tube condensing boilers. Patterson Kelly with Stainless Steel Heat Exchanger.

2.14.2 Re-use existing direct vent intake and discharge ducts; make modifications as necessary to connect the new boilers to the existing intake and discharge ducts. Intake duct material is galvanized steel. Discharge duct material is double wall, insulated stainless steel.

2.15 Gas Piping: Re-use existing 2" natural gas supply: make modifications as necessary to connect the new boilers to the existing natural gas piping. Piping material is Schedule 40 black steel threaded and coupled.

2.15.1 Provide a new gas regulator, sized appropriate to the new boilers and install upright. Purge and pressure test revised natural gas piping. Pipe the vent to the outside atmosphere using the shortest developed pipe length, and a pipe diameter as equal to the vent size. Mount a properly calibrated pressure gauge downstream of the regulator to monitor the downstream pressure.

2.15.2 Provide Drip Leg on the gas supply, near the entry point.

2.16 System Piping: The existing hot water system primary-secondary pumping arrangement will remain as-is, with modifications as necessary to accommodate new boilers and primary pump piping as follows:

1. Cut in a new, 200-gallon, insulated buffer tank equivalent to a Worthington HWBT200-3/3 for hot water storage. Install in primary loop between primary hot water supply header and connection to the secondary loop.

2. Provide a side-stream filter (maximum 10 micron) to remove existing particulate, sediment, etc. with built-in magnet upstream of new boilers.

3. Replace (2) existing hot water primary pumps BP-1 and BP-2 with (2) new, primary pumps (142 gpm at 30' TDH, 2 HP, 208-volt, 3 phase) appropriate to the new boilers.

4. Replace (2) existing 2.5" flanged Armstrong Flo-Trex triple duty valves associated with BP-1 and BP-2 with non-return check valves, and memory stop butterfly valves.

5. Replace existing 4" flanged Armstrong Flo-Trex triple duty valves associated with the secondary hot water pumps P-3 and P-4 with non-return check valves, and memory stop butterfly valves.

6. Provide new NB&G sets.

2.17 Chilled Water System:

2.17.1 The existing chilled water system primary-secondary pumping arrangement will remain as-is, with modifications to pump piping as follows:

1. Replace existing 6" flanged Armstrong Flo-Trex triple duty valves associated with the secondary chilled water pumps P-1 and P-2 with non-return check valves, and memory stop butterfly valves.

2. Provide new NB&G sets.

2.18 Pipe Identification Hot Water and Chill Water Piping: Provide pipe markers and flow arrows near each valve and control device, near each branch and near locations where pipes pass through walls, and at maximum intervals of 25' within the existing boiler room.

2.18.1 Insulation: Match existing type and thickness.

2.19 Electrical:

1. Provide new soft-start motor starters for the new primary pumps.

2. Demo existing power feeds to primary pumps and replace with new conduit and wiring, from load to source.

3. Demo existing power feeds to boilers and replace with new conduit and wiring, from load to source. New circuits will be 208/240V 1ph 60hz 15 amps.

2.20 Test and Balance: Provided by Atlanta Public Schools

2.20.1 Adjust and balance hot water circulating systems so that water quantities circulated through the new boilers meet specified quantities.

2.21 DDC Controls: Existing controls are Johnson Controls.

1. Demo existing control wiring connections to existing boilers and replace with new wiring from existing control panels. All new control wiring will be contained in raceway/conduit.

2. Provide all field wiring and mounting of all boiler sensors and devices as required by boiler installation instructions.

3. Provide all field wiring and mounting of all sensors and devices to accommodate DDC control as described in below I/O Summary.

4. Provide interface between boiler controller and new DDC control. Boiler control and boiler pump control will be through integral boiler controllers, monitored via BACnet interface by the DDC system.

