BID Addendum No. Five (5)

PROJECT: Iona Preparatory School

Addition and Alterations to the Pail Verni Fine Arts Center

255 Wilmot Road

New Rochelle, NY 10804

ADDENDUM NO. Five (5) Initiation Date: June 24, 2021

Architect's Project No.: 1618 PGA Contact: Danny Lam dlam@petergisolfiassociates.com

914-478-3677 x 340

TO ALL BIDDERS:

You are directed to make the following changes in this Contract:

A. General

B. Architectural

- 1. See attached revised sheets A-150 and A-151 with clarification to the 1st floor and 2nd floor lobby ceiling. Refer to A-950 Finish Schedule issued in addendum 1 for ceiling information.
- 2. Specification section 08 14 16 Flush Wood Doors Paragraph 2.3(A)(5) note there are no sketch veneer doors for this project. Refer to door elevations on A-900.
- 3. All pilasters shown in the classrooms are painted gypsum board.
- 4. Specification section 10 11 00 Visual Display Surfaces All markerboards/whiteboards shall be Claridge CONCEPT Dry Erase Board with aluminum trim and marker tray. All tackboards shall have wood trim per detail 1/A-600.

C. Structural

1. See attached revised sheet S-103 with revisions to roof truss spacing at the theater roof.

D. Mechanical

- 1. See attached revised sheet M-101 with revisions to HVAC notes.
- 2. See attached revised sheet M-102 with revisions to HVAC symbols.
- 3. See attached revised sheet M-103 with revisions to mechanical site plan.
- 4. See attached revised sheet M-201 with revisions to Verni demolition.
- 5. See attached revised sheet M-301 with revisions to mechanical construction plan.
- 6. See attached revised sheet M-311 with revisions to mechanical piping plan.
- 7. See attached ADDED sheet M-321 First Floor Refrigerant Piping Plan.
- 8. See attached ADDED sheet M-322 Second Floor Refrigerant Piping Plan.
- 9. See attached revised sheet M-403 with revisions to details.
- 10. See attached revised sheet M-501 with revisions to mechanical hot water riser diagram.
- 11. See attached revised sheet M-502 with revisions to mechanical air riser diagram.
- 12. See attached revised sheet M-601 with revisions to mechanical schedule.
- 13. See attached revised sheet M-602 with revisions to mechanical schedule.
- 14. See attached ADDED sheet M-603 Mechanical Schedule III.

E. Plumbing

1. See attached revised sheet P-102 – with updated drawing scale. Note there are discrepancies with pipe sizes (for gas and cold water) shown on C-100 Site Utility Plan. All contractors shall refer to pipe sizes shown on P-102 for plumbing site utilities.

PETER GISOLFI ASSOCIATES 566 Warburton Avenue Architects Hastings-on-Hudson NY 10706 Landscape Architects 914 478-3677 914 478-1600 fax Interior Architects

BID Addendum No. Five (5)

F. Sprinkler

1. See attached revised sheet SP-103 – with updated drawing scale.

G. Electrical

- 1. Clarification to scope for Addendum #3 Electrical Contractor to provide all raceways and back boxes for all low voltage cabling locations on all floors including the Theatre Areas. The low voltage cabling vendors shall coordinate, supply and install all low voltage cabling. Cable terminations and testing shall be provided by the low voltage vendors.
- 2. See attached revised sheet E-105 with revisions to notes regarding Parent's Hall.
- 3. See attached revised sheet E-201 with revisions to Verni demolition.
- 4. See attached revised sheet E-301 with revisions to first floor lighting plan.
- 5. See attached revised sheet E-303 with revisions to first floor power plan.
- 6. See attached revised sheet E-306 with revisions to first floor mechanical power plan.
- 7. See attached revised sheet E-307 with revisions to second floor mechanical power plan.
- 8. See attached revised sheet E-501 with revisions to electrical riser diagram.
- 9. See attached revised sheet E-601 with revisions to electrical panel schedule.

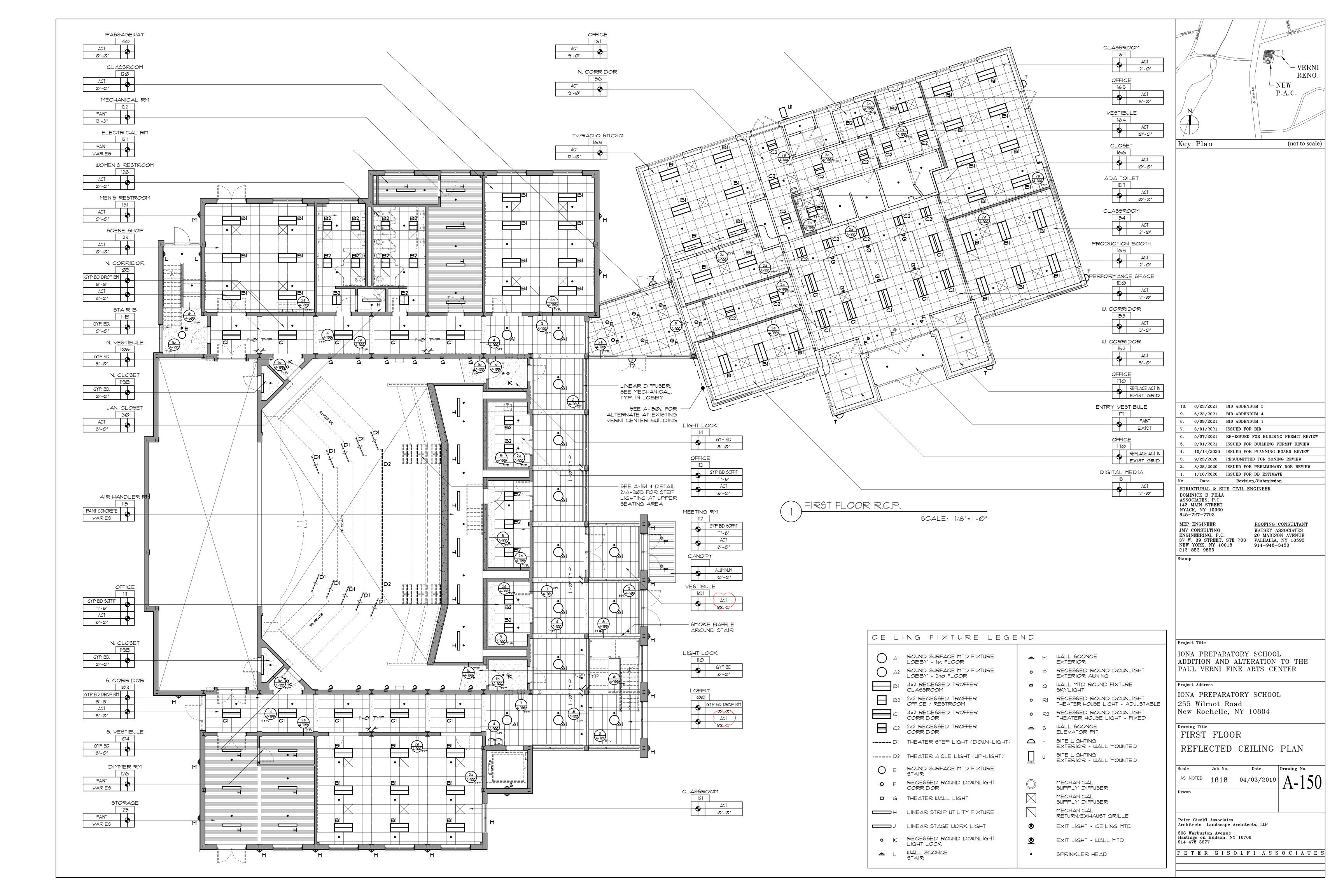
H. Fire Alarm – No change.

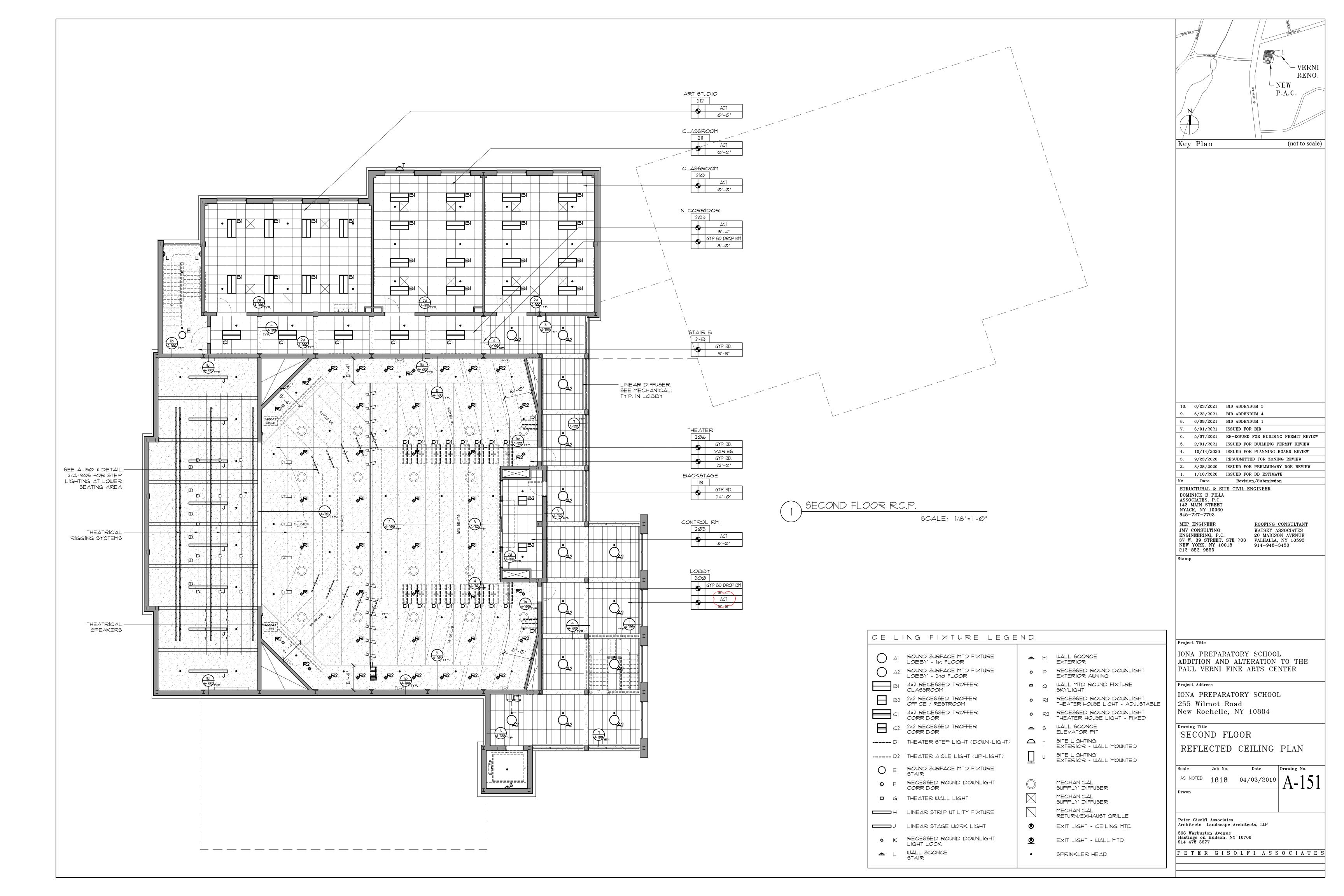
Attachments:

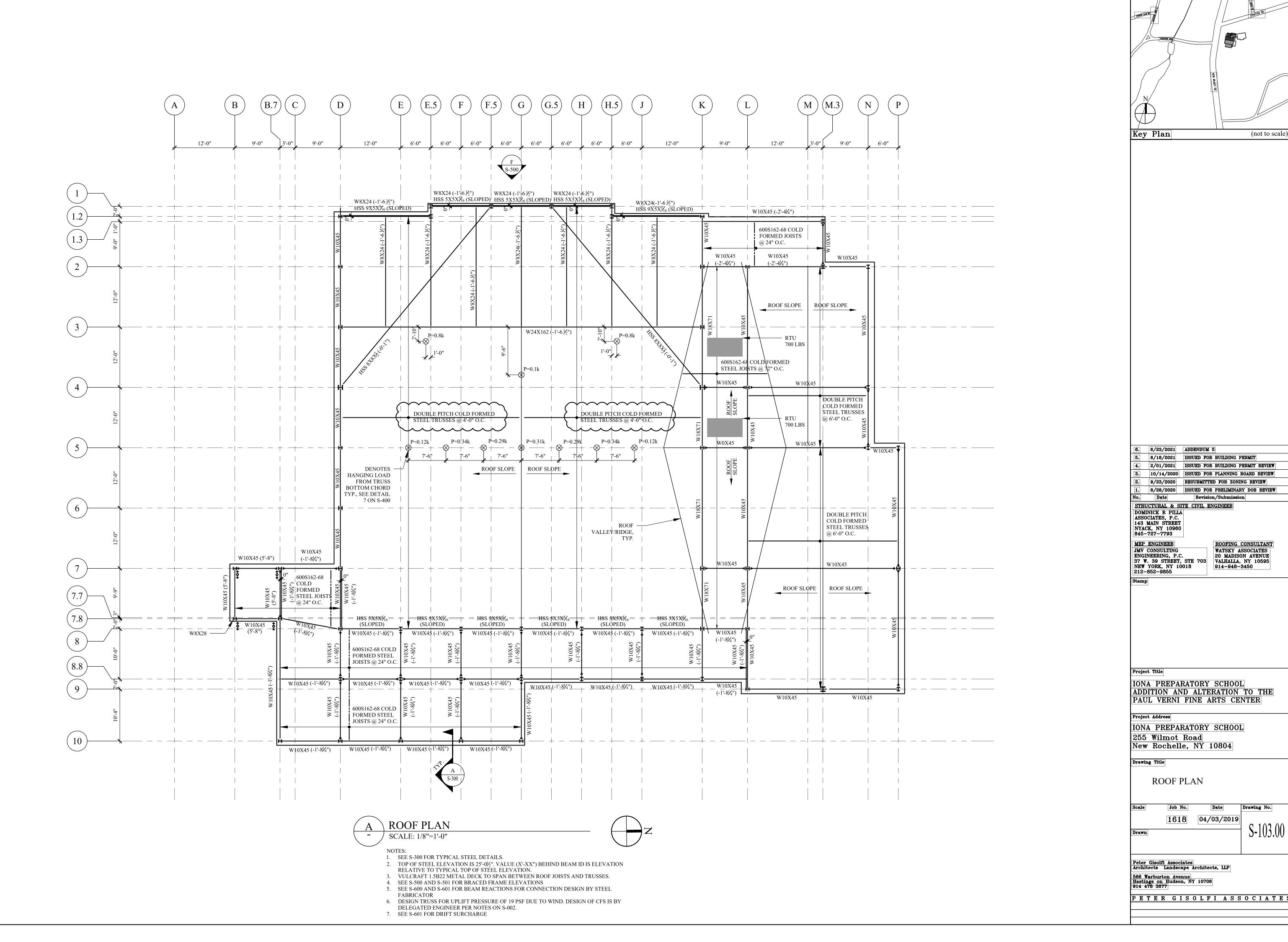
- Revised sheet A-150: Revision to 1st floor RCP
- Revised sheet A-151: Revision to 2nd floor RCP
- Revised sheet S-103: Revisions to roof truss spacing
- Revised sheet M-101: Revisions to HVAC notes
- Revised sheet M-102: Revisions to HVAC symbols
- Revised sheet M-103: Revisions to mechanical site plan
- Revised sheet M-201: Revisions to Verni demolition
- Revised sheet M-301: Revisions to mechanical construction plan
- Revised sheet M-311: Revisions to mechanical piping plan
- NEW sheet M-321: First Floor Refrigerant Piping Plan
- NEW sheet M-322: Second Floor Refrigerant Piping Plan
- Revised sheet M-403: Revisions to details
- Revised sheet M-501: Revisions to mechanical hot water riser diagram
- Revised sheet M-502: Revisions to mechanical air riser diagram
- Revised sheet M-601: Revisions to mechanical schedule
- Revised sheet M-602: Revisions to mechanical schedule
- NEW sheet M-603: Mechanical Schedule III
- Revised sheet P-102: Drawing scale updated
- Revised sheet SP-103: Drawing scale updated
- Revised sheet E-105: Revisions to notes
- Revised sheet E-201: Revisions to Verni demolition
- Revised sheet E-301: Revisions to first floor lighting plan
- Revised sheet E-303: Revisions to first floor power plan
- Revised sheet E-306: Revisions to first floor mechanical power plan
- Revised sheet E-307: Revisions to second floor mechanical power plan
- Revised sheet E-501: Revisions to electrical riser diagram
- Revised sheet E-601: Revisions to electrical panel schedule

End of Addendum No. 5

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(not to scale)

Drawing No.

MECHANICAL SPECIFICATIONS

GENERAL

- A. SCOPE INCLUDES WORK AT 255 WILMONT RD, NEW ROCHELLE, NY. THE OVERALL WORK SCOPE INCLUDES SPLIT AIR HANDLER UNITS, VRF AIR-CONDITIONING, VENTILATION, BOILER AND HEATING SYSTEMS.
- B. ALL WORK SHALL COMPLY WITH REQUIREMENTS OF THE 2020 NEW YORK STATE BUILDING CODES, AND LOCAL BUILDING DEPARTMENT STANDARDS.
- C. PRIOR TO SUBMISSION OF THEIR FORMAL BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING MECHANICAL, ELECTRICAL AND
- D. PRIOR TO SUBMISSION OF THIS BID, THIS CONTRACTOR SHALL VISIT THE JOB SITE IN ORDER TO ACQUAINT THEMSELVES WITH ACTUAL FIELD CONDITIONS AS IT RELATES TO THE SCOPE OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO THE SUBMISSION OF HIS BID. DISCREPANCIES NOT RESOLVED TO THE SATISFACTION OF THIS CONTRACTOR SHALL BE INCLUDED AS A WRITTEN DOCUMENT OF THE BID PACKAGE.
- E. ALL WORK SHALL BE INSTALLED IN A NEAT WORKMAN LIKE MANNER. ALL EQUIPMENT SHALL BE INSTALLED WITH ADEQUATE CLEARANCE FOR PROPER BALANCING, MAINTENANCE AND REPAIR OF THE EQUIPMENT.
- F. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND EQUIPMENT. FINAL LOCATIONS TO BE COORDINATED WITH FIELD CONDITIONS.
- G. INSTALLATION OF ALL NEW EQUIPMENT, DEVICES, AND PIPING SHALL BE COORDINATED WITH ALL TRADES. CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND GENERAL CONTRACTOR.
- H. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION: AIA DOCUMENT A201-2007 AND THE ARCHITECT'S SPECIFICATIONS ARE INCLUDED AS PART OF THIS CONTRACT.
- ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF OWNER AND ENGINEER. THIS CONTRACTOR IS TO PROCURE MANUFACTURER REPRESENTATIVES FOR PROPER START UP AND OPERATION OF INSTALLED EQUIPMENT.

2. SCOPE OF WORK

- A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND CONTRACTOR'S SURVEYS NECESSARY FOR A COMPLETE SAFE INSTALLATION OF THIS SCOPE OF WORK ALL WORK SHALL CONFORM TO THE 2020 NEW YORK STATE BUILDING CODE AND ALL AUTHORITIES HAVING JURISDICTION
- B. PAY ALL FEES AND CHARGES FOR WORK INSTALLED, CERTIFYING COMPLIANCE WITH THE NEW YORK STATE BUILDING CODES AND AUTHORITIES HAVING JURISDICTION.
- C. THIS CONTRACTOR SHALL PROCURE A LICENSED ENGINEER TO PERFORM ALL SIGN-OFF INSPECTIONS IN A TIMELY
- D. GENERAL CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION OF ALL SUB-CONTRACTORS AND SUB-CONTRACTORS SHALL PROVIDE ON-SITE SUPERVISION OF ALL OF THEIR PERSONNEL. G.C. SHALL SCHEDULE AN ON-SITE CONSTRUCTION MEETING WITH SUB-CONTRACTORS ON A WEEKLY BASIS AND AS NECESSARY TO RESOLVE ALL FIELD CONFLICTS.
- E. ALL CONTRACTORS AND SUB-CONTRACTORS SHALL CARRY GENERAL LIABILITY INSURANCE AS WELL AS BONDING REQUIRED BY THE CLIENT. ALL INSURANCE REQUIREMENTS MUST BE CONFIRMED WITH CLIENT PRIOR TO BIDDING PROJECT.
- F. CONTRACTOR TO FOLLOW ALL BUILDING REGULATIONS DURING DEMOLITION, CONSTRUCTION, TESTING AND SUBMISSION PHASES NO WORK SHALL COMMENCE UNTIL CONTRACTOR HAS REVIEWED AND ACCEPTED BUILDING RULES & REGULATIONS.

G. GENERAL SCOPE OF WORK AS FOLLOWS:

GENERAL (NOTES APPLY TO ALL CONTRACTORS)

- REVIEW OF PROJECT DOCUMENTS AND VISIT TO JOB SITE PRIOR TO SUBMISSION OF BID.
- PROVIDE FULL SUBMITTAL AND SHOP DRAWINGS FOR ALL WORK
- · SUBMIT AS-BUILTS, TEST REPORTS AND EQUIPMENT MANUALS TO ENGINEER FOR REVIEW.
- · CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY TESTING AND INSPECTIONS. CONTRACTOR IS RESPONSIBLE TO FUNCTIONALLY TEST
- SYSTEM TO ENSURE CONFORMANCE TO DESIGN DOCUMENTS AND PROPER OPERATION OF SYSTEM. · CONTRACTOR TO FOLLOW ALL BUILDING REGULATIONS
- DURING CONSTRUCTION, TESTING AND SUBMISSION • CONTRACTOR RESPONSIBLE FOR START-UP AND COMMISSIONING OF ALL EQUIPMENT. RETAIN
- MANUFACTURER REPRESENTATIVES AS NECESSARY. • CONTRACTOR IS RESPONSIBLE TO INSTALL A WORKING SYSTEM AND ASSIST ALL TRADES TO ASSURE SYSTEM IS OPERATIONAL AND FUNCTIONS AS DESIGNED.

MECHANICAL CONTRACTOR

- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO DEMOLISH ALL SYSTEMS AND EQUIPMENT AS INDICATED ON PLANS AND AS NECESSARY.
- PROVIDE AND INSTALL NEW EQUIPMENT, PIPING, AND ALL OTHER ACCESSORIES AS SCHEDULED ON PLANS.
- · DUCTWORK, PIPING, HANGERS, EQUIPMENT, INSULATION AND ACCESSORIES AS SHOWN ON PLANS AND AS NECESSARY FOR A COMPLETE JOB.
- · BALANCE ALL AIR SYSTEMS AS SHOWN ON PLANS.
- · PROVIDE AND INSTALL FIRE DAMPER AND ACCESS DOORS IN ALL RATED WALLS AND AS INDICATED ON DESIGN DRAWINGS. CONFIRM RATING REQUIREMENTS WITH ARCHITECT.

ELECTRICAL CONTRACTOR

· ELECTRICAL POWER AND CONTROL WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.

GENERAL CONSTRUCTION CONTRACTOR

• PROVIDE ALL NECESSARY CUTTING, PATCHING, SEALING AND FIRESAFING. FOR COMPLETION OF SCOPE OF WORK.

3. SHOP DRAWINGS

- A. GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE TO FACILITATE THE COORDINATION THE EXTENT OF WORK REQUIRED TO BE COMPLETED UNDER THIS CONTRACT. FAILURE TO EXAMINE ALL THE CONTRACT DOCUMENTS FOR THIS PROJECT WILL NOT RELIEVE THE CONTRACTOR OF HIS/HER RESPONSIBILITIES TO PERFORM THE WORK REQUIRED FOR A COMPLETE FULLY FUNCTIONAL AND SATISFACTORY INSTALLATION.
- B. SUBMIT TWO HARD PRINTS AND ONE DIGITAL PDF IN E-MAIL AND/OR CD OF SHEET METAL AND/OR PIPING SHOP DRAWINGS, CERTIFIED BY ALL TRADES THAT COORDINATION HAS BEEN ESTABLISHED. SUBMIT CERTIFIED EQUIPMENT CUTS WITH CONSTRUCTION WIRING DIAGRAMS AND AUTOMATIC TEMPERATURE CONTROL SHOP DRAWINGS.
- C. ALL BIDS ARE TO BE BASED ON EQUIPMENT SPECIFIED AND SCHEDULED. IF A SUBSTITUTION IS PROPOSED CUTS SHALL BE PROVIDED TO OWNERS/ENGINEERS HIGHLIGHTING THE SUBSTITUTION AND THE REASON FOR THE PROPOSED SUBSTITUTION. ALL SUBSTITUTIONS ARE SUBJECT TO OWNERS AND ENGINEERS APPROVAL. JMY SHALL BE COMPENSATED ON AN HOURS RATE BASIS FOR TIME SPENT REVIEWING SUBSTITUTE EQUIPMENT AND ANY TIME NECESSARY TO REVISE PLANS FOR FILING.
- D. ONLY-E-MAILED SUBMISSION SHALL NOT BE ACCEPTABLE.
- E. THIS CONTRACTOR SHALL PREPARE AND SUBMIT FOR APPROVAL DRAWINGS ON A SCALE NOT LESS THAN 3/8"=
- F. SUBMIT SHOP DRAWINGS, EQUIPMENT SUBMITTALS WHICH
- SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: DUCT LAYOUT AND APPURTENANCES
- EQUIPMENT LAYOUT
- CERTIFIED BALANCING REPORT

• CONTROLS DRAWING

- EQUIPMENT
- DUCTWORK AND AIR HANDLERS
- G. JMY SHALL REVIEW AND COMMENT ON SUBMITTED SHOP DRAWING AND EQUIPMENT SUBMITTALS, SCAN THE SHOP DRAWINGS AND DISTRIBUTE VIA E-MAIL. COMMENTS ON LARGE SUBMITTALS WILL BE SUMMARIZED ON THE COVER SHEET AND THAT COVER SHEET WILL BE RETURNED.
- H. SHOP DRAWINGS SHALL INDICATE OTHER ELEMENTS LOCATED IN THE VICINITY OF THE DUCTWORK AND PIPING SYSTEM, SUCH AS: STRUCTURAL ELEMENTS, ELECTRICAL FIXTURES, CONDUITS, OTHER PIPING SYSTEMS, EQUIPMENT, APPLIANCES, FIXTURES, ETC.
- I. SUBMIT DUCT CONSTRUCTION STANDARDS BASED ON SMACNA

4. AS-BUILTS DRAWINGS AND OPERATING AND SERVICE MANUALS

- A. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL DEVELOP AS BUILT DRAWINGS ACCURATELY REFLECTING THE INSTALLATION OF THE COMPLETE SYSTEM, RECORDING ALL CHANGES FROM THE ORIGINAL DESIGN THAT OCCURRED DURING THE CONSTRUCTION PROCESS.
- B. AFTER COMPLETION OF THE PROJECT THE CONTRACTOR SHALL FULLY INSTRUCT THE APPROPRIATE OWNERS PERSONAL ON THE OPERATIONS OF ALL SYSTEMS INSTALLED.
- C. THE CONTRACTOR SHALL DEVELOP OPERATION AND SERVICE MANUALS CONSISTING OF ALL OPERATION PROCEDURES FOR THE WHOLE SYSTEM, INCLUDING ORIGINAL SYSTEM SETTINGS. ALL SERVICE REQUIREMENTS AND PROCEDURES, INCLUDING RECOMMENDED SERVICE PERIODS, ALL ORIGINAL EQUIPMENT SUBMITTALS WITH ENGINEERING DATA, ALL EQUIPMENT INSTALLATION MANUALS AND PARTS
- D. AS PART OF FINAL ACCEPTANCE OF INSTALLATION THE CONTRACTOR SHALL SUPPLY THE OWNERS WITH TWO COPIES (2) OF CONTRACT CLOSE OUT DOCUMENTS INCLUDING SHOP-DRAWINGS, AS BUILT DRAWINGS, OPERATION AND MAINTENANCE MANUALS, AIR BALANCING REPORTS SIGNED OFF BY A LICENSED BALANCER AND ALL APPLICABLE WARRANTY AND PRODUCT REGISTRATION INFORMATION. THIS SHALL BE PROVIDED IN A DIGITAL IN ADDITION TO A BINDER WITH LAMINATED SHEETS. IN ADDITION, PROVIDE A DIGITAL COPY TO THE ENGINEER, ARCHITECT AND OWNER FOR THEIR RECORDS.

