February 22, 2023

WHITE PLAINS CITY SCHOOL DISTRICT

WHITE PLAINS HIGH SCHOOL UNIT VENTILATOR REPLACEMENTS:

SED Control Number: 66-22-00-01-0-016-028

CONTRACT H- HVAC WORK
CONTRACT E - ELECTRICAL WORK

WESTCHESTER COUNTY, NEW YORK

NOTE: *This clarification forms a part of the contract documents for the above project and must be acknowledged in the plans and specifications. Attach it to the inside front cover of each of the specifications.*

GENERAL CLARIFICATION TO PROJECT:

1. The Alarm Vendor name for Rochambeau Alternative HS is 'Alarm Specialists Inc.' 333 Old Tarrytown Rd., White Plains, NY 10603. Phone (914) 946-1998

CLARIFICATION TO SPECIFICATIONS:

1. Add SPECIFICATION SECTION WHITE PLAINS HIGH SCHOOL – SPECIAL PROVISIONS attached herewith.

2. Remove SPECIFICATION SECTION 011100 - SUMMARY OF WORK and add revised SPECIFICATION SECTION 011100 - SUMMARY OF WORK attached herewith.

3. Remove SPECIFCATION SECTION 004116.11 – PB – H and add revised SPECIFCATION SECTION 004116.11 – PB – H attached herewith.

4. Remove SPECIFICATION SECTION 004116.11 – PB – E and add revised SPECIFCATION SECTION 004116.11 – PB – E attached herewith.

5. Add SPECIFICATION SECTION 'EQUIPMENT DATA SHEET' as indicated in revised Appendix for the Mechanical Construction Prime Contractor to complete the attached template spreadsheet for each piece of HVAC equipment installed. Mechanical Construction Prime Contractor is to coordinate and work with the Facilities Department and Equipment Vendor to verify the information is accurate for each room.

6. Add SPECIFICATION SECTION 'EMF CONTROLS SCOPE SHEET' as indicated in revised Appendix for the Controls work that will be provided by a separate Contract. Mechanical Construction Prime Contractor shall coordinate Contract 'H" work with Controls Vendor (EMF Building Automation Specialists) indicated.

7. Add SPECIFICATION SECTION 'DAIKIN START-UP SCOPE SHEET' as indicated in revised Appendix for the mechanical equipment start-up scope of work that will be provided by a separate Contract. Mechanical Construction Prime Contractor shall coordinate Contract 'H" work with mechanical equipment supplier (Daikin) indicated. See previously provided DAIKIN MATERIAL / EQUIPMENT CONTRACT (DATED 01/03/2023) in Appendix for additional information regarding the equipment / scope that will be provided through this supplier which is not included in this Contract.

8. Remove SPECIFICATION SECTION – APPENDIX and add revised SPECIFICATION SECTION – APPENDIX attached herewith.

ADDENDUM NO. 1
WHITE PLAINS CITY SCHOOL DISTRICT
WHITE PLAINS HIGH SCHOOL UNIT VENTILATOR REPLACEMENTS:
SED CONTROL NUMBER: 66-22-00-01-0-016-028

February 22, 2023

CLARIFICATION TO DRAWINGS:

1. REMOVE DRAWING M 600.00 MECHANICAL SCHEDULES – SHEET 1 OF 2 an replace with revised DRAWING M 600.00 MECHANICAL SCHEDULES – SHEET 1 OF 2 attached herewith. Please note this drawing has been revised to show equipment that is being purchased directly by the school district which is not part of the contract.

2. REMOVE DRAWING M 601.00 MECHANICAL SCHEDULES – SHEET 2 OF 2 an replace with revised DRAWING M 601.00 MECHANICAL SCHEDULES – SHEET 2 OF 2 attached herewith. Please note this drawing has been revised to show equipment that is being purchased directly by the school district which is not part of the contract.

REQUEST FOR INFORMATION FROM KAREN PANARELLA (Joe Lombardo Plumbing & Heating of Rockland, Inc.)

1. Per DRAWING M 600.00, please confirm through the equipment companies the school district has pre-purchased all HVAC equipment.

   RFI response: Yes, the HVAC equipment has been pre-purchased by White Plains School District, see revised Drawing M600.00 and Daikin Material / Equipment Contract (Dated 01/03/2023) in Appendix for additional information.

REQUEST FOR INFORMATION FROM TAYLOR CLAYTON (All Bright Electric)

1. As per specification section 011100, Please provide an abbreviated summary for electrical and mechanical contracts.

   RFI response: Refer to revised attached Summary of Work, Special Provisions, Appendix Information and Contract Documents for Scope of Work.

2. Per specification section 011100, paragraph references 1.03-C-3 which suggests that all instrumentation wiring is the responsibility of the electrical contractor. No instrumentation wiring is shown on the drawings. Please confirm this is not in our scope of work.

   RFI response: Please omit paragraph in section 1.03-C.3, as this is not in Contract 'E' scope of work.

3. Please reference the above specification section. Please confirm that any BMS / control wiring for any mechanical equipment is the responsibility of the HVAC contractor.

   RFI response: As per added SPECIFICATION SECTION 'EMF CONTROLS SCOPE SHEET' as indicated in revised Appendix for the Controls work that will be provided by a separate Contract. Mechanical Construction Prime Contractor shall coordinate Contract 'H" work with Controls Vendor (EMF Building Automation Specialists) indicated.

REQUEST FOR INFORMATION FROM TONY PARADISO

1. Please provide mechanical steam and condensate pipe sizing to ceiling and wall hung unit ventilators. Provide a piping diagram for coils or fin tubing and pipe sizing for existing branch lines for new work.

   RFI response: Ceiling hung units in G Wing are hot water units and will require 1" hot water return and supply piping. Pipe sizes for A wing units to match existing piping serving existing unit ventilators.

ADDENDUM NO. 1
WHITE PLAINS CITY SCHOOL DISTRICT
WHITE PLAINS HIGH SCHOOL UNIT VENTILATOR REPLACEMENTS:
SED CONTROL NUMBER: 66-22-00-01-0-016-028

February 22, 2023

REQUEST FOR INFORMATION FROM S&L PLUMBING AND HEATING, CORP.

1. As per the bid documents, there shows an electrical contract and HVAC contract. However, there is reference to single prime contracts throughout the bid documents, PDF pg 8 “The within contract seeks bids from a single prime contractor.” Pg 9 references contract G which there is not one. Please confirm electrical and HVAC are separate contracts.

   RFI response: Yes, Electrical Construction Prime Contractor (Contract ‘E’) and Mechanical Construction Prime Contractor (Contract ‘H’) are separate contracts. All General Construction Work (Contract ‘G’) is part of Contract ‘H’.

2. If electrical and HVAC are separate contracts, please confirm whether a third envelop will be needed should we need to use a subcontractor.

   RFI response: See SPECIFICATION SECTION 002113 - INSTRUCTIONS FOR BIDDERS attached herewith. Each bid submission shall consist of three (3) sealed envelopes containing the Bid Proposal, Bid Qualifications, & Sub-Contractor Bid Qualifications.

REQUEST FOR INFORMATION FROM NICK LOPILATO (CLEAN AIR QUALITY SERVICE, INC.)

1. Please provide summary of work for Contract H. Currently Section 011100 – “Summary of Work” does not have project specific work and also references “Contract G” which does not exist. There’s needs to be a clear definitive scope of work in our to bid this properly.

   RFI response: Refer to revised attached Summary of Work, Special Provisions, Appendix Information and Contract Documents for Scope of Work.

2. Provide all equipment, pipe fittings, items, accessories, etc. furnished by the school district.

   RFI response: This has been noted on schedule sheet M600.00.

3. Is Contract H responsible for casework? If so, there are no details on how to finish casework with new unit ventilators. In addition, please provide school district’s casework contractor.

   RFI response: All General Construction work is the responsibility of Mechanical Construction Prime Contractor (Contract ‘H’).

4. Is Contract H responsible for ceiling removals & re-installations?

   RFI response: Removals and re-installations is the responsibility of Mechanical Construction Prime Contractor (Contract ‘H’).

5. Is Contract H responsible for new lintels, masonry work and roof work?

   RFI response: All General Construction work is the responsibility of Mechanical Construction Prime Contractor (Contract ‘H’).

6. Is Contract H responsible for asbestos removal?

   RFI response: There is no Asbestos Abatement scheduled for this Contract.

February 22, 2023

7. General Note 7 throughout most drawings says “PROVIDE AND INSTALL PIPE COVERINGS WHEREVER PIPING IS TO BE PLACED IN A VISIBLE AREA.” Either provide detail or specifications indicating what it is you’re looking for for “pipe covering”.

   RFI response: This general note corresponds to Note 3 in Work in Existing Areas on sheet M001.00.

8. Where will pre-purchased equipment be shipped to and stored? What is the date of procurement?

   RFI response: Delivery of Mechanical Equipment is scheduled to arrive between 6/1/23 – 6/30/23 and will be the Mechanical Construction Prime Contractor’s responsibility to store the equipment on site, within Sea Boxes provided by the Mechanical Prime if delivery of equipment happens prior to June 27, 2023. Storage of the units will be required if all units cannot be installed over the Summer 2023 at no additional cost to the Owner.

End of Addendum No. 1

*"**X:\WPSD (White Plains Central School District) - 10991\WPSD 2110 - (White Plains HS** UV Replacements)\03-Bid\Addenda\WPSD 2110 Addendum 1.docx"*

SPECIAL PROVISIONS

These Special Provisions are in addition to the Plans, Specifications and the other Contract Documents and shall be part of this Agreement between the Owner and the Contractor. All references to "This Prime Contractor", "This Contractor" or "Contractor" refers to the **Mechanical Prime Contractor** and **Electrical Prime Contractor** per each respective building project and associated SED #**.** The following provisions shall apply for each individual project and each Prime Contractor associated along with it. In cases of contradictions, the most stringent Provision shall govern.

General Requirements for Each Prime Contractor

I. General

1. All dates, durations, etc. defined herein shall be in business days.
2. Except for the basic building permit, each Prime Contractor's price shall include all fees and other costs for securing and maintaining (by the Prime Contractors or their subcontractors) for the life of the job; all permits, PE licenses, connection fees, inspections, etc., applicable to, or customarily secured for the Work. This provision includes any applications and/or permits to be issued by utility companies in the name of the Prime Contractor, or the Owner, as required for the Work. Originals of all permits are to be issued in the name of the Prime Contractor as required for the Work. Each Prime Contractor shall furnish the Construction Manager with original copies of all permits prior to the commencement of the Work, and, shall prominently display a copy of all permits at a location agreed to with the Construction Manager.
3. One week prior to the start of physical work, each Prime Contractor shall provide two copies of a video taped recording of all existing conditions to the Construction Manager. This taping shall provide a record of all-existing buildings, grounds, exterior conditions and interior conditions. The Contractor shall schedule a representative of both the Owner and the Construction Manager to be present at this taping. In the absence of this record, each Prime Contractor shall be responsible for paying the costs associated with any and all repairs or replacements of existing materials and/ or conditions that were damaged in an area where the Prime Contractor is working or has worked, as may be deemed necessary by the Owner or the Construction Manager.
4. Each Prime Contractor is responsible for providing the required mock-ups defined by the Contract Documents out of sequence as needed by the Architect.
5. Each Prime Contractor is responsible for providing all required Engineered material calculations as defined by the contract documents.
6. Each Prime Contractor shall provide drinking water for his own employees.
7. On Site Communications. Each Prime Contractor shall provide, or otherwise see that, the project manager, or site managers, and/or responsible workers of each Prime Contractor and major

subcontractor are equipped with cellular phones for the purpose of staying in contact with the Construction Manager.

8. Each Prime Contractor shall include in his base price the cost of all rigging and equipment required for the performance and installation of the Work.

9. **Each bidder who is awarded a contract must perform its work in compliance with all applicable CDC, OSHA and New York State protocols related to the COVID-19 pandemic, including social distancing, cleaning and disinfection protocols. Each bidder who is awarded a contract must ensure the individuals and entities retained by it to perform work comply with all applicable CDC, OSHA and New York State protocols related to the COVID-19 pandemic. Each bidder who is awarded a contract will be responsible to ensure the safety of those retained by the individuals and entities retained by it to perform its contract obligations and will be responsible for the means and the methods utilized to perform the Work. Each bidder who is awarded a contract will be required to cooperate with other contractors engaged by the School District/Owner in providing access to construction areas at the Project site while maintaining compliance with all applicable CDC, OSHA and New York State protocols related to the COVID-19 pandemic.**

   Any fines imposed or incurred for violation(s) of the Executive Orders of the Governor of New York State related to the COVID-19 pandemic as well as for violation(s) of all applicable CDC, OSHA and New York State protocols related to the COVID-19 pandemic will be the sole responsibility of the bidder awarded a contract whose conduct caused the violation(s).

   Each bidder awarded a contract must implement and follow all NYS guidelines and regulations regarding COVID-19. Including but not limited to hand washing/sanitizing stations, disinfecting, social distancing, contact tracing logs, etc... COVID-19 protocols, policy and procedures must be detailed and included in each prime contractor's safety manual and logistics plan and is to be submitted to the Construction Manager. This requirement extends to all subcontractors of each prime contractor.

   Each bidder awarded a contract will also be required to abide by the School District/ Owner's most recent requirements for COVID protection, which may continue to adjust due to Federal/State and Local government policies. Contractors not willing to abide by the School District/ Owner's requirements will not be able to access the School District/Owner's property to execute their work, and will be neglecting the terms of their contract.

II. Schedule

1. All Contractors are to recognize that the Project Schedule is of critical importance to the Owner. All aspects of construction must reflect a 'time is of the essence' construction strategy. The attached 'Bid Schedules' serves as a guide of critical milestone dates to the Project. Failure to meet intermediate milestone dates will jeopardize the overall Project Schedule. This failure will mandate Contractor(s) to, increase staff, work overtime, or use other means to recover time, at the costs of those Contractor(s) responsible for such delays. In addition, all costs due to delays in completion of the Work,

which require additional Custodial Overtime, Construction Management services, Architectural services, and Engineering services beyond the Work duration in the Bid Schedule, shall be borne by Contractor(s) responsible for delays.

2. Each contractor, prior to being awarded the contract shall prepare and submit a Preliminary Master Project Schedule for their Work. **Within (3) weeks of NOA (Notice of Award) all Prime Contractors will provide a coordinated Draft master schedule**. Each Prime's Project Schedule are to reflect all requirements for submittals, material and equipment procurement, material stockpiling, setting up Contractor's staging area and surveying of existing conditions. These Schedules, reflecting the critical milestone dates established by the attached 'Bid Schedule', are to be coordinated and shall be inclusive of other Prime Contractor's activity. The "Final" agreed upon overall schedule of work shall be developed and maintained by the Prime Contractor for Mechanical Construction in conjunction with the Construction Manager utilizing each Prime Contractor's Preliminary and updated Schedule(s). Specific relationships between Contractors, sequencing of activities, phasing, and critical "ties" of coordinated Work must be detailed on the Project Schedule. All Contractors shall utilize "Sure Track Project Manager 3.0-" as produced by Primavera Systems, Inc., -or- equal platform producing Gant Style Scheduling.
3. All Prime Contractors shall review the completed "Final" detailed construction schedule and acknowledge their acceptance of this schedule by signing a copy to be kept on record by the Construction Manager. This agreed upon schedule must incorporate all milestone dates and shall be established within four (4) weeks of Notice of Award .
4. The Prime Contractor for Mechanical Construction shall update the detailed construction schedule with the Construction Manager and issue copies to the other Prime Contractors, the Owner, Construction Manager, and the Architect monthly. Each Prime Contractor shall provide the Prime Contractor for Mechanical Construction with all information necessary to provide these updates.
5. Each Prime Contractor is to submit a schedule of projected fabrication on long lead items (items requiring four weeks and over to fabricate) three weeks after Notice of Award. Progress/Status reports on fabrication to be submitted to the Construction Manager every two weeks. 'Rate of Change' chart and marked up shop drawings to be included in these reports.
6. Each Prime Contractor shall be responsible for coordinating and expediting their fabrication and delivery schedules and keeping the Construction Manager informed as to their progress and their anticipated ability to stay on schedule. Should it become necessary (in the opinion of the Construction Manager) to supplement the Prime Contractor's expediting efforts in order to maintain job progress, the Construction Manager may elect to charge all costs incurred to said Prime Contractor.
7. In the event that Owner makes special arrangements to open a building at the request of a Contractor and the Contractor does not show, the Prime Contractor shall pay the Owner all costs incurred. All parties agree that any action taken to enforce this requirement shall not be construed by any Prime Contractor or its subcontractors/suppliers, as a reason for a claim (for either time or money) for delay to the Work or to the Prime Contractor, its subcontractors, or suppliers.

