

April 16, 2021

**HS ROOFTOP HVAC / ANNEX UV REPLACEMENT
And
G. NEARY BOILER REPLACEMENT PROJECT
For
North Rockland Central School District
MSA File No. 39062G & 39062N**

NOTICE TO BIDDERS

Re: ADDENDUM NO. 2

THE FOLLOWING REVISIONS TO THE PROJECT MANUAL AND OR THE DRAWINGS REFERENCED HEREIN SHALL BECOME A PART OF THE CONTRACT DOCUMENTS AND SHALL SUPERSEDE ANY PRIOR OR CONFLICTING INFORMATION.

- 1) SEALED BIDS will be received until 2:00 P.M. in the office of facilities, on the April 22nd, 2021, at the North Rockland Central School District, 65 Chapel Street, Garnerville, NY 10923, at which time and place they will be publicly opened and read. Faxed bids will NOT be accepted. Bids must be in sealed envelope(s) appropriately labeled with the following label:
“HS Rooftop HVAC / Annex UV Replacement and G. Neary Boiler Replacement Project – General Construction”
“HS Rooftop HVAC / Annex UV Replacement and G. Neary Boiler Replacement Project – Mechanical”
“HS Rooftop HVAC / Annex UV Replacement and G. Neary Boiler Replacement Project – Plumbing”
“HS Rooftop HVAC / Annex UV Replacement and G. Neary Boiler Replacement Project – Electrical”
- 2) Regarding emergency shut off at Boiler Room exit door. Note on 1/E-101 “Existing break glass station to remain” is void. The Electrical Contractor will refer to 1/M-101 “New emergency push button replaced in-kind and in same place.”
- 3) The CO panel will be furnished and installed by the Mechanical Contractor per M-101. The Electrical Contractor will provide power and connection between the panel and the FA system per the electrical E-101 drawing.
- 4) Attached Drawings E-111, and E-112 have been added to the drawing set, dated April 13, 2021 for the electrical scope of the Unit Ventilators. Key Note #1 details the specifics for disconnecting electric and connecting the new units. See attached revised A-000 Cover Sheet and the Specifications Section 000040 List of Drawings which incorporate the new drawings.
- 5) The HS RTU replacement requires roofing work to be performed. This work is to be under the scope of the Mechanical Contractor and subcontracted to a Roofing Contractor. See Section 011200, Multiple Contract Summary, Item 1.6.A.6.
- 6) The new RTU’s usually come with non-fused disconnect switches. Our drawings indicate the Electrical Contractor is responsible to furnish and install fusible disconnect switches to be field installed. (See M-001, Rooftop Air Handling Unit Schedule Note #7.)
- 7) The General Contractor shall be responsible for VCT at replaced/removed UV’s. Specifications Section 011200, Multiple Contract Summary, Item 1.7.D.4 states that the General Contractor will “Supply all materials,

labor, equipment, and tools to install flash patch at existing concrete slab, install new VCT floor tile where existing unit ventilators have been installed. Color to be selected by architect.” Each contractor should refer to Specification Sections 011200 Multiple Contract Summary for their respective scope of demolition. As per 011200 each contractor is responsible for their own removal of excess materials and debris.