5. FINAL ACCEPTANCE, GUARANTEES AND WARRANTIES

- A. AS PART OF THE CONTRACT THE CONTRACTOR SHALL GUARANTEE AND SERVICE THE FINAL INSTALLATION FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE INSTALLATION. (DEFINED BELOW)
- B. UP UNTIL FINAL ACCEPTANCE AND THE ONE YEAR GUARANTEE FOLLOWING, THE CONTRACTOR SHALL REPLACE OR REPAIR ANY EQUIPMENT OR MATERIAL FOUND TO BE DEFECTIVE AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE SURROUNDING AREAS RELATED TO THE ISSUE. IF A PRODUCT UNDER WARRANTEE REQUIRES A REPAIR DURING THIS PERIOD, THE CONTRACTOR IS FULLY RESPONSIBLE FOR COORDINATING THE MANUFACTURER'S REMEDIATION WORK TO
- C. FINAL ACCEPTANCE OF INSTALLATION SHALL BE CONFIRMED AFTER THE CONTRACTOR HAS INSTALLED AND BALANCED ALL SYSTEMS TO THE OWNERS/ENGINEERS APPROVAL, SUBMITTED AS BUILTS AND OPERATION AND MAINTENANCE MANUALS AND HAS OBTAINED ALL REQUIRED CERTIFICATES OF INSPECTIONS AND APPROVALS.
- D. FOR ALL APPLICABLE EQUIPMENT THE CONTRACTOR SHALL COMPLETE ALL WARRANTY AND PRODUCT REGISTRATION INFORMATION AND SUBMIT TO MANUFACTURERS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH COPIES OF ALL WARRANTIES FOR THEIR RECORDS.

6. CONNECTIONS TO EXISTING WORK, REMOVAL AND RELOCATION

- A. PLAN INSTALLATION OF ALL NEW WORK INCLUDING CONNECTIONS TO EXISTING WORK TO ENSURE MINIMUM INTERFERENCE WITH REGULAR OPERATION OF EXISTING BUILDING FACILITIES. ALL REQUIRED SYSTEM SHUTDOWNS AFFECTING OTHER AREAS SHALL BE COORDINATED WITH THE BUILDING.
- B. CONNECT NEW WORK TO EXISTING WORK IN A NEAT AND APPROVED MANNER RESTORE EXISTING WORK WHICH WAS DISTURBED WHILE INSTALLING NEW WORK TO A CONDITION ACCEPTABLE TO THE OWNER.
- C. REMOVAL AND RELOCATION OF SOME EXISTING MATERIAL. EQUIPMENT, OR PIPING WILL BE NECESSARY FOR THE PROPER INSTALLATION OF NEW WORK. ALL EXISTING CONDITIONS HAVE NOT BEEN COMPLETELY DETAILED ON THE

T. CUTTING AND PATCHING

- A. ALL NECESSARY CUTTING CORE DRILLING AND PATCHING FOR THE INSTALLATION OF THE MECHANICAL WORK SHALL BE PERFORMED BY THIS CONTRACTOR
- B. COORDINATE ALL CUTTING AND PATCHING FOR INSTALLATION OF MECHANICAL EQUIPMENT WITH BUILDING OWNERS AND OTHER BUILDING TENANTS WHO WILL BE EFFECTED BY THE
- C. FIRE-STOPPING SHALL BE THE SOLE RESPONSIBILITY OF THIS CONTRACTOR ALL EXISTING AND NEW PENETRATIONS MUST BE PROPERLY FIRE-STOPPED WITH APPROVED FIRE-STOPPING SEALANT

8. HANGING REQUIREMENTS

- HANGERS SHALL ONLY BE HUNG DIRECTLY FROM STRUCTURAL STEEL WHERE HANGERS CANNOT BE SUPPORTED DIRECTLY FROM BUILDING STEEL ALTERNATE HANGING METHODS MAY ATTACH TO THE STRUCTURAL SLAB TO THE FOLLOWING
- A. HANGERS SUPPORTING LOADS OF MORE THAN 100 POUNDS MUST BE ATTACHED DIRECTLY TO THE BEAMS
- B. ATTACHMENT TO THE SLAB SHALL UTILIZE EXPANSION BOLTS. C. FIELD TESTS MUST BE PERFORMED UTILIZING THE ACTUAL EQUIPMENT PROPOSED FOR USE IN THE BUILDING.
- D. EACH HANGER SHALL BE ATTACHED TO A MOUNTING ANGLE WITH A MINIMUM DIMENSION OF 2 imes 2 imes 3/16. EACH ANGLE SHALL HAVE AT LEAST TWO SUPPORTS, SUPPORTS SHALL BE SPACED AT LEAST FIVE INCHES APART
- E. THE MINIMUM SIZE OF SUPPORTS SHALL BE 3/8 INCH. POWER AND POWDER ACTUATED FASTENERS WILL NOT BE PERMITTED. THE INTENTION IS TO PROVIDE SUPPORT WHICH IN EACH CASE, SHALL NOT WEAKEN OR UNDULY STRESS THE BUILDING CONSTRUCTION
- F. NO EQUIPMENT MAY BE HUNG OF WOOD CONSTRUCTION

9. PIPING AND TUBING

WROUGHT-COPPER FITTINGS AND SILVER SOLDER BRAZED

- A. HOT WATER SUPPLY & RETURN: COPPER TYPE L, WROUGHT COPPER FITTINGS, SILVER SOLDERED-BRAZED.
- B. HOT WATER SUPPLY & RETURN PIPING (IN-SLAB)
- AQUATHERM BLUE PIPE SDR 11 MF
- C. <u>REFRIGERANT</u> <u>PIPING:</u> COPPER TYPE ACR, WROUGHT COPPER FITTINGS, AWS FILLER BRAZED.
- D. <u>CONDENSATE</u> <u>PIPING</u>: TYPE L DRAWN-TEMPER COPPER TUBING, WROUGHT-COPPER FITTINGS AND SILVER SOLDER
- E. INSTALL DRAINS CONSISTING OF 3/4" TEE FITTINGS AND BALL YALYES, AND SHORT NPS 3/4" THREADED NIPPLE WITH CAP FOR ANY LOW POINTS IN THE SYSTEM OR ANY AREAS THAT MAY REQUIRE A DRAINAGE
- F. PIPING SHALL BE SUPPORTED WITH APPROVED CLEVIS HANGERS AND ADJOUTABLE THREADED RODS AND SUITABLE CLAMPS OR MEANS OF BOLTING TO THE BUILDING STRUCTURE MAXIMUM SPACING SHALL BE 8'-0". HANGERS FOR INSULATED PIPES SHALL FIT OVER OUTSIDE OF THE INSULATION AND SHALL BE PROVIDED WITH PROTECTIVE SADDLES. HANGERS SHALL BE MASON, OR APPROVED EQUAL
- G. PROVIDE DIELECTRIC FITTINGS BETWEEN ALL DIS-SIMILAR
- METALS. H. PYC OR CPYC ARE NOT ACCEPTABLE.

10. PIPE FITTINGS

A. BRONZE FLANGES AND FLANGED FITTINGS: ASME B16.24.

B. FITTINGS: ANSI/ASME BIG.18 CAST COPPER OR ANSI/ASME

- B16.22 SOLDER WROUGHT COPPER. C. JOINTS:
- a. BRAZED JOINTS: JOINTS SHALL BE MADE UP IN ACCORDANCE WITH RECOMMENDED PRACTICES OF THE MATERIALS APPLIED. APPLY 95/5 TIN AND ANTIMONY ON ALL COPPER PIPING.
- 6.50 MM (2 INCHES) AND SMALLER: SCREWED OR WELDED JOINTS.
- C. BUTT WELDING: ASME BIG.9 WITH THE SAME WALL THICKNESS AS CONNECTING PIPING. d.FORGED STEEL, SOCKET WELDING OR THREADED: ASME
- e. SCREWED: 150 POUND MALLEABLE IRON, ASME B16.3. 125 POUND CAST IRON, ASME BIG.4, MAY BE USED IN LIEU OF MALLEABLE IRON. BUSHING REDUCTION OF A SINGLE PIPE SIZE, OR USE OF CLOSE NIPPLES, IS NOT
- ACCEPTABLE. f. UNIONS: ASME B16.39.
- g. BUTT WELDING: ASME BIG.9 WITH THE SAME WALL THICKNESS AS CONNECTING PIPING. ELBOWS SHALL BE LONG RADIUS TYPE, UNLESS OTHERWISE NOTED.
- J. WELDING FLANGES AND BOLTING: ASME B16.5
- D. FLANGE BOLTING: CARBON STEEL MACHINE BOLTS OR STUDS AND NUTS, ASTM A307, GRADE B. E. WELDED BRANCH AND TAP CONNECTIONS: FORGED STEEL
- WELDOLETS, OR BRANCHLETS AND THREADOLETS MAY BE USED FOR BRANCH CONNECTIONS UP TO ONE PIPE SIZE SMALLER THAN THE MAIN. FORGED STEEL HALF-COUPLINGS, ASME BIG.II MAY BE USED FOR DRAIN, VENT AND GAUGE CONNECTIONS.

11. YALYES

- A. ASBESTOS PACKING IS NOT ACCEPTABLE.
- B. ALL VALVES OF THE SAME TYPE SHALL BE PRODUCTS OF A SINGLE MANUFACTURER.
- C. YALYE 2-1/2" AND LESS SHALL BE ALL BRONZE, THREADED OR SOLDER ENDS, VALVES ABOVE 2-1/2" SHALL BE IRON BODY BRONZE AND SHALL HAVE FLANGED OR BUTT-WELDED ENDS.

D. SHUT-OFF YALVES:

a. BALL YALYES (PIPE SIZES 1/2" TO 1-1/2"): SCREWED CONNECTIONS, BRASS OR BRONZE BODY WITH CHROME-PLATED BALL WITH FULL PORT AND TEFLON SEAT AT 600 PSIG, WORKING PRESSURE RATING WITH SINGLE UNION END AND HI-FLOW HOSE DRAIN CONNECTION: WEBSTORE SERIES 4043. PROVIDE STEM EXTENSION TO ALLOW 2" OF PIPE INSULATION WHERE APPLICABLE.

- b. BALL YALVES (PIPE SIZES 1-1/2" TO 4"): MSS-SP 110/ SOLDER CONNECTIONS, BRASS OR BRONZE BODY WITH CHROME-PLATED BALL WITH FULL PORT AND TEFLON SEAT AT 600 PSIG WORKING PRESSURE RATING. PROVIDE STEM EXTENSION TO ALLOW OPERATION WITHOUT INTERFERING WITH PIPE INSULATION.
- D. GATE: SHALL BE OF SOLID WEDGE DISK TYPE CLASS 150 TRAVELING STEM UNION BONNET. SIMILAR TO STOCKHAM B-180 OR EQUIVALENT.
- E. BUTTERFLY (2" AND ABOVE): ONE PIECE BODY CONSTRUCTION HARD BACKED SEATS, TWO PIECE STAINLESS STEEL STEM, STEM BUSHINGS, O-RING STEM SEAL, EPDM SEAT, STREAMLINE DISK, EXTENDED NECK FOR PIPE INSULATION, 10 POSITION LEVER LOCK. HAMMOND MODEL 6000 SERIES
- F. CHECK: SWING TYPE, SCREWED CAPS, CLASS 150 BRONZE BODY, REGRIND BRONZE DISC, SCREWED ENDS. CHECK TO BE SIMILAR TO STOCKHAM MODEL B-321 OR EQUIVALENT.

MODEL 6211-01.

- G. STRAINERS (THREADED, FLANGED OR BUTT WELDED ENDS) BRONZE BODY, SCREWED SCREEN RETAINER WITH CENTERED BLOW DOWN FITTED WITH PIPE PLUG, MINIMUM FREE AREA 2-1/2 TIMES INLET AREA PERFORATIONS 1/16. SCREEN WIRE GAUGE TO SUIT SIZE AND SERVICE. BOLT ON FLANGE WITH TAP FOR BLOW DOWN.
- H. 3-PORT HYDRONIC MIX VALVE: PROVIDE 3-PORT HYDRONIC MIX YALVE OF CAST BRONZE BODY WITH COPPER BRASS AND POLYSULFONE INTERNAL PARTS AVAILABLE IN 3/4" AND I". THE ACTUATOR FOR THE PISTON SHALL HAVE LINEAL EXPANSION CHARACTERISTICS, AND SHALL BE COMPLETELY FILLED WITH TEMPERATURE SENSITIVE WAX. EACH PORT SHALL HAVE A UNION TO ALLOW FOR EASY SERVICING. THE MIX YALVE SHALL BE CAPABLE OF DELIVERING WATER TEMPERATURES RANGING FROM 100° TO 180°F. VALVE IS SIMILAR TO WATTS MIXTEMP 1800 OR SIMILAR.
- . BUTTERFLY MOTORIZED CONTROL VALVE: PROVIDE BUTTERFLY MOTORIZED CONTROL VALVE DESIGNED FOR USE IN ANSI CLASS 150 CHILLER PIPING SYSTEM. SEAT AND DISC DESIGN ENSURES POSITIVE VALVE SEALING WHILE MAINTAINING LOW SEATING TORQUE, YALVE SHALL BE ABLE TO CLOSE-OFF UP TO 50 PSI WITH A 200 PSI BODY RATING. VALVE IS APPLICABLE FOR 2-WAY APPLICATIONS. THIS YALVE HAS SPRING RETURN AND SHALL FUNCTION AS FAIL-CLOSE. THIS VALVE IS ABLE TO COMMUNICATE WITH PLC CONTROLLER AND IS SIMILAR TO BELIMO MODEL: HDU SERIES OR EQUIVALENT.
- J. THERMOMETERS: "ALL ANGLE" UNIVERSAL, SEPARATE SOCKET, INDUSTRIAL TYPE WITH \$304 STAINLESS STEEL EXTENSION NECK WELLS, WEISS OR APPROVED EQUAL.
- K. PRESSURE GAUGES: BOURBON TUBE SPRING TYPE WITH 4-1/2 DIAL SIZE, BRONZE TUBE, ALUMINUM CASE, WEISS OR APPROVED EQUAL.
- L. DIELECTRIC FITTING: FLANGE UNION TYPE, RATING SHALL BE COMPATIBLE WITH SYSTEM PRESSURES. INSTALL ON ALL STEEL TO COPPER PIPE. EPCO MODEL #GX'
- M. VALVE TAGS: BRASS, MINIMUM 2" DIAMETER, 1/16" THICK, STAMPED INDICATING SERVICE AND VALVE NUMBER.

12. DUCTWORK

A. DUCTWORK SHALL BE FABRICATED OF GALYANIZED STEEL AND INSTALLED IN ACCORDANCE WITH SMACNA HYAC DUCT CONSTRUCTION STANDARDS.

B. ALL DUCT SEAMS SHALL BE SEALED WITH BENJAMIN FOSTER

- 30-02 DUCT SEALANT. DUCT SHALL BE SEALED AND TESTED TO CONFORM TO SMACNA AIR LEAKAGE TEST MANUAL, 2012 EDITION, MEDIUM AND HIGH PRESSURE SEAL CLASS "A", LOW PRESSURE SEAL CLASS "C". C. ACOUSTICALLY LINE DUCTWORK WITH MAT-FACED GLASS
- SIZES SHOWN ARE CLEAR NET INSIDE DIMENSIONS. INSTALL ACOUSTICALLY LINED DUCT WHERE SHOWN ON DRAWINGS AND/OR AS LISTED HERE: a. ALL DUCTWORK IN AREAS WITH EXPOSED CEILING

DUCT LINER, 15" THICK AND 1-1/2" LB OF DENSITY. ALL DUCT

b. MINIMUM 15'0" FROM AIR CONDITIONING UNIT DISCHARGE AND INTAKE

WHERE DUCTWORK IS VISIBLE

- D. ALL SUPPLY DUCTS NOT ACOUSTICALLY LINED AND IN AREAS WITH DROP CEILING WHERE DUCT WILL NOT BE VISIBLE SHALL BE INSULATED WITH 2" THICK FOIL FACED VAPOR BARRIER FIBERGLASS WIRED IN PLACE. E. FLEXIBLE DUCT SHALL BE PRE-INSULATED CHLOROPRENE
- RUBBER COATED. CLASS FABRIC ZINC COATED METAL FLEXIBLE DUCTING. DUCT TO BE APPROVED EQUAL. FLEXIBLE DUCT SHALL ONLY BE USED FOR FINAL CONNECTIONS TO TERMINAL DEVICES. FLEXIBLE DUCT SHALL NOT EXCEED SIX (6) FEET TOTAL. FLEXIBLE DUCT SHALL ONLY BE UTILIZED IN AREAS WHERE IS WILL BE CONCEALED AND NOT VISIBLE.
- F. LOUVERED PLENUMS INCLUDING CONDENSER AIR INLET AND DISCHARGE, AND ECONOMIZER INTAKE AND EXHAUST SHALL BE INSULATED WITH I" THICK RIGID BOARD INSULATION, 61B DENSITY. BOARD TO HAVE FACTORY APPLIED WHITE FIRE RETARDING JACKET WITH MECHANICAL FASTENER.
- G. PROVIDE FLEX CONNECTIONS AT ALL FAN DISCHARGE FLANGES.
- H. YOLUME DAMPERS GALYANIZED STEEL, PER SMACNA STANDARDS. DAMPER ROD TO HAVE BEARING AT ONE END AND LEVER AND LOCK SCREW AT OTHER END.
- I. DUCTWORK ACCESS DOOR TO BE FABRICATED OF GALVANIZED STEEL, 14X14, LATCHED ALL AROUND SIMILAR TO YENTLOCK. PROVIDE INSULATED ACCESS DOORS FOR ACOUSTICALLY LINED DUCTWORK INSTALLATION.
- J. FUSIBLE LINK FIRE DAMPER, GALVANIZED STEEL FABRICATED WITH SHUTTER TYPE MECHANISM OUT OF AIRSTREAM, TYPE B OR APPROVED EQUAL. DAMPERS INSTALLED IN HORIZONTAL DIRECTION SHALL BE SPRING LOADED. FIRE DAMPERS TO BE INSTALLED IN DUCTS PENETRATING RATED WALLS AND ON OUTSIDE AIR LOUVERS, WHERE SHOWN ON DRAWING AND AS REQUIRED BY THE NEW YORK STATE BUILDING CODE.
- K CABLE OPERATED DAMPERS SHALL BE EXTRUDED ALUMINUM, SPRING LOADED WITH STEEL ROTARY CABLE ROTO-TWIST RT-100. CABLE OPERATED DAMPERS TO BE USED IN ALL IN-ACCESIBLE CEILING AND ALL FLOATING CEILINGS.

13. INSULATION

A. FOR THE PURPOSES OF THIS SECTION, EXPOSED DEFINES DUCTS OR PIPES WHICH ARE VISIBLE, AS IN EQUIPMENT ROOMS, SHELTERED OUTDOORS IN SERVICE TUNNELS AND IN ROOMS WITHOUT CEILINGS. CONCEALED DEFINES DUCT OR

- PIPING WHICH ARE NOT NORMALLY VISIBLE, AS IN PLENUMS, CHASES, SHAFTS, AND ABOVE CEILINGS. OUTDOORS DEFINES DUCT OR PIPING WHICH ARE EXPOSED TO RAIN, SNOW, AND/OR SUNLIGHT.
- B. ACCEPTABLE MANUFACTURERS OF THERMAL INSULATION PRODUCT ARE:
- a. ARMSTRONG
- b.CERTAINTEED

d.KNAUF

- C. JOHNS-MANYILLE
- e. OWENS-CORNING
- f. ARMACELL
- C. ADHESIVES AND INSULATION MATERIALS: COMPOSITE FIRE AND SMOKE HAZARD RATING MAXIMUM 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED PER ASTM E 84. ADHESIVES SHALL BE WATERPROOF.
- D. IDENTIFICATION: PROVIDE COMPOSITE MATERIAL WITH LEGIBLY PRINTED MANUFACTURER'S NAME, NOMINAL THICKNESS, FLAME SPREAD, AND SMOKE DEVELOPED RATINGS PER NFPA 90A AND UL 181.
- F. CONCEALED DUCTS: PROVIDE RG MINIMUM INSULATION FOR ALL SUPPLY DUCTWORK. COVER WITH FLEXIBLE GLASS FIBER INSULATION, K-VALUE AT 15 DEGREE FAHRENHEIT MAXIMUM .29 BTU- IN/HR-5Q FT F, 1/2" PCF MINIMUM DENSITY, WITH FACTORY APPLIED, GLASS REINFORCED ALUMINUM FOIL AND KRAFT PAPER VAPOR BARRIER ALL-SERVICE JACKET. MAXIMUM PERMEABILITY OF VAPOR BARRIER TO BE .02 PERMS.
- G. ACOUSTIC LINING: CLASS I GLASS FIBER INSULATION WITH K-YALUE AT 75 DEGREE FAHRENHEIT MAXIMUM 24 BTU-IN/HR-SQ FT F. 3 PCF MINIMUM DENSITY, ABSOLUTE ROUGHNESS PER FT OF EXPOSED SURFACE NOT TO EXCEED .004 FT, COATED TO PREVENT FIBER EROSION AT AIR VELOCITIES UP TO 4,000 FPM. COMPLY WITH THE REQUIREMENTS OF ASTM C 1071.
- H. WHERE INSULATION REQUIRES SEALING AND TAPING, COMPLETE REQUIRED PROCEDURES AT THE SAME TIME INSULATING MATERIAL IS APPLIED TO ENSURE CLEAN SURFACES EXIST FOR PROPER ADHESION.
- SECURE FLEXIBLE INSULATION TO DUCTWORK SURFACES WITH ADHESIVE AND WELDED CUPPED HEAD PINS, 12" ON CENTER, BOTH WAYS. BUTT INSULATION AND SEAL JOINTS AND BREAKS WITH 2" OVERLAP OF FOIL ADHERED OVER JOINT. J. ALL PIPING AS FOLLOWED IN THE CHART BELOW: MOLDED

GLASS FIBER WITH ALL SERVICE JACKET. OUTDOOR PIPING

FLUID	NOT	1INAL PIPE	OR TUBE SI	ZE
TEMP.	<["	TO < 1/2"	½" TO <4"	4" TO <8"
< 40° F	1"	1"	1"	1"
40-60°F	1"	1"	1"	1"
105-140°F	1.5"	1,5"	1,5"	1,5"

141-200°F

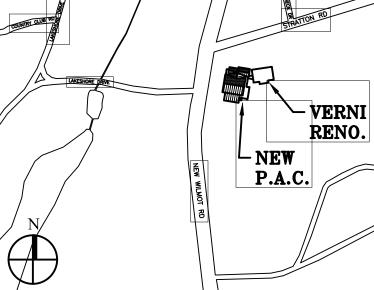
WITH 2 COATS OF BITOMASTIC

- K. REFRIGERANT PIPING: a.INDOOR REFRIGERANT PIPING 1" AP ARMAFLEX CLOSED-CELL ELASTOMERIC THERMAL
- INSULATION. b.OUTDOOR REFRIGERANT PIPING: 15" ARMAFLEX WITH PAINTED WB FINISH TO PROTECT
- L. SUPPORTS UTILIZE ARMAFLEX INSULATED PIPE HANGERS AT ALL SUPPORTS.

- 14. EQUIPMENT A. PROVIDE ALL EQUIPMENT AND ACCESSORIES OF THE SIZES AND CAPACITIES AS SCHEDULED AND AS
- INDICATED ON THE DRAWINGS. B. INSTALL EQUIPMENT IN ACCORDANCE WITH APPROVED SHOP DRAWINGS, MANUFACTURERS INSTRUCTIONS AND ALL CODES AND REGULATIONS WHICH APPLY. CEILING MOUNTED EQUIPMENT, PROVIDE SUPPORTS APPROVED ANCHORS SUSPENDED DIRECTLY FROM STRUCTURE. PROVIDE BUILDING STEEL SUPPLEMENTARY STEEL AS REQUIRED
- C. EQUIPMENT SHALL BE INSTALLED ON VIBRATION ISOLATORS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE UNLESS OTHERWISE SPECIFIED (BASED ON

ADEQUATELY SUPPORT THE LOAD.

- MASON INDUSTRIES). a.FLOOR MOUNTED EQUIPMENT- TYPE SUPER WSW **b.CEILING MOUNTED EQUIPMENT- TYPE 30N**
- D. TAG ALL EQUIPMENT, COMPONENTS, CONTROL DEVICE YALYES AND PIPING. EQUIPMENT MARKERS SHALL BE ENGRAYED LAMINATED PLASTIC. INCLUDE CONTACT-TYPE PERMANENT ADHESIVE OR SELF-TAPPING, STAINLESS STEEL SCREWS. LABEL UNITS TO REFLECT BASE BUILDING NOMENCLATURE.



Key Plan (not to scale

11. 6/23/2021 BID ADDENDUM 5 10. 6/18/2021 ISSUED FOR BUILDING PERMIT 6/09/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 8. 6/09/2021 BID ADDENDUM 7. 6/01/2021 ISSUED FOR BID 6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 5. 2/01/2021 ISSUED FOR BUILDING PERMIT REVIEW 10/14/2020 ISSUED FOR PLANNING BOARD REVIEW

1. 1/10/2020 ISSUED FOR DD ESTIMATE Date Revision/Submission STRUCTURAL & SITE CIVIL ENGINEER DOMINICK R PILLA ASSOCIATES, P.C.

3. 9/23/2020 RESUBMITTED FOR ZONING REVIEW

NYACK, NY 10960 845-727-7793 MEP ENGINEER ROOFING CONSULTANT JMV CONSULTING WATSKY ASSOCIATES 20 MADISON AVENUE VALHALLA, NY 10595 37 W. 39 STREET, STE 703

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IONA PREPARATORY SCHOOL ADDITION AND ALTERATION TO THE

PAUL VERNI FINE ARTS CENTER

Project Address

IONA PREPARATORY SCHOOL 255 Wilmot Road New Rochelle, NY 10804

MECHANICAL SPECIFICATIONS 1

Drawing No.

20-2723 04/03/2019 M - 101

Job No.

MECHANICAL SPECIFICATIONS

14.EQUIPMENT (CONTINUED)

INNER LAYER.

- E. SIZE: 2-1/2"X4" FOR CONTROL DEVICES AND DAMPERS 1/2" LETTER SIZE OF DATA INCLUDES:

 a. NAME AND PLAN NUMBER
- **b.EQUIPMENT SERVICE**

C.DESIGN CAPACITY

F. VALVE TAGS, 1-1/2" ROUND: STAMPED OR ENGRAVED WITH 1/4" LETTER FOR PIPING SYSTEM ABBREVIATION AND 1/2" NUMBERS WITH NUMBERING SCHEME. 5/32" HOLE FOR 5-HOOK FASTENER. MATERIAL: 2032 IN THICK BRASS OR 3/32" THK

LAMINATED PLASTIC WITH 2 BLACK SURFACES AND WHITE

- G. LETTER SIZE, 1/2", DUCT MARKERS: ENGRAVED, COLOR-CODED LAMINATED PLASTIC. INCLUDE DIRECTION AND QUANTITY OF AIRFLOW AND DUCT SERVICE. INCLUDE PERMANENT ADHESIVE.
- H. MANUFACTURED PIPE MARKERS, PREPRINTED, COLOR-CODED, WITH LETTER INDICATING SERVICE AND SHOWING DIRECTION OF FLOW.

15.CLEANING, BALANCING, AND ADJUSTMENTS

- A. THOROUGHLY CLEAN ALL NEW AND REUSED APPARATUS (COILS, REPLACE FILTERS, ETC.) PRIOR TO PLACING. IN OPERATION. CALIBRATE AND/OR REPLACE FAULTY CONTROLS ON EXISTING EQUIPMENT AS REQUIRED OR NOTED ON THE DRAWINGS. RESTORE FINISHED SURFACE, IF DAMAGED, & DELIVER ENTIRE INSTALLATION IN AN APPROVED CONDITION.
- B. THE CONTRACTOR SHALL TEST ALL MATERIALS AND EQUIPMENT FURNISHED OR INSTALLED UNDER THIS CONTRACT TO SEE THAT THEY OPERATE PROPERLY, QUALITY AND IN A SATISFACTORY MANNER AND ARE FREE FROM DEFECTS OF ANY DESCRIPTION.
- C. THE EQUIPMENT SHALL BE STARTED-UP, TESTED, ADJUSTED AND GENERALLY DE-BUGGED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATIONS.
- D. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEE THAT ALL MOTORS AND BEARINGS ARE PROPERLY LUBRICATED AS SOON AS THEY ARE CONNECTED BY THE ELECTRICAL CONTRACTOR AND BEFORE OPERATION OF THE EQUIPMENT.
- E. ALL DEFECTIVE MATERIALS AND WORKMANSHIP DISCLOSED BY THE TESTS, SHALL BE REMOVED AND REPLACED WITH NEW AND THE TEST REPEATED.
- F. AIR BALANCING WORK SHALL BE PERFORMED BY AN INDEPENDENT AABC CERTIFIED COMPANY, NOT ASSOCIATED WITH THE CONTRACTOR.
- G. UPON COMPLETION OF ALL HYAC WORK, TEST, ADJUST BALANCE NEW AIR DISTRIBUTION SYSTEMS TO PROVIDE AIR QUANTITIES INDICATED WITHIN PLUS OR MINUS 5%.
- H. WATER SYSTEMS SHALL BE BALANCED TO PROVIDE FLOW QUANTITIES INDICATED ON THE DRAWINGS. MARK VALVE TAG OF EACH BALANCING VALVE TO INDICATE POSITION OF VALVE STEM. SUBMIT CERTIFIED REPORT INDICATING METHOD OF BALANCING AND PIPING LAYOUT WITH FLOW VALVES AND LOCATIONS INDICATED.
- I. WATER SYSTEMS SHALL BE TESTED AT 1-1/2 TIMES ITS NORMAL OPERATING PRESSURE FOR A PERIOD OF 24 HOURS PRIOR TO START-UP OF SYSTEM. LEAKS MUST BE REPAIRED AND SYSTEM RE-TESTED PRIOR TO COMMISSIONING.
- J. WATER SYSTEMS SHALL BE CHEMICALLY CLEANED BY AN INDEPENDENT PIPE CLEANING CONTRACTOR FOR A PERIOD OF NO LESS THAN 8-HOUR PERIOD. MECHANICAL CONTRACTOR SHALL INSTALL APPROPRIATE VALVES FOR PROPER CLEANING. COORDINATE WITH BASE BUILDING TO WITNESS THE CLEANING.