8. The Owner shall take partial occupancy of the building's renovated spaces in accordance with the dates established by the Bid Schedule and the Special Provisions. The Contractors shall perform all Work necessary to maintain the Owner's move-in and occupancy schedule.
9. The Contractors shall include in their base price, all out of sequence Work and any Work required to be performed during overtime hours or non-working hours necessary to maintain the Master Schedule, the Prime Contractors' project schedule, or, the Owner's move-in schedule.

III. Submittal Milestone Requirements

Submittal Priorities

The following submittal dates (in business days) are critical to allow for proper fabrication timeframes to ensure timely completion of the project to meet the attached bid schedule. A complete listing of all submittal requirements is located in "Section 01 3300 Submissions", which shall be accompanied by each division's specific submittal requirements.

Major Mechanical Construction Submittals

Scaffolding and/or Stair tower-(may require PE Stamp)	15 days from Notice of Award
Bracing/Shoring-(may require PE Stamp)	15 days from Notice of Award
Rebar/Reinforcing Shop Drawings	15 days from Notice of Award
Structural Steel/Decking	15 days from Notice of Award
Masonry Submittals/Shop Drawings	15 days from Notice of Award
Interior Finishes	20 days from Notice of Award
Casework	20 days from Notice of Award
All remaining Submittals with-in	**20 days from Notice of Award**

Major HVAC Equipment

Duct Work	15 days from Notice of Award
Equipment	15 days from Notice of Award
Controls	20 days from Notice of Award
Hot/Chilled Piping and Enclosures	20 days from Notice of Award
HVAC Shop Drawings	20 days from Notice of Award
All remaining Submittals with-in	**20 days from Notice of Award**

Major Electrical Equipment

Service Equipment	15 days from Notice of Award
Fire Alarm	15 days from Notice of Award
All remaining Submittal with-in	**20 days from Notice of Award**

IV. Construction Milestones

All Prime Contractors:
Special consideration should be made to the requirements of the project bid schedule attached in the Specifications. Prime Contractors will be required to man each contract to meet the milestone dates indicated below and/or in the contract bid schedule. All costs should be included in the bid for working multiple shifts, nights, weekends, and holidays to complete each phase of the project.

Time frames indicated show milestone dates required to be met by all Prime Contractors. These areas, once completed, will be punch-listed and given partial occupancy for the Owner to occupy. Occupying these areas is critical to the Owner. If said dates are not met Liquidated damages may be assessed and back-charged to the responsible Contractor**.**

KEY MILESTONE DATES:

White Plains High School

UNIT VENTILATOR REPLACEMENTS & ASSOCIATED HVAC UPGRADES

- Construction Start: **June 26, 2023** | Installation Completion: **November 1, 2023**
- Commissioning of New Unit Ventilators and Condensers: **June 1, 2023**

ANTICIPATED DELIVERY OF MECHANICAL EQUIPMENT

- Construction Start: **June 1, 2023** | Substantial Completion: **June 27, 2023**

Any work that cannot be completed by the Substantial Completion Dates above, must be completed after-hours. After-hours are defined within section "VI. SCHOOL OPERATIONS & CONTRACTOR WORK HOURS".

The contractor shall note that the anticipated delivery of mechanical equipment by Daikin (provided by Owner) is expected to arrive between June 1st 2023 and June 30th 2023. The mechanical contractor will be responsible to store the equipment if it arrives prior to June 27th 2023, either on site in C boxes or off site in a secure location.

V. Summary Overview

Introduction for All Buildings & Projects

Each building must be ready for the 2023-24 school year which will begin shortly after August 31, 2023 and each Prime Contractor shall reference the dated set forth in the Bid Schedule . This requires all trades to work multiple shifts to execute the work-as needed. After August 31, 2023, each classroom that has been-or-is being worked on, must be able to produce fresh air, based on the NYS/Federal/NYCRR 155.5 Codes, Rules and Regulations. Each Unit must be able to supply heat to the room, no later than September

15th 2023- no exceptions taken. If any of the contractors will be unable to meet this requirement, the School District reserves their right to take over the work in accordance with the contract documents.

Special Considerations: The Mechanical Prime Contractor will be responsible to remove the mechanical equipment from the delivery vehicle (ex: truck, trailer, flatbed, etc.) in which the equipment arrives on, being supplied by Daikin Applied- through the School District. Once removed from the delivery vehicle, the mechanical prime contractor will then become responsible for the equipment received through Daikin Applied. The Mechanical Prime Contractor will then be the entity that controls the "chain of custody" for the equipment supplied by Daikin Applied. The Mechanical Prime Contractor will be responsible to store the equipment until it is ready to be deployed throughout the building, they will be responsible to transfer the equipment to its intended location, and remove any of the packing and rubbish from the equipment disposing of the packing material through debris containers or other means provided by the mechanical prime contractor.

Chain of Custody for Mechanical Prime Contractor: This is the total control of inventory provided through the Owner's other purchasing resources, such as the purchase of mechanical equipment through Daikin Applied- via OMNIA purchasing contract. The Mechanical Prime Contractor will be responsible to inventory, protect, secure and transport the equipment through their contract. Damage to the equipment not recorded at the time of delivery, will be this Prime Contractor's responsibility to correct, repair or replace. Until Substantial Completion, this contractor will be responsible for any type of damage to the equipment, including theft, fire, water damage, physical damage, electronic damage or any other means of loss that creates a defect of the unit, or modifies it from the time of acceptance. This Prime Contractor will create a log of all equipment received and will photograph each parcel or piece of equipment once delivered and then once installed.

It is assumed that some electrical components, along with the overall amount of work may hinder a commissioning of the new equipment by the end of 2023. Therefore, each Prime Contractor (PCM & PEM) shall include a Start Up for the Spring of 2024, with a Substantial Completion of June 1, 2024.

Commissioning Agent: The District will be obtaining the services of a Commissioning Agent as a Third-Party professional. All contracts associated with the installation of new mechanical equipment, including the Mechanical Equipment Vendor, Controls Contractor, the Prime Mechanical Contractor and the Prime Electrical Contractor agrees to work in harmony with the Commissioning Agent and the data provided, in line with the Contract Documents. This includes any interim punch lists, final punch lists, equipment tagging, testing and balancing, equipment scheduling, daily/weekly oversite and similar. Reference the section 230800 within the contract specifications.

VI. SCHOOL OPERATIONS & CONTRACTOR WORK HOURS

Each project will impact many areas within existing buildings, which in some cases will remain in operation during construction.

All contract work occurring **over the summer recess**, outside of normal school session, may be performed during the hours of 7:00am and 4:00pm, with second-shift work happening continuously until 11:00pm - once approved by the CM & Owner. Any other contract work impacting the operation of the school, at any point over the project schedule, must be performed on an after-hours schedule, weekends or school holidays.

All contract work being performed **before and after the summer recess** – if permitted, during normal school session, will need to be perform after-hours (3:30pm-11:00pm). If approved, the contractor is responsible for abiding by the local sound ordinance for construction activities, and will be responsible for any fines they may incur if not followed. All punch-list work shall be performed after school hours on a second-shift schedule.

Each Prime Contractor may work Saturday & Sundays to make up for lost time (Saturday/Sunday work will be required if necessary to meet deadline) with prior approval from the Owner and after the Contractor has verified allowable working hours by town ordinance. If any Prime Contractor must work on either a Saturday, Sunday or a Holiday, in order to make up time that has been lost due to the same contractor, that Contractor will be responsible to reimburse the District for any custodial overtime costs.

Abatement procedures happening at buildings with student and full staff and student occupancy will require those abatement activities to take place on a second shift schedule. This include White Plains High School, George Washington Elementary School and Eastview Middle School.

VII. SAFETY / LOGISTICS/STORAGE

1. Two weeks after the receipt of the Notice of Award, each Prime Contractor for Mechanical Construction shall provide a Site Safety/Logistics Plan to the Construction Manager. The site logistics plan should minimally include locations of the **eight-foot high temporary fence**, traffic plans for deliveries and removals, refuse container locations, crane locations, pick locations, boom radius, and lift locations. This plan shall also show the location of all staging and storage areas, non-rated and fire-rated partitions used to separate construction and school areas, made with plywood and/or gypsum wallboard, etc. The logistical information represented by the construction documents shall serve as a minimal guide.
2. Each prime contractor is to submit their corporate safety policy (2) weeks after Notice of Award . Plan to minimally meet OSHA standards. Each Prime Contractor shall make the participation of their subcontractors in this program mandatory. These Safety Programs should be a detailed Company Policy defining the specifics as to how a safe work environment shall be maintained

3. Each Prime Contractor and Sub Contractors shall schedule weekly safety meetings (Job Site Safety Talks) and submit meeting minutes indicating attendees and topics to the Construction Manager.

4. Each Prime Contractor is to identify in writing to the Construction Manager their "OSHA Competent Person Regarding Safety" Definition. "Competent person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

5. All flagmen required for deliveries to the site are to be furnished by the Prime Contractor responsible for the delivery. Any and all deliveries crossing the site or student traffic areas shall be escorted by flagmen. All flagmen shall wear orange vests. All deliveries shall be scheduled and coordinated with the Construction Manager and the Owner. Delivery blackout periods for bus traffic interference shall be established with the Construction Manager.

6. Smoking, firearms, alcoholic beverages, and indecent photography are expressly prohibited on all school properties. All persons representing Contractors, subcontractors or suppliers shall wear shirts, long pants and other proper attire while on school property. All persons representing Contractors, subcontractors or suppliers shall conduct themselves in a professional manner consistent with the rules and policies of The School District, and the New York State Education Department while on school property or otherwise representing this project.

7. Each Prime Contractor will ensure that all their employees, while on school property, will wear hard hats, high visibility vests, and ID badges at all times. Anyone on site without this the proper Personal Protection Equipment (PPE) will be escorted off school property.

8. Each Prime Contractor will ensure that every employee working on this project has completed a 10-hour OSHA training course. Any worker that cannot present a 10-hour OSHA safety-training card will be escorted off the property.

9. Food truck vendors for Construction Workers will only be allowed on school property with prior authorization from the School District. The District may allow or discontinue food vendor truck service at any time for any reason.

10. **Identification Badges**. Each Prime Contractor will provide an ID badge for each of their field personnel prior to coming on school property. All workmen shall display the badge on their person while on site, and at all times. Failure to wear identification badge at all times will result in the immediate removal from the jobsite.

11. Each Prime Contractor is responsible for their own storage and personnel trailers at each site. Each Contractor will be required to supply man trailers and storage box trailers as required. All costs related to its delivery, construction, protection, power, etc. is borne by the individual Contractors utilizing space. The Owner WILL NOT PROVIDE STORAGE SPACE. The placement of these trailers will be strictly limited to predetermined locations. Approval of the placement of any trailer or storage box must be received from the Construction Manager.

12. The parking for construction personnel shall be limited to designated parking areas only. Failure to abide by this rule will result in towing of cars at the expense of the Prime Contractor whom employs the individual.
13. All delivery vehicles/trucks/machinery/etc. permitted on site, must be equipped with back-up alarms and enter through the designated access points. Failure to demonstrate this ability will result in cancellation of delivery or stoppage of work. All delays associated with this cancellation will be the responsibility of the Prime Contractor responsible for the Work involved.
14. All temporary construction site fences installed by any Contractor shall be installed with a tightly woven, blind screen mesh. This mesh is to be installed on the "construction" side of the fence. The Mechanical Contractor will maintain all fencing daily and lock gates at the end of the day.
15. All crane picks, material delivery, etc. must be coordinated so as not to lift over any occupied area of the building. If absolutely necessary, this work shall be done on off hours to ensure the safety of the building occupants. Crane location must be carefully chosen to ensure the safety of building occupants. Crane picks must also not be conducted during academic hours within 20' of an occupied building.
16. The Owner or Construction Manager reserve the right to have all hoisting equipment periodically inspected by an independent inspector whose findings will be binding. The Prime Contractor at its own expense must make corrections before continuing work. The Owner or Construction Manager will not assume any responsibility for the safe operation of any hoisting equipment by exercising this right. Each Prime Contractor or Sub Contractor shall cooperate with the inspector by allowing time for the inspection. The Prime Contractor shall be notified 24 hours prior to the time of the inspection. These inspections do not release the Prime Contractor of their responsibility to provide all engineering, permits, and inspections as required by OSHA or the SED prior to use of any hoisting equipment.
17. All vehicular traffic (personal vehicles, trucks, equipment, deliveries, etc.) are to use the designated entrances as outlined on the Logistics Drawings. Access by other routes is to be on exception basis only.

VIII. SUBMITTALS

1. Each copy of each submittal shall have attached as the cover page the specified "Submittal Cover Sheet". All information requested in "Section 01 33 00 Submittal Requirements" shall be provided by the respective Contractor. Submittals will be returned without review if the cover sheet is not accurately completed.

2. Each Prime Contractor shall generate a complete "Submittal Log" within one business week of the Notice of Award. This log is to list all required submittals specific to your trade as detailed in the Project Manual/Specs. See enclosed form for your use. "ROJ" stands for Required on Job to assist your judgment of the time gap between submission, Architect review, fabrication/procurement and on-site need for putting the work item into place.

3. Each Prime Contractor shall review all submissions for completeness. Each Prime Contractor is responsible to stamp all shop drawings prior to submission to the Architect. The Architect will not review any shop drawings unless first reviewed by said Contractor. Bundle similar material submissions for proper review. Use the Architects Submittal cover sheet located in the Specifications
4. **All submissions shall be sent electronically to the Architect. Submittals will be processed and stored electronically, with access available to all Prime Contractors for coordination. The District has elected to use the program NewForma for all project correspondence.**
5. Each Prime Contractor shall provide one transmittal for each submission package identifying each unique submission individually. For each submittal with the submission package, the Prime Contractor shall identify the length of the delivery time and the necessary "last date" an item may be received on site. Each Prime Contractor shall keep a log of all submissions in a manner prescribed by the Construction Manager and the attached form. Minimally, the Contractor shall update this submittal log biweekly and provide a copy to the Construction Manager for review and information.
6. Each Prime Contractor shall copy the Construction Manager's Project Manager on all transmittals, correspondence, RFI's and any other documents sent to the Architect, his consultants or the Owner
7. At the direction of the Construction Manager, each Prime Contractor shall provide copies of either document and/or data files for any requested document on one of the following programs: Microsoft Word, Microsoft Excel, or Primavera's SureTrack – Project Manager 2.0 scheduling program.

IX. LINE, LEVELS & GRADE

1. Each Prime Contractor for Mechanical Construction shall establish a baseline and benchmark system for each area of renovation or component. This survey work shall be completed by a NYS licensed professional surveyor. The surveyor(s) employed to establish this system or to extend and maintain an existing benchmark system for the work of other trades shall not have less than five years' experience in performing construction surveys similar to the work they will perform for this project. The other Prime Contractors and their subcontractors shall be responsible for extending these lines, levels and grades, and for performing all layouts for their own work. Each Prime Contractor is solely responsible for any damage or loss due to incorrect extension of lines, level or grades in their layout. Each Prime Contractor and their subcontractors shall be responsible for the accuracy with respect to the layout of their work. Any discrepancies or errors in the drawings, perceived by a Prime Contractor or subcontractor, shall be immediately reported to the Construction Manager and Architect. If any corrections are necessary, they shall be executed in accordance with procedures approved by the Construction Manager.
2. Each Prime Contractor and their subcontractors shall be responsible to offset, or to protect, their markings from anything that may disturb them.
3. Each Prime Contractor for Mechanical Construction and all other Contracts will build to existing conditions of the site and joining buildings. To confirm line, level and grade, the Prime Mechanical Construction Contractor will employ a licensed NYS surveyor by the end of the project and produce an 'As-Built' drawing including final elevations and boundaries of any structural or earth modifications.

X. MANAGEMENT OF WORK

1. **Each Prime Contractor shall employ (from one week after Notice of Award until punch-list and closeout are complete) at a minimum a full-time Project Manager and a separate dedicated full-time on-site Superintendent. The Project Manager and Site Superintendent shall represent the Prime Contractor. All communications given to the Project Manager or Site Superintendent -either verbal or written- shall be binding. Important communications shall be so confirmed in writing.**

   If a contractor is awarded multiple contracts, they must include multiple superintendents and foreman per building/contracts. There is no exception to this requirement.