- 8) Question: On the floor plans A-111, it shows a replacement for UV-706 in science room 706, but it is not shown on the table below (Unit Ventilator Schedule). Please confirm that there is a UV replacement for this room.
Answer: UV-706 in Science Room 706 will require replacement. UV-706 will require a 1,250 CFM unit Ventilator similar to room 704. Outside air flow shall be 410 CFM. UV-706 to match SCI-704 on 1/M-012.
- 9) Attached Section 011200, Multiple Contract Summary, has been revised, dated April 13, 2021, remove original and replace with attached.
- 10) Question: On your alternates, you mention “Disconnect existing feeder to unit and save for future connection.” Same for outlet. Does this mean I box it, and label it? No connection will be included for a new Unit. Is this correct?
Answer: For full scope of Alt 2-1, Alt 2-2, and Alt 2-3 refer to both E-101, Alt 2-1, Alt 2-2, and Alt 2-3 for Demolition notes and E-102, Alt 2-1, Alt 2-2, Alt 2-3 for Installation notes. Electrical Contractor is expected to disconnect the existing units and connect the new units.
- 11) Rooms where units FC-509A, FC-509B, FC-509C, UV-600C, and UV-701B are located are to have new fin tube enclosures where existing unit is removed. Color to be selected from manufacturer’s standard color chart. Basis of design: slant-fin R series. Disregard note 16 on M-111 and note 9 on M-112 to provide 22 GA min galvanized panel.
- 12) Question: For the welding required for the structural reinforcement, is it required for the General Contractor to have a NYS licensed welder perform the welding work? Even though there will be an inspection afterwards?
Answer: Contractor shall have AWS Certified Welding and submit copy of certificate, if not state or NYC licensed.
- 13) CR-701B on Unit Ventilator Schedule on 1/M-012 is mislabeled as CR-701A. UV-701B on drawing 1/A-111 refers to CR-701A on Unit Ventilator Schedule on 1/M-012.
- 14) Attached drawing E-011 has been added to the drawing set, dated April 13, 2021. See attached revised A-000 Cover Sheet and the Specifications Section 000040 List of Drawings which incorporate the new drawings.

END OF ADDENDUM NO. 2

SECTION 011200 - MULTIPLE CONTRACT SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes a summary of each contract, including responsibilities for coordination and temporary facilities and controls.
- B. Specific requirements for Work of each contract are also indicated in individual Specification Sections and on Drawings.
- C. Related Requirements:
 - 1. Section 011000 "Summary" for the Work covered by the Contract Documents, restrictions on use of Project site, phased construction, coordination with occupants, and work restrictions.
 - 2. Section 013100 "Project Management and Coordination" for general coordination requirements.

1.3 DEFINITIONS

- A. Permanent Enclosure: As determined by Architect, the condition at which roofing is insulated and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures equivalent in weather protection to permanent construction.

1.4 PROJECT COORDINATOR

- A. Project coordinator shall be responsible for coordination between the General Construction Contract, Plumbing Contract, HVAC Contract, Electrical Contract,.
 - 1. HVAC Contractor will act as Project Coordinator.

1.5 COORDINATION ACTIVITIES

- A. Coordination activities of Project coordinator include, but are not limited to, the following:
 - 1. Provide overall coordination of the Work.
 - 2. Coordinate shared access to workspaces.
 - 3. Coordinate product selections for compatibility.
 - 4. Provide overall coordination of temporary facilities and controls.
 - 5. Coordinate, schedule, and approve interruptions of permanent and temporary utilities, including those necessary to make connections for temporary services.
 - 6. Coordinate construction and operations of the Work with work performed by each Contract and Owner's construction forces and separate contracts.
 - 7. Prepare coordination drawings in collaboration with each contractor to coordinate work by more than one contract.
 - 8. Coordinate sequencing and scheduling of the Work. Include the following:

- a. Initial Coordination Meeting: At earliest possible date, arrange and conduct a meeting with contractors for sequencing and coordinating the Work; negotiate reasonable adjustments to schedules.
 - b. Prepare a combined contractors' construction schedule for entire Project. Base schedule on preliminary construction schedule. Secure time commitments for performing critical construction activities from contractors. Show activities of each contract on a separate sheet. Prepare a simplified summary sheet indicating combined construction activities of contracts.
 - 1) Submit schedules for approval.
 - 2) Distribute copies of approved schedules to contractors.
9. Provide photographic documentation.
 10. Provide quality-assurance and quality-control services specified in Section 014000 "Quality Requirements."
 11. Coordinate sequence of activities to accommodate tests and inspections, and coordinate schedule of tests and inspections.
 12. Provide information necessary to adjust, move, or relocate existing utility structures affected by construction.
 13. Locate existing permanent benchmarks, control points, and similar reference points, and establish permanent benchmarks on Project site.
 14. Provide field surveys of in-progress construction and site work and final property survey.
 15. Provide progress cleaning of common areas and coordinate progress cleaning of areas or pieces of equipment where more than one contractor has worked.
 16. Coordinate cutting and patching.
 17. Coordinate protection of the Work.
 18. Coordinate firestopping.
 19. Coordinate completion of interrelated punch list items.
 20. Coordinate preparation of Project record documents if information from more than one contractor is to be integrated with information from other contractors to form one combined record.
 21. Print and submit record documents if installations by more than one contractor are indicated on the same contract drawing or shop drawing.
 22. Collect record Specification Sections from contractors, collate Sections into numeric order, and submit complete set.
 23. Coordinate preparation of operation and maintenance manuals if information from more than one contractor is to be integrated with information from other contractors to form one combined record.
- B. Responsibilities of Project coordinator for temporary facilities and controls include, but are not limited to, the following:
1. Provide common-use field office for use by all personnel engaged in construction activities.

1.6 GENERAL REQUIREMENTS OF CONTRACTS

- A. Extent of Contract: Unless the Agreement contains a more specific description of the Work of each Contract, requirements indicated on Drawings and in Specification Sections determine which contract includes a specific element of Project.
1. Unless otherwise indicated, the work described in this Section for each contract shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
 2. Blocking, backing panels, sleeves, and metal fabrication supports for the work of each contract shall be the work of each contract for its own work.
 3. Equipment pads for the work of each contract shall be the work of each contract for its own work.
 4. Roof-mounted equipment curbs for the work of each contract shall be the work of each contract for its own work.
 5. Painting for the work of each contract shall be the work of each contract for its own work.
 6. Cutting and Patching: Each contract shall perform its own cutting; patching shall be under the General Construction Contract.

7. Through-penetration firestopping for the work of each contract shall be provided by each contract for its own work.
 8. Contractors' Startup Construction Schedule: Within five working days after startup horizontal bar-chart-type construction schedule submittal has been received from Project coordinator, submit a matching startup horizontal bar-chart schedule showing construction operations sequenced and coordinated with overall construction.
- B. Substitutions: Each contractor shall cooperate with other contractors involved to coordinate approved substitutions with remainder of the work.
1. Project coordinator shall coordinate substitutions.
- C. Temporary Facilities and Controls: In addition to specific responsibilities for temporary facilities and controls indicated in this Section and in Section 015000 "Temporary Facilities and Controls," each contractor is responsible for the following:
1. Installation, operation, maintenance, and removal of each temporary facility necessary for its own normal construction activity, and costs and use charges associated with each facility, except as otherwise provided for in this Section.
 2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
 3. Its own field office, complete with necessary furniture, utilities, and telephone service.
 4. Its own storage and fabrication sheds.
 5. Temporary enclosures for its own construction activities.
 6. Staging and scaffolding for its own construction activities.
 7. General hoisting facilities for its own construction activities, up to **2 tons (2000 kg)**.
 8. Waste disposal facilities, including collection and legal disposal of its own hazardous, dangerous, unsanitary, or other harmful waste materials.
 9. Progress cleaning of work areas affected by its operations on a daily basis.
 10. Secure lockup of its own tools, materials, and equipment.
 11. Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
- D. Temporary Heating, Cooling, and Ventilation: Project coordinator] is responsible for temporary heating, cooling, and ventilation, including utility-use charges, temporary meters, and temporary connections.
- E. Use Charges: Comply with the following:
1. Water Service: Include the cost for water service, whether metered or otherwise, for water used by all entities engaged in construction activities at Project site in the General Construction Contract.
 2. Electric Power Service: Include the cost for electric power service, whether metered or otherwise, for electricity used by all entities engaged in construction activities at Project site in the General Construction Contract.
- 1.7 GENERAL CONSTRUCTION CONTRACT
- A. Supply all necessary materials, labor, services, equipment, and tools required to perform the following site General Construction, work for the RTU, Unit Ventilator and Boiler replacement. All work to be installed in strict accordance with Specifications and Drawings.
- B. Supply all necessary materials, equipment, devices and labor for implementation and up-keep of site safety as it relates to this scope of work, to meet or exceed OSHA and / or safety agencies having jurisdiction on this project. Any and all costs resulting from OSHA sited violations will be the complete responsibility of this subcontractor.
- C. This project is a prevailing wage project, and it is the responsibility of this sub-contractor to ensure that all of the latest rules and regulations published by the NYS Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit are strictly followed and adhered to. In the events of an audit conduct by the NYS Department of Labor, this sub-contractor will be responsible for any and all costs associated with the audit and the Departments' final decision.