16. ACCESS PANELS

A. CONTRACTOR TO PROVIDE AND INSTALL ACCESS PANELS FOR MAINTENANCE ON ALL EQUIPMENT ABOVE HARD CEILING OR BEHIND HARD WALLS. THIS INCLUDES BUT IS NOT LIMITED TO STRAINERS, SHUTOFF VALVES, CONTROL VALVES. COORDINATE SIZE AND LOCATION OF ALL ACCESS PANELS WITH FIELD CONDITIONS, ARCHITECT AND ENGINEER.

IT. YOLUME DAMPERS

- A. DAMPERS SHALL BE CABLE (NOT CORD TYPE) ROTARY,
 TWIST TYPE TO TURN GEAR ON AIR FOIL TYPE DAMPER.
 FRAME AND BLADES SHALL BE CONSTRUCTED OF ALUMINUM
 WITH TOLERANCES TO PREVENT DAMPER HANG-UP.
- B. ROTO TWIST MODEL 100, DISTRIBUTED BY AIR DISTRIBUTION SYSTEMS.

| |18.DIFFUSERS, GRILLES AND REGISTER

- A. SUPPLY AIR REGISTERS SHALL BE TITUS TYPE OMNI, R-OMNI, FLOWBAR OR AS APPROVED.
- B. RETURN AIR GRILLES SHALL BE TITUS 350 RL OR AS APPROVED.
- C. DIFFUSERS AND REGISTERS SHALL BE COMPATIBLE WITH THE CEILING OR WALL CONSTRUCTION TO WHICH THEY ARE INSTALLED.
- D. FINISH SHALL BE WHITE UNLESS NOTED. FINISH TO BE APPROVED BY THE ARCHITECT AS SPECIFIED BY THE ARCHITECT.

19. HEAT PUMP VRF CONDENSING UNIT

A. GENERAL:

- a. THE CONDENSING UNIT SHALL BE FACTORY ASSEMBLED AND PRE-WIRED WITH ALL NECESSARY ELECTRONIC & REFRIGERANT CONTROLS. THE REFRIGERATION CIRCUIT OF THE CONDENSING UNIT SHALL CONSIST OF SCROLL COMPRESSORS, MOTORS, FANS, CONDENSER COIL, ELECTRONIC EXPANSION VALVES, SOLENOID VALVES, 4-WAY VALVE, DISTRIBUTION HEADERS, CAPILLARIES, FILTERS, SHUT OFF VALVES, OIL SEPARATORS, SERVICE PORTS & REFRIGERANT REGULATOR. HIGH/LOW PRESSURE GAS LINE, LIQUID AND SUCTION LINES MUST BE INDIVIDUALLY INSULATED BETWEEN THE CONDENSING AND INDOOR UNITS.
- b. THE SYSTEM WILL AUTOMATICALLY RESTART OPERATION AFTER A POWER FAILURE AND WILL NOT CAUSE ANY SETTINGS TO BE LOST, THUS ELIMINATING THE NEED FOR REPROGRAMMING.
- c. THE UNIT SHALL INCORPORATE AN AUTO-CHARGING FEATURE.
- d.THE FOLLOWING SAFETY DEVICES SHALL BE INCLUDED ON THE CONDENSING UNIT, HIGH PRESSURE SENSOR AND SWITCH, LOW PRESSURE SENSOR, CONTROL CIRCUIT

- FUSES, CRANKCASE HEATERS, FUSIBLE PLUG, OVERLOAD RELAY, INVERTER OVERLOAD PROTECTOR, THERMAL PROTECTORS FOR COMPRESSOR AND FAN MOTORS, OVER CURRENT PROTECTION FOR THE INVERTER AND ANTI-RECYCLING TIMERS.
- e. OIL RECOVERY CYCLE SHALL BE AUTOMATIC OCCURRING 2 HOURS AFTER START OF OPERATION AND THEN EVERY 8 HOURS OF OPERATION. THE CONDENSING UNIT WILL BE FACTORY CHARGED WITH R-4104.
- f. THE SYSTEM MUST BE INSTALLED BY A FACTORY TRAINED CONTRACTOR/DEALER. THE BIDDERS SHALL BE REQUIRED TO SUBMIT TRAINING CERTIFICATION PROOF WITH BID DOCUMENTS.
- g.UNIT TO COME WITH A ONE (1) YEAR WARRANTY ON ALL MATERIAL AND WORKMANSHIP, AND A SIX (6) YEAR EXTENDED WARRANTY ON COMPRESSORS.
- IN THE SYSTEM WILL BE PRODUCED IN AN ISO 9001 AND ISO 14001 FACILITY, STANDARDS SET BY THE INTERNATIONAL STANDARD ORGANIZATION (ISO). THE SYSTEM SHALL BE FACTORY TESTED FOR SAFETY AND FUNCTION
- 1. ADVANCED DIAGNOSTICS SYSTEMS SHALL INCLUDE A SELF DIAGNOSTIC, AUTO-CHECK FUNCTION TO DETECT A MALFUNCTION AND DISPLAY THE TYPE AND LOCATION.

B. UNIT CABINET:

- a. THE CONDENSING UNIT SHALL BE COMPLETELY WEATHERPROOF AND CORROSION RESISTANT. THE UNIT SHALL BE CONSTRUCTED FROM RUST-PROOFED MILD STEEL PANELS COATED WITH A BAKED ENAMEL FINISH.
- C. FAN:
- a. THE CONDENSING UNIT SHALL CONSIST OF ONE OR MORE PROPELLER TYPE, DIRECT-DRIVE 350 OR 750 W FAN MOTORS THAT HAVE MULTIPLE SPEED OPERATION VIA A DC (DIGITALLY COMMUTATING) INVERTER.
- b. THE CONDENSING UNIT FAN MOTOR SHALL HAVE MULTIPLE SPEED OPERATION OF THE DC INVERTER TYPE.
- C. THE FAN MOTOR SHALL HAVE INHERENT PROTECTION AND PERMANENTLY LUBRICATED BEARINGS AND BE MOUNTED.
- d.THE FAN MOTOR SHALL BE PROVIDED WITH A FAN GUARD TO PREVENT CONTACT WITH MOVING PARTS.

D. CONDENSER COIL:

- a. THE CONDENSER COIL SHALL BE MANUFACTURED FROM COPPER TUBES EXPANDED INTO ALUMINUM FINS TO FORM A MECHANICAL BOND.
- b. THE HEAT EXCHANGER COIL SHALL BE OF A WAFFLE LOUVER FIN AND RIFLED BORE TUBE DESIGN TO ENSURE HIGH EFFICIENCY PERFORMANCE.
- C. THE HEAT EXCHANGER ON THE CONDENSING UNITS SHALL BE MANUFACTURED FROM HI-X SEAMLESS COPPER TUBE WITH N-SHAPE INTERNAL GROOVES MECHANICALLY BONDED ON TO ALUMINUM FINS TO AN E-PASS DESIGN.
- d.THE FINS ARE TO BE COVERED WITH AN ANTI-CORROSION ACRYLIC RESIN AND HYDROPHILIC FILM TYPE EI.

E. COMPRESSOR:

- a. THE INVERTER SCROLL COMPRESSORS SHALL BE VARIABLE SPEED (PVM INVERTER) CONTROLLED WHICH IS CAPABLE OF CHANGING THE SPEED TO FOLLOW THE VARIATIONS IN TOTAL COOLING AND HEATING LOAD AS DETERMINED BY THE SUCTION GAS PRESSURE AS MEASURED IN THE CONDENSING UNIT. IN ADDITION, SAMPLINGS OF EVAPORATOR AND CONDENSER TEMPERATURES SHALL BE MADE SO THAT THE HIGH/LOW PRESSURES DETECTED ARE READ EVERY 20 SECONDS AND CALCULATED.
- b. THE INVERTER DRIVEN COMPRESSOR IN EACH CONDENSING UNIT SHALL BE OF HIGHLY EFFICIENT RELUCTANCE DC (DIGITALLY COMMUTATING), HERMETICALLY SEALED SCROLL "G2-TYPE" WITH A MAXIMUM SPEED OF 1,980 RPM.
- C. NEODYMIUM MAGNETS SHALL BE ADOPTED IN THE ROTOR CONSTRUCTION TO YIELD A HIGHER TORQUE AND EFFICIENCY IN THE COMPRESSOR INSTEAD OF THE NORMAL FERRITE MAGNET TYPE. AT COMPLETE STOP OF THE COMPRESSOR, THE NEODYMIUM MAGNETS WILL POSITION THE ROTOR INTO THE OPTIMUM POSITION FOR A LOW TORQUE START.
- d. THE CAPACITY CONTROL RANGE SHALL BE AS LOW AS
- 4% TO 100%.

 e. EACH COMPRESSOR SHALL BE EQUIPPED WITH A CRANKCASE HEATER, HIGH PRESSURE SAFETY SWITCH,
- AND INTERNAL THERMAL OVERLOAD PROTECTOR.

 f. OIL SEPARATORS SHALL BE STANDARD WITH THE EQUIPMENT TOGETHER WITH AN INTELLIGENT OIL MANAGEMENT SYSTEM.
- g. THE COMPRESSOR SHALL BE SPRING MOUNTED.

20. FAN COIL UNITS

- A. PROVIDE AND INSTALL HORIZONTAL OR VERTICAL, COOLING FAN COIL UNITS.
- B. COOLING COIL SHALL BE CONSTRUCTED OF COPPER TUBES AND ALUMINUM PLATE TYPE FINS. COIL SHALL BE SET IN STAINLESS STEEL DRAIN PAN WITH FLOAT SWITCH TO DE-ENERGIZE UNIT UPON A HIGH WATER CONDITION.
- C. CABINET SHALL BE CONSTRUCTED OF GALVANIZED STEEL WITH THERMAL/ACOUSTICAL INSULATION ON REMOVABLE PANELS.
- D. FIELD INSTALL PLEATED FILTER WITH 20% ASHRAE EFFICIENCY RATING.
- E. UNITS SHALL BE PROVIDED IN SIZES AS SCHEDULED.

22. THERMOSTATS AND SENSORS (COOLING/HEATING)

- A. NEW THERMOSTATS SHALL BE PROGRAMMABLE THERMOSTAT CAPABLE OF ALL REQUIRED FUNCTIONS TO MEET THE SEQUENCE OF OPERATION.
- B. NEW SENSORS SHALL BE COMPATIBLE FOR TIE IN TO MANUFACTURER WALL CONTROLLER.

 C. THERMOSTAT SHALL BE LCD, 1-DAY PROGRAMMABLE.
- THERMOSTAT SHALL BE LCD, T-DAY PROGRAMMABLE, PROPORTIONAL INTEGRAL CONTROL WITH 2 OCCUPIED/UNOCCUPIED PERIODS PER DAY.

23. BOILER

- A. PROVIDE AND INSTALL NATURAL GAS BOILER AS SPECIFIED ON PLANS.
- B. THE ENTIRE BOILER SYSTEM AND ITS INSTALLATION SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS, APPLICABLE LOCAL, STATE AND FEDERAL CODES AND

ASSOCIATED NATIONAL BOARD REQUIREMENTS.

- C. BOILERS MUST BE FULLY FACTORY TEST FIRED PRIOR TO SHIPMENT. MANUFACTURER SHALL SUPPLY COPIES OF THE TEST FIRE REPORT, INCLUDING FUEL/AIR SETTINGS AND COMBUSTION TEST RESULTS.
- D. HEAT EXCHANGER, PRESSURE VESSEL AND CONDENSATION COLLECTION BASIN SHALL CARRY A 10 YEAR WARRANTY AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP AND FAILURE DUE TO THERMAL SHOCK.
- E. THE BOILER SHALL BE CONSTRUCTION AND STAMPED IN ACCORDANCE WITH SECTION IV OF THE ASME CODE OF LOW PRESSURE HEATING BOILERS WITH A MAXIMUM WATER WORKING PRESSURE OF 160 PSIG.
- F. BOILER(S) SHALL BE 84+% MINIMUM AHRI CERTIFIED THERMAL EFFICIENT AS REQUIRED BY BTS 2000.
- G. BOILER SHALL BE CAPABLE OF FULL MODULATION FIRING. WITH A TURN DOWN OF UP TO 5 TO 1.
- H. DESCRIPTION: BOILER SHALL BE NATURAL GAS FIRED AND VERTICAL WATER TUBED DESIGN. THE BOILER SHALL BE BUILT ON A STEEL BASE, INCLUDING INSULATED JACKET, FLUE-GAS VENT, COMBUSTION AIR INTAKE CONNECTION, WATER SUPPLY, RETURN, AND CONDENSATE DRAIN CONNECTIONS, AND CONTROLS.
- I. HEAT EXCHANGER: THE HEAT EXCHANGER SHALL BEAR THE ASME "H" STAMP FOR 160 PSI WORKING PRESSURE AND SHALL BE NATIONAL BOARD LISTED. THE HEAT EXCHANGER SHALL BE A "FIN TUBE" DESIGN WITH 1/2" I.D. STRAIGHT COPPER TUBES HAVING EXTRUDED INTEGRAL FINS SPACED SEVEN FINS PER INCH.
- J. BURNER: NATURAL GAS, FORCED DRAFT SINGLE BURNER PREMIX DESIGN. THE BURNER SHALL BE HIGH TEMPERATURE STAINLESS STEEL.
- K. BLOWER: BOILER SHALL BE EQUIPPED WITH A PULSE WIDTH MODULATING BLOWER SYSTEM TO PRECISELY CONTROL THE FUEL/AIR MIXTURE TO PROVIDE MODULATING BOILER FIRING RATES FOR MAXIMUM EFFICIENCY.
- L. GAS TRAIN: THE BOILER SHALL BE SUPPLIED WITH A GAS TRAIN DESIGNED WITH NEGATIVE PRESSURE REGULATION AND SHALL BE CAPABLE OF A MINIMUM 5:1 TURNDOWN.

M. CASING:

- a. THE JACKET SHALL BE 18 GAUGE PRE-PRIMED AND PAINTED STEEL JACKET...
- b. THE INSULATION SHALL BE A MINIMUM & INCH THICK, MINERAL FIBER INSULATION SURROUNDING THE HEAT EXCHANGER.
- O. ELECTRICAL POWER: SINGLE POINT FIELD POWER CONNECTION SHALL HAVE FACTORY INSTALLED AND FACTORY WIRED SWITCHES, MOTOR CONTROLLERS, TRANSFORMERS, AND OTHER ELECTRICAL DEVICES NECESSARY AND SHALL PROVIDE A SINGLE POINT FIELD POWER CONNECTION TO THE BOILER.
- P. TESTS AND INSPECTIONS: PERFORM INSTALLATION AND STARTUP CHECKS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- Q. PERFORMANCE TESTS: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT COMPONENT ASSEMBLIES AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS, AND TO CONDUCT PERFORMANCE TESTING.
- R. CONTROL: BOILER CONTROLS SHALL FEATURE A STANDARD, FACTORY INSTALLED 8" LCD SCREEN DISPLAY WITH THE FOLLOWING STANDARD FEATURES:

 a. BOILER SHALL CALCULATE THE SET POINT USING: A
- FIELD INSTALLED, FACTORY SUPPLIED OUTDOOR SENSOR AND AN ADJUSTABLE RESET CURVE.

 b. BOILER SHALL ENERGIZE ANY PUMP IT CONTROLS FOR AN ADJUSTABLE TIME IF THE ASSOCIATED PUMP HAS
- BEEN OFF FOR A TIME PERIOD OF 24 HOURS.

 C. BOILER SHALL MAKE THE DOMESTIC HOT WATER CALL FOR HEAT A PRIORITY OVER ANY SPACE HEATING CALL AND ADJUST THE BOILER SET POINT TO THE DOMESTIC HOT WATER BOILER SET POINT.
- d.BOILER SHALL HAVE A PC PORT ALLOWING THE CONNECTION OF PC BOILER SOFTWARE.

24. PUMPS

- A. PROVIDE AND INSTALL NEW VERTICAL PUMPS
- B. PUMP CASING SHALL BE CONSTRUCTED OF ASTM A48 CLASS 30 CAST IRON. THE PUMP CASING SHALL BE RATED FOR 250 PSI WORKING PRESSURE.
- C. THE IMPELLER SHALL BE ASTM B584-836/875 BRONZE AND HYDRAULICALLY BALANCED. THE IMPELLER SHALL BE DYNAMICALLY BALANCED TO ANSI GRADE G6.3 AND SHALL BE FITTED TO THE SHAFT WITH A KEY.
- D. ALL PUMPS SHALL BE FITTED WITH A DISCHARGE MULTI-PURPOSE BALANCING VALVE OR OTHER MEANS OF PROVIDING SYSTEM BALANCE, ISOLATION, AND CHECK FEATURE FOR REVERSE FLOW. THE VALVE SHALL BE STRAIGHT OR ANGLE PATTERN
- E. THE PUMP SHALL HAVE A FACTORY INSTALLED VENT/FLUSH LINE TO INSURE REMOVAL OF TRAPPED AIR FROM THE CASING AND MECHANICAL SEAL COOLING.
- F. PROVIDE MANUFACTURER'S STANDARD WARRANTY ON ALL PUMPS.

25. EXPANSION TANK (BLADDER TYPE)

- A. PROVIDE AND INSTALL NEW EXPANSION TANK THAT IS CONSTRUCTION: WELDED STEEL, DESIGNED, TESTED AND STAMPED IN ACCORDANCE WITH ASME (BPY CODE SEC VIII, DIY I) SUPPLIED WITH NATIONAL BOARD FORM U-I, RATED FOR PROPER SYSTEM WORKING PRESSURE, WITH FLEXIBLE SEAMLESS HEAVY DUTY BUTYL RUBBER DIAPHRAGM. DIAPHRAGM SHALL BE ABLE TO ACCEPT THE PARTIAL YOLUME OF THE EXPANSION TANK.
- B. SYSTEM CONNECTION WILL BE VIA A 3/4 INCH NPT CONNECTION ON THE TOP OF THE TANK. A SCHRADER VALVE FITTING SHALL BE INSTALLED AT THE BOTTOM OF THE TANK TO ALLOW EXTERNAL PRESSURIZATION OF THE BLADDER.
- C. PROVIDE TANK AS SCHEDULED ON PLAN

26. AIR SEPARATOR

- A. PROVIDE AND INSTALL NEW AIR REMOVAL DEVICE THAT IS CONSTRUCTED OF STEEL AND SHALL BE DESIGNED, FABRICATED AND STAMPED PER ASME SECTION VIII DIVISION
- B. THE UNIT SHALL BE PAINTED WITH ONE COAT OF RED OXIDE PRIMER.

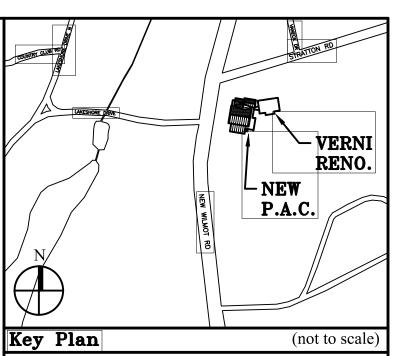
T. FLUE PIPE

- A. PROVIDE AND INSTALL FLUE AS FOLLOWS:
- B. DURAVENT POLYPRO SYSTEM
- C. INSTALL FLUE WITH POSITIVE SLOPE UPWARDS FROM APPLIANCES.
- D. PROVIDE ALL NECESSARY MANUFACTURER FLUE FITTINGS FOR A COMPLETE INSTALLATION.
- E. FLUE INSTALLATION TO MEET ALL REQUIREMENTS OF THE 2020 NEW YORK STATE FUEL AND GAS CODE AND ALL OTHER APPLICABLE CODES.

28. LABELING

- A. LABEL ALL PIPE EVERY 20 FT.
- B. LABEL ALL RATED WALLS THAT PIPE PASSES THROUGH
- C. TAG ALL VALVES AND PROVIDE VALVE TAG

	HYAC SY	MBOL LIST	
<u> </u>	EXISTING DUCTWORK	HWS HWR	NEW HOT WATER SUPPLY PIPE NEW HOW WATER RETURN PIPE
7////// 54444445	EXISTING DUCTWORK OR HYAC EQUIPMENT TO BE REMOVED	C	NEW CONDENSATE PIPE
	NEW DUCTWORK	NO NC	NORMALLY OPEN NORMALLY CLOSED
	NEW ACOUSTICALLY LINED DUCTWORK		DIRECTION OF FLOW PIPE UP PIPE DOWN
	EXISTING HYAC EQUIPMENT		PIPE CONTINUATION
扫圆 卧	NEW HYAC EQUIPMENT	<u>•</u>	CAPPED PIPE
N N	DUCT UP	•	CONNECT TO EXISTING
	DUCT DOWN		BALL VALVE
[2x6]	12" WIDE × 6" HIGH DUCT		BUTTERFLY VALVE
4	AIR FLOW DIRECTION		GATE VALVE
(250)	BALANCE TO 250 CFM		TWO WAY CONTROL YALVE
	CEILING DIFFUSER		THREE WAY CONTROL VALVE
	WALL GRILLE OR LINEAR BAR	P-10-0	CHECK YAYLE
	RETURN GRILLE	P-1/8	STRAINER
FD/AD	FIRE DAMPER / ACCESS DOOR	T T	TEMPERATURE GAUGE
FSD/AD	FIRE SMOKE DAMPER / ACCESS DOOR	P	PRESSURE GAUGE
MD	MOTORIZED DAMPER		BALL SHUTOFF AND GAUGE PORT / DRAIN
	VOLUME DAMPER	TS / FS	SENSOR T= TEMPERATURE F= FLOW
	DUCT DETECTOR		WATER PRESSURE REDUCTION VALVE
CP CP	CONDENSATE PUMP	DP of	DIFFERENTIAL PRESSURE SENSOR
\sqr 0	LEAK DETECTOR		AIR SEPARATOR
	EXISTING AIR HANDLER	Ť	AIR VENT
	NEW WALL MOUNTED VRF AIR HANDLER		RELIEF VALVE
3	DRAWING NOTE *3		RPZ
AD	CEILING ACCESS DOOR	<u>₽</u> -1 5 1€	PLUG VALVE
VFD	VARIABLE FREQUENCY DRIVE		PUMP
(TYP)	TYPICAL		INLINE PUMP
OR O	EXPANSION TANK	Y •	FUNNEL DRAIN FLOOR DRAIN
	CLEARANCE AROUND EQUIPMENT	E E	EXISTING TO REMAIN RELOCATED
(T) AHU-1	THERMOSTAT FOR AHU-1	— §	TEMPERATURE SENSOR
1-½"L 1-½"S	1/2" LIQUID AND 1-1/8" SUCTION REFRIGERATION LINES	1-1/2 "CD	1-1/2" CONDENSATE DRAIN PIPE
0—	ULTRAVIOLET TREATMENT SYSTEM	4	IONIZATION SYSTEM
	•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	······································



11. 6/23/2021 BID ADDENDUM 5

10. 6/18/2021 ISSUED FOR BUILDING PERMIT

9. 6/09/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW

8. 6/09/2021 BID ADDENDUM 1

7. 6/01/2021 ISSUED FOR BID

6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW
5. 2/01/2021 ISSUED FOR BUILDING PERMIT REVIEW
4. 10/14/2020 ISSUED FOR PLANNING BOARD REVIEW
3. 9/23/2020 RESUBMITTED FOR ZONING REVIEW
2. 8/28/2020 ISSUED FOR PRELIMINARY DOB REVIEW
1. 1/10/2020 ISSUED FOR DD ESTIMATE

Revision/Submission

DOMINICK R PILLA
ASSOCIATES, P.C.
143 MAIN STREET
NYACK, NY 10960
845-727-7793

MEP ENGINEER
ROOF

STRUCTURAL & SITE CIVIL ENGINEER

Date

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WATSKY ASSOCIATES
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VALHALIA, NY 10595
914-948-3450