5. DDC control will be visible from the APS Facilities building, 1631 La France Street, NE Atlanta, GA 30307.

Point Name	Hardware Points				Software Points						Show On Graphic	
	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm		
Boiler 1 Hot Water Return Temp	x									x		x
Boiler 1 Hot Water Supply Temp	x									x		x
Boiler 2 Hot Water Return Temp	x									x		x
Boiler 2 Hot Water Supply Temp	x									x		x
Hot Water Differential Pressure	x									x		x
Hot Water Loop Return Temp	x									x		x
Hot Water Loop Supply Temp	x									x		x
Boiler 1 Hot Water Supply Temp Setpoint Reset		x								x		x
Boiler 2 Hot Water Supply Temp Setpoint Reset		x								x		x
Boiler 1 Alarm Status			x							x	x	x
Boiler 1 Low Water Level			x							x	x	x
Boiler 1 Status			x							x		x
Boiler 2 Alarm Status			x							x	x	x

Point Name	Hardware Points				Software Points						Show On Graphic	
	AI	AO	BI	BO	AV	BV	Loop	Sched	Trend	Alarm		
Boiler 2 Low Water Level			x							x	x	x
Boiler 2 Status			x							x		x
Circulation Pump 1 Status			x							x		x
Circulation Pump 2 Status			x							x		x
Hot Water Pump 3 Status			x							x		x
Hot Water Pump 4 Status			x							x		x
Boiler 1 Enable				x						x		x
Boiler 2 Enable				x						x		x
Totals	7	2	10	2	0	0	0	0	0	21	4	21

3.0 DRAWINGS, SKETCHES AND SPECIFICATIONS:

3.0.1 M101, M102, M103, M104, M105, M106, M201, M202, M301, M302, M303

3.2 SPECIFICATIONS:

3.2.1 APS Delivery Order Contract Specifications Divisions 1 through 19, Volume 1, Atlanta, Georgia, 1 December 2008.

3.2.2 APS Design Guidelines v2.10 Issued: 7/1/2008, Revision: 12/1/2010

3.2.3 Atlanta Public Schools Design Guidelines, Div. 23 HVAC, dated 04/02/18

8.0 MATERIAL SAFETY DATA SHEETS: A Material Safety Data Sheet is required to be on site five days prior to a hazardous material being brought to any APS Facility. The activity Hazard Analysis shall identify the person responsible for maintaining the MSDS documentation, ensuring personnel training, and proper container labeling.

9.0 CODES AND STANDARDS: All work by all trades should be in accordance with Federal, State, and Local Building Codes. APS and B&R standards require careful attention to detail to ensure a durable, clean, and professionally constructed product. Work, which does not meet these standards, is unacceptable and will be redone until satisfactorily completed.

10.0 SPECIAL CONSIDERATIONS:

10.1 CLARIFICATIONS/SPECIAL CONSIDERATIONS: None

10.2 EXCLUSIONS: None

10.3 EXCEPTIONS: None

10.4 SALVAGEABLE/REPAIRABLE MATERIALS FOR TURN-IN: Per APS Request

10.5 PROTECTION OF WORK AND PROPERTY:

10.5.1 The Contractor shall continuously maintain protection of all work from damage and shall protect the owner's property from damage or loss arising in connection with the work to be performed.

10.5.2 Daily cleanup is mandatory. All debris generated by this project shall become the property of the Contractor and shall be removed from the job site to an approved landfill in accordance with applicable federal, state and/ or local regulations.

10.6 QUALITY ASSURANCE/ QUALITY CONTROL

10.6.1 All materials and equipment shall be new.

10.6.2 All materials shall be installed per manufacturer's installation instructions and all applicable codes (UPC, UMC, NED, NPC, NFPAQ, SMACNA), the APS specifications, approved submittal requirements, and recognized good work practices.

10.6.3 Safety shall be in compliance with all OSHA and B&R requirements.

10.7 SUBMITTALS (3 COPIES NEEDED OF EACH):

10.7.1 Progress Schedule

10.7.2 Schedule of Values

10.7.3 Daily Reports

- 10.7.4 MSDS Sheets
- 10.7.5 Permits / Signed off Permits (as required)
- 10.7.6 Drawings & As Built Drawings
- 10.7.7 New Boiler, Pumps & Accessories
- 10.7.8 New Valves and Pumps for Chilled Water System Modifications
- 10.7.9 Piping Identification Markers and Arrows
- 10.7.10 New Electrical Conduits, Starters, Etc.
- 10.7.11 T & B as required.
- 10.7.12 Commissioning Reports as required
- 10.7.13 DDC Controls, Sensors, Devices, Points List, Drawings, Etc.
- 10.7.14 Start-up Reports
- 10.7.15 Control Operations Reports
- 10.7.16 Operation & Maintenance Manuals