- D. Work in the General Construction Contract includes, but is not limited to, the following:
1. Ceiling tile removal and installation. Provide replacement tiles and grid if damaged during removal.
 2. Supply all materials, labor, equipment, and tools for installation of metal stud partition to encase new ductwork in HS at unit ventilator.
 3. Supply all materials, labor, equipment, and tools to install and finish gypsum at newly constructed metal stud wall. Finish and paint all new surfaces, and any damaged existing surfaces.
 4. Supply all materials, labor, equipment, and tools to install flash patch at ext'g concrete slab, install new VCT floor tile where existing unit ventilators have been installed. Color to be selected by architect.
 5. File, pay for, and obtain all required permit, inspections and approvals.
 6. Schedule and perform all inspections required by this scope of work.
 7. Removal and disposal of daily generated debris. Upon completion of this contractor's work, all excess materials and debris in the building and site are to be removed and disposed of promptly.
 8. This is a prevailing wage project.
 9. Supply all materials, labor, equipment, and tools for structural reinforcement scope.

1.8 PLUMBING CONTRACT

- A. Supply all necessary materials, labor, services, equipment and tools required to perform the following site Plumbing work for the RTU, Unit Ventilator and Boiler replacement. All work to be installed in strict accordance with Specifications and Drawings.
- B. Supply all necessary materials, equipment, devices and labor for implementation and up-keep of site safety as it relates to this scope of work, to meet or exceed OSHA and / or safety agencies having jurisdiction on this project. Any and all costs resulting from OSHA sited violations will be the complete responsibility of this subcontractor
- C. This project is a prevailing wage project and it is the responsibility of this sub-contractor to ensure that all of the latest rules and regulations published by the NYS Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit are strictly followed and adhered to. In the events of an audit conduct by the NYS Department of Labor, this sub-contractor will be responsible for any and all costs associated with the audit and the Departments' final decision.
- D. Work in the Plumbing Contract includes, but is not limited to, the following:
1. Supply all materials, labor, equipment and tools for backflow prevention equipment.
 2. Supply all materials, labor, equipment, and tools to modify the existing water piping to the new boiler.
 3. Heat tape & insulate as required by local codes.
 4. Install all gas piping from source and connect as required.
 5. Supply and install all necessary blocking, anchors, and hangers to support and secure gas piping.
 6. Make tie-in to gas source.
 7. Paint piping as required by local/state code.
 8. Gas piping contractor to coordinate tie-in location, pressure requirements, etc. with local gas provider.
 9. File, pay for, and obtain all required permit, inspections and approvals.
 10. Schedule and perform all inspections required by this scope of work.
 11. Demolition of existing item/systems being replaced.
 12. Removal and disposal of daily generated debris. Upon completion of this contractor's work, all excess materials and debris in the building and site are to be removed and disposed of promptly.
 13. This is a prevailing wage project.