2. Each Prime Contractor shall provide copies of their daily construction reports to the Construction Manager's either through the Submittal Program or Electronically via E-mail. These reports shall be submitted no later than 10:00am the following workday. The daily reports shall provide detailed information concerning the Prime Contractors' activities and operation only. Daily Construction Reports to the Construction Manager shall detail manpower for each subcontractor and direct work-force, weather and work activities on site.

3. Each Prime Contractor shall have responsible representation at the **MANDATORY** weekly job meetings held at the Construction Manager's job office from Notice of Award thru close out. These meetings will be held to arrange for a satisfactory coordination of all building trades so as not to impede job progress. Prime Contractors or subcontractors who fail to attend the meetings will be **back-charged $500.00 per each occurrence.**

4. Each Prime Contractor shall submit two-week look ahead schedules identifying the anticipated activity, and material needs for all of the work scheduled to be formed by the Prime Contractor and his subcontractors for the identified time period. Each Prime Contractor shall keep this schedule current and provide a biweekly report to the Construction Manager concerning the actual performance and activity compared to the two-week look ahead. The two-week look ahead shall be uploaded to the submittal Program by the End of Business of each weekly meeting.

5. The MEP Coordination shall follow the guidelines stated below:

   a. Each Prime Contractor shall have sufficient responsible representatives at mechanical/electrical/plumbing coordination meetings held at a location to be determined. These meetings shall be held as frequently as required by the Construction Manager or any other Prime Contractor. The Mechanical Construction Prime Contractor shall also include a representative at these meetings.

   b. All Contractors are expected to jointly produce coordination drawings. Prime Contractors are to first submit their respective shop drawings for approval, to the Owner's Architect and Engineers in order to make any necessary changes prior to going through the coordination process. The HVAC Contractor shall provide orange line CAD Drawings showing all of the approved ductwork. The HVAC Contractor shall locate on these CAD Drawings all piping in orange pencil/ lines. The Plumbing Contractor shall locate the plumbing lines on these CAD Drawings in blue pencil/ lines.

The Electrical Contractor shall indicate conduit runs in green pencil/ lines. The Mechanical Construction Prime will have the last coordination review. As each coordination drawing is completed, Contractors are to meet with the Construction Manager and the Architect to review and resolve all identified conflicts on the coordination drawings.

Note: for areas without HVAC work, the Mechanical Prime shall provide the necessary CAD Drawings with black line. All coordination meetings will be held at the Construction Manager's office.

c. It is the responsibility of the Prime Contractor for Mechanical Construction to coordinate all points of entry through the foundations, slab penetrations, sleeves, roof openings and penetrations, wall openings and penetrations etc. with the work of all other Contractors, including but not limited to M. E. P. Primes, kitchen equipment, casework and casework accessories.

d. It is the responsibility of each Prime Contractor to coordinate with the architectural details and elements, such as soffits, variations in ceiling height and materials, fire/smoke partitions or barriers, folding partition, doors, lockers, and any other Mechanical Construction items that impact the space above the ceiling or otherwise requiring light framing and/or miscellaneous support or bracing.

6. Site cleanliness: If any Prime Contractor fails to keep the site safe and clean within four hours of being notified by the Construction Manager either verbally or in writing, the Construction Manager will have this work performed and back charged to the appropriate Prime Contractor at prevailing overtime rates plus 15%. Notice to field personnel is deemed notice to this Prime Contractor.

7. Dust and fume control is essential to the reduction of health risks to the surrounding personnel. Methods of dust control shall include but not be limited to the following:

    a. Adequate ventilation.
    b. Wetting down.
    c. Keeping bags of insulating materials, cement, etc. closed.
    d. Controlled mixing of materials under field conditions.
    e. Special attention should be utilized in sawing of insulation and certain acoustical materials and storage of materials.
    f. Job housekeeping must be maintained.
    g. Advising all personnel of hazardous conditions, including supervisors and workmen.
    h. Installing temporary barriers.
    i. <u>Each Prime Contractor shall be responsible for instituting the above policies to insure minimal impact to surrounding occupied areas.</u>

8. Each Prime Contractor shall confine operations on the premises to areas designated by the Construction Manager and permitted by law, ordinances, permits and the Contract Documents, and shall not unreasonably encumber the premises with any materials or equipment. Each Prime Contractor shall coordinate all of his operations with, and secure approval from, the Construction Manager before using any portion of the Premises. Field personnel are to be confined to the work area assigned.

9. Where material is specified to be furnished by others or furnished and delivered only, the Prime Contractor installing the material shall be responsible for scheduling the delivery and receiving, unloading, storing, handling, relocating, hoisting, distribution, laying out and installing this material. Upon receipt of material by the Prime Contractor installing the material, any risk of loss and damage of the material shall be the responsibility of that Prime Contractor accepting the material.
10. All Prime Contractors and their subcontractors shall allow sufficient time to inspect and accept the work of the previous Contractors. Should any discrepancies be discovered, The Construction Manager shall be notified sufficiently in advance so that corrective action can be agreed to and taken (by all necessary parties) without affecting the progress of any Contractor or the work.
11. All Prime Contractors are advised to exert the utmost care and diligence when working in or near any existing buildings or site work which is to remain. The absence of protection around such items shall not excuse any of the Prime Contractors from their liability to provide protection. Any damages to the existing buildings, sitework or facilities shall be repaired and expensed to the responsible Prime Contractor.
12. Each Prime Contractor shall be solely responsible to remove and replace the existing ceiling tiles and grid in areas of the existing building where their work is required but new ceilings are not scheduled. In the event that the existing ceilings are damaged and cannot be replaced to the satisfaction of the Owner, the responsible Prime Contractor shall be solely responsible for replacing, in kind, the existing ceilings with new tile and grid. A qualified Contractor, acceptable to the Owner, shall perform all ceiling replacements.
13. All disconnect and/or tie-in work involving any utilities that would interfere with the ongoing operations of the Owner shall be completed on an after-hours basis. The performance of this work shall be projected on the required schedules and the Owners Representative is to be notified at least forty-eight hours in advance of commencing with this work. All overtime and standby personnel necessary to complete these tie-ins shall be the responsibility of the Prime Contractor performing the work.
14. At the same time the Prime Contractor submits their Insurance Certificate they shall also submit to the Construction Manager the labor rates of each category of labor for which he or his subcontractors shall employ (either directly or indirectly). This information shall be itemized in the format shown below.

Contractor's Name					
Contractor's Address					
Contractor's Office Phone					
Contractor's Fax Number					
Contractor's Email Address					
Labor Rate Breakdown					
Worker's Title		**Journey man**	**1.5 Rate**	**Fore man**	**1.5 Rate**
Base Hourly Rate					
Payroll Tax & Insurance:	**% Per Hr**				
FICA					

Federal Unemployment					
State					
Workers Compensation					
Disability					
Other (Explanation Required)					
Subtotal					
Benefits:	**$ Per Hr**				
Vacation					
Health & Welfare					
Pension					
Annuity					
401K Fund					
Other (Explanation Required)					
Other (Explanation Required)					
Subtotal					
Hourly Labor Rate					

XI. REQUEST FOR INFORMATION (RFIs)

1. Refer to the specifications for a complete explanation of the Request For Information process, and copy of the RFI form. RFIs will be corresponded electronically and will be required for an interpretation needed by the Architect of the Drawings and Specifications. Questions asked within the field to the Architect or Engineer, shall be recorded by the prime contractor asking the question and submitted via RFI for formality.

XII. TESTING/INSPECTIONS

1. If NYSED, the Architect or Owner or determines that any work requires special inspection, testing or approval, the Construction Manager will instruct the Prime Contractor of such special inspection, or testing. If such special inspection or testing reveals a failure of the work to comply with the requirements of the Contract Documents, the Prime Contractor responsible shall bear all costs thereof, including compensation for the Architect's, Construction Manager, and Testing Lab costs.
2. Each Prime Contractor shall furnish incidental labor to:
    a. Provide access to the work to be tested, sampled and inspected.
    b. Obtain and handle samples at the project site or at the source of the product to be tested.
    c. Facilitate inspections, samplings and tests.

d. Coordinate with the Owners Rep and testing lab and submit schedule of required tests one week in advance.
e. Coordinate inspections

3. As they relate to the timely prosecution of the work, all Prime Contractors shall coordinate independent testing and inspections. If any Prime fails to coordinate such inspections and additional costs are incurred to the Owner, the Prime Contractor will be responsible for that inspection cost.

4. **The following is a list of intended controlled inspections:**
   a. Soil bearing, sub-grade inspection and/or compaction
   b. Concrete field and plant testing & rebar placement
   c. Masonry or stone field inspection, mortar sampling, reinforcement placement inspection
   d. Structural steel field welding, bolting, connections, and metal deck
   e. Asphalt and sub-base inspection
   f. Soil compaction, density and sieve analysis testing, soil bearing
   g. Water and air infiltration for windows
   h. Roofing & flashing – ***by Contractor performing the work***
   i. Waterproofing
   j. Under slab plumbing work – ***by Contractor performing the work***
   k. Firestopping
   l. Fireproofing
   m. Underwriters/UL inspection – ***by Contractor performing the work***
   n. Asbestos air monitoring

5. The Architect and Construction Manager shall be notified twenty-four hours prior to the need of testing, in the event the Contractor does not give proper notification and the work is done with no test, that Contractor will bear all costs for such tests.

6. ***All controlled inspection testing costs will be paid for by the Owner except as noted above.***

7. As part of the two-week look ahead, each Prime Contractor shall provide the Construction Manager with a schedule of all anticipated on-site Owner supplied inspections (if any are required). The Prime Contractor shall submit all requests for Owner-supplied inspection for all items of controlled inspection by 1:30 p.m. of the day previous.

XIII. CHANGES TO THE WORK

1. Refer to Article 7 of the General Conditions for additional information pertaining to this subject.

2. All change proposals for extra work by the Prime Contractors shall be submitted to the Construction Manager, with a complete labor and material breakdown and on the basis of net difference in quantities. The Owner reserves the right to request adequate back up such as invoices, subcontractor quotes, etc., to substantiate the change order cost. Current labor rates for all trades are to be submitted to the Construction Manager by the respective Prime Contractors at the first scheduled job meeting. When both additions and deductions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of net increase or decrease.

All change requests shall follow the cost breakdown found in § 7.2.1 of Article 7 located in the General Conditions.

XIV. SCHEDULE OF VALUES/PAYMENTS

1. Within one week after Notice of Award , the Prime Contractor shall submit a detailed billing breakdown on the AIA G702/ G703 – CM Version form for approval by Construction Manager and Architect. No payments will be made until such billing breakdown is approved. Each Prime Contractor will be required to breakdown the project cost for each building project, by NYSED #.
2. The schedule of values will be reviewed and adjusted if necessary. Once approved, the schedule of values is to be used for the AIA pay application. The schedule of value will take into account and include at minimum the following items:
    a. Bonds/Insurance based on actual invoice amount
    b. Labor and material shown per line items greater than $5,000 in work.
    c. Submittals - 1% of contract sum
    d. Punch list - 1% of contract sum
    e. Close-out documents/warranties - 3% of the contract sum
    f. Meeting Attendance & Meeting Documentation - 2% of the contract sum
    g. Allowances
    h. Approved Alternates
    i. Labor and Material breakdown for each line Item

    Note: Punch list value will be dispersed only when the work has been confirmed to be completed 100%. ALL PAYMENT APPLICATIONS SHALL INCLUDE A 5% RETAINAGE FACTOR.
3. The Owner has elected to require the Prime Contractor to submit releases of liens with respect to all Work previously performed and for which payments were made under a preceding application. Beginning with the second payment requisition and with each subsequent payment requisition, each Prime Contractor shall furnish to Owner the following documents:
    a. Labor and/or Materials Affidavit
    b. Daily and Weekly Wage Affidavit
    c. Prime Contractor's-Partial Release and Wavier of Lien
4. Monthly Payment Applications for Payments shall be made as per Article 9 of the General Conditions of the Contract
5. All Payment Applications for Payment are to include certified payroll for each employee working directly under the Prime Contractor, as well as all subcontractors working under agreements with the Prime Contractor.
6. All Payment Applications for Payment are to include 10-Hour (or higher) OSHA cards for all workers listed on the certified payrolls.

XV. PUNCH LIST

1. Upon substantial completion of each phase of work, each Prime Contractor is to submit to the Owner/Architect/Construction Manager a letter declaring the work is substantial complete. Included with said letter is to be the Contractor's punchlist.

   Upon the receipt of above, the Construction Manager will schedule with the Owner, Architect, and Contractor a walk through to develop an Owner's punchlist. This Owner's punchlist agreed by all parties shall serve as the only punchlist. Upon failure to complete the Owner's punchlist within four weeks from receipt, the Owner reserves the right to complete same work and backcharge the costs of material, labor, supervision and other incidental costs.

XVI. INSURANCE/INDEMNIFICATION

1. All Prime Contractors must issue a Certificate of Insurance with liability limits as defined in the General Conditions and Division 01, naming Triton Construction Company, The Architect, The Architect's Consultants and the School District as an 'Additional Insured' in addition to all other parties as stipulated in the General Conditions of the Contract in the project manual.
2. All Prime Contractors agree to indemnify and hold harmless Triton Construction Company, The Architect, The Architect's Consultants, the School District, its agents and employees in addition to all other parties as stipulated in the General Conditions of the Contract in the project manual.
3. All Prime Contractors and Sub-Contractors/sub-subcontractor's/vendors/etc. insurance/indemnification shall comply with Article 11 "Insurance" as specified in the General Conditions of the Contract in the project manual.

Specific Scope Requirements for Each Prime Contractor

Each Prime Contractor is to refer to the technical specifications and drawings for further, or more comprehensive requirements.

Prime Contractor for Mechanical Construction (PCM)

1. This Prime Contractor shall provide, for all the building construction work, all necessary site refuse containers and disposal services to maintain the site in a clean and safe condition. This Prime Contractor shall be responsible for emptying and/or replacing all containers on a regular basis or when full. All containers and disposal services shall be provided by a single entity. This Prime Contractor shall provide sufficient labor to keep the site clean on a daily basis and shall be responsible for providing the daily broom cleaning as necessary to maintain site safety.
2. This Prime Contractor shall coordinate with the; Electrician, Controls Contractor and the Equipment Vendor (Daikin) to allow all Contractors unabated access to the building and surrounding work areas.

3. This Prime Contractor shall provide and maintain temporary chemical toilets for the duration of the project. The quantity of these toilets should be as required to properly maintain sanitary facilities and easy access for the personnel on the job. This quantity shall be a minimum of two toilets per major work area. This requirement shall include all necessary paper products, supplies and services, as well as the maintenance of these toilets until all work is complete and the Owner assumes partial occupancy of the completed work areas. As a minimum, this Contractor shall include the pumping and servicing of these toilets twice per week.
4. All Scaffolding or Stair Towers shall be designed and stamped by a licensed NYS PE. When designing this scaffolding consideration should be given to the environment, scaffolding system being used, means of access, means of tying the scaffolding to the structure, location, length of time to be erected, climate conditions, wrapping/containment of building, purpose of use, loadings, etc. all scaffolding and/ or stair tower access points must be secured while not in use. If and when needed, the scaffolding may be used for access by other Prime Contractors during construction- this contractor will not restrict access by others using the scaffold.
5. This Prime Contractor shall provide testing and inspection of the scaffolding on a daily basis and per governing regulation (e.g.,: OSHA). A log of these inspections are to be kept in the PCM's job trailer, along with inspections tags that identify the status of the scaffolding (inspection dates, okay to use, caution, danger). Report to the Construction Manager all corrective work required through the course of the project.
6. As shown on the logistics plan, this Prime Contractor shall include in his bid price, all costs to provide an **8' ht.** rental type chain link construction fencing and gates. All fencing shall have a tightly woven, blind screen mesh installed on the "construction" side of the fence. Mesh to be dark green or black. When directed by the Construction Manager, this Prime Contractor shall remove and dispose of this fencing and all related materials. Gates for man access shall be passive to the exterior of the jobsite during the event of an emergency, but remain closed for un-authorized entry during construction. All gates shall be locked when the site is not active, with a double-keyed system, granting the District access to the site at all times.
7. This Prime Contractor will repair, replace, correct, or finish grade, topsoil, and seed all areas with-in the construction site and staging area that was disturbed by the work of this project.
8. This Prime Contractor shall provide and maintain all temporary plastic barriers, partition walls, doors, hardware and plywood barriers for the duration of the project to separate work areas from public areas and to maintain security, dust, and noise control. Temporary partitions and doors will be painted with 1x coat of primer and 2x coats of paint for esthetics. Where needed, temporary fire-rated systems will need to be installed to maintain the build's existing fire code conformance.
9. Construction Signage. The PCM shall include in his base price all construction signage required by OSHA and the Site Logistics plans. At the site fence, "Construction Area keep out", "Hard Hats Required" and "Authorized personal only" signage shall be posted every 10' on site fencing. This Prime Contractor shall reference the logistics plans for each project to include any other signage designated for entry gates. Signs shall be made of either metal of durable PVC to endure the project duration.