IONA PREPARATORY SCHOOL
ADDITION AND ALTERATION TO THE
PAUL VERNI FINE ARTS CENTER

Project Address

IONA PREPARATORY SCHOOL

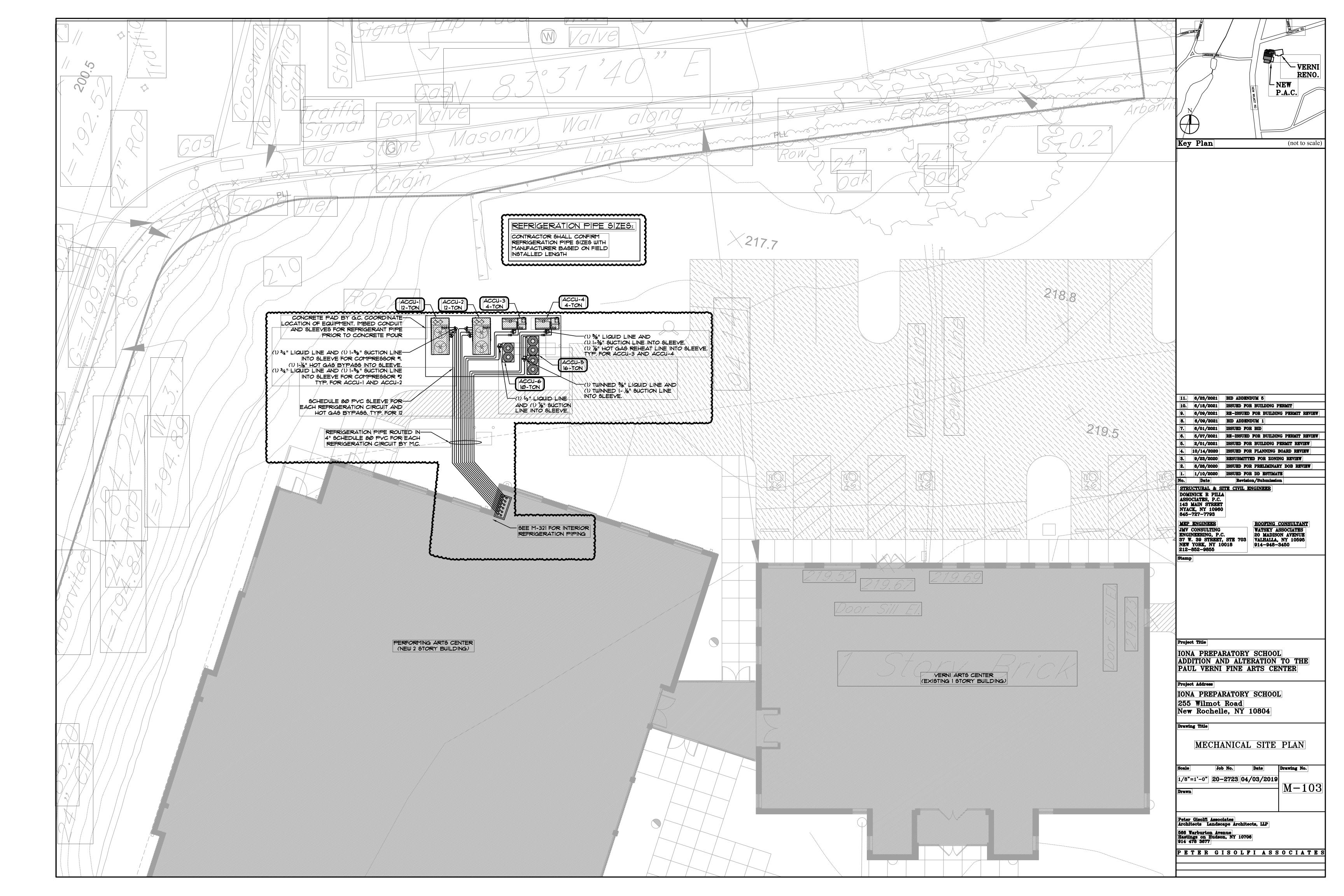
255 Wilmot Road

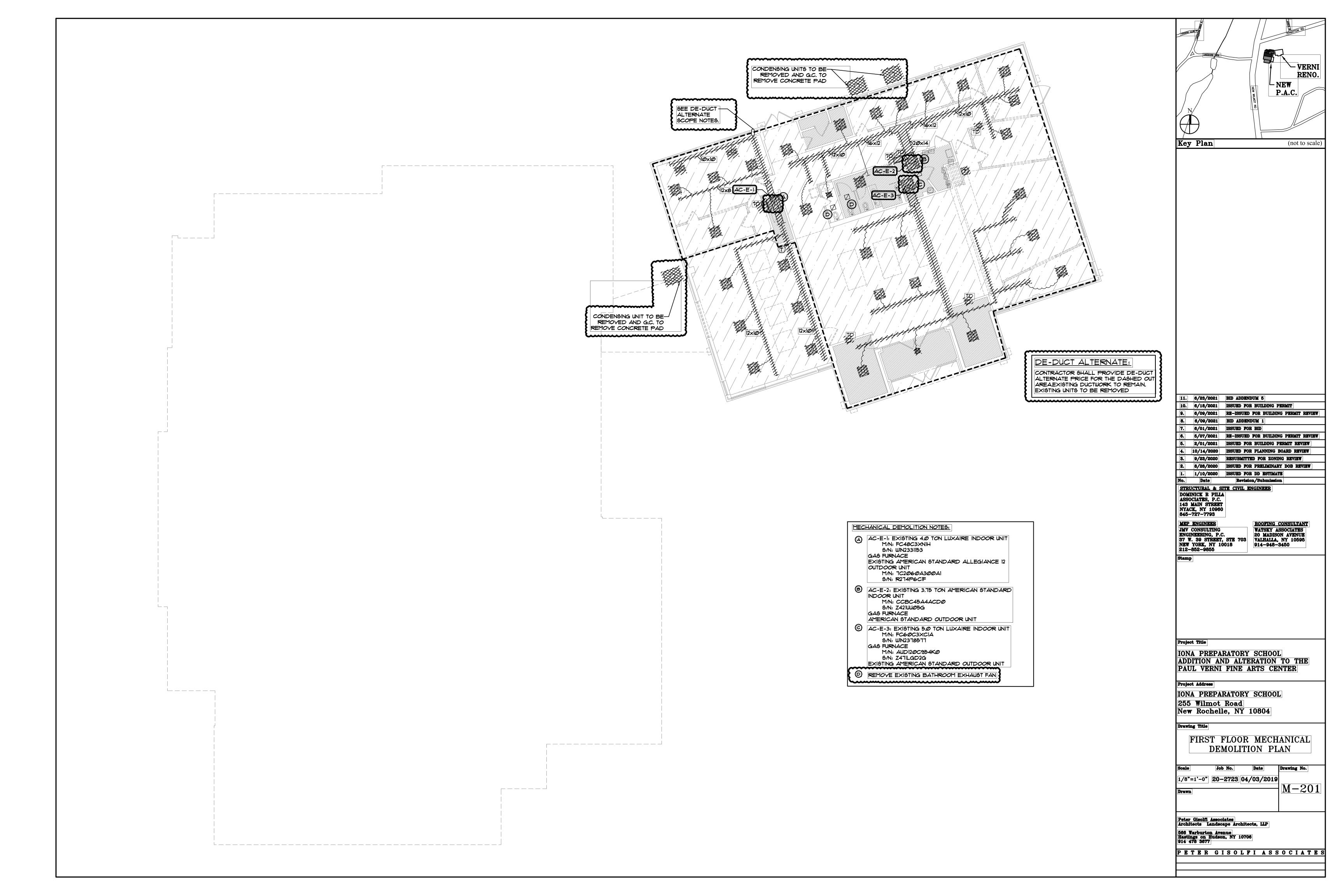
New Rochelle, NY 10804

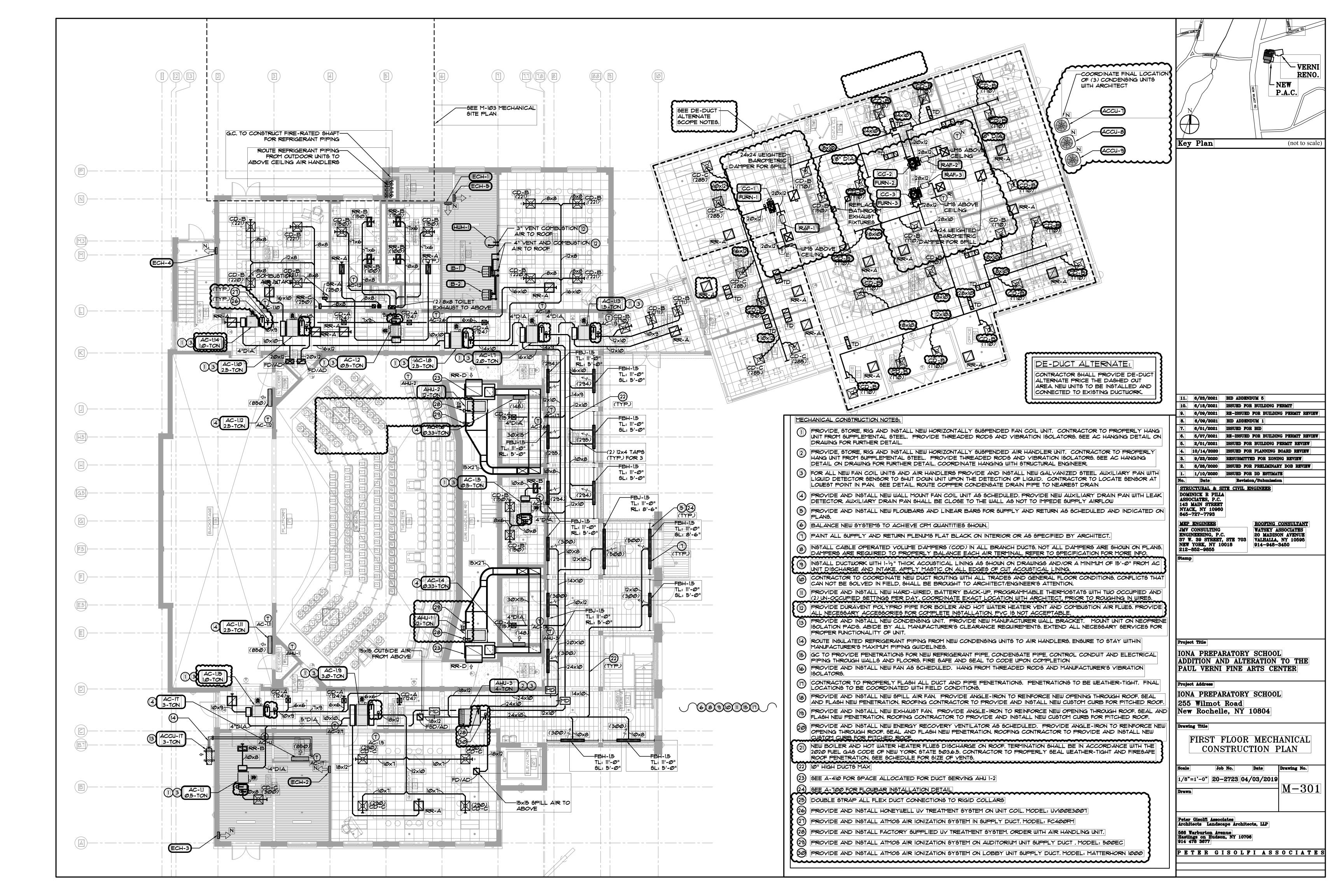
MECHANICAL SPECIFICATIONS II

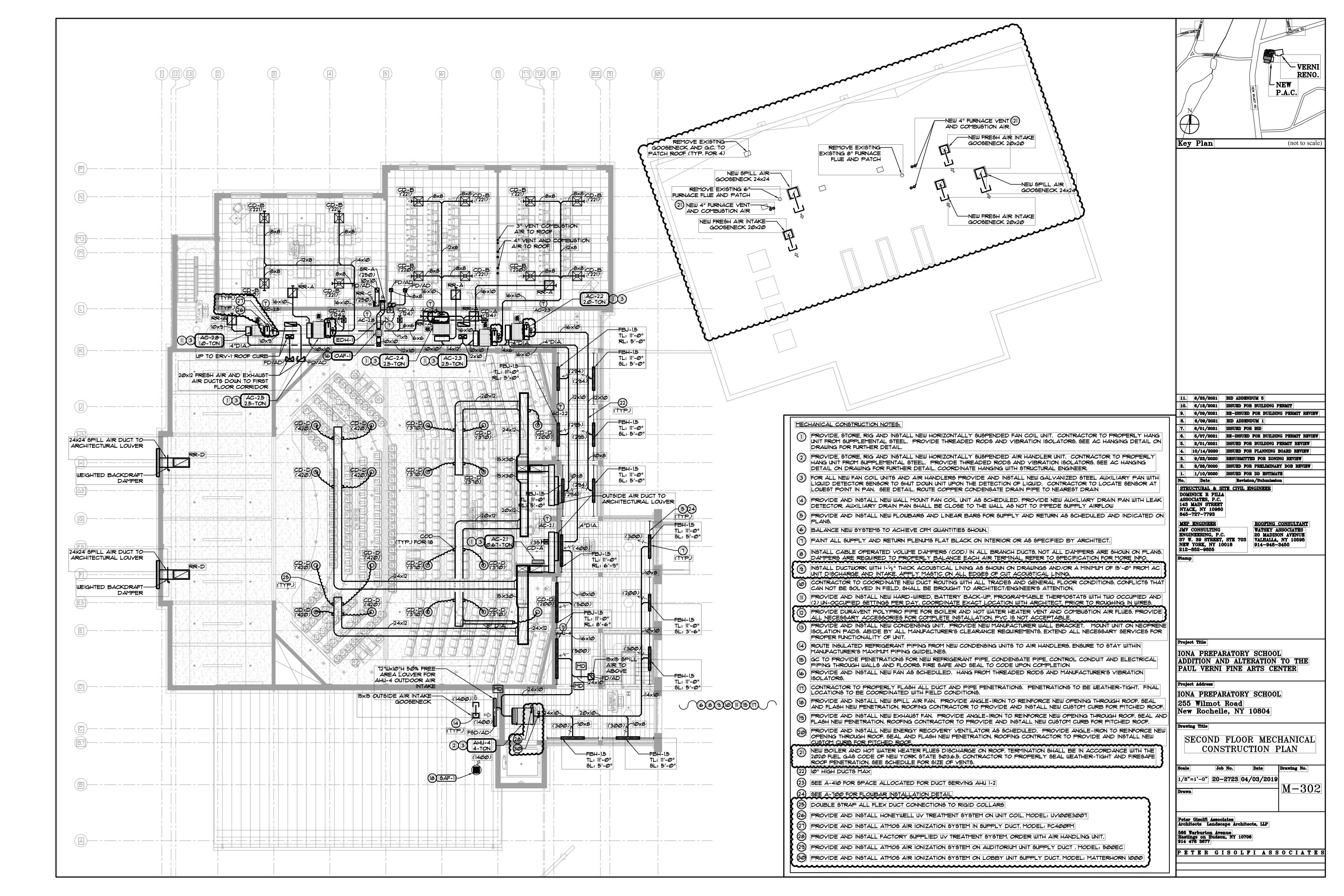
| NTS | 20-2723 | 04/03/2019 | M-102

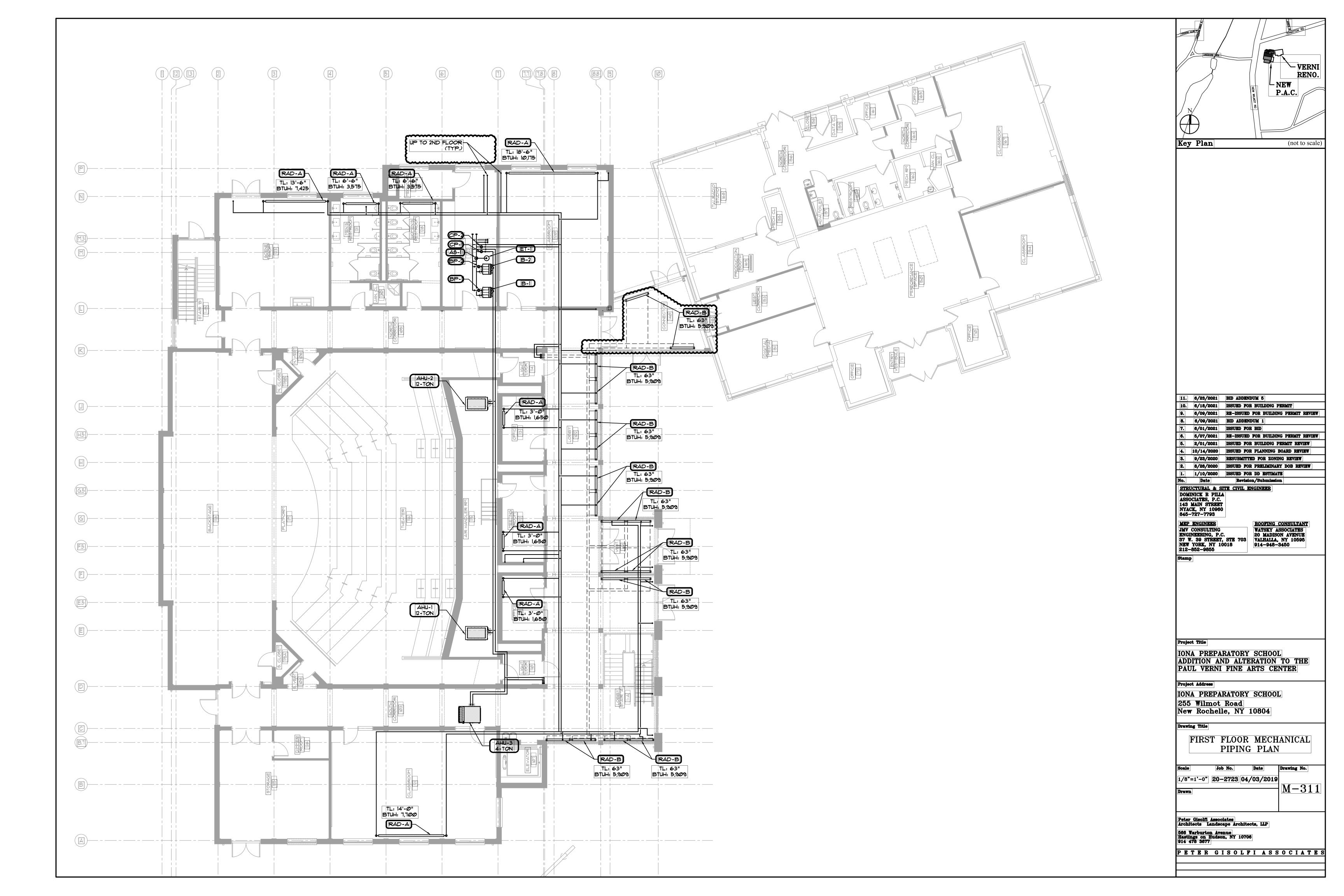
Peter Gisolfi Associates
Architects Landscape Architects, LLI
566 Warburton Avenue