1.9 HVAC CONTRACT

- A. Supply all necessary materials, labor, services, equipment and tools required to perform the following site electrical work for the RTU, Unit Ventilator and Boiler replacement. All work to be installed in strict accordance with Specifications and Drawings.
- B. Supply all necessary materials, equipment, devices and labor for implementation and up-keep of site safety as it relates to this scope of work, to meet or exceed OSHA and / or safety agencies having jurisdiction on this project. Any and all costs resulting from OSHA sited violations will be the complete responsibility of this subcontractor
- C. This project is a prevailing wage project and it is the responsibility of this sub-contractor to ensure that all of the latest rules and regulations published by the NYS Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit are strictly followed and adhered to. In the events of an audit conduct by the NYS Department of Labor, this sub-contractor will be responsible for any and all costs associated with the audit and the Departments' final decision.
- D. Work in the HVAC Contract includes, but is not limited to, the following:
1. Remaining work not identified as work under other contracts.
 2. Curbs, RTUs/UV's, Boilers, and accessories to be hoisted onto the roof or required floor level.
 3. Assemble roof curbs, set in place, anchor and flash to roof structure.
 4. Assemble Boiler, set in place, anchor and make all pipe connections.
 5. Supply and install galvanized supply and return curb transitions.
 6. Install RTUs onto curbs and weather-tight.
 7. Install all RTU accessories, including filters.
 8. Install UV's and new cabinets, associated ductwork work and duct/pipe insulation.
 9. Install thermostats connect to BMS and make connections at RTUs and UV's.
 10. Program thermostats for heat, cooling and occupied & unoccupied times.
 11. Make all supply and return ductwork connections.
 12. Start up and test RTUs/UV's and Boiler for heat. Cooling and fresh air where applicable.
 13. Adjust all volume dampers and diffusers to provide proper air flow.
 14. Make all ductwork connections for fans.
 15. Test all fans.
 16. Balance system as per specifications.
 17. File, pay for, and obtain all required permit, inspections, and approvals.
 18. Schedule and perform all inspections required by this scope of work.
 19. Removal and disposal of daily generated debris.
 20. Demolition of existing system/items that are being replaced.
 21. Upon completion of this contractor's work, all excess materials and debris in the building and site are to be removed and disposed of promptly.
 22. This is an prevailing wage project.
 23. Provide/install new fin tube enclosures.
- E. Temporary facilities and controls in the HVAC Contract include, but are not limited to, the following:
1. Temporary facilities and controls that are not otherwise specifically assigned to the Plumbing Contract, , Electrical Contract,.
 2. Unpiped temporary toilet fixtures, wash facilities, and drinking water facilities, including disposable supplies.
 3. Temporary enclosure for building exterior.
 4. Temporary roads and paved areas.
 5. Project identification and temporary signs.
 6. General waste disposal facilities.
 7. Temporary fire-protection facilities.
 8. Barricades, warning signs, and lights.
 9. Site enclosure fence.
 10. Security enclosure and lockup.
 11. Environmental protection.