This Prime Contractor shall also include signage for COVID-19 protection, alike the construction signage, stating “Keep Social Distance”, “Wear Mask” and “Sanitize Frequently”.

10. Final Cleaning: The PCM shall provide a final cleaning service to prepare all areas of interior construction for use and to provide a final cleaning after substantial completion is achieved and after direction to provide such service is received form the Construction Manager. This work shall be completed in cooperation with the building maintenance staff and their respective procedures.
11. Equipment Pads: Unless specifically noted on the contract documents, the associated Prime Contractor for the Equipment (PCM, PCE) will provide all **interior and exterior** concrete equipment pads whether shown on the contract documents or not.

    This Prime Contractor will provide any modifications to existing or provide new equipment pads for mechanical equipment, as called out on the drawings.
12. This Prime Contractor is responsible for protection of finished work. Including but not limited to; floors, walls, equipment and ceilings. This Prime Contractor will provide, maintain, and remove the appropriate protection materials necessary to adequately protect his finished product.
13. This Prime Contractor should note there are numerous areas where the existing ceilings are remaining. This Contractor will be required to remove and reinstall any ceilings displaced by installation of this Contractor’s Work. If open ceilings are not replaced within a twenty-four hour period after a request by the Construction Manager, either verbal or written, the Construction Manager will have said ceilings reinstalled and all related costs will be back charged to said Contractor.
14. Unless otherwise noted in the construction documents, this Prime Contractor will repair and patch all walls, floors, and ceilings to match adjacent finishes after the removal of interior partitions, ceilings, floors, Mechanical conduit, piping and ductwork. This includes all walls and ceilings above finished ceilings or spaces. Each Prime Contractor will cut and cap their own work inside finished walls, floors and ceilings.
15. This Prime Contractor shall provide fire extinguishers for the life of the project, the extinguishers are to be hung and identified as per OSHA requirements (1 per 3000 sq ft, or better). These extinguishers are to be re-charged and inspected for the life of the project.
16. If due to location of fabrication plant, a local storage yard is required, all cost associated with this storage yard including receiving, unloading, storing, shake-out, reloading, and delivery to the site shall be this Prime Contractors’ cost.
    a) The Owner may have an Inspector at the plant during the fabrication period. Appropriate access shall be provided at all times for this individual.
17. Abatement Work: This Prime Contractor will be responsible to hire a qualified and DOL licensed Abatement Contractor to perform ALL Hazardous Material removal at areas indicated in the drawings. This work will only take place during the summer recess or over an extended break/holiday with the Owner’s approval.

    Where buildings will be occupied over the summer recess (White Plains High School, George Washington Elementary School and Eastview Middle School) all abatement activities shall take place after 3:30pm and no later than 7:00am each morning.
18. Under slab **MEP Trenching at New & Existing Slabs**:

New Slabs: The Prime Contractor for Mechanical Construction (PCM) will be responsible to coordinate with the MEP contractors and Construction Manager through the Contract Documents and the Coordination Drawings, for any under-slab piping. The PCM will be responsible to provide the trenching, bedding, backfill and compaction for such MEP under-slab items. Each MEP Prime Contractor (the PCP, PCM & PCE) will be responsible to provide a final layout to the PCM, prior to trenching. Each MEP Prime contractor will be responsible to level their piping with provided bedding from the PCM, testing the piping prior to back filling.

Existing Slabs: Where existing slabs require new/modified underground MEP piping or conduit; The PCM will be responsible to survey/mark-out, sawcut, trench, lay bedding, backfill, dowel/reinforce and place new concrete level with existing floors. Each MEP Prime Contractor (PCM & PCE) will be responsible to provide a final layout to the PCM, prior to trenching. Each MEP Prime contractor will be responsible to level their piping with provided bedding from the PCM, testing the piping prior to back filling.

19. Openings in Existing Systems: Each respective Prime Contractor will be responsible to provide their own openings through existing wall, floor, and ceiling systems not shown to be removed on the Architectural Drawings. Where openings for MEPs are required in new wall, floor or ceiling systems, the MC shall coordinate with the respective MEP Prime contractor to locate those openings and frame the system to incorporate the new opening.
20. Core Drilling: Each respective Prime Contractor shall provide their own core drilling through existing and new wall, floor, foundation, or slab systems.
21. Roof Systems: In any case, the MC shall make all penetrations through the existing Roofing System with a qualified roofer who is certified on the existing roof system. Openings in the roof deck shall be coordinated by the respective contractor requiring the opening, and the opening shall be made by the PCM, this Prime Contractor.
22. Each Prime Contractor is required to fire stop and/ or smoke stop all walls, floors and ceilings after completion of all their own work.
23. This Prime Contractor will hire the services of an underground utility surveyor to locate and mark all existing underground utilities and services with-in the Area of Work.
24. This Prime Contractor will repair, replace, correct, or finish grade, topsoil, and seed all areas with-in the construction site that was disturbed by the work of this project, including any staging areas for material and equipment.
25. New Mechanical Roof Top Units, Exhaust Fans and Pipe Portals will be furnished and installed by the Mechanical Prime (including roof membrane/insulation cutting and patching), with final Electrical/ Fire-Alarm terminations by the Electrical Prime under separate contracts. Roof Top Curbs and Pipe Portals will be furnished, lifted/picked, and set/installed by the Prime Mechanical Contract. Blocking for curbs, final flashing, roof deck penetrations/openings and structural reinforcing shall be by the Prime Mechanical Contract. Coordination between each trade to install the roof system and new curbs in a seamless matter is required per each Prime's contract. The following sequence clarifies the coordination between the Mechanical Construction Prime (PCM), Mechanical (PCM) and Electrical (PCE) trades for New Mechanical RTU/ Exhausts Fan Equipment:

A. Roof Top Unit Curbs:
   1. Furnished, coordinated, lifted/picked and installed by Mechanical (PCM) Prime
   2. Deck/Roof Opening, Structural Reinforcing, Blocking, Insulation and Roof Flashing by Mechanical Construction (PCM) Prime
   3. Pipe Portals/ Pitch Pockets Furnished by Mechanical (PCM) Prime
   4. Pipe Portals/ Pitch Pockets Installed and Flashed by Mechanical Construction (PCM) Prime
B. Rooftop Dunnage
   1. Furnished, coordinated, lifted/picked and installed by Mechanical Construction (PCM) Prime
   2. Deck/Roof Opening, Structural Reinforcing, Blocking, Insulation and Roof Flashing by Mechanical Construction (PCM) Prime
C. Mechanical Equipment (RTUs):
   1. Furnished, hoisted/picked and installed by Mechanical (PCM) Prime
   2. Piping by Mechanical (PCM) Prime
   3. Ductwork by Mechanical (PCM) Prime
   4. Controls by Mechanical (PCM) Prime
   5. Electrical by Electrical (PCE) Prime
   6. Fire Alarm/ Shutdowns by Electrical (PCE) Prime

Temporary protection of open curbs prior to units being installed, will be provided and maintained, by the Mechanical Construction Contractor in cooperation of all other trades. Water infiltration as a result the Mechanical or Electrical Primes not re-protecting open roof curbs, will be the sole responsibility of that trade to reimburse the PCM Prime - to correct the temporary protection. Any damages to the interior finishes of the building, caused by water infiltration, will be the responsibility of that Prime Contractor causing the leak, to correct the damages per the terms of the General Conditions.

26. This Prime Contractor shall coordinate with the Electrician and Mechanical Construction Prime Contractors to allow all Contractors unabated access to the building.
27. Each Prime Contractor is required to fire stop and/ or smoke stop all walls, floors and ceilings after completion of all their own work.
28. This Prime Contractor will include modification to existing casework required to replace existing equipment. Case work will require Shop Drawings to be submitted to the Architect for approval. Casework will need to be installed by the end of the Summer, prior to student arriving for the 2023-24 academic year. In any case that the case work is not available, this Prime Contractor will deploy temporary protection in place of the casework, so that the space is finished and ready for occupancy.
29. This Prime Contractor will install all related control valves for equipment. For the equipment purchased through Daikin Applied, the manufacturer will be supplying all control valve for installation by this Prime Contractor. For any work outside of the equipment being supplied through Daikin Applied, all Control Valves will be furnished and installed through this Prime Contract. (Reference Controls Scope of Work)

Prime Contractor for Electrical (PCE)

1. The PCM shall provide dumpsters for this contractor to use for day-to-day rubbish. Each Prime Contractor is responsible for collecting, moving, placing, breaking down boxes and pallets, and disposing rubbish, on

a daily basis, all debris from their activities into a dumpster supplied by the PCM. Each Prime Contractor is responsible to broom clean the areas they worked in at the end of each day.

2. The PCE shall use the dedicated staging areas for the PCE's Construction Field Office. The PCE will be required to remove and reinstall the fencing that surrounds this location for installation of the PCE's construction office. The PCE will be required to install electric, sanitary, water, phone, cable etc. at the PCP's expense. Electric bills to the trailer only will be paid by the Owner.
3. The Prime Contractor for Electrical is to temporarily support existing ceiling mounted equipment/devices (i.e., speakers, fire alarm apparatuses, exit signs, wiring, light fixtures, etc.) as required for demolition of existing ceilings until new equipment/devices are installed or existing equipment/device can be permanently remounted in the new ceiling by this Prime Contractor – whether shown on the plans or not.
4. The Prime Contractor for Electrical shall provide and keep temporary light and power operational for a period from fifteen minutes before the earliest starting time of the earliest trade, to fifteen minutes after the established quitting time of the trade which stops latest in the evening (fifteen foot candles) throughout the entire construction area (normal working hours 7:00 am to 4:00 pm, second-shift 3:00pm-11:00pm).

   This applies to all scheduled workdays, Monday through Saturday inclusive, which are established as regular workdays for any trade engaged in the work, including such days that are holidays for Electricians but are regular workdays for other trades. These services are to be kept operational until the CM determines that they are no longer required for the execution of the work. Temporary light shall consist of a minimum of (1) bulb and cage per 10 square feet of floor space in all spaces no matter of size throughout the existing building spaces being renovated.
5. The Prime Contractor for Electrical shall include in his base price all costs associated with providing and maintaining adequate temporary light and power to all areas of work required by the construction documents. Each major area of work shall be provided with an adequate sized distribution panel for temporary light and power.
6. The Prime Contractor for Electrical shall provide temporary power for masonry work, mixers, steel work, or fire proofing work, compressors etc. that may require 220V temporary power. Power is to be provided at each major area of work if required.
7. **Existing Ceilings:** This Prime Contractor (PCE) should note there are numerous areas where the existing ceilings are remaining. **This Contractor will be required to remove and reinstall any ceilings displaced by installation of this Contractor's Work, where ceilings are not being removed on the Architectural Plans.** If open ceilings are not replaced within a twenty-four hour period after a request by the Construction Manager, either verbal or written, the Construction Manager will have said ceilings reinstalled and all related costs will be back charged to said Contractor.

   Any damage or dirt from the removal and reinstallation of ceiling systems, caused by this Prime Contractor will the responsibility of this contractor to replace in kind, or better.
8. The Prime Contractor for Electrical shall replace all burned out light bulbs, within the work areas, when building is turned over to the owner at substantial completion.

9. This Prime Contractor shall coordinate with the General Construction Prime and Mechanical Prime Contractors to allow all Contractors unabated access to the building.
10. Access to Work within Existing Walls, Ceiling & Floors: Unless otherwise noted in the construction documents, this Prime Contractor will cut and cap their own work inside finished walls, floors and ceilings. Access for removals, installation and capping within existing chase walls, walls, soffits or hard ceilings that are not indicated on the drawings for the PCM to remove and replace- will be cut and patched by the MEP contractor requiring access. For shared access to the same wall/ceiling systems, the contractor with the most work will be responsible for cutting and patching the shared openings. Patching must be performed by a skilled tradesman of the associated work (carpentry, taping, painting, etc.,,).
11. Each Prime Contractor is required to fire stop and/ or smoke stop all walls, floors and ceilings after completion of all their own work.
12. This Prime Contractor is responsible for protection of finished work. This Prime Contractor will provide, maintain, and remove the appropriate protection materials necessary to adequately protect his finished product.
13. This Prime Contractor will modify all existing Fire Alarm devices that are part of the existing building being renovated, maintain the devices throughout construction, and or disconnect as needed. This Prime Contractor will assure that no troubles exist, by hiring a Fire Alarm vendor who is licensed to modify the existing Fire Alarm system to accept any temporary changes through construction.

    Surface Mounted Devices: This Prime Contractor shall remove all existing surface-mounted Fire Alarm Devices such as Strobes, Horns, Pull-Stations, etc., on walls receiving new finishes, such as Tile, etc., and shall reinstall devices on face of new finish. This includes any type of surface-mounted conduit/ wire-mold.

    Recessed Devices: This Prime Contractor shall modify any in-wall/recessed Fire-Alarm boxes for devices such as Strobes, Horns, Pull-Stations, etc., with collars or extensions to meet the face of the new wall finish in areas where existing walls are receiving new finishes, such as tile, etc.,.
14. This Prime contractor will modify existing power devices where walls are receiving new finishes, such as Tile, etc.,.
    Surface Mounted Devices: This Prime Contractor shall remove all existing surface-mounted Electrical Devices such as light switches, receptacles, junction boxes, etc., on walls receiving new finishes, such as Tile, etc., and shall reinstall devices on face of new finish. This includes any type of surface-mounted conduit/ wire-mold.

    Recessed Devices: This Prime Contractor shall modify any in-wall/recessed Electrical Devices such as light switches, receptacles, junction boxes, etc., with collars or extensions to meet the face of the new wall finish in areas where existing walls are receiving new finishes, such as tile, etc.,.
15. This Prime Contractor is to develop a separate site-specific electrical service shutdown/upgrade schedule within four weeks after Notice of Award. This schedule will be developed in conjunction with the Construction Manager and the Owner. No shutdown/transfer will be permitted at any time without prior written notification. The Prime Contractor for Electrical shall provide temporary power for all

'others' work ongoing at the site during any electrical shutdown or transfer period that would otherwise deny other Contractors power. No shutdown or transfer shall be allowed during active school hours. Any and all shutdowns must be scheduled on the Owners off days (weekends, holidays). Any shutdown longer than three days will require this Prime Contractor to supply temporary power for the Owner (i.e., generators). The Electrical Prime Contractor shall provide a minimum of forty-eight hours' notice to the Owner and the Construction Manager or any necessary power shutdown.

16. New Mechanical Roof Top Units, Exhaust Fans and Pipe Portals will be furnished and installed by the Mechanical Prime (including roof membrane/insulation cutting and patching), with final Electrical/ Fire-Alarm terminations by the Electrical Prime under separate contracts. Roof Top Curbs and Pipe Portals will be furnished, lifted/picked, and set/installed by the Prime Mechanical Contract. Blocking for curbs, final flashing, roof deck penetrations/openings and structural reinforcing shall be by the Prime Mechanical Contract. Coordination between each trade to install the roof system and new curbs in a seamless matter is required per each Prime's contract. The following sequence clarifies the coordination between the Mechanical Construction Prime (PCM), Mechanical (PCM) and Electrical (PCE) trades for New Mechanical RTU/ Exhausts Fan Equipment:
    D. Roof Top Unit Curbs:
        1. Furnished, coordinated, lifted/picked and installed by Mechanical (PCM) Prime
        2. Deck/Roof Opening, Structural Reinforcing, Blocking, Insulation and Roof Flashing by Mechanical Construction (PCM) Prime
        3. Pipe Portals/ Pitch Pockets Furnished by Mechanical (PCM) Prime
        4. Pipe Portals/ Pitch Pockets Installed and Flashed by Mechanical Construction (PCM) Prime
    E. Rooftop Dunnage
        1. Furnished, coordinated, lifted/picked and installed by Mechanical Construction (PCM) Prime
        2. Deck/Roof Opening, Structural Reinforcing, Blocking, Insulation and Roof Flashing by Mechanical Construction (PCM) Prime
    F. Mechanical Equipment (RTUs):
        1. Furnished, hoisted/picked and installed by Mechanical (PCM) Prime
        2. Piping by Mechanical (PCM) Prime
        3. Ductwork by Mechanical (PCM) Prime
        4. Controls by Mechanical (PCM) Prime
        5. Electrical by Electrical (PCE) Prime
        6. Fire Alarm/ Shutdowns by Electrical (PCE) Prime

    Temporary protection of open curbs prior to units being installed, will be provided and maintained, by the Mechanical Construction Contractor in cooperation of all other trades. Water infiltration as a result the Mechanical or Electrical Primes not re-protecting open roof curbs, will be the sole responsibility of that trade to reimburse the PCM Prime - to correct the temporary protection. Any damages to the interior finishes of the building, caused by water infiltration, will be the responsibility of that Prime Contractor causing the leak, to correct the damages per the terms of the General Conditions.