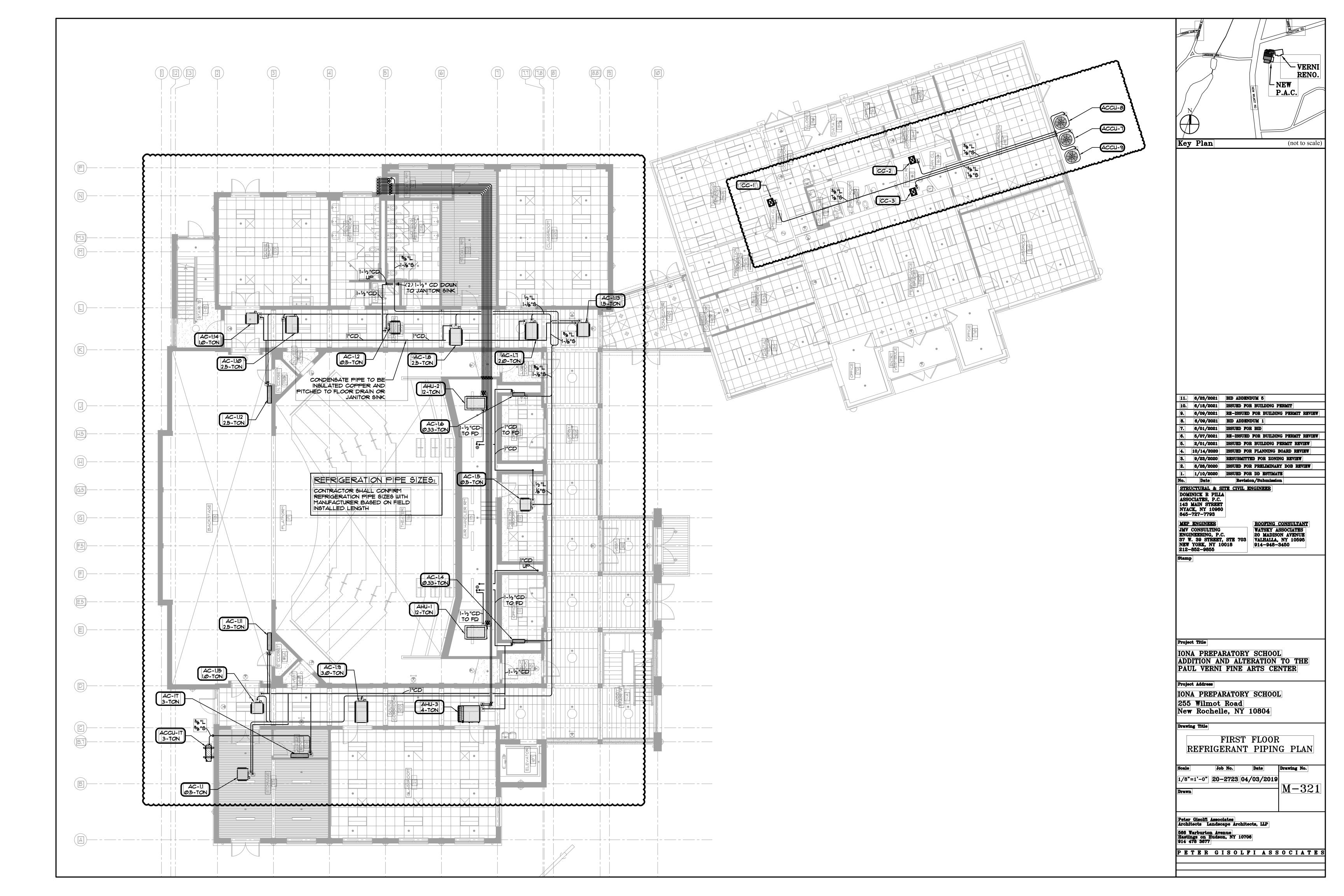


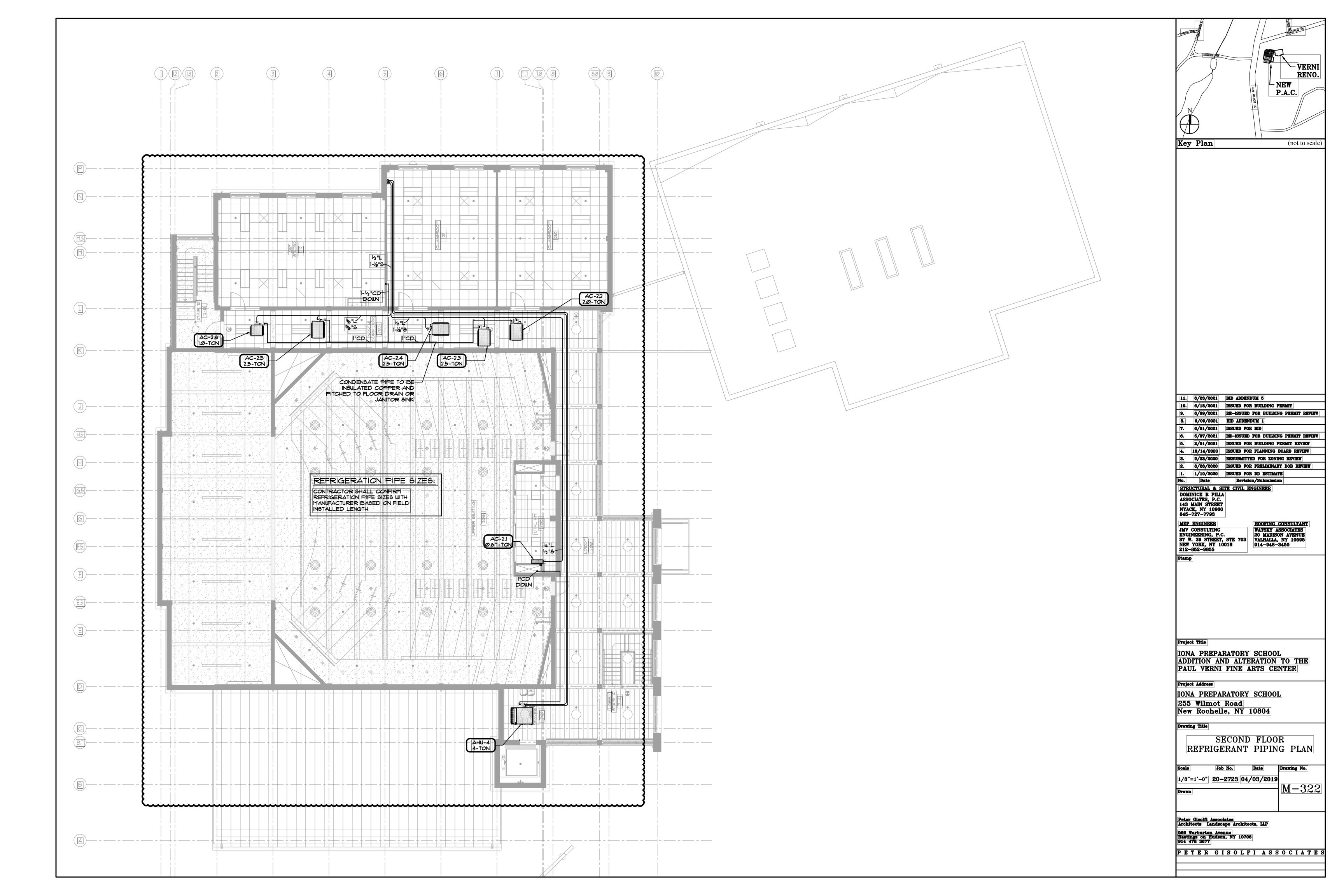


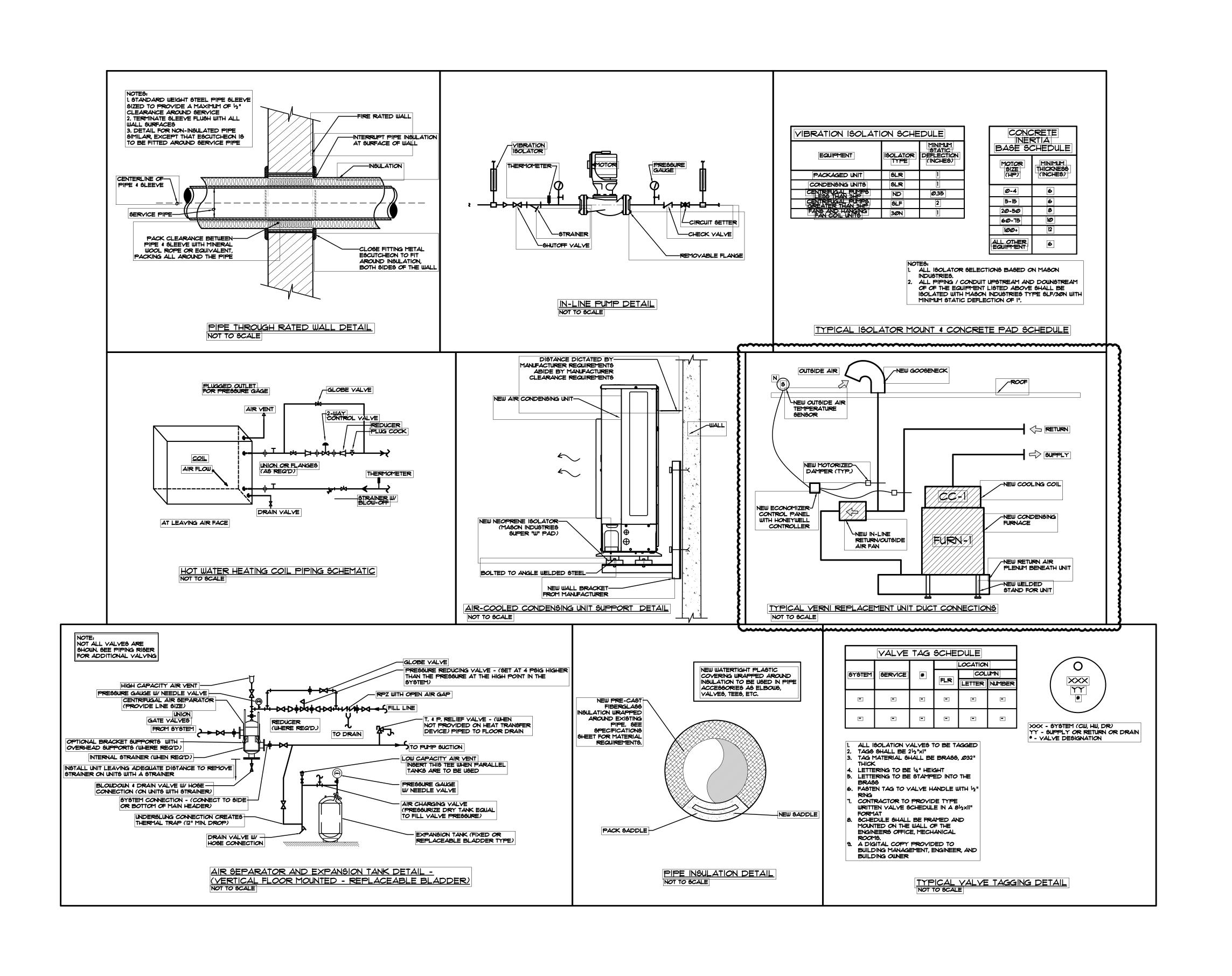


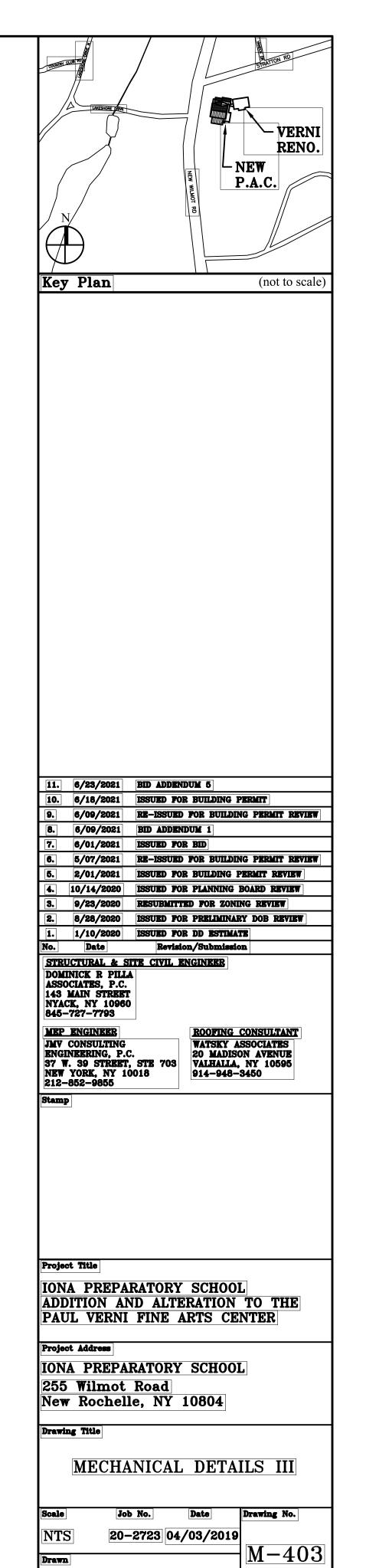


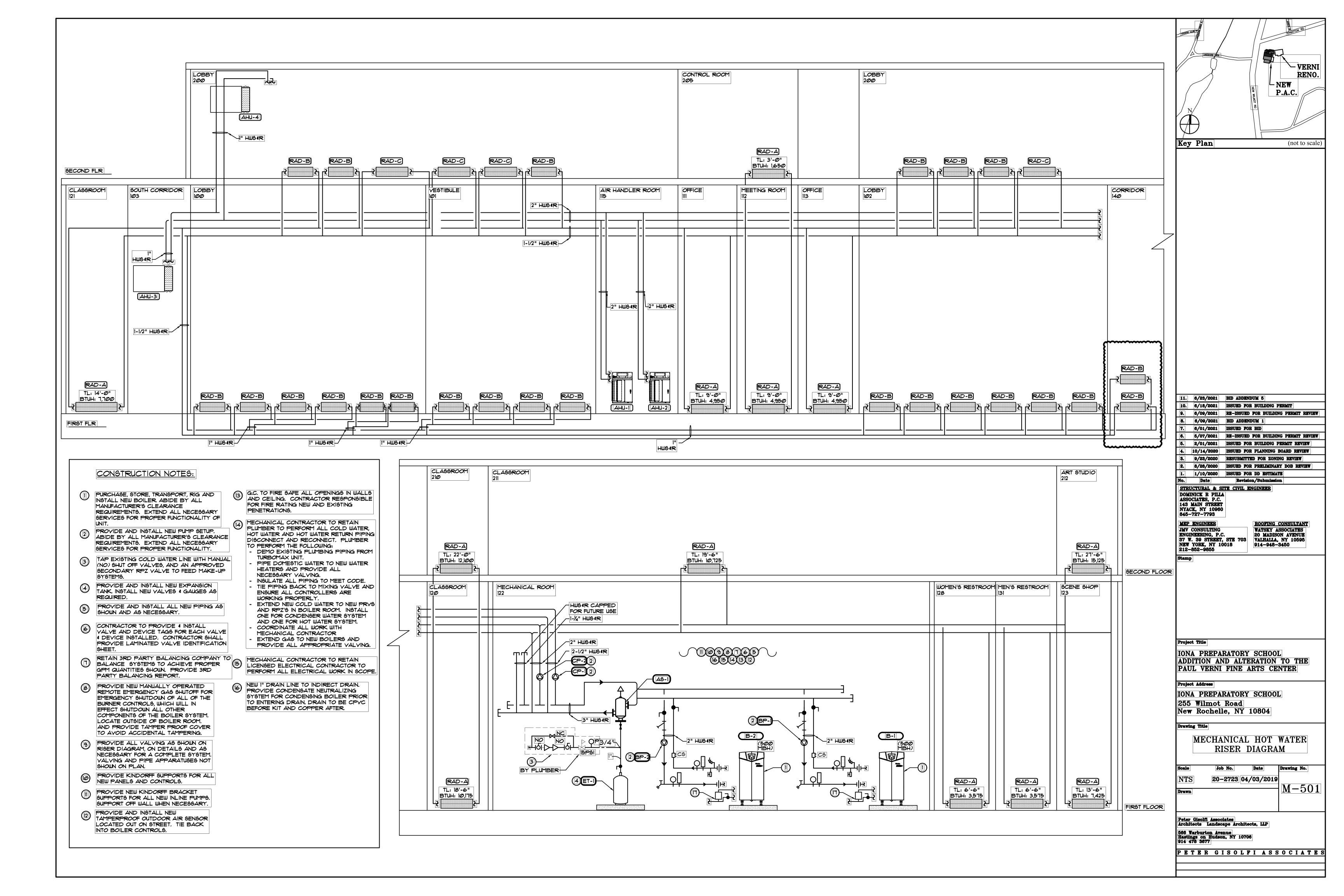


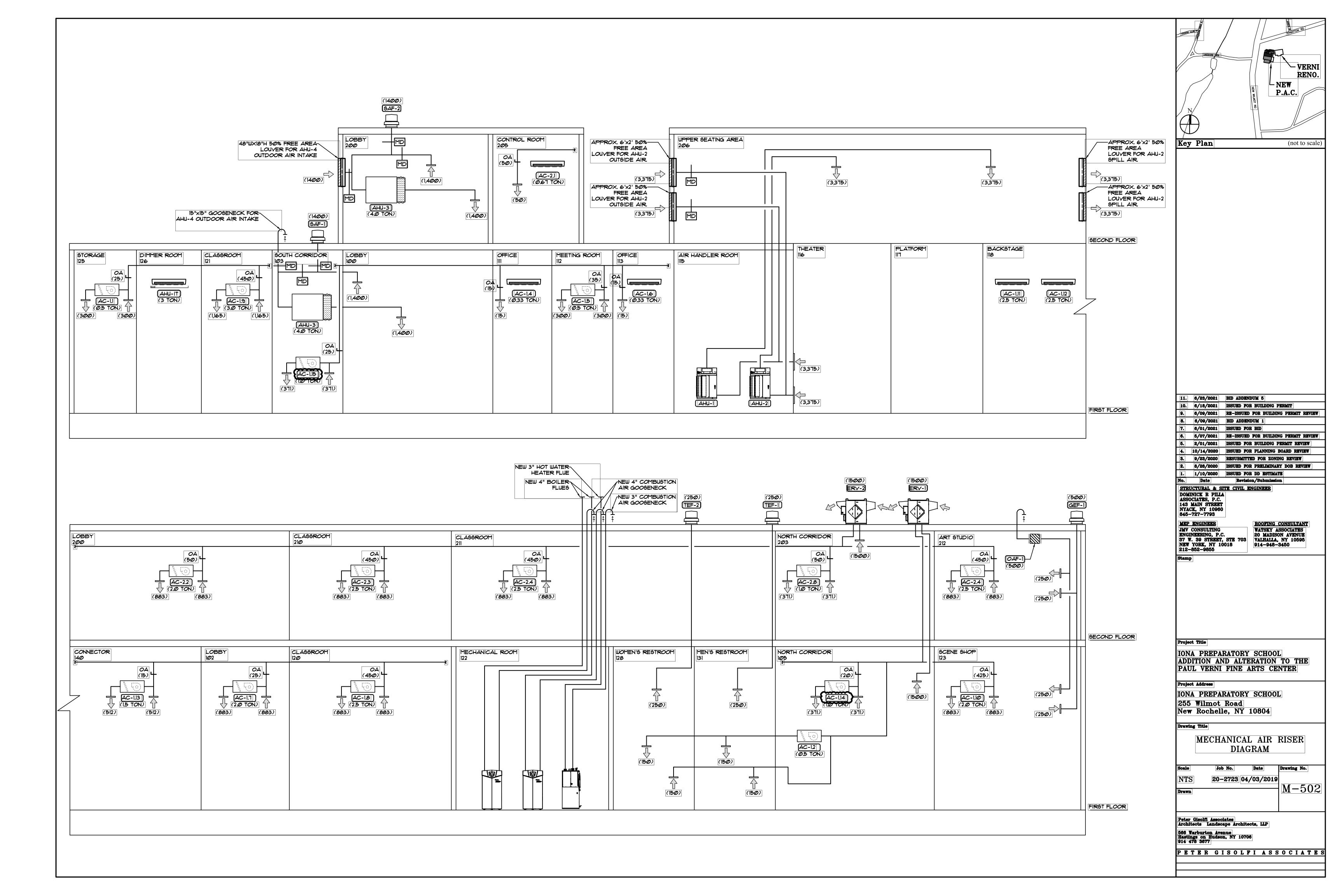












									SPLIT A	AIR CO	NDITI	ONING U	NIT SCH	IEDULE														
						A	AIR HANDLING	UNIT										AIF	R COOLE	D CONE	PENSIN	G UNIT						
AHU NO.	SERVICE	NOMINAL TONNAGE	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	CFM HIGH/LOW	MAX ESP MANU	TYPE	MODEL	UNIT ELEC	i i		AIR HANDLER WEIGHT (LBS)	SOUND PRESSURE (dBA)	PHYSICAL DIMENSIONS HXWXD (in.)	COND MA	ANUF.	MODEL*	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	SOUND PRESSURE (dBA)		MODULE	OF MP VOL		ELEC.	WEIGHT	PHYSICAL DIMENSIONS HXWXD (IN.)	
AC-1.1	STORAGE 134	0.5	6,000	6,700	300	0.6 MITSUBI	DUCTED - CEILING UNIT	PEFY-PO6NMAU-E3	208/1	1.1	15	49	29	9-7/8" × 27-9/16" × 28-7/8"		िर	······	~~~~		~~~~			~~~	••••	~~~	~~~~		7
AC-1.2	WOMEN'S RESTROOM 133 4 MEN'S RESTROOM 13	9 0.5	6,000	6,700	300	0.6 MITSUBI	DUCTED - CEILING UNIT	PEFY-POGNMAU-E3	208/1	1.1	15	49	29	9-7/8" × 27-9/16" × 28-7/8"		}												 {
AC-1.3	DELETED															}											71-10/16"	{
AC-1.4	OFFICE 114	Ø.33	4,000	4,500	[48]	N/A MITSUBI	WALL MOUNTED CASSETTE	PKFY-P04NLMU-E	208/1	Ø.2	15	24	28	11-25/32" × 30-7/16" × 9-11/32"		 						MODULE [20	3/3	33 5	569	× 48-14/16"	{
AC-1.5	FACULTY LOUNGE 115	Ø.5	6,000	6,700	300	Ø6 MITSUBI		PEFY-P06NMAU-E3	208/1	1.1	15	49	29	9-7/8" × 27-9/16" × 28-7/8"		{											29-3/l6"	}
AC-16	OFFICE 116	Ø.33	4,000	4,500	[148]	N/A MITSUBI	WALL MOUNTED CASSETTE	PKFY-P04NLMU-E	208/1	@2	15	24	28	1-25/32" × 3Ø-7/16" × 9-11/32		{												}
AC-1.7	LOBBY 102	2.0	24,000	27,000	883	Ø6 MITSUBI		PEFY-P24NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"		 					EER 11.2							}
AC-18	CLASSROOM 120	2.5	30,000	34,000	883	Ø.6 MITSUBI	DUCTED - CEILING UNIT	PEFY-P3@NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"	ACCU-5	ME	PUHY-PI92TSNU-A	192,000	216,000	62	IEER 23.4							- 1
AC-1.9	CLASSROOM 121	3.0	36,000	40,000	1165	Ø.6 MITSUBI		PEFY-P36NMAU-E3	208/1	3.32	15	86	41	9-7/8" × 55-1/8" × 28-7/8"		}					3.59							{
AC-1.10	SCENE SHOP 122	2.0	24,000	27,000	883	Ø.6 MITSUBI	DUCTED -	PEFY-P24NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"		 												}
AC-1.11	STAGE 118	2.5	30,000	34,000	350	N/A MITSUBI		PKFY-P30NKMU-E	208/1	0.5	15	46	49	[4-3/8" × 46-1/16" × 11-5/8"		{						MODULE		2/2	22		71-10/16" ×	}
AC-1.12	STAGE 118	2.5	30,000	34,000	850	N/A MITSUBI		PKFY-P30NKMU-E	208/1	0.5	15	46	49	[4-3/8" × 46-1/16" × 11-5/8"		{						*2	20	9/ <i>3</i>] [33 5	569	48-14/16" × 29-3/16"	}
AC-1.13	PASSAGEWAY 140	1.5	18,000	20,000	512 424	Ø.4 MITSUBI		PEFY-PISNMAU-E3	208/1	1.56	15	58	32	9-7/8" × 35-7/16" × 28-7/8"		 												}
AC-1.14	FIRST FLOOR NORTH CORRIDOR 105	1.0	12,000	13,500	371 265	0.6 MITSUBI	DUCTED - CEILING UNIT	PEFY-PI2NMAU-E3	208/1	1.2	15	49	34	9-7/8" × 27-9/16" × 28-7/8"		 												{
AC-1.15	FIRST FLOOR SOUTH CORRIDOR 103	1.0	12,000	13,500	371 265	0.6 MITSUBI	DUCTED - CEILING UNIT	PEFY-PI2NMAU-E3	208/1	1.2	15	49	34	9-7/8" × 27-9/16" × 28-7/8"		Ų	••••••				 							43
AC-2.1	CONTROL ROOM 215	0.67	8,000	9,000	237	N/A MITSUBI	WALL MOUNTED CASSETTE	PKFY-POSNLMU-E	208/1	Ø.3	15	25	35	11-25/32" × 3Ø-7/16" × 9-11/32"														
AC-2.2	LOBBY 201	2.0	24,000	27,000	883	Ø6 MITSUBI		PEFY-P24NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"							EER							
AC-2.3	CLASSROOM 220	2.5	30,000	34,000	883	Ø6 MITSUBI		PEFY-P3@NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"			PUHY-P12ØTNU-A	120,000	135,000	(42)	12.3	SINGLE		3/2		6	71-10/16" ×	
AC-2.4	CLASSROOM 221	2.5	30,000	34,000	883	Ø6 MITSUBI	DUCTED - CEILING UNIT	PEFY-P3@NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"	ACCU-6	ME	run I - Fize INU-A	120,000	ששעפכו	62	IEER 23,6 COP	MODULE	20	<i>9/3</i>]	41 6	594	48-14/16" × 29-3/16"	
AC-2.5	ART STUDIO 222	2.5	30,000	34,000	883	Ø6 MITSUBI	DUCTED - CEILING UNIT	PEFY-P3@NMAU-E3	208/1	2.7	15	67	39	9-7/8" × 43-5/16" × 28-7/8"							3.8							
AC-2.8	SECOND FLOOR NORTH CORRIDOR 203	1.0	12,000	13,500	371 265	Ø6 MITSUBI	DUCTED - CEILING UNIT	PEFY-PI2NMAU-E3	208/1	1.2	15	49	34	9-7/8" × 27-9/16" × 28-7/8"														

* SELECTIONS BASED ON MITSUBISHI ELECTRIC. CONTACT MALCOLM SIGELBAUM - 718 269 3650 * PROVIDE FILTER RACK FOR DUCTED UNITS AND (2) SPARE FILTERS * PROVIDE HARD-WIRED THERMOSTAT FOR EACH AIR HANDLING UNIT AND (2) MASTER WIFI-ENABLED THERMOSTAT MODEL: AE-200A

* FOR ACCU-5 TWINNING KIT IS REQUIRED MODEL: CMY-YI00CBK3

														e	PLIT AIR I	HANDL	LER U	NIT SCH	EDULE											
									[N	000F	UNIT									S	······	`		OUTDO	OR UI	NIT				
AHU	LOCATION	NOMINAL TONNAGE	COOLING CAPACITY (BTUH)	CFM	ESP	EAT	LAT		VATER C		FLOW	PD	MANUF.	MODEL	UNIT ELEC	CTRICAL (CHAR		PHYSICAL DIMENSIONS HXWXD (in.)	COND	* OF	MANUF.	MODEL*	COND. L	JNIT ELE	EC.	COND. UNIT WEIGHT	PHYSICAL DIMENSIONS HXWXD (in.)	REF	EFF.
NO.		TONNAGE	(BTUH)	OITT	ESP	DB (F)	DB (°F)	(MBH)	(*F)	(#)	(GPM)	(FT)			VOLTS-PHASE	MCA	MOCP	WEIGHT (LBS)	(in.)	UNIT	COMP.			VOLTS-PHASE	MCA	MFA	(LBS)	HXWXD (In.)		(COOL)
AHU-1	THEATER 110	12	149,080	3375	1.75	45.5	@.re	196.8	160	139.9	20	2.2	AAON	V3-DRB-8-0- 162C-12L	208 - 3 PH	11.0	15	750	13-1/8 × 56-1/8 × 34-1/4	ACCU-	2	AAON	CFA-Ø13-B-A-8- DCØØK	208 - 3 PH	55	70	1154	57×94×46-3/7	R-410A	10.3
AHU-2	THEATER 110	12	149,080	3375	1.75	45.5	@re	196.8	160	139.9	20	2.2	AAON	V3-DRB-8-0- 162C-12L	208 - 3 PH	11.00	15	150	73-1/8 × 56-1/8 × 34-1/4	ACCU-1	2	AAON	CFA-Ø13-B-A-8- DCØØK	208 - 3 PH	55	70	1154	57x94x46-3/7	R-410A	10.3
AHU-3	LOBBY FOYER 103	4	49,470	1400	0.6	42.5	94.8	83.3	160	[137]	7.4	Ø.4	AAON	H3-BRB-8-0- 161C-12N	208 - 3 PH	4.0	15	596	22-1/8 × 57 × 42-3/8	ACCU-3	1	AAON	CFA-004-A-A-8- DC00H	208 - 3 PH	23	35	454	56-1/4×61-1/2×29-1/4	R-410A	12.0
AHU-4	LOBBY FOYER 203	4	49,470	1400	0.6	42.5	94.8	83.3	160	[FEI]	7.4	0.4	AAON	H3-BRB-8-0- 161C-12N	208 - 3 PH	4.0	15	596	22-1/8 × 57 × 42-3/8	ACCU-	1	AAON	CFA-004-A-A-8- DC00H	208 - 3 PH	23	35	454	56-1/4×61-1/2×29-1/4	R-410A	12.00

SELECTIONS BASED ON AAON, CONTACT PAUL JOHNSTON (GIL-BAR) - 212 331 8272
REFER TO MANUFACTURER'S INSTALLATION GUIDELINES FOR MORE INFORMATION
PROVIDE MANUFACTURER SUPPLIED ULTRAVIOLET LIGHT PURIFICATION PACKAGE

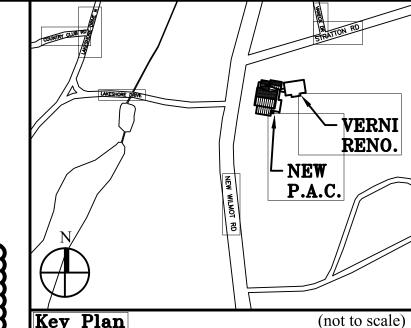
IT ROOM SPLIT AIR CONDITIONING	UNIT SCHEDULE
INDOOR UNIT	OUTDOOR UNIT
AHU LOCATION NOMINAL COOLING CFM MANUF. TYPE MODEL WINT ELECTRICAL CHAR. HANDLER WEIGHT HANDLER WEIGHT (In.)	COND LOCATION MANUF. MODEL* COOLING: CAPACITY (BTUH) COOLING: CAPACITY (BTUH) COOLING: COND. UNIT ELEC. PRESSURE (INIT WEIGHT (EFF. (COOL)) PHYSICAL DIMENSIONS HXWXD (IN.) PHYSICAL DIMENSIONS HXWXD (IN.) PHYSICAL DIMENSIONS HXWXD (IN.)
AC-IT IT ROOM 3 34600 887	8 ACCU-IT ROOF MITSUBISHI MUY-D36NA 34,600 208-230/1 21 25 56 126 33-7/16x33-1/16x13 R-410A 5EER 15.1

SELECTIONS BASED ON "MITSUBISHI ELECTRIC" MANUFACTURER. CONTACT MALCOM SIGELBAUM - 718 269 3650

PROVIDE ALL AIR HANDLERS WITH HARD WIRED THERMOSTATS. ALL THERMOSTATS TO BE ENCLOSED IN TAMPER-PROOF CASES PROVIDED BY G.C.

PROVIDE LOW AMBIENT WIND BAFFLES (2 PER CONDENSING UNIT).

REFER TO MANUFACTURER'S INSTALLATION GUIDELINES FOR MORE INFORMATION



11. 6/23/2021 BID ADDENDUM 5 10. 6/18/2021 ISSUED FOR BUILDING PERMIT 9. 6/09/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 8. 6/09/2021 BID ADDENDUM 1 7. 6/01/2021 ISSUED FOR BID 6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 5. 2/01/2021 ISSUED FOR BUILDING PERMIT REVIEW 4. 10/14/2020 ISSUED FOR PLANNING BOARD REVIEW 3. 9/23/2020 RESUBMITTED FOR ZONING REVIEW 1. 1/10/2020 ISSUED FOR DD ESTIMATE No. Date Revision/Submission STRUCTURAL & SITE CIVIL ENGINEER DOMINICK R PILLA ASSOCIATES, P.C. 143 MAIN STREET NYACK, NY 10960 845-727-7793 MEP ENGINEER

JMV CONSULTING
ENGINEERING, P.C.
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NEW YORK, NY 10018
212-852-9855

ROOFING CONSULTANT
WATSKY ASSOCIATES
20 MADISON AVENUE
VALHALIA, NY 10595
914-948-3450

IONA PREPARATORY SCHOOL ADDITION AND ALTERATION TO THE

MECHANICAL SCHEDULES I

20-2723 04/03/2019

PETER GISOLFI ASSOCIATES

Drawing No.

M - 601

PAUL VERNI FINE ARTS CENTER

IONA PREPARATORY SCHOOL

New Rochelle, NY 10804

Project Address

255 Wilmot Road

					SPLIT	COOLING	COIL SCHED	ULE							
	INDO	OR EVAPORATO	R SECTION				OUTDOOR CON	NDENSE	R SEC	TION		NOMINAL			
CC DESIG	SERVICE	LOCATION	MODEL NUMBER	PHYSICAL DIMENSIONS Lxwxh	ACCU DESIGN.	MODEL NUMBER	ELECTRICAL (VOLT/HZ/PHASE)	MCA	MOP	PHYSICAL DIMENSIONS Lxwxh	WEIGHT (LBS.)	COOLING CAPACITY	MANUFACTURER	EER	SEER
CC-1	EAST VERNI	MECH CL. 155	4PXACU48	21-1/8"x19-3/4"x24-7/8"	ACCU-T	4TTA4Ø48	208/60/3	18	30	[37-1/4"x34-1/4"x29-1/8"]	[89]	4 TONS	TRANE	12.5	15.0
CC-2	NORTH VERNI	MECH RM 162	4PXACU48	21-1/8"x19-3/4"x24-7/8"	ACCU-8	4TTA4Ø48	208/60/3	18	30	[37-1/4"×34-1/4"×29-1/8"]	୧ଷା	4 TONS	TRANE	12.5	15.0
CC-3	SOUTH VERNI	MECH RM 162	4PXCCU60	21"×21-1/2"×3Ø-11/16"	P-UOOA	4TTA3060	208/60/3	21	35	[37-1/4"×34-1/4"×37-1/4"]	226	5 TONS	TRANE	11.5	13.5

					C	ONDENSING	FURNACE SO	CHEDULI							
FURNA DESIG		SERVICE	LOCATION	MANUFACTURER	MODEL NUMBER	STAGE I HEATING INPUT/OUTPUT (MBH)	STAGE 2 HEATING INPUT/OUTPUT (MBH)	AFUE	HEATING TEMP RISE	CFM	MOTOR HP	ELECTRICAL (VOLT/HZ/PHASE)	MOP	WEIGHT (LBS.)	PHYSICAL DIMENSIONS LXWXH
FURN	-1	EAST VERNI	MECH CL. 155	TRANE	58×2B080	52/41.6	80/64	80%	5Ø.15°F	1600	3/4	12 <i>0/60/</i> 1	15 A	129	29"xl8"x34"
FURN	-2	NORTH VERNI	MECH RM 162	TRANE	58×2B080	52/41.6	80/64	80%	5Ø.15°F	1600	3/4	12 <i>0/60/</i> 1	15 A	129	29"xl8"x34"
FURN	-3	SOUTH VERNI	MECH RM 162	TRANE	58×2B080	52/41.6	80/64	80%	50.15°F	2000	3/4	[12 <i>0</i> /6 <i>0</i> /1]	15 A	129	29"xl8"x34"

											EN	ERGY F	RECOVERY	UNIT									
UNIT			FRESH	FRESH	SPACE	SPACE		WINTER OPERATIO			SUMMER OPERA			ELECTRIC	AL CHAF	ર		PHYSICA	L SIZE				
NO.	SERVICE	LOCATION	AIR FLOW (CFM)	AIR FLOW ESP (IN WC)	EXHAUST AIR FLOW (CFM)	EXHAUST FLOW ESP (IN WC)	'I AIR	TOTAL EFFECTIVENESS	OUTSIDE AIR (°F)	طالم ا	TOTAL EFFECTIVENESS	OUTSIDE AIR (°F)	VOLTS-PHASE	1	MCA	MOCP	LENGTH	WIDTH	HEIGHT	MAX WEIGHT (LBS)	MANUFACT.	MODEL*	FITRATION
ERV-1	IST FLR	ROOF	1,500	1.0	1,533	1.0	70	66.0%	13.9	75	50.3%	92.4	208/3/60	2 9 1.5	10.8	15	87.5"	43.4"	43.9"	689	RENEWAIRE	HE-2×JRTY-535UU	FRESH AIR = MERY 8 EXHAUST AIR = MERY 8
ERY-2	2ND FLR	ROOF	1,500	Ø.75	1,524	0.5	70	66.0%	13.9	75	50.3%	92.4	208/3/60	2 @ 1.5	10.8	15	87.5"	43.4"	43.9"	689	RENEWAIRE	HE-2×JRTY-535UU	FRESH AIR = MERY 8 EXHAUST AIR = MERY 8

SELECTION BASED ON 'RENEW AIRE' MANUFACTURER. CONTACT DANIEL BREIT - HIGHMARK - 646-849-6441

STANDARD FEATURES: NON-FUSED DISCONNECT, 24 VAC TRANSFORMER/RELAY PACKAGE
PROVIDE TWO (2) ADDITIONAL MERY 8 FILTERS

PROVIDE BACKDRAFT DAMPER

PROVIDE PAINTABLE 6" LOUVERED WALL VENT
PROVIDE TEMPERATURE SENSOR - DUCT MOUNT (DS-600)

*PROVIDE DIGITAL TIME CLOCK (TCTD)

								CONDENSING	BOILER	SCHEDU	LE				OPE	RATING SUPF	PLY WATER TEMP	ERATURE: 160°F
UNIT	LOCATION	BOILER INPUT	THERMAL	BOILER OUTPUT (BTUH)	MANUFACTURER	MODELNO	OPERATING	DIMENSIONS	VENT	PIP		ION SIZING	GAS CONTESTION	COMBUSTION		HEX WATER	RELIEF VALVE	MAX WORKING!
NO.	LOCATION	(BTUH) MAX/MIN	AFUE.	(BTUH) MAX	I ANUFACTURER	MODEL NO.	WEIGHT (LBS)	$(W \times D \times H)$	DIAMETER	HWS &R	BOILER	CONDENSATE CONNECTION	SIZE	AIR SIZE	MIN/MAX (GPM)	YOLUME (GAL)	RATING	PRESSURE
B-1	MECH RM	500,000/ 50,000	97.7%	489,000	LOCHINYAR	FTX500N	460	26¼"×27½"×53½"	4" DIA	2" DIA	I" DIA	I" DIA	I" DIA	4" DIA	10/105	3.5	50 PSI	160 PSI
B-2	MECH RM	500,000/ 50,000	97.7%	489,000	LOCHINYAR	FTX500N	460	26¼"×27½"×53½"	4" DIA	2" DIA	I" DIA	I" DIA	I" DIA	4" DIA	10/105	3.5	50 PSI	160 PSI

			AIR SEPAR	ATOR SCH	EDULE		
UNIT DES.	SERVICE	CAPACITY	FLANGED TANGENTIAL OPENING (IN.)	MODEL	STRAINER		MANUFACTURER
AS-1	HOT WATER	190	3"	RL-3F	N	ĺ	BELL 4 GOSSETT

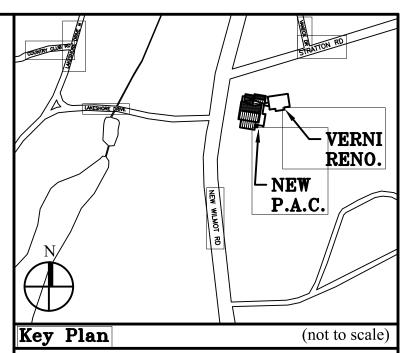
PROVIDE ALL NECESSARY CONTROLS FOR BOILER OPERATION INCLUDING RESET CONTROLS, ALL SAFETIES, PUMP CONTROLS, ETC.

			CIRC	ULATOF	R PUMP SCH	EDULE					
PUMP NO.	LOCATION	DUTY	MODEL	<u>M</u>	TYPE	WATER TEMP.	GPY.	HEAD (FT.H ₂ O)	RPM	MOTOR	ELEC.CHAR. (VOLTS-PHASE)
BP-I	MECH. RM.	BOILER CIRCULATOR	ECOCIRC XL 20-140	B4G	CIRCULATOR	140	100 (MAX)	10	•	1/2	208/1/60
BP-2	MECH. RM.	BOILER CIRCULATOR	ECOCIRC XL 20-140	B4G	CIRCULATOR	140	(MAX)	10	•	1/2	208/1/60
CP-I	MECH. RM.	AIR HANDLER HEATING	ECOCIRC XL 65-130	B4G	CIRCULATOR	140	55	25	•	1	208/1/60
CP-2	MECH. RM.	RADIATOR HEATING LOOP	ECOCIRC XL 65-130	B4G	CIRCULATOR	140	40	35	•	1	208/1/60

			CIRC	ULATOR	R PUMP SCH	EDULE					
PUMP No.	LOCATION	DUTY	MODEL	<u>R</u>	TYPE	WATER TEMP.	GP M	HEAD (FT.H ₂ O)	RPM	MOTOR	ELEC.CHAR. (VOLTS-PHASE)
BP-1	MECH. RM.	BOILER CIRCULATOR	ECOCIRC XL 20-140	B4G	CIRCULATOR	140	100 (MAX)	10	•	1/2	208/1/60
BP-2	MECH. RM.	BOILER CIRCULATOR	ECOCIRC XL 20-140	B4G	CIRCULATOR	140	IOO (MAX)	10		1/2	208/1/60
CP-1	MECH. RM.	AIR HANDLER HEATING	ECOCIRC XL 65-130	B4G	CIRCULATOR	140	55	25	•	1	208/1/60
CP-2	MECH. RM.	RADIATOR HEATING LOOP	ECOCIRC XL 65-130	B4G	CIRCULATOR	140	40	35	•	1	208/1/60
-	-	-			-					.	