12. Restoration of Owner's existing facilities used as temporary facilities.

1.10 ELECTRICAL CONTRACT

- A. Supply all necessary materials, labor, services, equipment and tools required to perform the following site electrical work for the RTU, Unit Ventilator and Boiler replacement. All work to be installed in strict accordance with Specifications and Drawings.
- B. Supply all necessary materials, equipment, devices and labor for implementation and up-keep of site safety as it relates to this scope of work, to meet or exceed OSHA and / or safety agencies having jurisdiction on this project. Any and all costs resulting from OSHA sited violations will be the complete responsibility of this subcontractor
- C. This project is a prevailing wage project and it is the responsibility of this sub-contractor to ensure that all of the latest rules and regulations published by the NYS Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit are strictly followed and adhered to. In the events of an audit conduct by the NYS Department of Labor, this sub-contractor will be responsible for any and all costs associated with the audit and the Departments' final decision.
- D. Work in the Electrical Contract includes, but is not limited to, the following:
 1. Supply and install all electrical materials, devices, and equipment for the RTU, UV and Boiler replacement.
 2. Supply and install complete electrical service from source to new RTU's.
 3. Supply and install complete electrical service from source to new RTU Condenser units as an alternate
 4. Supply and install RTU disconnects and make electrical connections.
 5. Supply and install RTU maintenance receptacles and make electrical connections.
 6. Disconnect and reconnect electrical connection to UV's and Boiler.
 7. Test all site installed systems.
 8. Test all factory installed systems.
 9. File and obtain and pay for all required permits, inspections and approval.
 10. Schedule and perform all inspections required by this scope of work.
 11. Start up RTUs
 12. Supply and install fire alarm devices wire to existing panels
 13. Removal and disposal of daily generated debris.
 14. Upon completion of this contractor's work, all excess materials and debris in the building, connecting link and site are to be removed and disposed of promptly, and site restored to original condition.
 15. Demolition of existing item/systems being replaced.
 16. This is a prevailing wage project.
- E. Temporary facilities and controls in the Electrical Contract include, but are not limited to, the following:
 1. Electric power service and distribution.
 2. Electrical connections to existing systems and temporary facilities and controls furnished by the General Construction Contract, Plumbing Contract, HVAC Contract, Electrical Contract,.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011200

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011200

NRHS ROOFTOP HVAC AND ANNEX UV REPLACEMENT

NORTH ROCKLAND HIGH SCHOOL
106 Hammond Road
Thiells, NY 10984
SED# 50-02-01-06-0-016-029

OWNER:
NORTH ROCKLAND
CENTRAL SCHOOL DISTRICT
65 CHAPEL STREET
GARNERVILLE, NY 10923

ARCHITECT:
MICHAEL SHILA ARCHITECTS, LLP
140 Park Avenue
New City, NY 10956

MEP ENGINEER:
GREENMAN-PEDERSON, INC.
400 Rella Boulevard, Suite 207
Montabello, NY 10901

MATERIALS LEGEND	
	CONCRETE MASONRY UNIT
	BRICK
	RIGID INSULATION
	CONCRETE
	GRAVEL OR STONE
	EARTH
	EIFS
	ASPHALT PAVING
	SAND/MORTAR/GYPSUM BOARD
	STEEL
	ACT
	ROUGH WOOD
	BRONZE

ABBREVIATIONS	
ACT	ACOUSTICAL CEILING TILE
A.F.F.	ABOVE FINISH FLOOR
ASPH	ASPHALT
BLK	BLOCK
BLK'G	BLOCKING
BUR	BUILT UP ROOFING
CLG	CEILING
CONC	CONCRETE
CONT	CONTINUOUS
C.J.	CONTROL JOINT
DN	DOWN
DIA	DIAMETER
DWG	DRAWING
E.F.	EACH FACE
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
E.W.	EACH WAY
E.W.C.	ELECTRICAL WATER COOLER
EL	ELEVATION
ELC	ELECTRICAL CONTRACTOR
EXIST	EXISTING
EXP	EXPANSION
EXT'G	EXISTING EXTERIOR
EXTR	EXTERIOR
FF	FIREPROOF
FIN	FINISH(ED)
GA	GAUGE
GC	GENERAL CONTRACTOR
GALV	GALVANIZED
GL	GLASS
GWB	GYPSUM WALL BOARD
HM	HOLLOW METAL
H.P.	HIGH POINT
HAC	HEATING & A/C CONTRACTOR
ITR	INDIVIDUAL TREATMENT ROOM
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
LP	LOW POINT
MAX	MAXIMUM
MFR	MANUFACTURER
MTL	METAL
MIN	MINIMUM
MO	MASONRY OPENING
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
OC	ON CENTER
OP'N'G	OPENING
PBC	PLUMBING CONTRACTOR
PLAS.LAM.	PLASTIC LAMINATE
PL	PLATE
PLY'D	PLYWOOD
RAD	RADIUS
REF.CLG.	REFLECTED CEILING
REQ'D	REQUIRED
RO	ROUGH OPENING
SIM	SIMILAR
STL	STEEL
SUSP.CLG.	SUSPENDED CEILING
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.I.F.	VERIFY IN FIELD
VCT	VINYL COMPOSITE TILE
W/	WITH
WD	WOOD