17. Under slab **MEP Trenching at New & Existing Slabs**:

New Slabs: This Prime contractor will be responsible to coordinate with the PCM contractor and Construction Manager through the Contract Documents and the Coordination Drawings, for any under-slab piping. The Prime Contractor for Mechanical Construction (PCM) will be responsible to provide the trenching, bedding, backfill and compaction for such MEP under-slab items. Each MEP Prime Contractor (the PCP, PCM & PCE) will be responsible to provide a final layout to the PCM, prior to trenching. Each MEP Prime contractor will be responsible to level their piping with provided bedding from the PCM, testing the piping prior to back filling.

Existing Slabs: Where existing slabs require new/modified underground MEP piping or conduit; The PCM will be responsible to survey/mark-out, sawcut, trench, lay bedding, backfill, dowel/reinforce and place new concrete level with existing floors. Each MEP Prime Contractor (the PCP, PCM & PCE) will be responsible to provide a final layout to the PCM, prior to trenching. Each MEP Prime contractor will be responsible to level their piping with provided bedding from the PCM, testing the piping prior to back filling.

1. Openings in Existing Systems: Each respective Prime Contractor will be responsible to provide their own openings through existing wall, floor, and ceiling systems not shown to be removed on the Architectural Drawings. Where openings for MEPs are required in new wall, floor or ceiling systems, the MC shall coordinate with the respective MEP Prime contractor to locate those openings and frame the system to incorporate the new opening.
2. Core Drilling: Each respective Prime Contractor shall provide their own core drilling through existing and new wall, floor/slab or foundation systems.
3. Roof Systems: In any case, the PCM shall make all penetrations through the existing Roofing System with a qualified roofer who is certified on the existing roof system. Openings in the roof deck shall be coordinated by the respective contractor requiring the opening, and the opening shall be made by the PCM.
4. Existing Fire Alarm: This Prime Contractor (PCE) shall include in their base price all costs associated to temporarily maintain the existing fire alarm during construction, through a qualified vendor certified to work on the building's FA system. In the case that the fire alarm needs to be taken off-line, the EC is to provide a dedicated Firewatch per NFPA and NYSED's requirements.

   Any work which modifies the existing Fire Alarm shall take place after-hours in buildings that are occupied with Students and Faculty. This includes Student and Faculty occupancy over the Summer academic-recess months.

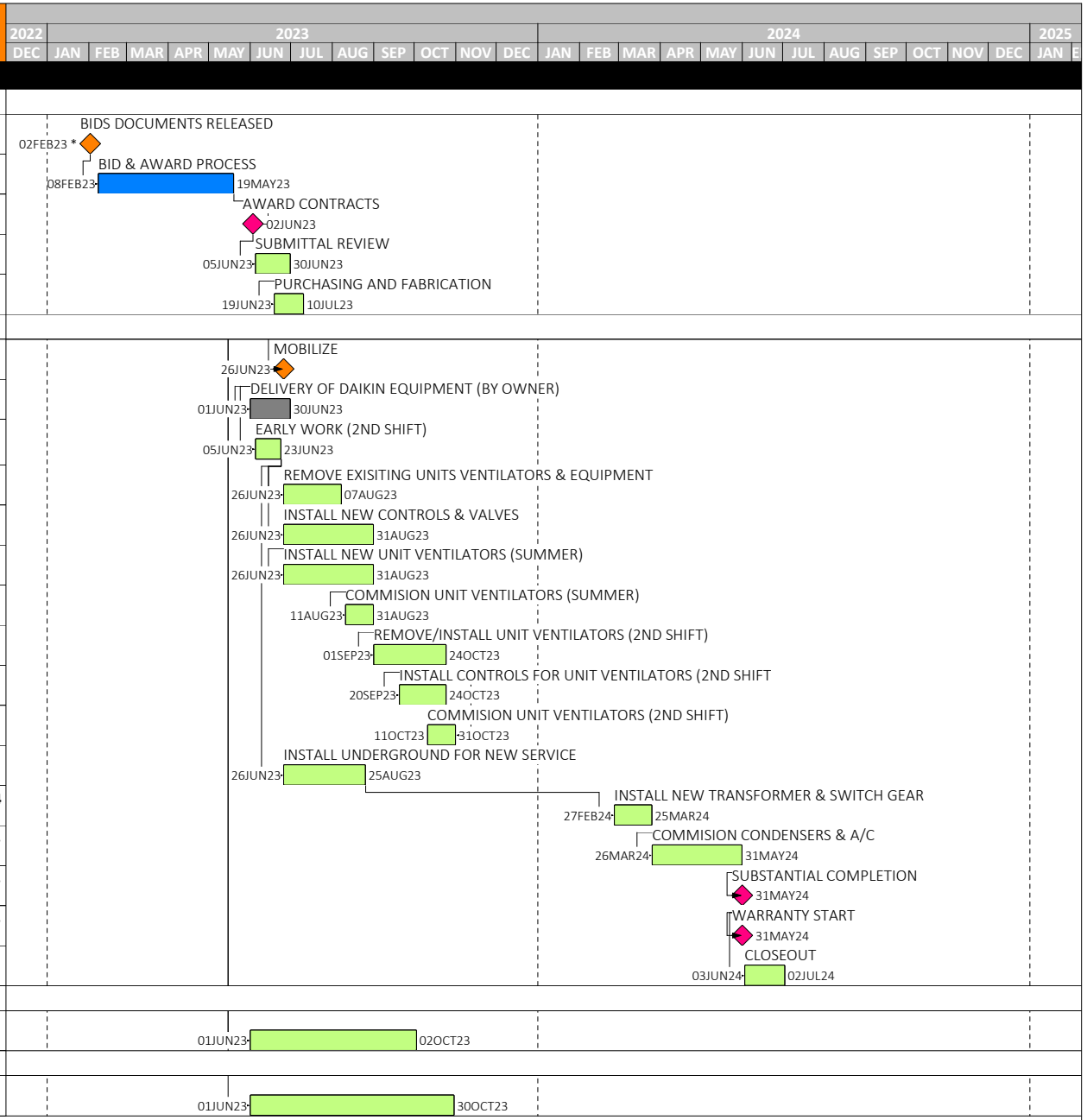
Prime Contractor for Controls (PCC) – NOT BEING BID

Reference "EMF Scope of Work for White Plains Public Schools UV Replacement Project" – Addendum #1

Vendor for Equipment (Daikin) – NOT BEING BID

Reference "Daikin Applied Equipment Proposal Dated 1/17/23" – Addendum #1

Act ID	Description	Orig Dur	Early Start	Early Finish
HVAC & UNIT VENTILATOR UPGRADES				
DRAWING DEVELOPMENT/ BID & AWARD				
1410	BIDS DOCUMENTS RELEASED	0	02FEB23 *	
1420	BID & AWARD PROCESS	73	08FEB23	19MAY23
1430	AWARD CONTRACTS	0		02JUN23
1440	SUBMITTAL REVIEW	20	05JUN23	30JUN23
1445	PURCHASING AND FABRICATION	15	19JUN23	10JUL23
WHITE PLAINS HIGH SCHOOL				
4001	MOBILIZE	0	26JUN23	
4005	DELIVERY OF DAIKIN EQUIPMENT (BY OWNER)	22	01JUN23	30JUN23
4008	EARLY WORK (2ND SHIFT)	15	05JUN23	23JUN23
4009	REMOVE EXISITING UNITS VENTILATORS & EQUIPMENT	30	26JUN23	07AUG23
4011	INSTALL NEW CONTROLS & VALVES	48	26JUN23	31AUG23
4016	INSTALL NEW UNIT VENTILATORS (SUMMER)	48	26JUN23	31AUG23
4021	COMMISION UNIT VENTILATORS (SUMMER)	15	11AUG23	31AUG23
4026	REMOVE/INSTALL UNIT VENTILATORS (2ND SHIFT)	38	01SEP23	24OCT23
4031	INSTALL CONTROLS FOR UNIT VENTILATORS (2ND SHIFT	25	20SEP23	24OCT23
4032	COMMISION UNIT VENTILATORS (2ND SHIFT)	15	11OCT23	31OCT23
4034	INSTALL UNDERGROUND FOR NEW SERVICE	44	26JUN23	25AUG23
4036	INSTALL NEW TRANSFORMER & SWITCH GEAR	20	27FEB24	25MAR24
4037	COMMISION CONDENSERS & A/C	49	26MAR24	31MAY24
4038	SUBSTANTIAL COMPLETION	0		31MAY24
4041	WARRANTY START	0		31MAY24
4076	CLOSEOUT	22	03JUN24	02JUL24
+GEORGE WASHINGTON ELEMENTARY SCHOOL				
		87	01JUN23	02OCT23
+EASTVIEW MIDDLE SCHOOL				
		107	01JUN23	30OCT23



Company name	TRITON/ H2M
Project name	WPCSD_UV (GW WP...
Project title	WPCSD - HVAC/UVBID SCHEDULE
Number/Version	BID 1.0
Page number	1A

WHITE PLAINS CITY SCHOOL DISTRICT

HVAC & UNIT VENTILATOR REPLACEMENTS

BID SCHEDULE

- Early bar
- Progress bar
- Summary bar
- Start milestone point
- Finish milestone point

PART 1 - GENERAL

1.01 BRIEF PURPOSE OF PROJECT / GENERAL

A. The purpose of the project is to remove existing unit ventilators and replace with new unit ventiators with air conditioning. Upgrade electric for new unit ventilators..

B. All work shown and specified in the Contract Documents shall be the work of this Construction Contract. The Owner does not anticipate awarding other prime contracts for the project as shown.

C. This Section provides an abbreviated summary of the work for the Construction Contracts associated with the Owner's program to construct the project.

D. In the event that any of the provisions in the technical specifications conflicts with the general conditions, the provision more favorable to the owner, as determined by the owner in its sole discretion, shall govern.

1.02 NOMENCLATURE

A. Where the terms "Engineer/Architect", "Architect/Engineer", "Engineer", or "Architect" are used throughout these Contract Documents, they shall mean the firm of H2M architects + engineers as may be abbreviated by H2M or H2M Group.

B. The terms "Contractor" and/or "Prime Contractor" where used shall refer to the individual or company who has entered into an agreement with the Owner to perform the work contained within these Contract Documents. The lack of word capitalization shall be incidental.

C. The terms "Contractor" and/or "Prime Contractor" where used within the body of a specific Construction Contract, (i.e.; Contract E and Contract H), shall refer to the individual or company who has entered into an agreement with the Owner to perform the work contained within those Contract Documents. The lack of word capitalization shall be incidental.

D. The Electrical Construction Contractor may be referred to as the "Electrical Contractor", "Prime Electrical Contractor", "Contract E Contractor" or similar wording. The lack of word capitalization shall be incidental. This Construction Contract shall be known as Contract E.

E. The Heating, Ventilating & Air Conditioning Construction Contractor may be referred to as the "HVAC Contractor", "Prime HVAC Contractor", "Contract H Contractor" or similar wording. The lack of word capitalization shall be incidental. This Construction Contract shall be known as Contract H.

F. Where the terms "owner" or "owner's construction representative" are used, they will be defined as a person selected by the owner, or the actual owner.

1.03 ABBREVIATED SUMMARY OF CONTRACT E WORK

A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. Each Contractor shall coordinate, through the Owner/Architect/Engineer, the work of their contract with the work by others.

B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.

C. The work includes, but is not limited to, the following:

1. Provide, install, maintain, and repair, if necessary, temporary power and light throughout the site and to the Owner/Architect/Engineer's field office. Temporary power shall be provided at location(s) selected by the Architect/Engineer based on input by the General Contractor.
2. Main secondary feeders, power distribution, and instrumentation control wiring. Provide, mount, and install electrical conduit, wire, fittings, boxes, panels, and electrical accessories.
3. Electrical connections (final termination) to all equipment, control panels, ventilating equipment and electrical devices.
4. Removal of existing components as noted.
5. Final electrical terminations to all control panels, pumping equipment, blowers, HVAC equipment, etc.
6. Wiring connections to all electrical equipment (including equipment furnished by others).
7. Testing, programming and adjusting of all electrical systems.
8. Startup participation for the various equipment and systems of the project. Provide complete service to troubleshoot and assist manufacturer service representatives in obtaining a completely functional installation. Provide systems and equipment training for Owner personnel.
9. Project closeout submittals.

D. All other work shown and specified in the Contract Documents for Contract E.

1.04 ABBREVIATED SUMMARY OF CONTRACT H WORK

A. Furnish all labor, equipment, materials, tools, means, methods, and incidentals necessary to complete the Work as required by the Contract Documents for this Construction Contract. Each contractor shall coordinate, through the Owner/Architect/Engineer, the work of their contract with the work by others.

B. This following abbreviated summary is provided in order to briefly describe the work covered by the Contract Documents for this Construction Contract. It is not all inclusive of the work under the Contract.

C. The work includes, but is not limited to, the following:
1. Startup participation for the various equipment and systems of the project and provide complete service to troubleshoot and assist manufacturer service representatives in obtaining a completely functional installation.
2. New hydronic unit heaters and associated piping.
3. New exhaust fans, supports, and associated equipment.
4. New grilles, registers, duct work, supports and accessories.
5. Furnish and install louvers.
6. New air conditioning system.
7. Testing and balancing of systems.
8. Project closeout submittals.

D. All other work shown and specified in the Contract Documents for Contract H.

1.05 PARTIAL LISTING OF SPECIFIC CONTRACT REQUIREMENTS

A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but are not limited to, the following:
1. The contractor shall adhere to all New York State Education Department requirements, including but not limited to NYCRR, Title 8, Chapter 2, Part 155.5 - Uniform Safety Standards for School Construction and Maintenance
2. Local laws and ordinances of Westchester County and New York State.____
3. Local gas utility requirements for new services, connections, alterations and related work.

4. The contractor shall adhere to all New York State Education Department requirements, including but not limited to NYCRR, Title 8, Chapter 2, Part 155.5 - Uniform Safety Standards for School Construction and Maintenance.

1.06 PARTIAL LISTING OF OVERALL CONTRACT REQUIREMENTS

A. The Contract Documents detail the work included in the Contract. Related requirements and conditions covered by the Contract Documents include, but is not limited to, the following:
   1. Debris removal and daily and final cleaning up.
   2. Site utilization and management so as not to disrupt the Owner's ability to operate the existing facilities in a safe and efficient manner.
   3. Maintain the Owner's ability to operate the facility at all times during the construction period.
   4. Facilities to be used during the contract period that are to be used by the Owner or his representatives and others involved with constructing the project.
   5. Product and equipment storage and handling requirements.
   6. Starting and adjusting of the equipment and systems required under the project.
   7. Site safety in accordance with all applicable federal, state, and local regulations.
   8. Project submittals, meetingstesting serviceswork plansschedulesshop drawingscloseout procedures and documentsmanualsas-built drawingsfinal commissioning of the work shall be provided as required by the Contract.
   9. Provide and maintain, at all times, temporary roadways for site access to all parties involved with the project.
   10. Sequence and schedule the construction so that new facilities come on-line before pre-existing facilities are demolished, dismantled or taken offline.
   11. Temporary facilities and controls necessary to construct the project and to maintain permit levels of sewage treatment at all time.
   12. Site utilization and management so as to allow other prime contractors to perform work in conjunction with this project and to afford them equal opportunity and space to complete their contractual obligations with the Owner as solely defined by the Architect/Engineer.
   13. To not hinder the Owner's ability to deliver a safe and potable water supply.
   14. To not hinder the Owner's ability to maintain permit levels of sewage treatment at all times.