	RADIATOR SCHEDULE											
DESIGNATION	BTUH	SECTIONS	WATER TEMP	WIDTH	HEIGHT	LENGTH	MANUFACTURER	TYPE				
RAD-A	550/FT	SEE PLANS	160°F	3 1/8"	10 3/4"	SEE Plans	VULCAN	LC-209				
RAD-B	5909	19	160°F	5 %"	8"	63"	JAGA	MINI FREESTANDING (TYPE II)				
RAD-C	8865	6	160°F	5 %"	8"	94 ½"	JAGA	MINI FREESTANDING (TYPE 11)				

	EXPANSION TANK SCHEDULE										
UNIT DES.	SERVICE	FLUID	TOTAL SYSTEM VOLUME (GAL)	TANK TOTAL VOL. (GAL)	TANK ACCEPTANCE (GAL)	DIMENSIONS HEIGHT DIA (IN)	LOGGED WEIGHT	MODEL	MANUFACTURER	REMARKS	
ET-1	HOT WATER HEATING SYSTEM	WATER	70	e.	2.4	26-1/2" [12"	136	D-20V	BELL & GOSSETT	DIAPHRAGM-TYPE TYPICAL FOR I	



11. 6/23/2021 BID ADDENDUM 5 10. 6/18/2021 ISSUED FOR BUILDING PERMIT 9. 6/09/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 8. 6/09/2021 BID ADDENDUM 1 7. 6/01/2021 ISSUED FOR BID 6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 5. 2/01/2021 ISSUED FOR BUILDING PERMIT REVIEW 4. 10/14/2020 ISSUED FOR PLANNING BOARD REVIEW 3. 9/23/2020 RESUBMITTED FOR ZONING REVIEW 2. 8/28/2020 ISSUED FOR PRELIMINARY DOB REVIEW

1. 1/10/2020 ISSUED FOR DD ESTIMATE No. Date Revision/Submission STRUCTURAL & SITE CIVIL ENGINEER

DOMINICK R PILLA
ASSOCIATES, P.C.
143 MAIN STREET
NYACK, NY 10960
845-727-7793 MEP ENGINEER

JMV CONSULTING
ENGINEERING, P.C.
37 W. 39 STREET, STE 703
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212-852-9855

ROOFING CONSULTANT
WATSKY ASSOCIATES
20 MADISON AVENUE
VALHALIA, NY 10595
914-948-3450

IONA PREPARATORY SCHOOL
ADDITION AND ALTERATION TO THE
PAUL VERNI FINE ARTS CENTER

Project Address

IONA PREPARATORY SCHOOL 255 Wilmot Road New Rochelle, NY 10804

MECHANICAL SCHEDULES II

Drawing No. Job No. Date 20-2723 04/03/2019 M - 602

	FAN SCHEDULE												
FAN DESIGN.	AREA SERVED	CFM	STATIC PRESSURE (INCHES)	ELEC.CHAR (V-PH-Hz.)	MOTOR (HP)	FAN TYPE	RPM	MODEL	MANUFACTURER	DIMENSIONS WXDXH OR DIA (IN)	REMARKS		
TEF-1	WOMEN'S RESTROOM 133	25Ø	Ø5"	115-1-60	1/20	ROOF MOUNTED	1550	G-080-DG	GREENHECK	19.4×19.4×12.1	INTEGRATE INTO LIGHTING CONTROL FOR ROOM AND OPERATE ON 15 MIN TIME DELAY AFTER LIGHTS TURN OFF. PROVIDE VARIGREEN DIAL CONTROL.		
TEF-2	MEN'S RESTROOM 139	250	Ø5"	115-1-60	1/20	ROOF MOUNTED	1550	G-080-DG	GREENHECK	19.4×19.4×12.1	INTEGRATE INTO LIGHTING CONTROL FOR ROOM AND OPERATE ON 15 MIN TIME DELAY AFTER LIGHTS TURN OFF. PROVIDE VARIGREEN DIAL CONTROL.		
GEF-I	SCENE SHOP 122/ ART STUDIO 222	500	Ø.4 "	115-1-60	1/6	ROOF MOUNTED	1550	G-090-VG	GREENHECK	21.75×21.75×14.6	PROVIDE LOCAL SWITCH IN SCENE SHOP AND ART STUDIO. PROVIDE VARIGREEN DIAL CONTROL.		
OAF-1	SCENE SHOP 122/ ART STUDIO 222	500	Ø.4 "	115-1-60	1/6	IN-LINE	1550	5Q-35-VG	GREENHECK	15×16×15	INTERLOCK OAF-1 WITH GEF-1 SERVING SCENE SHOP AND ART STUDIO. PROVIDE VARIGREEN DIAL CONTROL.		
SAF-1	LOBBY FOYER	1400	Ø.5"	115-1-60	1/3	ROOF MOUNTED	1480	CUE-121	GREENHECK	25×28×25			
SAF-2	LOBBY FOYER	1400	Ø5"	115-1-60	1/3	ROOF MOUNTED	1480	CUE-121	GREENHECK	25×28×25			
RAF-1	FURN-1	1600	Ø.25"	115-1-60	=	IN-LINE	1325	CSP-AI750	GREENHECK	35×15×15	INTERLOCK RAF WITH UNIT SUPPLY FAN. PROVIDE DIAL SPEED CONTROL.		
RAF-2	FURN-2	1600	<i>0.</i> 25"	115-1-60	-	IN-LINE	1325	CSP-A1750	GREENHECK	35×15×15	INTERLOCK RAF WITH UNIT SUPPLY FAN. PROVIDE DIAL SPEED CONTROL.		
RAF-3	FURN-3	2000	Ø.25"	115-1-60	•	IN-LINE	79@	CSP-A2150	GREENHECK	35×15×15	INTERLOCK RAF WITH UNIT SUPPLY FAN. PROVIDE DIAL SPEED CONTROL.		

	CEILING DIFFUSER SCHEDULE											
DESIGNATION	NOMINAL SIZE	MODEL	NECK SIZE	CFM RANGE	MAX.	MAX.	REMARKS					
CD-A	12×12	OMNI	8"	Ø-244	16	רו	SQUARE CEILING DIFFUSER					
CD-B	24×24	OMNI	8"	Ø-244	10	12	SQUARE CEILING DIFFUSER					
CD-C	24×24	OMNI	10"	245-400	13	דו	SQUARE CEILING DIFFUSER					
CD-D	22.5"D	R-OMNI	10"	0-400	13	20	CIRCULAR CEILING DIFFUSE					

COMMINI CLUM TO	A STRATTON RD
LAKESHORE DATE	VERNI
	RENO. NEW P.A.C.
N A	9 8

(not to scale)

Key Plan

	FLOW BAR DIFFUSER SCHEDULE												*RETURN AIR BASED ON 500 FPT
DESIGNATION	TYPE	NOMINAL FLOWBAR OPENING (IN)	* OF SLOTS	CFM/FT	TOTAL LENGTH (FT)	ACTIVE LENGTH (FT)	TOTAL SUPPLY (CFM)	NC	MAX. THROW	MOUNTING	BORDER TYPE	MODEL	REMARKS
FBJ-1	SUPPLY / RETURN	[1"]	1	<u>6:</u> 70 R: 42	SEE	SEE	VARIES	20	20	WALL/CEILING	22	FL-10 JT	PROVIDE I" LINED PLENUM BOX
FBJ-1.5	SUPPLY / RETURN	1.5"	1	S: 120 R: 63	SEE PLAN	SEE PLAN	VARIES	22	26	WALL/CEILING	22	FL-15 JT	PROVIDE I" LINED PLENUM BOX
FBJ-2	SUPPLY / RETURN	2"	1	9: 195 R: 84	SEE	SEE	VARIES	29	34	WALL	22	FL-2Ø	PROVIDE 1" LINED PLENUM BOX
FBH-1	SUPPLY PETURN	1"	1	6: 55 R: N/A	SEE PLAN	SEE PLAN	VARIES	26	21	CEILING	22	FL-10 HT	PROVIDE I" LINED PLENUM BOX
FBH-1.5	SUPPLY / RETURN	1.5"	1	S: 60 R: N/A	SEE PLAN	SEE PLAN	VARIES	31	25	CEILING	22	FL-15 HT	PROVIDE I" LINED PLENUM BOX
FBH-2	SUPPLY / RETURN	2"	1	6: 75 R: N/A	SEE	SEE PLAN	VARIES	33	27	CEILING	22	FL-2Ø HT	PROVIDE I" LINED PLENUM BOX

SINGLE DEFLECTION RETURN/EXHAUST REGISTER SCHEDULE									
DESIGNATION	CFM	SIZE	NC	MODEL	REMARKS				
RR-A	Ø-225Ø	24×24	25	350RL	•				
RR-B	Ø-81Ø	24×12	13	350RL	•				
RR-C	Ø-28 5	12×8	10	350RL	•				
RR-D	Ø-3375	42×24	20	350RL	-				

(5)	SINGLE DEFLECTION SUPPLY REGISTERS									
DESIGNATION	CFM	SIZE	NO	THROW	MODEL					
SR-A Ø-285 12x8 15 24 3ØIRL										
BELECTIONS ARE	BAGED ON "T	THE MANUE A								

SELECTIONS ARE BASED ON "TITUS" MANUFACTURER.

REGISTERS ARE: DOUBLE DEFLECTION WITH 3/4" BLADE SPACING,

STEEL MATERIAL, WELDED BORDER

FINAL COLOR SHALL BE APPROVED BY ARCHITECT.

SELECTIONS BASED ON "TITUS" MANUFACTURER

-PROVIDE SOUND ATTENUATION FOR ALL SUPPLY AND RETURN PLENUM BOXES

-DUCTWORK FABRICATOR TO VERIFY PLENUM SIZES WITH ALL CONSTRUCTION DETAILS. COORDINATE WITH G.C. FOR CUSTOM CUTS TO ACCOMMODATE FRAMING.
-PROVIDE BLANK OFFS FOR UNUSED SECTION OF FLOWBAR (ACCESSORY MODEL* FBBØ BLANK-OFF)

-PROVIDE INSULTED RETURN HOOD / LIGHT SHIELD FOR PLENUM RETURN SECTIONS OF FLOWBAR (ACCESSORY MODEL * FBRI INSULATED RETURN HOOD / LIGHT SHIELD)

-FOR PORTIONS OF HIGH-THROW FLOWBAR THAT ARE UTILIZED FOR RETURN CONTRACTOR RESPONSIBLE FOR FIELD CUTTING OUT BAFFLE AND INSTALL INSULATED RETURN HOOD/PLENUM.

	ELECTRIC CABINET HEATER SCHEDULE											
[DESIGNATION]	LOCATION	HEATER	KW	ELEC.CHAR (YOLTS-PH.)	SERIES	MODEL	MANUFACTURER					
ECH-1	MECHANICAL ROOM	FAN FORCED WALL HEATER	3	208-1	AWFA	AWFA3008	STELPRO					
ECH-2	STORAGE	FAN FORCED WALL HEATER	B	208-1	AWFA	AWFA3008	STELPRO					
ECH-3	STORAGE	FAN FORCED WALL HEATER	a	208-1	AWFA	AWFA3008	STELPRO					
ECH-4	STAIR I-B	FAN FORCED WALL HEATER	B	208-1	AWFA	AWFA3008	STELPRO					
ECH-5	MECHANICAL ROOM	FAN FORCED WALL HEATER	3	208-1	AWFA	AWFA3008	STELPRO					

*PROVIDE ADAPTOR KIT FOR SIDES OF HEATER WHEN NOT RECESSED IN WALL.
WHEN UNIT CAN BE RECESSED THEY SHOULD BE. COORDINATE EACH LOCATION WITH ARCHITECT.
*PROVIDE WALL MOUNTED DIGITAL THERMOSTAT

	ELECTRIC DUCT HEATER SCHEDULE BASED ON Ø DEG EAT										
	LOCATION	CFM	DUCT	AIR VELOCITY			DUCT HEAT	TER CHARAC	TERISTICS		
DESIGNATION	LOCATION	CFM	SIZE	(FPM)	HEATER	KW	NO. OF HEATING STAGES	ELEC.CHAR. (VOLTS-PH.)	SIZE	MODEL	REMARKS
EDH-1	NORTH CORRIDOR 203	500	10×10	775	OPEN	11	MODULATING	208-3PH	10×10	QUA	PROPORTIONAL MODULATING CONTROL

BASED ON 'INDEECO' MANUFACTURER

- "K" CONTROLS OPTION WHICH INCLUDES AUTOMATIC RESET THERMAL CUTOUTS,

SAFETY MAGNETIC CONTACTORS, FUSES, TRANSFORMER TO SUPPLY INTERNAL CONTROL CIRCUIT
AND SAFETY DISCONNECT SWITCH.

REGISTERS HAVE 35° DEFLECTION WITH 3/4" BLADE SPACING. FINAL COLOR SHALL BE APPROVED BY ARCHITECT.

- INCLUDE AIRFLOW INTERLOCK & DUCT MOUNTED THERMOSTAT - INCLUDE OVERTEMPERATURE PROTECTION.

11.	6/23/2021	BID ADDENDUM 5
10.	6/18/2021	ISSUED FOR BUILDING PERMIT
9.	6/09/2021	RE-ISSUED FOR BUILDING PERMIT REVI
8.	6/09/2021	BID ADDENDUM 1
7.	6/01/2021	ISSUED FOR BID
6.	5/07/2021	RE-ISSUED FOR BUILDING PERMIT REVI
5.	2/01/2021	ISSUED FOR BUILDING PERMIT REVIEW
4.	10/14/2020	ISSUED FOR PLANNING BOARD REVIEW
3.	9/23/2020	RESUBMITTED FOR ZONING REVIEW
2.	8/28/2020	ISSUED FOR PRELIMINARY DOB REVIEW
1.	1/10/2020	ISSUED FOR DD ESTIMATE
No.	1/10/2020 Date	Revision/Submission
No.	Date UCTURAL & S	Revision/Submission
No. STR DOM	Date UCTURAL & S	Revision/Submission SITE CIVIL ENGINEER
No. STR DOM ASS 143	Date UCTURAL & S INICK R PILL OCIATES, P.C. MAIN STREET	Revision/Submission SITE CIVIL ENGINEER A
No. STR DOM ASS 143 NYA	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096	Revision/Submission SITE CIVIL ENGINEER A
No. STR DOM ASS 143 NYA 845	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793	Revision/Submission SITE CIVIL ENGINEER A T O
No. STR DOM ASS 143 NYA 845	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793 PENGINEER	Revision/Submission SITE CIVIL ENGINEER A T O ROOFING CONSULTANT
No. STR DOM ASS 143 NYA 845	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793 ENGINEER CONSULTING	Revision/Submission SITE CIVIL ENGINEER A T O ROOFING CONSULTANT WATSKY ASSOCIATES
No. STR DOM ASS 143 NYA 845 MEP JMV ENG	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793 ENGINEER CONSULTING INEERING, P.W. 39 STREET	Revision/Submission SITE CIVIL ENGINEER A T O ROOFING CONSULTANT WATSKY ASSOCIATES 20 MADISON AVENUE VALHALLA, NY 10595
No. STR DOM ASS 143 NYA 845 MER JMV ENG 37 NEW	Date UCTURAL & S IINICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793 ENGINEER CONSULTING INEERING, P.	Revision/Submission SITE CIVIL ENGINEER A T O ROOFING CONSULTANT WATSKY ASSOCIATES 20 MADISON AVENUE VALHALLA, NY 10595
No. STR DOM ASS 143 NYA 845 MEP JMV ENG 37 NEW 212	Date UCTURAL & S INICK R PILL OCIATES, P.C. MAIN STREE CK, NY 1096 -727-7793 ENGINEER CONSULTING INEERING, P. W. 39 STREET YORK, NY 1 -852-9855	Revision/Submission SITE CIVIL ENGINEER A T O ROOFING CONSULTANT WATSKY ASSOCIATES 20 MADISON AVENUE VALHALLA, NY 10595
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Project Title

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Project Address

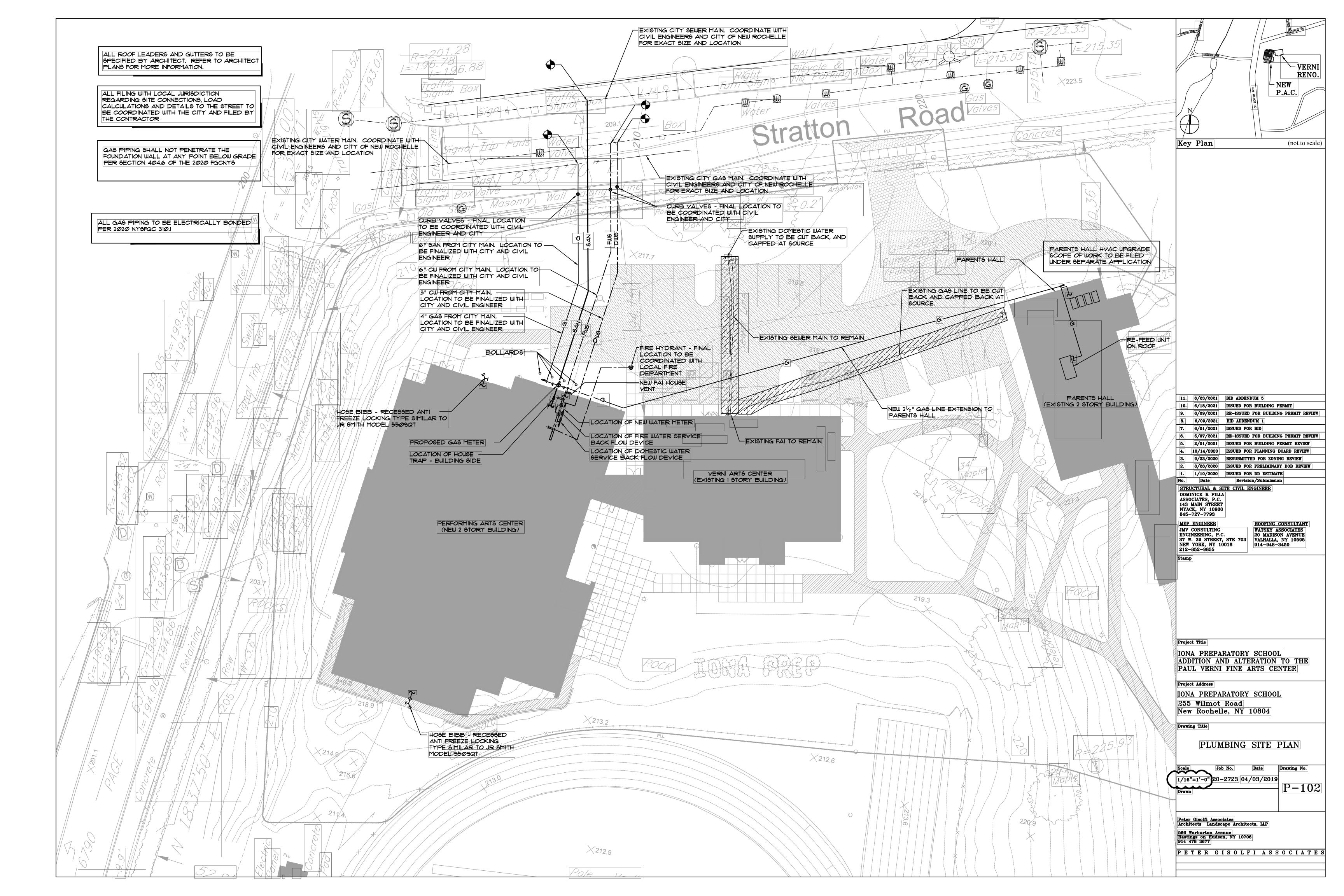
IONA PREPARATORY SCHOOL
255 Wilmot Road
New Rochelle, NY 10804

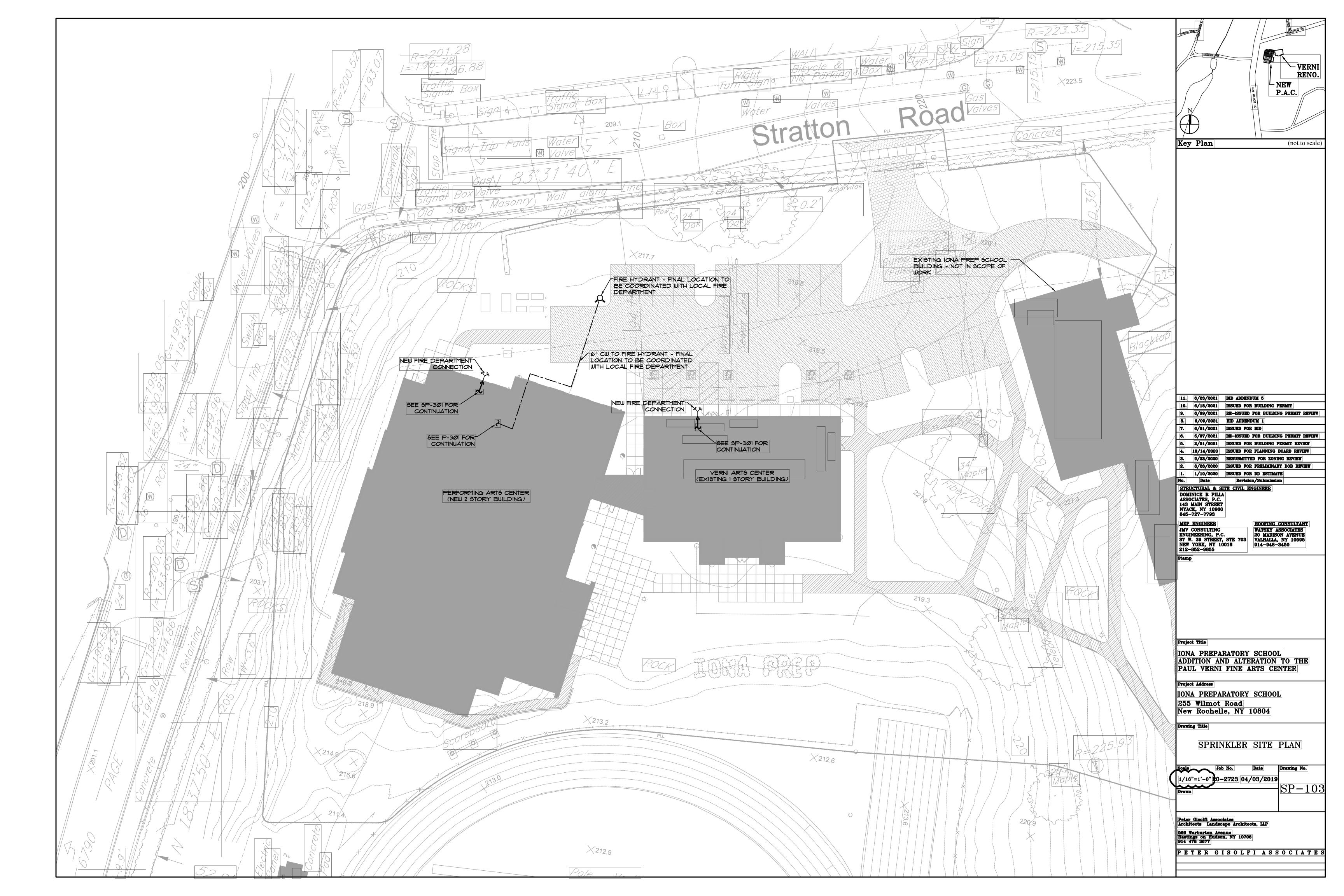
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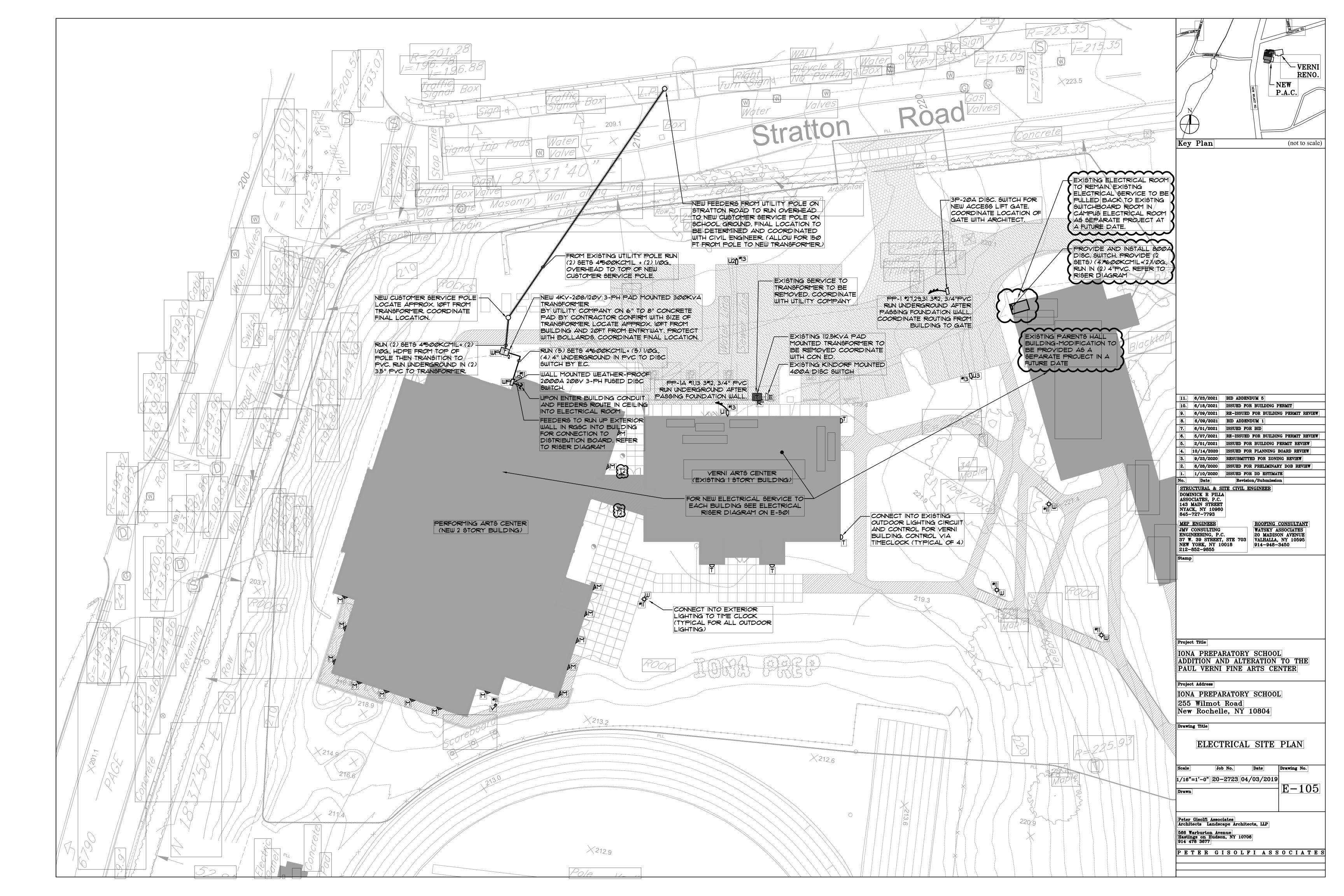
MECHANICAL SCHEDULES III