B. The Owner has or will award other construction contracts associated with this project.

C. It is anticipated that work of all the contracts will coincide with work of this Contract.

D. Each Contractor shall coordinate the work between the various construction contracts, through the Owner/Architect/Engineer, as required to complete the contract requirements in accordance with the requirements contained in Section 013100.

1.07 OWNER SUPPLIED PRODUCTS AND UTILITIES

A. The Owner will not be supplying equipment, labor, or tools for the project.

B. The Owner will pay for electricity usage. The restrictions on electrical usage shall be as follows:
   1. Power tool usage during specified working hours will only be permitted.
   2. Dewatering and trash pumps and portable heaters will not be permitted.
   3. Sump pumps, if less than 1/3 horsepower will be allowed. Only two (2) sump pumps will be permitted to operate at the same time.
   4. Power to help cure concrete or painting systems will not be permitted.

C. The Owner reserves the right to stop paying for electrical usage at any time if, in the opinion of the Owner/Architect/Engineer, the Contractor causes excessive electrical charges or does not conserve electricity to the maximum extent possible in the opinion of the Architect/Engineer. All Contractors shall conserve electricity during the course of construction.

1.08 EXISTING CONDITIONS

A. The Drawings show certain information that has been obtained by the Owner regarding various conditions that exist at the location of the project both below and at grade.

B. The Owner and the Architect/Engineer expressly disclaims all responsibility for the accuracy or completeness of the information given on the Drawings with regard to existing facilities.

C. In the case where the Contractor discovers an obstruction not indicated on the Drawings or not described via specification reference, then the Contractor shall immediately notify the Architect/Engineer of the obstructions' existence.

D. The Architect/Engineer will determine if the obstruction is to be relocated or removed.

E. Compensation for this extra work will be paid for in accordance with the provisions in the Contract for "Extra Work".

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 011100

Note: The bidder is asked to use either black ink or typewriter (black ribbon) in completing this proposal form. Each line item amount must be completed. Failure to do so will be grounds for disqualification of the bidder.

BASE BID: Contract E – Electrical Construction Work

ITEM 1 – BONDS and INSURANCES

(written in words) _____($)

ITEM 2 – DIVISION 1 – GENERAL REQUIREMENTS

(written in words) _____($)

ITEM 3 – DIVISION 1 – PROJECT SUPERVISION

(written in words) _____($)

ITEM 4 – DIVISION 7 – FIRE STOPPING

(written in words) _____($)

ITEM 5 – DIVISION 26 – ELECTRICAL DEMOLITION

(written in words) _____($)

ITEM 6 – DIVISION 26 – CONDUCTORS AND CABLES

(written in words) _____($)

ITEM 7 – DIVISION 26 – GROUNDING AND BONDING

(written in words) _____($)

ITEM 8 – DIVISION 26 – SUPPORT DEVICES and HANGERS

(written in words) _____($)

ITEM 9 – DIVISION 26 – CONDUIT

(written in words) _____($)

ITEM 10 – DIVISION 26 – BOXES and WIREWAYS

(written in words) _____($)

ITEM 11 – DIVISION 26 – ELECTRICAL IDENTIFICATION

(written in words) _____($)

ITEM 12 – DIVISION 26 – PANEL BOARDS

(written in words) _____($)

ITEM 13 – DIVISION 26 – WIRING DEVICES

(written in words) _____($)

ITEM 14 – AS-BUILT DRAWINGS

(written in words) _____($)

ITEM 15 – PROJECT CLOSEOUT

(written in words) _____($)

ALLOWANCE E1 – ALLOWANCE FOR GENERAL CONTINGENCY

(written in words) *Thirty Thousand Dollars and 00 Cents* (**$ 30,000.00**)

TOTAL BASE BID (ITEMS 1 – 15 INCLUSIVE, PLUS ALLOWANCE E1)
(written in words) _____($)

Note: The WHITE PLAINS CITY SCHOOL DISTRICT is exempt from Federal, New York State and local taxes. TOTAL AMOUNT BID shall be exclusive of all taxes.

EACH BIDDER SHALL SUBMIT WITH IT'S BID A SEPARATE SEALED LIST THAT NAMES THE SUBCONTRACTORS THAT THE BIDDER WILL USE TO PERFORM WORK AND THE AGREED UPON AMOUNT TO BE PAID FOR A.) HEATING, VENTILATION AND AIR-CONDITIONING WORK, B.) PLUMBING WORK AND C.) ELECTRICAL WORK. AFTER THE LOW BID IS ANNOUNCED, THE SEALED LIST OF SUBCONTRACTORS SUBMITTED BY THE APPARENT LOW BIDDER SHALL BE OPENED AND THE NAMES OF THE SUBCONTRACTORS ANNOUNCED. ANY CHANGE OF SUBCONTRACTOR OR AGREED UPON AMOUNT TO BE PAID SHALL REQUIRE THE APPROVAL OF THE PUBLIC OWNER, UPON A SHOWING OF "LEGITIMATE CONSTRUCTION NEED" FOR SUCH CHANGE.

"LEGITIMATE CONSTRUCTION NEED" SHALL INCLUDE, BUT NOT BE LIMITED TO:

A CHANGE IN PROJECT SPECIFICATIONS,
A CHANGE IN CONSTRUCTION MATERIAL COSTS,
A CHANGE IN SUBCONTRACTOR STATUS, OR
THE SUBCONTRACTOR HAS BECOME UNWILLING, UNABLE OR UNAVAILABLE TO PERFORM THE SUBCONTRACT.

THE SEALED LISTS OF SUBCONTRACTORS SUBMITTED BY ALL OTHER BIDDERS SHALL BE RETURNED TO THEM UNOPENED AFTER THE CONTRACT AWARD.

PAYMENTS TO SUBCONTRACTORS AND MATERIAL MEN MUST BE MADE WITHIN 7 CALENDAR DAYS AS OPPOSED TO 15 CALENDAR DAYS OF THE RECEIPT OF PAYMENT FORM THE PUBLIC OWNER. FAILURE TO PAY WITHIN 7 CALENDAR DAYS WILL RESULT IN INTEREST DUE FOR ALL CALENDAR DAYS SUBSEQUENT TO THE SEVENTH DAY THROUGH THE DATE THAT PAYMENT IS MADE.

THE BIDDER UNDERSTANDS THAT THE OWNER RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS AND TO WAIVE ANY INFORMALITIES IN THE BIDDING.

THE BIDDER AGREES THAT THE BID SHALL BE GOOD AND MAY NOT BE WITHDRAWN FOR A PERIOD OF **FORTY-FIVE (45)** CALENDAR DAYS AFTER THE SCHEDULED CLOSING TIME FOR RECEIVING BIDS.

THE BIDDER HAS SUBMITTED ALL REQUESTS FOR OTHER BRAND NAMES OR PRODUCTS NOT LISTED IN THE SPECIFICATIONS IN ACCORDANCE WITH ARTICLE 6(W) OF THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION.

SITE SUPERVISION

THE SUCCESSFUL CONTRACTOR IS TO PROVIDE FULL TIME SITE SUPERVISION FOR HIS OR HER STAFF, SUBCONTRACTORS AND SUPPLIERS FOR THE DURATION OF THIS PROJECT. A COMPETENT SUPERINTENDENT SHALL BE IN ATTENDANCE AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED UNDER THEIR CONTRACT. THE SUPERINTENDENT IS RESPONSIBLE TO VISIT THE JOB SITE DAILY WHEN WORK IS NOT BEING PERFORMED UNDER THEIR CONTRACT AND TO MONITOR THE OVERALL CONSTRUCTION PROGRESS. A QUALIFIED SITE SUPERINTENDENT MUST HAVE THE AUTHORITY TO REPRESENT AND MAKE DECISIONS FOR HIS OR HER COMPANY WITH REGARDS TO THE SUBJECT JOB, MUST BE ABLE TO GIVE GUIDANCE AND DIRECTION TO EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS, AND MUST BE KNOWLEDGEABLE ABOUT THE WORK TO BE PROVIDED. **FAILURE TO PROVIDE A QUALIFIED SITE SUPERINTENDENT AT THE JOB SITE SHALL SUBJECT SAID PRIME CONTRACTOR TO A PENALTY OF $1,000 PER DAY FOR EVERY OCCURRENCE.**

TIME OF COMPLETION

ALL WORK UNDER THIS CONTRACT SHALL BE COMPLETED BETWEEN THE FOLLOWING HOURS, IN ACCORDANCE WITH THE FOLLOWING DATES:

WORK DAYS:	**Monday – Saturday**
WORK HOURS (Normal Shift):	**7:00 AM - 8:00 PM**
WORK HOURS (Second Shift):	**3:00 PM - 10:00 PM**
CONSTRUCTION START DATE (Normal Shift):	**June 26th, 2023 – August 31st, 2023**
CONSTRUCTION START DATE (Second Shift):	**September 1st, 2023 – November 1st, 2023**
SUBSTANTIAL COMPLETION (UV / Condenser Installation):	**November 1st, 2023**
SUBSTANTIAL COMPLETION (Full Commissioning):	**May 1st, 2024**
FINAL COMPLETION:	**June 1st, 2024**

IF NECESSARY, WEEKEND, HOLIDAY AND EVENING WORK SHALL BE PROVIDED TO ENSURE THE COMPLETION DATES LISTED ABOVE, AT THE SOLE COST AND EXPENSE OF THE BIDDER.

FAILURE OF THE CONTRACTOR TO COMPLETE WORK BY THE SPECIFIED TIME SHALL SUBJECT HIM/HER TO LIQUIDATED DAMAGES AS SET FORTH IN ARTICLE 13 OF THE GENERAL CONDITIONS.

THE CONSTRUCTION MANAGER SHALL ACT AS THE RECORD KEEPER OF CONTRACT DAYS; HE WILL BE THE SOLE JUDGE OF DELAYS CAUSED BY WEATHER. ONLY WEATHER DELAYS, AS ADJUDGED BY THE CONSTRUCTION MANAGER, WILL BE CONSIDERED FOR EXTENSIONS OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT A BI-WEEKLY REQUEST FOR DELAYS DUE TO WEATHER TO THE CONSTRUCTION MANAGER FOR APPROVAL. NO OTHER DELAY CLAIMS

WILL BE ACCEPTED, FOR CREDIT TOWARDS THE PROJECT COMPLETION SCHEDULE, REGARDLESS OF THE SOURCE OF THE DELAY.

FAILURE OF THE CONTRACTOR TO COMPLETE ALL WORK SHOWN AND SPECIFIED IN THE CONTRACT DOCUMENTS, BY ALL OF THE SPECIFIED TIME FRAMES, SHALL SUBJECT THE CONTRACTOR TO LIQUIDATED DAMAGES, AS SET FORTH IN ARTICLE 13 OF THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, IN THE SUM OF ONE THOUSAND DOLLARS ($1,000.00) PER CALENDAR DAY. SUCH DAMAGES WILL COMMENCE ON THE DAY AFTER THE COMPLETION DATE OR THE DAY AFTER ANY LISTED MILESTONE DATE IN THE NOTICE TO PROCEED.

WITHIN TEN (10) CONSECUTIVE CALENDAR DAYS AFTER THE DATE OF THE NOTICE OF AWARD, THE BIDDER SHALL EXECUTE THE CONTRACT AND FURNISH THE REQUIRED PERFORMANCE BOND, PAYMENT BOND AND INSURANCES.

THE BOARD OF EDUCATION OF THE DISTRICT RESERVES THE RIGHT TO AWARD THIS CONTRACT TO OTHER THAN THE LOW BIDDER IF THE LAW SO PERMITS.

THE UNDERSIGNED HEREBY ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDA (IF ANY):

ADDENDUM NO.	DATED
_____	_____
_____	_____

SPECIFIC DAMAGES WILL BE ASSESSED AND DEDUCTED FROM AMOUNTS OTHERWISE DUE THE CONTRACTOR FOR ADDITIONAL INSPECTION (FIELD) AND CONTRACT ADMINISTRATION (OFFICE) TIME EXPENDED BY THE ARCHITECT/ENGINEER AND/OR OTHER CONSTRUCTION EMPLOYEE(S) HIRED TO ADMINISTER OR OBSERVE THE CONTRACT, SHOULD THE CONTRACTOR COMPLETE THE CONTRACT BEYOND THE CONTRACT COMPLETION PERIOD SPECIFIED ABOVE.

SUCH DEDUCTION SHALL BE IN ACCORDANCE WITH THE ARCHITECT, ENGINEER'S, AND/OR OTHER CONSTRUCTION EMPLOYEE(S) STANDARD HOURLY BILLING RATES IN EFFECT AT THE TIME FOR THE SCHOOL DISTRICT.

THE REQUIREMENTS OF THE PROPOSAL HAVE BEEN COMPLETELY READ, UNDERSTOOD AND ACKNOWLEDGED BY THE BIDDER.

BIDDER: _____

BIDDER'S ADDRESS: _____

SIGNED BY: _____ TITLE: _____

DATE: _____

Telephone number where the contractor or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but not later than twenty-four (24) hours:

DAY: (___) _____ NIGHT: (___) _____

FAX: (___) _____

FEDERAL I.D. NO. OR SOCIAL SECURITY NO.: _____

Note: The bidder is asked to use either black ink or typewriter (black ribbon) in completing this proposal form. Each line item amount must be completed. Failure to do so will be grounds for disqualification of the bidder.

BASE BID: Contract H – Heating, Ventilation and Air Conditioning Work

ITEM 1 – BONDS and INSURANCES

(written in words) _____($)

ITEM 2 – DIVISION 1 – GENERAL REQUIREMENTS

(written in words) _____($)

ITEM 3 – DIVISION 1 – PROJECT SUPERVISION

(written in words) _____($)

ITEM 4 – DIVISION 2 – DEMOLITION WORK

(written in words) _____($)

ITEM 5 – DIVISIONS 3 - 9 – GENERAL CONSTRUCTION WORK

(written in words) _____($)

ITEM 6 – DIVISION 7 – FIRESTOPPING

(written in words) _____($)

ITEM 7 – DIVISION 23 – PIPE, VALVES, FITTINGS, PIPE HANGERS AND SUPPORTS

(written in words)_____($)

ITEM 8 – DIVISION 23 – MECHANICAL SYSTEM IDENTIFICATION

(written in words)_____($)

ITEM 9 – DIVISION 23 – BALANCING OF AIR SYSTEMS

(written in words)_____($)

ITEM 10 – DIVISION 23 – PIPING & DUCTWORK INSULATION

(written in words)_____($)

ITEM 11 – DIVISION 23 – CONTROLS

(written in words) _____($)

ITEM 12 – DIVISION 23 – STEAM SPECIALTIES

(written in words) _____($)

ITEM 13 – DIVISION 23 – SHEET METAL WORK

(written in words)_____($)

ITEM 14 – DIVISION 23 – DIFFUSERS, REGISTERS AND GRILLES

(written in words) _____ ($)

ITEM 15 – DIVISION 23 – AIR COOLED CONDENSING UNITS

(written in words) _____ ($)

ITEM 16 – DIVISION 23 – UNIT VENTILATOR

(written in words) _____ ($)

ITEM 17 – DIVISION 23 – FINNED-TUBE RADIATION HEATERS

(written in words)_____ ($)

ITEM 18 – AS-BUILT DRAWINGS

(written in words) _____ ($)

ITEM 19 – PROJECT CLOSEOUT

(written in words) _____ ($)

ALLOWANCE H1 – ALLOWANCE FOR GENERAL CONTINGENCY

(written in words) *Fifty Thousand Dollars and 00 Cents* (**$ 50,000.00**)

TOTAL BASE BID (ITEMS 1 – 19, PLUS ALLOWANCE H1)
(written in words) _____ ($)

Note: The WHITE PLAINS SCHOOL DISTRICT is exempt from Federal, New York State and local taxes. TOTAL AMOUNT BID shall be exclusive of all taxes.