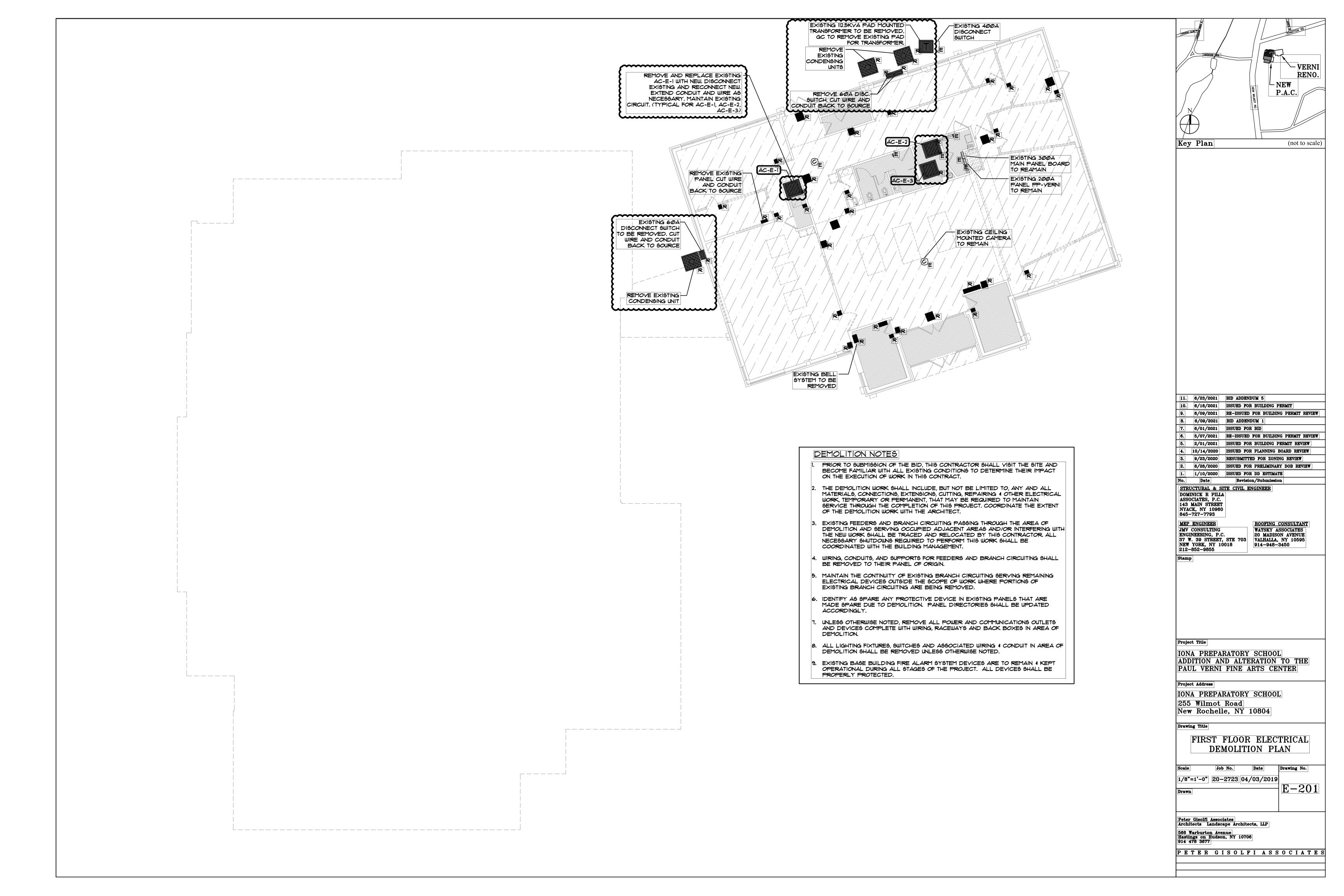
| NTS | 20-2723 | 04/03/2019 | M-603 | | M-603 | |

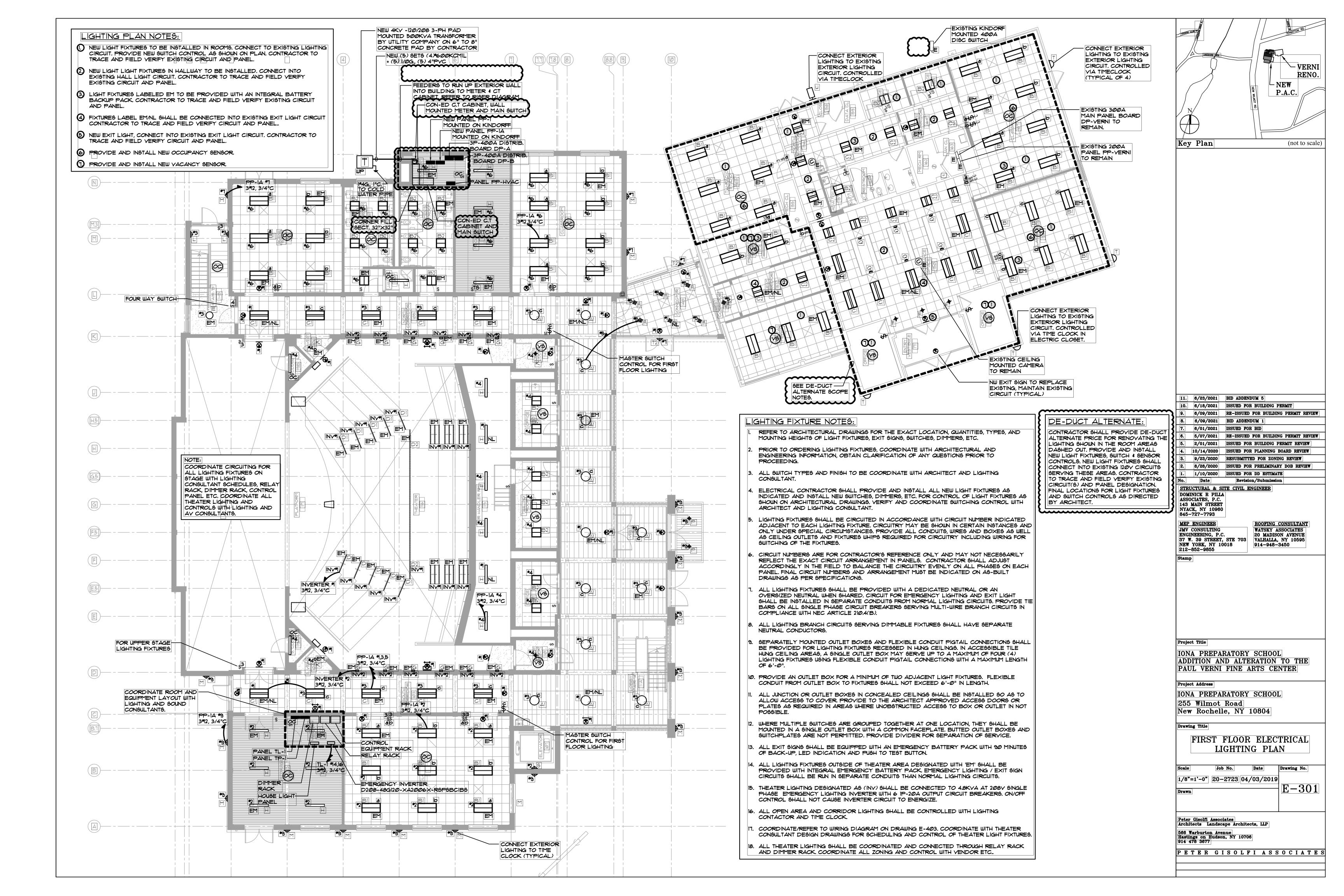
Peter Gisolfi Associates
Architects Landscape Architects, LLP
566 Warburton Avenue

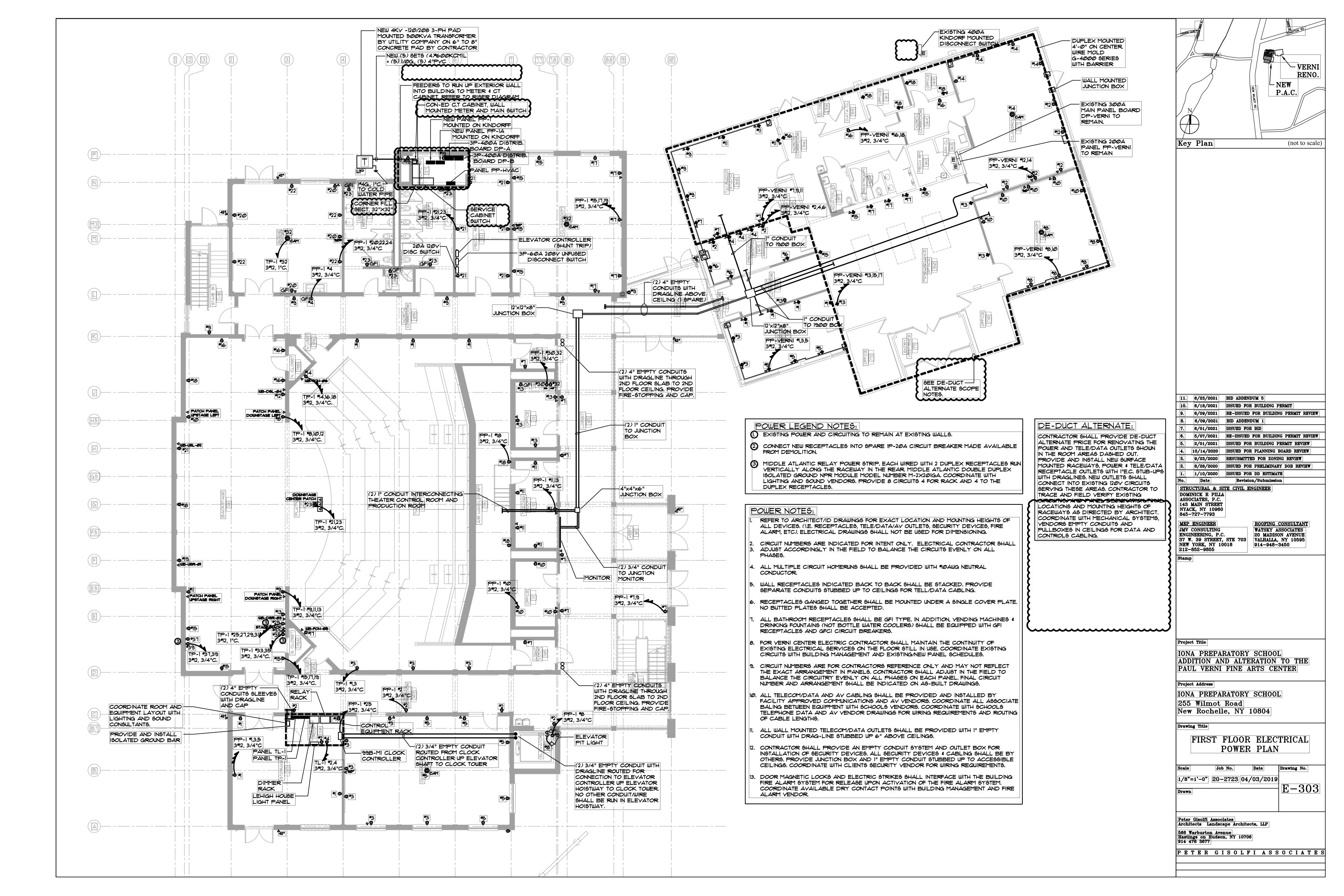


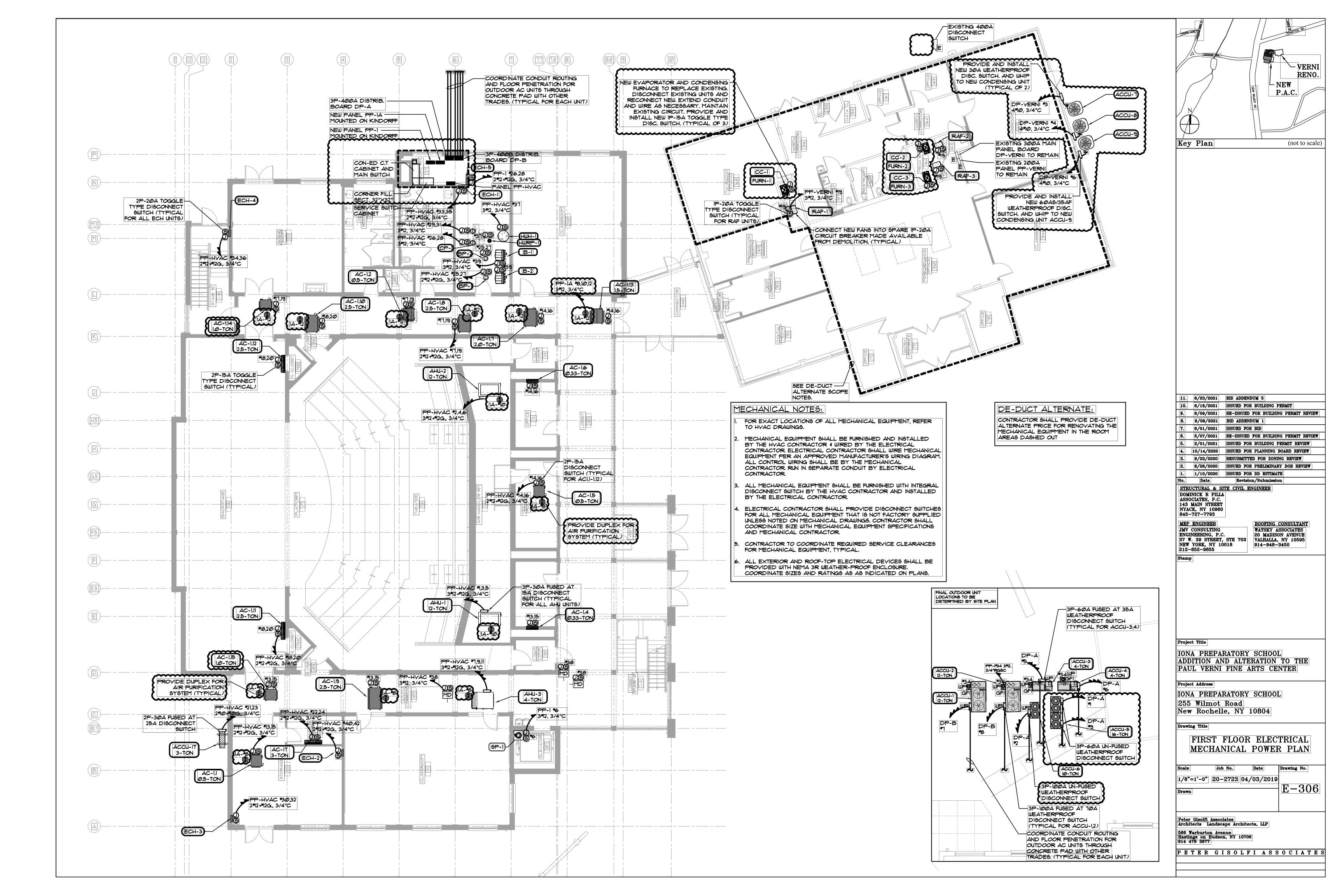


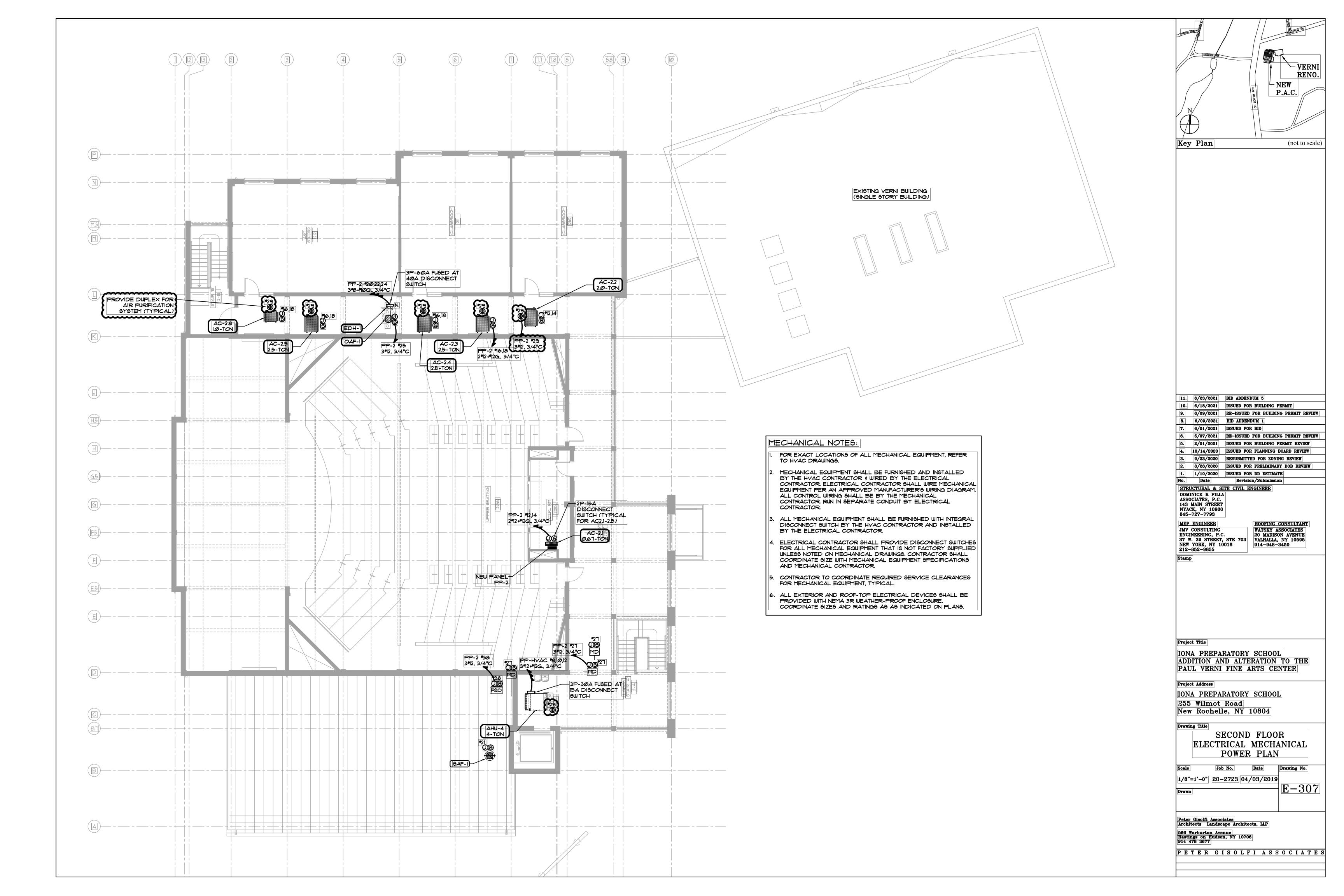


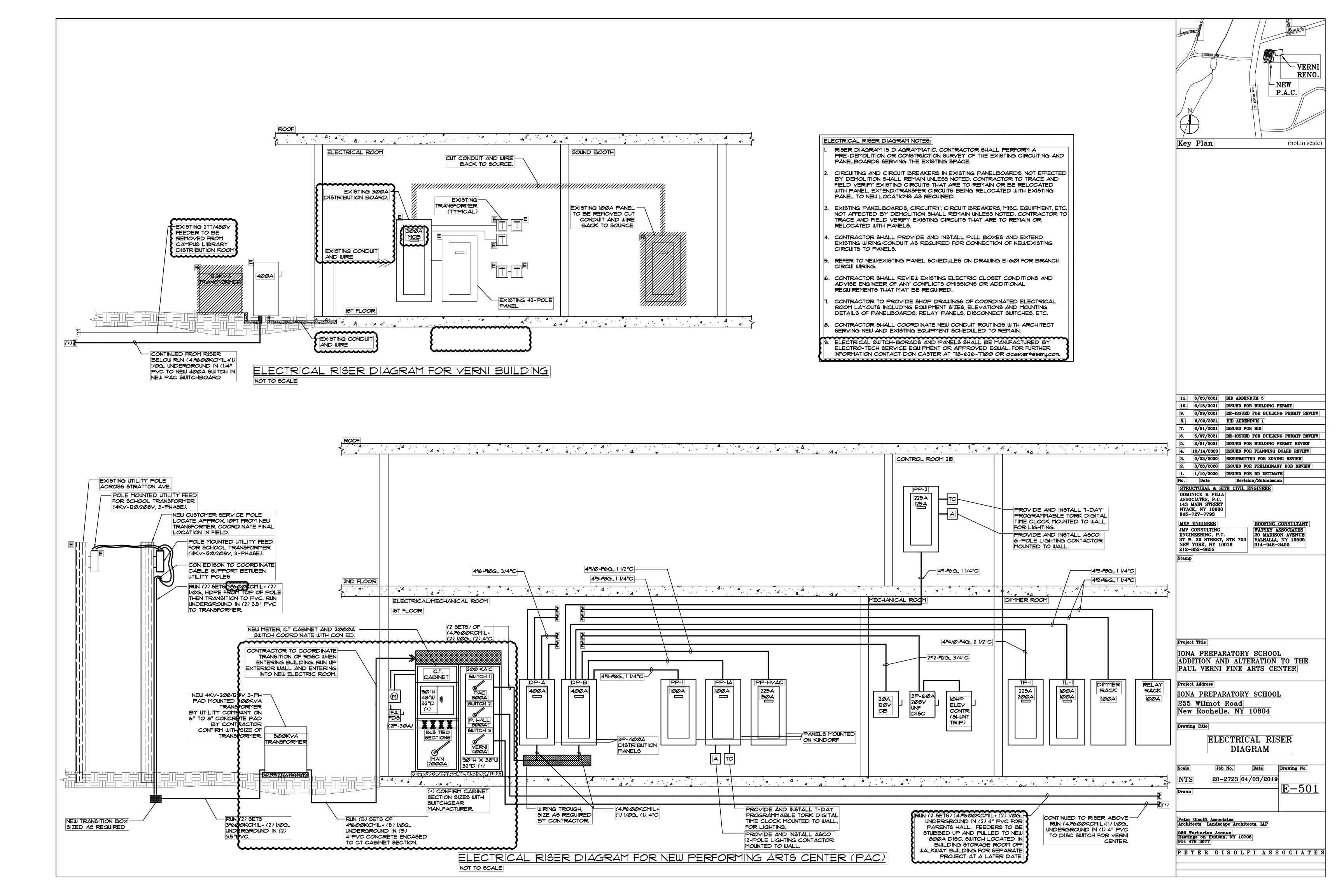


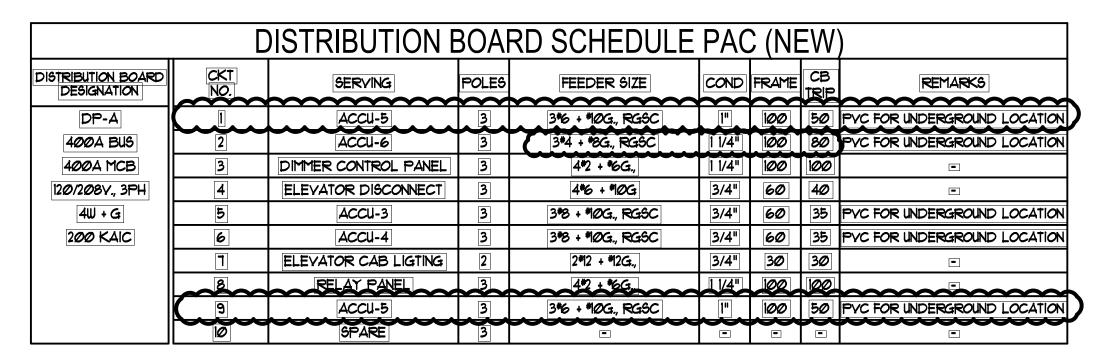












	DISTRIBUTION BOARD SCHEDULE PAC (NEW)												
DISTRIBUTION BOARD DESIGNATION	CKT NO.	SERVING	POLES	FEEDER SIZE	COND	FRAME	CB TRIP	REMARKS					
DP-B	1	PP-1	3	4*3 + *8G	1 1/4"	100	100	•					
400A BUS	2	PP-1A	3	4*3 + *8G	1 1/4"	100	100	•					
400A MCB	3	PP-2	3	44 + 46G	1 1/4"	200	125	•					
12 <i>0/20</i> 8V., 3PH	4	TL-1	3	4*3 + *8G.,	1 1/4"	100	60	•					
4W + G	5	TP-1	3	4*4/0 + 4G	2.5"	200	200	•					
200 KAIC	6	PP-HVAC	3	44/0 + 46G	1 1/2"	200	150	•					
	٦	ACCU-1	3	3*6 + *10G., RGSC	1"	100	70	PVC FOR UNDERGROUND LOCATION					
	8	ACCU-2	3	3*6 + *10G., RGSC	1"	100	70	PVC FOR UNDERGROUND LOCATION					
	9	SPARE	3	•	•	•	•	•					
	10	SPARE	3	•	•		•	•					

PANEL SCHEDULE NOTES:	
 CONTRACTOR TO PROVIDE HACR NEW SUPPLEMENTAL AC UNITS. 	TYPE CIRCUIT BREAKER FOR

- NEW CIRCUIT BREAKERS TO BE PROVIDED IN EXISTING PANELS SHALL MATCH EXISTING MANUFACTURER & TYPE. (VERNI BUILDING)
- PHASE LEGS OF ALL PANELS SHALL BE BALANCED AT SUPPLY POINT TO WITHIN 10% AND +/-5% OF EACH PHASE.
- I. ALL UN-USED CIRCUIT BREAKERS IN PANELS SHALL BE PLACED IN THE "OFF" POSITION AND MARKED AS SPARE.
- 5. ALL PANELS IDENTIFIED ON DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
- 6. CONTRACTOR TO COORDINATE NEW CIRCUITS WITH EXISTING TO REMAIN IN EACH PANELS. COORDINATE CIRCUIT DESIGNATIONS AND ARRANGEMENT IN PANELS.
- CONTRACTOR TO PROVIDE NEW TYPE WRITTEN PANEL DIRECTORIES IN EACH PANEL AFFECTED BY NEW CIRCUITING

			P	P-VI	ERN	VI ((E)	(IS	TIN	G)					
Volt 1	20/208	Main E	Breaker			P	has	е	3		Ground Bu	s X		Cover:	
Bus 2	00A	Lug	gs Only X		٧	Vire	Ser	vice	4		IG Bu	s	Mo	unting	Surface
AIC 1	OK .	Feed Thi	u Lugs		20	00%	Neι	ıtral		<u> </u>					
Circuit Description	Ceptacles Offices,	Ar Motors Inc	Equipment Se	Alling	A	\ E	3 (;	\\ \\	eaker Ratif	ighting asceptacts	argest notor	ner Motors	opliances &	guithrent Circu Descriptio
DIGITAL MEDIA OUTLET	1440			20A	1	$\widehat{}$	^	2	20A		720				PROD. RM RECEPT.
DIGITAL MEDIA OUTLET	720			20A	3	^	^	4	20A		1080				PROD. RM RECEPT.
DIGITAL MEDIA OUTLET	1080			20A	5	$\widehat{}$	$\widehat{}$	6	20A		1080				PROD. RM RECEPT.
TV STUDIO OUTLET	1080			20A	7	^	$\widehat{}$	8	20A		900				RM. 154 RECEPT
TV STUDIO OUTLET	1080			20A	9	_	_	10	20A		900				RM. 154 RECEPT
TV STUDIO OUTLET	1080			20A	11	$\widehat{}$	^	12	20A		900				RM. 167 RECEPT
PERF. 150 RECEPT.	1260			20A	13	_	_	14	20A		900				RM. 167 RECEPT
PERF. 150 RECEPT.	1080			20A	15	_	~	16	20A		720				CORRIDOR RECEPT.
PERF 150 RECEPT	1080			20A	17	~	^	18	20A		1440				OFFICE RECEPT.
RAF-1,2,3		150		20A	19	_	~	20	20A						EXISTING
EXISTING	\sim		\sim	20A	21	_	_	22	20A						EXISTING
EXISTING				20A	23	_	_	24	20A						EXISTING
EXISTING				20A	25	~	~	26	20A						EXISTING
EXISTING				20A	27	~	~	28	20A						EXISTING
EXISTING				20A	29	~	_	30	20A						EXISTING
				2P	31	_	_	32	20A						EXISTING
EXISTING				30A	33	_	~	34	20A						EXISTING
EXISTING				20A	35	_	_	36	20A						EXISTING
SPARE				20A	37	_	_	38	20A						SPARE
SPARE				20A	39	~	_	40	2P						
SPARE				20A	41	_	_	42	20A						EXISTING
						Load	ls in								
Total	0 9900	0 150		0		lt-An	npere	es		0	8640	0 0	-	0	Total
	Load Summary		Demand Load	Note	s:								Load Sur		
Lighting Receptacle (First 10KW)	0.0 K\			-									Summary		KVA
Receptacle (Remainder)	10.0 K\			-								Design			KVA
	8.5 K\			+									nd Load:		KVA
Largest Motor Other Motors	0.0 K\		0.0 KVA		or e	mb al-							Capacity		KVA
Appliances	0.2 K\ 0.0 K\		0.2 KVA 0.0 KVA		arsyr N⊏⊜			210 /	I/B//			Phas	Summary •• ^·	,	kase KVA
- ' '	0.0 K\		0.0 KVA	(ref	NEC :					einala -	nolo brookers:	Phas			KVA
Equipment Sub-feed	0.0 K\	_		+						with tie	oole breakers;	Phas			KVA
Feed thru	K\](Z) S	anyıt	, POI	UDIE	ancis	vviu i u e	Dal.	Frida	O.	0.7	1777
Total Load (KVA)	18.7 K\		13.1 KVA	+	Prov	ide t	ia ha	ar he	tween	sinale r	oole breakers;	All Cir	ouit Broo	kore ^	are 20A, 1P
Total Load (Amps)	51.9 Al		36.5 AMP	_	1					with tie		1	Noted C		•
Design Load (Amps)	31.3 A	***	160.0 AMP	_	1,0,3	, ngic	, poi	C DI C	Jairers	**************************************	Dui.				
DOUGHT LOOK (FILIPS)			100.0 741		_							ID.F: N	ational El	ectric (Code Demand factor

					DI	P-VI	ER	NI (ΕX	IS	TIN	G)						
Volt	120/20	8	Main	Breaker	300A			Pl	hase		3		Gro	und Bus	X		Cover:	
Bus	300A		Lu	gs Only			١	Wire S	Servi	се	4			IG Bus	3	Мо	ounting	Surface
AIC			Feed Th	ıru Lugs			2	00%	Neut	ral						,		
Circuit Description	Receptach	Model Desir	Motors Applia	Equipme The Tree	Breaker Ra	iii	,	4 <i>B</i>	С		81	eaker Rat	Lighting	eceptacle	argest out	e Motors	Poliances Poliances	guingent Circui Description
SPARE						3P 150A	1		<u></u>	2	3P 200A							SUB PANEL
								_										
			216)		3P					3P				2160			
ACCU-7			216	0		30A	3			4	30A				2160			ACCU-8
			216	0							00/1				2160			
						^_					۸۵.				2520			
SMALL KILM						3P 30A	5			6	3P 35A				2520			ACCU-9
						307					JUA				2520			
						3P					3P							
LARGE KILM						40A	7			8	100A							SUB PANEL
Total			0 040					Load							14040			Total
Total	0	0 nd Summary	0 648 D.F.	+ -	nd Load	_		olt-Am	peres	3			0) (14040	0 Load Su	_	Total
Lighting	LUA	0.0 KV/		_	KVA	NOLE	<u>s.</u>								+	ummary		KVA
Receptacle (First 10KW)		0.0 KV/			KVA										Design		108.0	
Receptacle (Remainder)		0.0 KV			KVA											d Load:		KVA
Largest Motor		0.0 KV/			KVA	1										Capacity		KVA
Other Motors		20.5 KV/	_		KVA	Tie ba	ar sy	mbols	:							ummary		
Appliances		0.0 KV/	A 0.6	5 0.0	KVA	1		Section		0.4	(B)).				Phas			KVA
Equipment		0.0 KV/	A 1.0	0.0	KVA	^	Pro	vide ti	e bar	bet	ween	single	pole bre	akers;	Phas	e B:	6.8	KVA
Sub-feed		KV	A 1.0	0.0	KVA	^	1					with ti			Phas	e C:	6.8	KVA
Feed thru		KV	A 1.0	0.0	KVA		_											
Total Load (KVA)		20.5 KV	A	20.5	KVA	^	Pro	vide ti	e bar	bet	ween	single	pole bre	akers;	All Circ	uit Brea	akers A	re 20A, 1P
Total Load (Amps)		57.0 AM	Р	57.0	AMP	^	(3)	single	pole	bre	akers	with ti	e bar.		Unless	Noted (Otherw	ise.
Design Load (Amps)				300.0	AMP	^									D.F. N	ational F	lectric (Code Demand factor
Spare (Amps)				243.0	AMP	1									J	agoniai L	.50010 (, sas Domana Iasto

								PP.	-1	(NE	EW)							
	120/208			Main B	reaker	100A			F	has	e	3		Ground	Bus	Х		Cover:	
	100A				s Only						vice	4		IG	Bus		Mo	unting	Surface
	10K		Fe	ed Thru	ı Lugs			20	00%	Ne	utral		Ш,						
Circuit Description	Peceptacles	Test Mot	ther Moto	Appliance ors	Equipmen	Rake, Rall	ii.	A	\ E	3 (С	/*	Realter Ratif	ighing Recer	tacles.	gest Moto	Ter Motors	pliances E	dipplest Circuit Description
ROOM 125 RECEPT.		720	Ì				20A	1	_	~	2	20A	ĺ	720					HALL RECEPTACLES
ROOM 121 RECEPT.		1080					20A	3	(_	4	20A					600		HALL WATER FOUNT.
ROOM 121 RECEPT.		900					20A	5	(_	6	20A						1403	SUMP PUMP
HALL RECEPTACLES		1260					20A	7	(_	8	20A		360					ELEVATOR RECEPT.
HALL RECEPTACLES		720					20A	9	(_	10	20A		540					OFFICE 111 RECEPT.
RM. 112 RECEPT.		900					20A	11	(12	20A							SPARE
OFICE 113 RECEPT.		720					20A	13	(_	14	20A							SPARE
ROOM 120 RECEPT.		720					20A	15	(_	16	20A							SPARE
ROOM 120 RECEPT.		900					20A	17	(18	20A		360					ROOM 115 RECEPT.
MECH ROOM 127		360					20A	19	(20	20A		720					ROOM 122 RECEPT.
MECH ROOM 122		1080					20A	21	(22	20A		720					ROOM 122 RECEPT.
BATHROOM RECEPT.		900					20A	23	(24	20A		, , , ,					Spare
CLOCK CONTROLLER		000				240	20A	25	_		26	2P				1500			Ориго
OLOGIN GOIVINGLELIN						170	20/	27	_		28	20A				1500			ECH-5
ACCESS LIFT GATE						170	3P	29	(30	20A				1000	1200		MICROWAVE
						170	20A	31	(32	20A					500		REFRIGERATOR
ROOF RECEPT.		360					20A	33	(34	20A		1080					OUTDOOR RECEPT
Spare							20A	35	(36	20A		180					CLOCK RECEPTACLE
Spare							20A	37	(38	20A		100					Spare
Spare							20A	39	(40	20A							Spare
Spare							20A	41	_		42	20A							Spare
- Paris									Load	ds in			1						9,500
Total	0 1	0620	0	0	0	750		Vo	lt-Ar	nper	es		0	4680	0	3000	2300	1403	Total
	Load	Summ	ary	D.F.	Deman	d Load	Notes	s:								Panel	Load Sur	nmary	
Lighting		0.0	KVA	1.00		KVA										Load S	ummary	22.8	KVA
Receptacle (First 10KW)		10.0		1.00	10.0											Design			KVA
Receptacle (Remainder)		5.3		0.35		KVA											d Load:		KVA
Largest Motor		0.0		1.00		KVA											Capacity		KVA
Other Motors		3.0		1.00		KVA	Tie ba	,									ummary	<u> </u>	
Appliances		2.3		0.65		KVA	(Per N					,				Phas			KVA
Equipment		2.2		1.00		KVA	(oole breake	ers;	Phas			KVA
Sub-feed			KVA	1.00		KVA	_	(2) s	ingle	e pol	e bre	akers	with tie	bar.		Phas	e C:	6.9	KVA
Feed thru			KVA	1.00		KVA		1_											
Total Load (KVA)		22.8			18.5		(oole breake	ers;				Are 20A, 1P
Total Load (Amps)		63.2	AMP		51.4			(3) s	ingle	e pol	e bre	akers	with tie	bar.		Unless	Noted (therw	ise.
Design Load (Amps)					83.3		(l								D.F: Na	ational E	lectric (Code Demand factor
Spare (Amps)					31.9	AMP													

						Ī	PP.	-2 (NĒ	W	()							
Volt	120/208	3	Main B	reaker 1	25A			P	hase	Э	3		Ground	l Bus	Х	(Cover:	
Bus	225A		Lug	s Only			٧	Vire :	Serv	ice	4		IG	Bus		Мо	unting	Surface
	10K		Feed Thr	u Lugs			20	00%	Neu	tral								
Circuit Description	Receptack	Motor Gest	Aboliano de la constante de la	Equipment of the second	Hot Pali	iiid	Δ	l B	c	;	Br	eaker Rati	righting bece	pracies	rgest dor Motor	AP	diances 60	diprent Cir Descrip
HALL WATER FOUNT.				400		20A	1		$\overline{}$	2	20A		540					ART ROOM RECE
HALLWAY RECEPT.		900				20A	3	_	^	4	20A		540					ART ROOM RECE
HALLWAY RECEPT.		900				20A	5	_	_	6	20A		360					ART ROOM RECE
ROOM 211 RECEPT.		720				20A	7	_	^	8	20A		720					ROOM 210 RECER
ROOM 211 RECEPT.		900				20A	9	_	_	10	20A		900					ROOM 210 RECER
EMNL & EXIT LTG.	155					20A	11	_	_	12	2P				312			AC-2.1,2.2
HALLWAY LIGHTING	760					20A	13	_	~	14	15A				312			AU-2. 1,2.2
CLASS ROOM LTG.	960					20A	15	_	$\overline{}$	16	2P				842			AC 222425 2
Spare						20A	17	_	~	18	15A				842			AC-2.3,2.4,2.5, 2
Spare						20A	19	_	~	20					3666			
SAF-1			864			20A	21	_	$\overline{}$	22	3P 40A				3666			EDH-1
TEF-1,TEF-2			1056			20A	23	_	_	24	40A				3666			
OAF-1			528			20A	25	_	$\overline{}$	26	20A				1392			GEF-1, SAF-2
MOTOPITED PAMPED			200	200	_	20A	27	_	~	28	20A				30			FSD
AIR PURIFIER					300	20A	29	_	$\overline{}$	30					1296			
Spare	~~	~~	~~	~~		20A	31	_	$\overline{}$	32	3P				1296			ERV-1
Spare						20A	33	_	$\overline{}$	34	15A				1296			
Spare						20A	35	_	$\overline{}$	36					1296			
Spare						20A	37	_	$\overline{}$	38	3P				1296			ERV-2
Spare						20A	39	_	$\overline{}$	40	15A				1296			
Spare						20A	41	_	\neg	42	20A				1200			Spare
opu.o						2071	-	Load	s in		2071							900.0
Total	1875	3420	0 2648	400	300			lt-Am	pere	s		(3060	0		0	0	Total
	Load	d Summary	D.F.	Demand I		Notes	S:									oad Sun		10.44
Lighting Receptacle (First 10KW)		1.9 KVA	1.00	1.9 K											Load Su		34.2	
Receptacle (Remainder)		6.5 KVA	1.00 0.35	6.5 K											Design I		36.0	
		0.0 KVA		0.0 K													34.1	
Largest Motor		0.0 KVA	1.00	0.0 K		 		- alaa							Spare C		1.9	
Other Motors Appliances	-	25.2 KVA 0.4 KVA	1.00 0.65	25.2 K 0.3 K		Tie ba				10.4	1/D\\				Load Su Phase	mmary .	<i>per Pna</i> 11.6	
Appriances Equipment		0.4 KVA 0.3 KVA	1.00	0.3 K		(Per I	1				. ,,	cinale :	nolo brooks	oro:	Phase		12.4	
Equipmeni Sub-feed		U.3 KVA KVA	1.00	0.3 K			1					single with tie	pole breake har	515,	Phase		10.2	
Feed thru		KVA	1.00	0.0 K			(∠) \$	single	· pole	DIE	sakei S	vviui üE	5 Dal.		Filase	. O.	10.2	IVVA
		34.2 KVA	1.00	34.1 K			Dro	ido ti	a ha	r ho	tupon	einale :	pole breake	ore:	All Circ	uit Dres	kere Ar	- 20A 1B
Total Load (KVA) Total Load (Amps)		95.0 AMP		34.1 K		_	1					single with tie	•	515,	Unless			e 20A, 1P
Design Load (Amps)		SOLU AIVIP		100.0 A			(3)	angle	POIE	, DIE	Jancis	vviu i u e	Jai.					
Design Load (Amps)				100.0 A	IVIE		1								In E. No	tional Fla	actric C	ode Demand factor

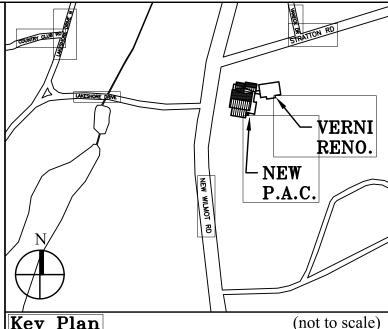
							•	TL	-1 (NE	ΞW)							
Volt	120/20	8		Main B	reaker	100A				has		3		Grour	nd Bus	Х		over:	
	100A				s Only	100/		٧			vice	4	1		G Bus		_		Surface
	10K		Fe	ed Thru	•			_			utral	_	†	•				9	
	Peceptacle	Toest No.	Piner Moto	Appliance Ors	Equipme	Reaker Rall	16		\ <i>I</i>	3 (/s	eaker Rati	Lighting Re	ceptacles	dest Motor	er Motors		
THEATER LIGHTING	774						20A	1	_		2	20A		180					DIMMER RM. RECEPT
CONTROL EQ. RACK						800	20A	3		_	4	20A		180					DIMMER RM. RECEPT
CONTROL EQ. RACK						800	20A	5	_	_	6	20A						800	SPOT LIGHT POS.
CONTROL EQ. RACK						800	20A	7	_	_	8	20A						800	SPOT LIGHT POS.
CONTROL EQ. RACK						800	20A	9			10	20A						800	PRODUCTION LTG.
ļ						1440	3P	11	_	_	12	20A						800	PRODUCTION LTG.
FOH CEILING LIFT						1440	20A	13	_	_	14	2P						2005	EMERGENCY
						1440		15	_	$\overline{}$	16	30A						2005	INVERTER
Spare							20A	17	_	_	18	20A							Spare
Spare							20A	19	_	_	20	20A							Spare
Spare							20A	21		_	22	20A							Spare
Spare							20A	23	_	_	24	20A							Spare
Spare							20A	25	_	_	26	20A							Spare
Spare							20A	27	_	_	28	20A							Spare
Spare							20A	29	_	_	30	20A							Spare
Spare							20A	31	_	_	32	20A							Spare
Spare							20A	33	_	_	34	20A							Spare
Spare							20A	35	_	_	36	20A							Spare
Spare							20A	37	_	_	38	20A							Spare
Spare							20A	39	_	_	40	20A							Spare
Spare							20A	41	_	_	42	20A							Spare
T	77.4				0	7500				ds in				000	0	0	_	7040	T
Total	774	0	0	_	_				lt-Ar	nper	res		C	360	0	- 1	0	7210	Total
	Loa	d Summ		D.F.		d Load	Notes	s:									oad Sum		17) / A
Lighting Receptacle (First 10KW)			KVA KVA	1.00		KVA											ımmary	15.9 28.8	
Receptacle (Remainder)			KVA	0.35		KVA										Design Demand		15.9	
, , ,			KVA	1.00		KVA												12.9	
argest Motor Other Motors			KVA	1.00		KVA	Tie ba	er cv.	mbol	٠.							apacity <i>ummary p</i>		
Appliances			KVA	0.65		KVA	(Per N	•			210 4	1(B))				Phase			KVA
Equipment		14.7		1.00		KVA	`	1				. ,,	single	pole brea	kers:	Phase			KVA
Sub-feed			KVA	1.00		KVA		1					with tie		inors,	Phase			KVA
eed thru			KVA	1.00		KVA		1,-/,		. 201			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. ~~		. 11430			
Total Load (KVA)		15.9				KVA	_	Prov	ide 1	ie b	ar be	tween	single	pole brea	kers:	All Circ	uit Brea	kers A	re 20A, 1P
Total Load (Amps)		44.1				AMP	(ı					with tie		,		Noted O		*
Design Load (Amps)					80.0	AMP		1	-							D.E. 1.			and Demonstration
Spare (Amps)					35.9	AMP										D.F: Na	tional Ele	etric C	Code Demand factor

						Р	P-	1A	(N	E۷	V)							
Volt	120/20	8	Mai	n Breake	r 100A			F	has	е	3		Grou	nd Bus	Х		Cover:	
Bus	100A		l	.ugs Onl	у	1	١	/ Vire	Ser	vice	4			IG Bus		Mo	ounting	Surface
	10K		Feed	hru Lug	s		2	00%	Net	utral								
Circuit Description	Peceptach	Motor Gest	Noto's	Equipa	Breaker Par	iiid	,	4 <i>E</i>	3 (9	Br	aaker Rating	dhing	cediacies	rdest ou	er Motors	Aprilance's	gipnent Circuit Description
EMNL/EXIT LIGHTING	385		Ì			20A	1	_	_	2	20A	1000						GENERAL LIGHTING
HALLWAY LIGHTING	880					20A	3	_	_	4	20A	600						GENERAL LIGHTING
PASSAGWAY LTG.	200					20A	5	_	~	6	20A	960				_		GENERAL LIGHTING
OUTDOOR LTG.	320					20A	7	_	_	8	20A						250	AIR PURIFIER
OUTDOOR LTG.	520					20A	9	_	_	10	20A					7	100	AIR PURIFIER
SITE LIGHTING	500					20A	11	_	_	12	20A						300	AIR PURIFIER
SITE LIGHTING	405					20A	13	_	_	14	20A						~	- Spare-
Spare						20A	15	_	_	16	20A							Spare
Spare						20A	17	_	_	18	20A							Spare
Spare						20A	19	_	_	20	20A							Spare
Spare						20A	21	_	_	22	20A							Spare
Spare						20A	23	_	_	24	20A							Spare
Spare						20A	25	_	~	26	20A							Spare
Spare						20A	27	_	_	28	20A							Spare
Spare						20A	29	_	_	30	20A							Spare
Spare						20A	31	_	_	32	20A							Spare
Spare						20A	33	_	_	34	20A							Spare
Spare						20A	35	_	_	36	20A							Spare
Spare						20A	37	_	_	38	20A							Spare
Spare						20A	39	_	_	40	20A							Spare
Spare						20A	41	$\overline{}$	$\overline{}$	42	20A							Spare
•								Load	ds in									<u>'</u>
Total	3210	0	0	_	0 0			olt-Ar	nper	es		2560	0	0		0		Total
1-4-41	Loa	d Summary	D.I		and Load	Notes	S:									Load Su		10.74
ighting Receptacle (First 10KW)		5.8 KV			8 KVA	ł										ummary		KVA
Receptacle (Remainder)		0.0 KV			0 KVA	ł									Design		30.0	
argest Motor		0.0 KV 0.0 KV	_		0 KVA 0 KVA	l									Deman			KVA
argest Motors		0.0 KV			0 KVA 0 KVA	TIG 6	or co	mhc	c.							Capacity	23.6 per Pha	
Appliances		0.0 KV			0 KVA 0 KVA	Tie ba	,			210 /	1/B\\				Phase		,	KVA
Equipment		0.0 KV		_	7 KVA	(. ,,	single po	olo bros	kore:	Phase			KVA
Sub-feed		U.7 KV			0 KVA	_						single po with tie l		ineis,	Phase			KVA
eed thru		KV	_		0 KVA		(4)	onigi	o pui	CDIC	Janeis	vaui ue i			- IIas	J J.	2.0	13773
Fotal Load (KVA)		6.4 KV			4 KVA	_	Pro	vide :	tie h	ar he	tween	single po	ale bres	ikers.	All Circ	uit Bro	akere A	re 20A, 1P
Fotal Load (AVA)		17.8 AIV			8 AMP	_						with tie b			I		otherwi	•
Design Load (Amps)		17.0 AW	-		3 AMP	_	(5)	J. 191	الحام د	J 216		. man u C I						
Sociali Foad (Links)				30.	~ /4VII		ı								ID F: Na	ational F	lectric C	ode Demand factor

							PP.	<u>-H</u>	VA	C ((NE	EW)							
Volt	120/208	В		Main E	reaker	150A			F	has	e	3		Grou	ınd Bus	Х		Cover:	
	225A				s Only]	١	V ire	Ser	vice	4			IG Bus		Mo	unting	Surface
	10K		Fe	ed Thr	u Lugs			2	00%	Ne	utral			, ,					
Circuit Description	Receptack	Motor Se	Petier Mon	Appliant 15	Equipme,	eaker Pall		Å	A <i>E</i>	3 (c	/*	eaker Rat	Lighting R	ecedyachee	rigest notor	A P	pilances E	gjifftent Circu Descriptio
				1320		`		1	_	~	2					1320			·
AHU-1				1320			3P	3	(_	4	3P				1320			AHU-2
				1320			15A	5	_	_	6	15A				1320			
				480				7	_	_	8					480			
AHU-3				480			3P	9	_	_	10	3P				480			AHU-4
				480			15A	11	_	_	12	15A				480			
				605			2P	13	$\overline{}$	_	14	2P				578			
AC-1.1,1.4,1.9, 1.15				605			15A	15	_	_	16	15A				578			AC-1.5, 1.6, 1.7, 1.13
				520			2P	17	_	_	18	2P				385			
AC-1.2,1.8, 1.14				520			15A	19		_	20	15A				385			AC-1.10,1.11,1.12
				2184			2P	21	_	_	22	2P				104			
ACCU-IT				2184			25A	23		_	24	15A				104			AC-IT
				1123			2P	25	_	_	26	2P				915			
BP-1,BP-2				1123			20A	27		_	28	20A				915			CP-1
				915			2P	29		_	30	2P				1500			
CP-2				915			20A	31	_	_	32	20A				1500			ECH-3
				1500			2P	33	_	_	34	2P				1500			
ECH-1				1500			20A	35	_	_	36	20A				1500			ECH-4
HWH-1, HWRP-1				600			20A	37	_	_	38	20A				300			MOTORIZED DAMPER
B-1,B-2				200			20A	39	_	_	40	2P				1500			
Spare							20A	41	$\overline{}$	_	42	20A				1500			ECH-2
										ds in									
Total	0	0 d Summ	0	19894 D.F.	0 Deman	0	Notes		olt-Ar	nper	es			0 0	0		.oad Sun	0	Total
Lighting	LOG		KVA	1.00		KVA	Notes	<u>. </u>								Load Su			KVA
Receptacle (First 10KW)			KVA	1.00		KVA	۱ '		ļ							Design I			KVA
Receptacle (Remainder)			KVA	0.35		KVA										Demand			KVA
Largest Motor			KVA	1.00		KVA										Spare C			KVA
Other Motors		38.6		1.00	38.6		Tie ba	ır sv	mbol	s:						Load Su			
Appliances			KVA	0.65		KVA	(Per N				210.4	l(B)).				Phase			KVA
Equipment			KVA	1.00		KVA	$\overline{}$,	single	pole bre	akers;	Phase	B:		KVA
Sub-feed			KVA	1.00		KVA	_						with tie			Phase	C:	13.7	KVA
Feed thru			KVA	1.00	0.0	KVA			_	•									
Total Load (KVA)		38.6	KVA		38.6	KVA	^	Prov	vide :	tie b	ar be	tween	single	pole bre	akers;	All Circu	uit Brea	kers A	re 20A, 1P
Total Load (Amps)		107.1	AMP		107.1	AMP	_	(3)	singl	e pol	le br	eakers	with tie	e bar.		Unless	Noted C	therw	ise.
Design Load (Amps)					120.0	AMP	_									D E. No	tional Ela	octrio C	Code Demand factor
Spare (Amps)					12.9	VIVID	I									וס.ר: ועמו	uulidi Ele	ouic C	Joue Demaila lactor

							•	TP.	-1 ((NE	EW)							
Volt	120/208		ı	Main B	reaker	200A			P	has	е	3		Ground	Bus	Х		Cover:	
Bus	225A			Lugs	s Only			٧	Vire	Sen	vice	4		IG	Bus		Me	ounting	Surface
AIC	10K		Fee	ed Thru	ı Lugs			20	00%	Neι	ıtral								
Circuit Description	Seceptacles	Sst Motor	C. Moto	Appliance's	Equipment	aker Rali		A	\ E	3 (2	Bre	aker Ratin	d Recer	tacles Lar	gest Moto	ner Motors	poliances Poliances	guiprient Circui Description
THEATER RECEPT		540					20A	1	_	_	2	20A		360					THEATER RECEPT.
THEATER RECEPT		540					20A	3	_	_	4	20A		720					CTRL. RM RECEPT.
CTRL. LTG. COMMS						1200	20A	5	_	_	6	20A		360					CTRL. RM RECEPT.
CTRL. AUDIO PATCH						1200	20A	7	_	_	8	20A						1200	DOWNSTAGE LEFT
DOWNSTAGE RIGHT						1200	20A	9	_	_	10	20A						1200	UPSTAGE LEFT
UPSTAGE RIGHT						1200	20A	11		_	12	20A						1200	WB-DSL-04
WB-DSR-03						1200	20A	13	_	_	14	20A						1200	WB-FOH-06
CONV. RECEPT.		540					20A	15	_	_	16	20A		540					CONV. RECEPT
WB-FOH-05						1200	20A	17	_	_	18	20A		360					CONV. RECEPT
WB-USR-01						1200	20A	19	_	_	20	20A						1200	PROJECTOR
WB-USL-02						1200	20A	21	_	_	22	20A						1200	PROJECTOR SCREEN
DOWNSTAGECENTER						1200	20A	23	_	_	24	20A						1200	PIPE GRID-07
STAGE RACK						1200	20A	25	_	$\overline{}$	26	20A						1200	PIPE GRID-07
STAGE RACK						1200	20A	27	_	_	28	20A						1200	PIPE GRID-08
STAGE RACK						1200	20A	29	_	_	30	20A						1200	PIPE GRID-08
STAGE RACK						1200	20A	31	_	_	32	20A		360					CLASSRM. CAMERAS
STAGE RACK						1200	20A	33	_	_	34	20A							Spare
STAGE RACK						1200	20A	35	_	_	36	20A							Spare
STAGE RACK						1200	20A	37	_	_	38	20A							Spare
STAGE RACK						1200	20A	39	_	_	40	20A							Spare
Spare							20A	41	$\overline{}$	$\overline{}$	42	20A							Spare
· ·										ds in									
Total		1620	0	0		20400			lt-An	nper	es		0	2700	0	0		12000	Total
	Load S	ummar	_	D.F.	Demand		Notes	:							_		Load Su		
Lighting		0.0 KV		1.00	0.0 1												ummary		KVA
Receptacle (First 10KW)	4.3 KVA 1.00 0.0 KVA 0.35					(VA										Design			KVA
Receptacle (Remainder)					0.0										ŀ		d Load:		KVA
Largest Motor		0.0 KV	_	1.00	0.0		T:- 1 -		'						ŀ		Capacity		KVA
Other Motors Appliances		0.0 KVA 1.00 0.0 KVA 0.65			0.0 I		Tie ba (Per N	•			210 /	(R)\			ŀ	Load S Phas		per Ph	ase KVA
Equipment		32.4 KV		1.00	32.4 1		(L 61)						sinale s	ole breake	, e.	Phas			KVA
Equipment Sub-feed		32.4 KV		1.00	0.0 1		$\stackrel{\frown}{=}$						single p with tie		15,	Phas			KVA
eed thru		KV		1.00	0.0 1		- `	(2) 5	git	, poi	- DIE	ancis	ur ue	Dai.	ŀ	1 1105	J J.	11.5	11.4/1
Total Load (KVA)		36.7 KV	_	1.50	36.7		_	Prov	ide t	ie ha	ar he	tween	single n	ole breake	ers:	All Cir	cuit Bre	akers 4	Are 20A, 1P
Total Load (Amps)		02.0 AN			102.0								with tie		,			Otherw	*
Design Load (Amps)	•				160.0 /			ν-, σ		, , , , , ,					ŀ				
Spare (Amps)					58.0 /		\vdash								- 1	D.F: Na	ational E	lectric (Code Demand factor

* COORDINATE CONTROLS AND PROGRAMMING OF THEATER LIGHTING WITH LIGHTING AND AY CONSULTANTS



Key Plan (not to scale)

11. 6/23/2021 BID ADDENDUM 5 10. 6/18/2021 ISSUED FOR BUILDING PERMIT 9. 6/09/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 8. 6/09/2021 BID ADDENDUM 1 7. 6/01/2021 ISSUED FOR BID 6. 5/07/2021 RE-ISSUED FOR BUILDING PERMIT REVIEW 5. 2/01/2021 ISSUED FOR BUILDING PERMIT REVIEW 4. 10/14/2020 ISSUED FOR PLANNING BOARD REVIEW 3. 9/23/2020 RESUBMITTED FOR ZONING REVIEW 2. 8/28/2020 ISSUED FOR PRELIMINARY DOB REVIEW 1. 1/10/2020 ISSUED FOR DD ESTIMATE No. Date Revision/Submission STRUCTURAL & SITE CIVIL ENGINEER DOMINICK R PILLA ASSOCIATES, P.C. 143 MAIN STREET NYACK, NY 10960 845-727-7793 MEP ENGINEER

JMV CONSULTING
ENGINEERING, P.C.
37 W. 39 STREET, STE 703
NEW YORK, NY 10018

212 952 0855

Project Title IONA PREPARATORY SCHOOL ADDITION AND ALTERATION TO THE PAUL VERNI FINE ARTS CENTER

Project Address

NEW YORK, NY 10018 212-852-9855

IONA PREPARATORY SCHOOL 255 Wilmot Road New Rochelle, NY 10804

ELECTRICAL PANEL SCHEDULE

Drawing No. 20-2723 04/03/2019 E - 601