EACH BIDDER SHALL SUBMIT WITH IT'S BID A SEPARATE SEALED LIST THAT NAMES THE SUBCONTRACTORS THAT THE BIDDER WILL USE TO PERFORM WORK AND THE AGREED UPON AMOUNT TO BE PAID FOR A.) HEATING, VENTILATION AND AIR-CONDITIONING WORK, B.) PLUMBING WORK AND C.) ELECTRICAL WORK. AFTER THE LOW BID IS ANNOUNCED, THE SEALED LIST OF SUBCONTRACTORS SUBMITTED BY THE APPARENT LOW BIDDER SHALL BE OPENED AND THE NAMES OF THE SUBCONTRACTORS ANNOUNCED. ANY CHANGE OF SUBCONTRACTOR OR AGREED UPON AMOUNT TO BE PAID SHALL REQUIRE THE APPROVAL OF THE PUBLIC OWNER, UPON A SHOWING OF "LEGITIMATE CONSTRUCTION NEED" FOR SUCH CHANGE.

"LEGITIMATE CONSTRUCTION NEED" SHALL INCLUDE, BUT NOT BE LIMITED TO:

A CHANGE IN PROJECT SPECIFICATIONS,
A CHANGE IN CONSTRUCTION MATERIAL COSTS,
A CHANGE IN SUBCONTRACTOR STATUS, OR
THE SUBCONTRACTOR HAS BECOME UNWILLING, UNABLE OR UNAVAILABLE TO PERFORM THE SUBCONTRACT.

THE SEALED LISTS OF SUBCONTRACTORS SUBMITTED BY ALL OTHER BIDDERS SHALL BE RETURNED TO THEM UNOPENED AFTER THE CONTRACT AWARD.

PAYMENTS TO SUBCONTRACTORS AND MATERIAL MEN MUST BE MADE WITHIN 7 CALENDAR DAYS AS OPPOSED TO 15 CALENDAR DAYS OF THE RECEIPT OF PAYMENT FORM THE PUBLIC OWNER. FAILURE TO PAY WITHIN 7 CALENDAR DAYS WILL RESULT IN INTEREST DUE FOR ALL CALENDAR DAYS SUBSEQUENT TO THE SEVENTH DAY THROUGH THE DATE THAT PAYMENT IS MADE.

THE BIDDER UNDERSTANDS THAT THE OWNER RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS AND TO WAIVE ANY INFORMALITIES IN THE BIDDING.

THE BIDDER AGREES THAT THE BID SHALL BE GOOD AND MAY NOT BE WITHDRAWN FOR A PERIOD OF **FORTY-FIVE (45)** CALENDAR DAYS AFTER THE SCHEDULED CLOSING TIME FOR RECEIVING BIDS.

THE BIDDER HAS SUBMITTED ALL REQUESTS FOR OTHER BRAND NAMES OR PRODUCTS NOT LISTED IN THE SPECIFICATIONS IN ACCORDANCE WITH ARTICLE 6(W) OF THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION.

SITE SUPERVISION

THE SUCCESSFUL CONTRACTOR IS TO PROVIDE FULL TIME SITE SUPERVISION FOR HIS OR HER STAFF, SUBCONTRACTORS AND SUPPLIERS FOR THE DURATION OF THIS PROJECT. A COMPETENT SUPERINTENDENT SHALL BE IN ATTENDANCE AT THE JOB SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED UNDER THEIR CONTRACT. THE SUPERINTENDENT IS RESPONSIBLE TO VISIT THE JOB SITE DAILY WHEN WORK IS NOT BEING PERFORMED UNDER THEIR CONTRACT AND TO MONITOR THE OVERALL CONSTRUCTION PROGRESS. A QUALIFIED SITE SUPERINTENDENT MUST HAVE THE AUTHORITY TO REPRESENT AND MAKE DECISIONS FOR HIS OR HER COMPANY WITH REGARDS TO THE SUBJECT JOB, MUST BE ABLE TO GIVE GUIDANCE AND DIRECTION TO EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS, AND MUST BE KNOWLEDGEABLE ABOUT THE WORK TO BE PROVIDED. **FAILURE TO PROVIDE A QUALIFIED SITE SUPERINTENDENT AT THE JOB SITE SHALL SUBJECT SAID PRIME CONTRACTOR TO A PENALTY OF $1,000 PER DAY FOR EVERY OCCURRENCE.**

TIME OF COMPLETION

ALL WORK UNDER THIS CONTRACT SHALL BE COMPLETED BETWEEN THE FOLLOWING HOURS, IN ACCORDANCE WITH THE FOLLOWING DATES:

WORK DAYS:	**Monday – Saturday**
WORK HOURS (Normal Shift):	**7:00 AM - 8:00 PM**
WORK HOURS (Second Shift):	**3:00 PM - 10:00 PM**
CONSTRUCTION START DATE (Normal Shift):	**June 26th, 2023 – August 31st, 2023**
CONSTRUCTION START DATE (Second Shift):	**September 1st, 2023 – November 1st, 2023**
SUBSTANTIAL COMPLETION (UV / Condenser Installation):	**November 1st, 2023**
SUBSTANTIAL COMPLETION (Full Commissioning):	**May 1st, 2024**
FINAL COMPLETION:	**June 1st, 2024**

IF NECESSARY, WEEKEND, HOLIDAY AND EVENING WORK SHALL BE PROVIDED TO ENSURE THE COMPLETION DATES LISTED ABOVE, AT THE SOLE COST AND EXPENSE OF THE BIDDER.

FAILURE OF THE CONTRACTOR TO COMPLETE WORK BY THE SPECIFIED TIME SHALL SUBJECT HIM/HER TO LIQUIDATED DAMAGES AS SET FORTH IN ARTICLE 13 OF THE GENERAL CONDITIONS.

THE CONSTRUCTION MANAGER SHALL ACT AS THE RECORD KEEPER OF CONTRACT DAYS; HE WILL BE THE SOLE JUDGE OF DELAYS CAUSED BY WEATHER. ONLY WEATHER DELAYS, AS ADJUDGED BY THE CONSTRUCTION MANAGER, WILL BE CONSIDERED FOR EXTENSIONS OF THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL SUBMIT A BI-WEEKLY REQUEST FOR DELAYS DUE TO WEATHER TO THE CONSTRUCTION MANAGER FOR APPROVAL. NO OTHER DELAY CLAIMS WILL BE ACCEPTED, FOR CREDIT TOWARDS THE PROJECT COMPLETION SCHEDULE, REGARDLESS OF THE SOURCE OF THE DELAY.

FAILURE OF THE CONTRACTOR TO COMPLETE ALL WORK SHOWN AND SPECIFIED IN THE CONTRACT DOCUMENTS, BY ALL OF THE SPECIFIED TIME FRAMES, SHALL SUBJECT THE CONTRACTOR TO LIQUIDATED DAMAGES, AS SET FORTH IN ARTICLE 13 OF THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, IN THE SUM OF ONE THOUSAND DOLLARS ($1,000.00) PER CALENDAR DAY. SUCH DAMAGES WILL COMMENCE ON THE DAY AFTER THE COMPLETION DATE OR THE DAY AFTER ANY LISTED MILESTONE DATE IN THE NOTICE TO PROCEED.

WITHIN TEN (10) CONSECUTIVE CALENDAR DAYS AFTER THE DATE OF THE NOTICE OF AWARD, THE BIDDER SHALL EXECUTE THE CONTRACT AND FURNISH THE REQUIRED PERFORMANCE BOND, PAYMENT BOND AND INSURANCES.

THE BOARD OF EDUCATION OF THE DISTRICT RESERVES THE RIGHT TO AWARD THIS CONTRACT TO OTHER THAN THE LOW BIDDER IF THE LAW SO PERMITS.

THE UNDERSIGNED HEREBY ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDA (IF ANY):

ADDENDUM NO.	DATED

SPECIFIC DAMAGES WILL BE ASSESSED AND DEDUCTED FROM AMOUNTS OTHERWISE DUE THE CONTRACTOR FOR ADDITIONAL INSPECTION (FIELD) AND CONTRACT ADMINISTRATION (OFFICE) TIME EXPENDED BY THE ARCHITECT/ENGINEER AND/OR OTHER CONSTRUCTION EMPLOYEE(S) HIRED TO ADMINISTER OR OBSERVE THE CONTRACT, SHOULD THE CONTRACTOR COMPLETE THE CONTRACT BEYOND THE CONTRACT COMPLETION PERIOD SPECIFIED ABOVE.

SUCH DEDUCTION SHALL BE IN ACCORDANCE WITH THE ARCHITECT, ENGINEER'S, AND/OR OTHER CONSTRUCTION EMPLOYEE(S) STANDARD HOURLY BILLING RATES IN EFFECT AT THE TIME FOR THE SCHOOL DISTRICT.

THE REQUIREMENTS OF THE PROPOSAL HAVE BEEN COMPLETELY READ, UNDERSTOOD AND ACKNOWLEDGED BY THE BIDDER.

BIDDER: _____

BIDDER'S ADDRESS: _____

SIGNED BY: _____ TITLE: _____

DATE: _____

Telephone number where the contractor or a competent representative can accept a telephone message and provide a reasonable reply as soon as possible, but not later than twenty-four (24) hours:

DAY: (___) _____ NIGHT: (___) _____

FAX: ( )

FEDERAL I.D. NO. OR SOCIAL SECURITY NO.: _____

APPENDIX

- **DAIKIN MATERIAL / EQUIPMENT CONTRACT (DATED 01/17/2023)**
- **DAIKIN START-UP SCOPE SHEET**
- **EMF CONTROLS SCOPE SHEET**
- **DISTRICT EQUIPMENT DATA SHEET**
- **FINAL REPORT FOR ENVIRONMENTAL INSPECTION SERVICES – WHITE PLAINS HIGH SCHOOL (DATED 2018)**

CONTROLS SCOPE SHEET

Daikin Applied NY Scope of Work for the WPSD Unit Ventilator Replacement Projects

PROJECTS

1. **HIGHLANDS MS**
2. **CHURCH ST ES**
3. **GEORGE WASHINGTON ES**
4. **EASTVIEW MS**
5. **WHITE PLAINS HS**

SCOPE OF WORK TO INCLUDE THE FOLLOWING:

- Pre-installation Coordination Meeting to review approved VRV submittal documents and ensure installing contractor understands piping rules, best practices for piping, unit configuration, control wiring requirements, etc.
- Installation Coordination Meeting after first system is installed and while accessible, we will review with installer to determine it is within Daikin Standards/Guidelines and offer recommendations as necessary.
- Daikin Factory Service will provide start-up assistance after the following has been completed:
    - Pre-startup checklist has been filled out completely by the installing contractor and submitted to Daikin Applied
    - Condensing system has been pressure tested, evacuated and refrigerant charged per Daikin requirements
    - Condensing systems have passed the “Test Mode” (communication error trouble shooting is responsibility of the installing contractor)
- Daikin Factory Service will complete the start-up forms for each condensing system
- Daikin to configure and program each Daikin Flexstat controller after installation
- Daikin to configure each Intesis integration module after installation
- Daikin to start-up each unit ventilator, commissioning the cooling and hot water/steam modes. (air balancing and water balancing by others)
- Daikin to complete and submit unit ventilator start-up forms to factory

Daikin VRV System Installation Notes

Nitrogen Purge

To ensure no oxidation takes place while installing, all brazing of refrigerant piping shall be performed with a dry nitrogen purge. 2-3 psi of nitrogen fills the lines and displaces oxygen while brazing. Nitrogen needs to flow until the pipe cools and torque values are as per Daikin installation instructions.

Pressure Testing

All piping systems shall be pressure tested to 550 PSIG and held for 24hours.

1) Nitrogen pressure test to 150 PSIG and hold for 3 minutes
2) Increase to 325 PSIG and hold for 5 minutes
3) Increase to 550 PSIG and hold for 24 hours (450 PSIG if system includes FXTQ indoor units)

Triple Evacuation

A triple evacuation of all piping shall be performed.

1) Pull a vacuum to 4000 microns and hold for 15 minutes. Introduce nitrogen into the system at 2-3 psi. Nitrogen will absorb moisture vapor which is easily removed during the next step.
2) Pull a vacuum to 1500 microns and hold for 20 minutes. Break the vacuum again with nitrogen in the same manner.
3) Evacuate the system down to 500 microns and hold for 1 hour.

Flared Connections

All flared connections must be torqued to standard torque values relative to flare nut size.

Pipe Insulation

All piping insulation shall be in accordance with Daikin's minimum thicknesses (refer to installation manual) along with local code. See attached document for pipe insulation thickness guide.

Communication Wiring

Communication wiring shall be 18-2 or 16-2 AWG stranded, non-polarized, non-shielded. **Do not use 4 conductor wire, it will cause interference. Do not use solid thermostat wire.**

VRF Pipe Insulation Thickness

NYC Energy Conservation Code – Table C403.2.10

Piping serving as part of a heating or cooling system shall be thermally insulated in accordance with Table C403.2.10:

TABLE C403.2.10
MINIMUM PIPE INSULATION THICKNESS (in inches)[a, c]

FLUID OPERATING TEMPERATURE RANGE AND USAGE (°F)	INSULATION CONDUCTIVITY		NOMINAL PIPE OR TUBE SIZE (inches)				
	Conductivity Btu · in./(h · ft² · °F)[b]	Mean Rating Temperature, °F	1	1 to 1 1/2	1 1/2 to 4	4 to 8	8
> 350	0.32 – 0.34	250	4.5	5.0	5.0	5.0	5.0
251 – 350	0.29 – 0.32	200	3.0	4.0	4.5	4.5	4.5
201 – 250	0.27 – 0.30	150	2.5	2.5	2.5	3.0	3.0
141 – 200	0.25 – 0.29	125	1.5	1.5	2.0	2.0	2.0
105 – 140	0.21 – 0.28	100	1.0	1.0	1.5	1.5	1.5
40 – 60	0.21 – 0.27	75	0.5	0.5	1.0	1.0	1.0
< 40	0.20 – 0.26	50	0.5	1.0	1.0	1.0	1.5

For SI: 1 inch = 25.4 mm, °C = [(°F) - 32]/1.8.

a. For piping smaller than $1^1/_2$ inches and located in partitions within conditioned spaces, reduction of these thicknesses by 1 inch shall be permitted (before thickness adjustment required in footnote b) but not to a thickness less than 1 inch.

b. For insulation outside the stated conductivity range, the minimum thickness (T) shall be determined as follows:

$T = r\{(1 + t/r)K/k - 1\}$ where:

T = minimum insulation thickness,

r = actual outside radius of pipe,

t = insulation thickness listed in the table for applicable fluid temperature and pipe size,

K = conductivity of alternate material at mean rating temperature indicated for the applicable fluid temperature (Btu · in/h · ft² · °F) and

k = the upper value of the conductivity range listed in the table for the applicable fluid temperature.

c. For direct-buried heating and hot water system piping, reduction of these thicknesses by $1^1/_2$ inches (38 mm) shall be permitted (before thickness adjustment required in footnote b but not to thicknesses less than 1 inch (25 mm)).

Daikin VRV Refrigerant Operating Temperatures

VRV Piping	Suction Line	Liquid Line	High/Low Pressure Line
Temperature Range	35°F-50°F	70°F-90°F	115°F-150°F 35°F-50°F

Daikin VRV Product Insulation Notes

Daikin recommends the following *minimum* insulation requirements (located in the installation manual). Always refer to local code for determination of insulation thickness. Refer to installation manual for further details.

- Insulation of pipes should be done after performing air tight test and vacuum drying.
- Always insulate the suction gas pipe, high/low pressure gas pipe, liquid pipe, and pipe connections.
- Failing to insulate the pipes may cause leaking or burns. Be sure to use insulation designed for HVAC equipment.
- Reinforce the insulation on the refrigerant piping according to the installation evironment. Condensation might form on the surface of the insulation. Refer to the below:
  - Ambient temp: 86°F
    Humidity: 75%-80% RH
    Minimum thickness: 9/16 in.
  - Ambient temp: Exceeds 86°F
    Humidity: 80% RH
    Minimum thickness: 3/4 in.

EMF Scope of work for the White Plains Public Schools UV Replacement Projects

1. Highlands MS:
    a. Scope of work:
        i. Decommission, safe-off, and remove existing UV controls prior to demolition and remove of UV.
        ii. Decommission, safe-off, and remove existing AHU controls prior to demolition and remove of UV.
        iii. Decommission, safe-off, and remove existing pneumatic radiation thermostat and controls prior to removal of pneumatic radiation control valve (by others).
        iv. Modify and upgrade exiting ATC electro/pneumatic MB & local control panels to incorporate DDC BMS.
        v. In rooms with existing UVs to be removed, evaluate condition of existing exhaust fan(s) and/or relief dampers. Report any deficiencies and costs for repair of the same.
        vi. Install UV unit mounted BACnet room controller (furnished by others) and required I/O wiring from wall mounted room controller to UV controller (furnished by others).
        vii. Install Intesis BACnet interface unit (furnished by others) and required communication wiring (both P1-P2 and BACnet) from Intesis unit to wall mounted room controller and UV controller (furnished by others).
        viii. Furnish, install, & wire new and/or modified AHU local control panels (LCP).
        ix. Replace existing exhaust fan pneumatic controls with DDC.
        x. Install wiring from classroom radiation valve (installed by others) to UV wall mounted room controller.
        xi. Furnish, install, and wire radiation room controller/sensor and radiation control valve (installed by others).
        xii. Decommission existing central air station.
        xiii. Furnish & install Daikin VRF communication wiring (F1-F2 & P1-P2).
        xiv. Furnish & install BMS BACnet MS/TP communication wiring.
        xv. Furnish & install BMS building level controller.
        xvi. BMS design, layout, submission, & documentation.
        xvii. BMS configuration, programming, & graphics.
        xviii. Check, test, startup, & commissioning.
2. Church Street:
    a. Scope of work:
        i. Decommission, safe-off, and remove existing UV controls prior to demolition and remove of UV.
        ii. In rooms with existing UVs to be removed, evaluate condition of existing exhaust fan(s) and/or relief dampers. Report any deficiencies and costs for repair of the same.
        iii. Install UV unit mounted BACnet room controller (furnished by others) and required I/O wiring from wall mounted room controller to UV controller (furnished by others).

iv. Install Intesis BACnet interface unit (furnished by others) and required communication wiring (both P1-P2 and BACnet) from Intesis unit to wall mounted room controller and UV controller (furnished by others).
v. Furnish & install BMS BACnet MS/TP communication wiring.
vi. Furnish & install BMS building level controller.
vii. BMS design, layout, submission, & documentation.
viii. BMS configuration, programming, & graphics.
ix. Check, test, startup, & commissioning.

b. Not in scope of work:
i. Furnish & install Daikin VRF communication wiring (F1-F2 & P1-P2) except as indicated 1. a. iv. above.

3. High School:
a. Scope of work:
i. Decommission, safe-off, and remove existing UV controls prior to demolition and remove of UV.
ii. In rooms with existing UVs to be removed, evaluate condition of existing exhaust fan(s) and/or relief dampers. Report any deficiencies and costs for repair of the same.
iii. Install UV unit mounted BACnet room controller (furnished by others) and required I/O wiring from wall mounted room controller to UV controller (furnished by others).
iv. Install Intesis BACnet interface unit (furnished by others) and required communication wiring (both P1-P2 and BACnet) from Intesis unit to wall mounted room controller and UV controller (furnished by others).
v. Furnish & install Daikin VRF communication wiring (F1-F2 & P1-P2).
vi. Furnish & install BMS BACnet MS/TP communication wiring.
vii. Furnish & install BMS building level controller.
viii. BMS design, layout, submission, & documentation.
ix. BMS configuration, programming, & graphics.
x. Check, test, startup, & commissioning.

4. Eastview MS:
a. Scope of work:
i. Decommission, safe-off, and remove existing UV controls prior to demolition and remove of UV.
ii. In rooms with existing UVs to be removed, evaluate condition of existing exhaust fan(s) and/or relief dampers. Report any deficiencies and costs for repair of the same.
iii. Install UV unit mounted BACnet room controller (furnished by others) and required I/O wiring from wall mounted room controller to UV controller (furnished by others).
iv. Install Intesis BACnet interface unit (furnished by others) and required communication wiring (both P1-P2 and BACnet) from Intesis unit to wall mounted room controller and UV controller (furnished by others).
v. Furnish & install Daikin VRF communication wiring (F1-F2 & P1-P2).

vi. Furnish & install BMS BACnet MS/TP communication wiring.
vii. Furnish & install BMS building level controller.
viii. BMS design, layout, submission, & documentation.
ix. BMS configuration, programming, & graphics.
x. Check, test, startup, & commissioning.

5. George Washington ES:
    a. Scope of work:
        i. Decommission, safe-off, and remove existing UV controls prior to demolition and remove of UV.
        ii. In rooms with existing UVs to be removed, evaluate condition of existing exhaust fan(s) and/or relief dampers. Report any deficiencies and costs for repair of the same.
        iii. Install UV unit mounted BACnet room controller (furnished by others) and required I/O wiring from wall mounted room controller to UV controller (furnished by others).
        iv. Install Intesis BACnet interface unit (furnished by others) and required communication wiring (both P1-P2 and BACnet) from Intesis unit to wall mounted room controller and UV controller (furnished by others).
        v. Furnish & install BMS BACnet MS/TP communication wiring.
        vi. Furnish & install BMS building level controller.
        vii. BMS design, layout, submission, & documentation.
        viii. BMS configuration, programming, & graphics.
        ix. Check, test, startup, & commissioning.
    b. Not in scope of work:
        i. Furnish & install Daikin VRF communication wiring (F1-F2 & P1-P2) except as indicated 1. a. iv. above.

WPCSD - Equipment Inventory Sheet
Maintenance Direct information.

1	Item Number											
2	Classification	Bldg Group	Electric	All	HVAC	Life Safety	Plumbing	Pool Equip	Roofing	Special	Equip Special	Systems	Surfaces
3	Type											
4	Description											
5	Manufacturer											
6	Supplier											
7	Date Purchased											
8	Original Cost											
9	Location											
10	Building											
11	Area/Rm #											
12	Area Number											
13	Tag Number											
14	Model Number											
15	Serial Number											
16	Out of Service-Begin											
17	Out of Service-End											
18	Date Placed											
19	Date Removed											
20	Warranty Expires											
21	Life Expectancy Unit											
22	Life Expectancy											
23	Notes											
24	Reading Measurement											
25	Current Reading											
26	Previous Reading											
27	Usage Unit of Measure											

Note: Description is a good place to put any information you want to mention about the equipment, like part number, filter and belt sizes, etc.

AIR OUTLETS

DESIGNATION	SYMBOL	BASIS OF DESIGN: MNF/ MODEL NO.	DESCRIPTION	FACE SIZE (IN)	AIR FLOW RANGE (CFM)		NECK SIZE DIAMETER (IN.)
					MIN	MAX	
A	A (CFM)	TITUS/300RL-5	SIDEWALL SUPPLY REGISTER	SEE DRAWINGS	SEE DRAWINGS	SEE DRAWINGS	NA
B	B (CFM)	TITUS/OMNI	SQUARE FACE CEILING DIFFUSER	24x24 UNLESS OTHERWISE NOTED ON DRAWINGS	0	200	6
					201	315	8
					316	450	10
					451	650	12
					651	850	14
C	C (CFM)	TITUS/350RL-5	RETURN/EXHAUST GRILLE	24x24 UNLESS OTHERWISE NOTED ON DRAWINGS	SEE DRAWINGS	SEE DRAWINGS	NA

NOTES:

1. PROVIDE ALUMINUM CONSTRUCTION FOR ALL TERMINALS IN SHOWER ROOMS, TOILETS, JANITORS' CLOSETS AND OTHER HUMID AREAS.
2. FOR CONSTRUCTION DETAILS AND ACCESSORIES SEE SPECIFICATION SECTION 233713.
3. PROVIDE OPPOSED BLADE DAMPER FOR ALL REGISTERS AND DIFFUSERS.
4. PROVIDE MOUNTING FRAMES TO MATCH CEILING IN WHICH UNIT IS INSTALLED, COUNTERSINK ALL MOUNTING SCREWS.
5. FOR NAILOR SELECTIONS, SEE SPECIFICATIONS.

VRF CONDENSING UNITS

EQUIPMENT NO.	LOCATION	PERFORMANCE/ CONSTRUCTION REQUIREMENTS									BASIS OF DESIGN INFORMATION						NOTES
		IEER	REQUIRED IEER	REFRIGERANT	REMOTE CONDENSING UNIT						MNF	MODEL NO.	NOMINAL DIMENSIONS L x W x H (IN.)	NOMINAL OPERATING WEIGHT (LBS.)	ELECTRICAL DATA		
					HEATING OUTSIDE AIR TEMP. (DEG. F)			COOLING OUTSIDE AIR TEMP. (DEG. F)							VOLTS/ PHASE	MCA (A)	MOCP (A)	
					TOTAL CAPACITY (MBH)	MAX (°F)	MIN (°F)	TOTAL CAPACITY (MBH)	MAX (°F)	MIN (°F)								
CU-1-1	SEE PLANS	30	11.4	R-410A	540	60	-13	480	122	23	DAIKIN	REYQ480AATJA	138 x 31 x 66	1914	460/3	33.4 + 33.4	40 + 40	1-3
CU-1-2	SEE PLANS	30	11.4	R-410A	540	60	-13	480	122	23	DAIKIN	REYQ480AATJA	138 x 31 x 66	1914	460/3	33.4 + 33.4	40 + 40	1-3
CU-2-1	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3
CU-2-2	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3
CU-2-3	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3
CU-2-4	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3
CU-2-5	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3
CU-2-6	SEE PLANS	30	11.4	R-410A	360	60	-13	405	122	23	DAIKIN	REYQ360AATJA	118 x 31 x 66	1745	460/3	24.9 + 28.3	30 + 35	1-3

NOTES:

1. INTERNAL UNIT CONTROLS.
2. DISCONNECT SWITCH.
3. 12" ROOF RAILS.
4. THIS EQUIPMENT IS NOT IN THE CONTRACT AND INCLUDED FOR REFERENCE ONLY. EQUIPMENT TO BE SUPPLIED TO THE SCHOOL DISTRICT BY THE MANUFACTURER. SEE SPECIFICATIONS FOR MORE DETAILS.

VRF UNIT VENTILATOR UNITS

EQUIPMENT NO.	TYPE	AREA SERVED	SIZE (TONS)	PERFORMANCE/CONSTRUCTION REQUIREMENTS					BASIS OF DESIGN INFORMATION						REMARKS
				REFRIGERANT	SUPPLY UNIT DATA			OUTDOOR AIRFLOW (CFM)	MNF	MODEL NO.	NOMINAL DIMENSIONS L x W x H (IN.)	NOMINAL OPERATING WEIGHT (LBS.)	ELECTRICAL DATA		
					AIRFLOW (CFM)	TOTAL RATED COOLING CAPACITY	TOTAL RATED HEATING CAPACITY						VOLTS/ PHASE	MCA (A)	
UV-1-1	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-1-2	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-1-3	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-1-4	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-1-5	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-1-6	VERTICAL UV	CLASSROOMS	2.5	R410A	800	25.9	63	400	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-1	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-2	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-3	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-4	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-5	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-6	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-7	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-8	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-9	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-10	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-11	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-12	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-13	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-14	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-15	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-16	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-17	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-18	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-19	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-20	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-21	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-22	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-23	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-24	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-25	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-26	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-27	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-28	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6
UV-2-29	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	450	TEMSPEC	VUD1200D	28 x 21.5 x 93	300	115 / 1	11	1-6

NOTES:

1. INTERNAL DRAIN PAN.
2. LOW VOLTAGE WALL MOUNTED CONTROLLER.
3. INTEGRAL CONDENSATE PUMP.
4. TOP ACOUSTICAL PLENUM.
5. SIDE PIPE COVERS.
6. EXTRUDED ALUMINUM INTAKE LOUVER.

H2M architects + engineers
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Purchase, NY 10577
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CONSULTANTS:

MARK	DATE	DESCRIPTION
1	02/03/2023	FINAL BID DOCUMENT

STATE OF NEW YORK
BRIAN CASTELLI
099167
LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
DAK	DAK	BMC	REVIEWER
PROJECT No.	DATE:	SCALE:	
WPSD2110	FEBRUARY 2023	AS SHOWN	

CLIENT
White Plains City School District

WHITE PLAINS HIGH SCHOOL UNIT VENTILATOR REPLACEMENTS

550 North Street
White Plains, NY 10605

SED No. 66-22-00-01-0-16-028

CONTRACT
CONTRACT H HEATING VENTILATION AND AIR CONDITIONING

STATUS
FINAL BID DOCUMENT

SHEET TITLE
MECHANICAL SCHEDULES (1 OF 2)

DRAWING No.
M 600.00

VRF UNIT VENTILATOR UNITS

EQUIPMENT NO.	TYPE	AREA SERVED	SIZE	PERFORMANCE/CONSTRUCTION REQUIREMENTS					BASIS OF DESIGN INFORMATION						REMARKS
				REFRIGERANT	SUPPLY UNIT DATA			OUTDOOR AIRFLOW (CFM)	MNF	MODEL NO.	NOMINAL DIMENSIONS L x W x H (IN.)	NOMINAL OPERATING WEIGHT (LBS.)	ELECTRICAL DATA		
					AIRFLOW (CFM)	TOTAL RATED COOLING CAPACITY	TOTAL RATED HEATING CAPACITY						VOLTS/ PHASE	MCA (A)	
UV-2-30	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-31	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-32	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-33	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-34	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-35	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-36	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-37	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-2-38	VERTICAL UV	CLASSROOMS	3	R410A	1000	30.7	70	300	TEMSPEC	VUD1200D	28 x 21.5 x 93	450	115 / 1	11	1-6
UV-3-1	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-2	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-3	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-4	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-5	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-6	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-7	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-8	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-9	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-10	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-11	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-3-12	VERTICAL UV	CLASSROOMS	4	R410A	1400	42.5	96	450	TEMSPEC	VUD1600D	33 x 23 x 93	750	115 / 1	11	1-6
UV-4-1	CEILING UV	CLASSROOMS	2	R410A	600	24.3	29.5	200	DAIKIN	BCHD0081	43 x 29 x 18	343	115 / 1	5.5	1-3
UV-4-2	CEILING UV	CLASSROOMS	2	R410A	600	24.3	29.5	200	DAIKIN	BCHD0081	43 x 29 x 18	343	115 / 1	5.5	1-3
UV-4-3	CEILING UV	CLASSROOMS	2	R410A	600	24.3	29.5	200	DAIKIN	BCHD0081	43 x 29 x 18	343	115 / 1	5.5	1-3
UV-4-4	CEILING UV	CLASSROOMS	2	R410A	900	24.3	29.5	200	DAIKIN	BCHD0081	43 x 29 x 18	343	115 / 1	5.5	1-3
UV-5-1	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-5-2	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-5-3	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-5-4	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-5-5	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-5-6	CEILING UV	CLASSROOMS	3	R410A	900	39.7	50.0	300	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-1	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-2	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-3	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-4	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-5	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-6	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-7	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-8	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-9	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-10	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-11	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-12	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-13	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-14	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-15	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3
UV-6-16	CEILING UV	CLASSROOMS	4	R410A	1200	47.9	56.9	400	DAIKIN	BCHD0161	46 x 45.5 x 18	572	115 / 1	14.4	1-3

NOTES:

1. INTERNAL DRAIN PAN.
2. LOW VOLTAGE WALL MOUNTED CONTROLLER.
3. INTEGRAL CONDENSATE PUMP.
4. TOP ACOUSTICAL PLENUM.
5. SIDE PIPE COVERS.
6. EXTRUDED ALUMINUM OUTDOOR AIR INTAKE LOUVER.
7. ALL VERTICAL UV'S TO BE SIZED FOR 2 PSI STEAM.
8. ALL CEILING UV'S TO BE SIZED FOR EWT OF 180 AND LWT OF 160.
9. THIS EQUIPMENT IS NOT IN THE CONTRACT AND INCLUDED FOR REFERENCE ONLY. EQUIPMENT TO BE SUPPLIED TO THE SCHOOL DISTRICT BY THE MANUFACTURER. SEE SPECIFICATIONS FOR MORE DETAILS.

1

H2M architects + engineers

2700 Westchester Ave., Suite 415
Purchase, NY 10577
914.358.5623 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION
1	02/23/23	FINAL BID DOCUMENT

STATE OF NEW YORK · BRIAN CASTELLI · 099167 · LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
DAK	DAK	BMC	REVIEWER

PROJECT No.:	DATE:	SCALE:
WPSD2110	FEBRUARY 2023	AS SHOWN

CLIENT

White Plains City School District

WHITE PLAINS HIGH SCHOOL UNIT VENTILATOR REPLACEMENTS

550 North Street
White Plains, NY 10605

SED No. 66-22-00-01-0-16-028

CONTRACT

CONTRACT H
HEATING VENTILATION AND AIR CONDITIONING

STATUS

FINAL BID DOCUMENT

SHEET TITLE

MECHANICAL SCHEDULES (2 OF 2)

DRAWING No.

M 601.00