DRAWING No.	DRAWING TITLE	DATE
A-000	COVER SHEET	04-13-21
A-100	HS ROOF PLAN	11-10-20
A-101	EXISTING SOLAR PV ROOF PLAN	11-10-20
A-110	HS ANNEX FIRST FLOOR PLAN	11-10-20
A-111	HS ANNEX SECOND AND THIRD FLOOR PLAN	11-10-20
A-400	CLG REMOVAL & INSTALLATION PLAN	03-25-21
A-500	DETAILS	11-10-20
S-001	GENERAL NOTES & TYPICAL DETAILS	03-25-21
S-002	FLOOR PLAN	03-25-21
M-001	NOTES & SCHEDULES	01-26-21
M-002	CONTROLS	01-26-21
M-011	MECHANICAL NOTES AND DETAILS	11-10-20
M-012	MECHANICAL SCHEDULES	03-25-21
M-013	MECHANICAL VENTILATION SCHEDULE	03-25-21
M-101	MECHANICAL ROOF PLAN	11-10-20
M-111	PARTIAL 1ST & 2ND FLR PLANS - MECHANICAL	03-25-21
M-112	PARTIAL 3RD FLR PLAN - MECHANICAL	03-25-21
M-501	DETAILS	11-10-20
F-001	ELECTRICAL COVER SHEET	11-10-20
E-011	ELECTRICAL NOTES AND DETAILS	04-13-21
E-101	ROOF PLAN DEMOLITION	11-10-20
E-102	ROOF PLAN INSTALLATION	11-10-20
E-111	PARTIAL 1ST AND 2ND FLOOR PLANS - ELECTRICAL	04-13-21
E-102	PARTIAL 3RD FLOOR PLAN - ELECTRICAL	04-13-21

GENERAL NOTES

- G.C. TO VERIFY ALL DIMENSIONS IN THE FIELD AND IS TO NOTIFY ARCHITECT IF THERE ARE ANY DISCREPANCIES

ALTERNATES

ALT. #2-1: - REMOVE AND REPLACE UNIT G1
 ALT. #2-2: - REMOVE AND REPLACE UNIT K1
 ALT. #2-3: - REMOVE AND REPLACE UNIT F2
 ALT. #3: - PROVIDE DX COIL, CONDENSING UNIT AND ELECTRICAL FEEDERS FOR UNIT E2. PROVIDE NEW ROOF CURBS AS REQUIRED.
 ALT. #4: - PROVIDE DX COIL, CONDENSING UNIT AND ELECTRICAL FEEDERS FOR UNIT E5. PROVIDE NEW ROOF CURBS AS REQUIRED.
 ALT. #5: - PROVIDE DX COIL, CONDENSING UNIT AND ELECTRICAL FEEDERS FOR UNIT H2. PROVIDE NEW ROOF CURBS AS REQUIRED.

ALLOWANCES

ALLOWANCE NO. 1: CLEAN EXISTING MAIN DUCTWORK FOR 20 LINEAR FEET PER UNIT
 ALLOWANCE NO. 2: REPLACE EXISTING SUPPLY AND RETURN PIPING AND INSULATION FOR 20 LINEAR FEET PER UNIT
 ALLOWANCE NO. 3: PERFORM COMMISSIONING OF INSTALLED AIR HANDLING EQUIPMENT BY THIRD PARTY AGENCY FOR 3 UNITS

UNIT PRICES

UNIT PRICE NO. 1:
 PROVIDE UNIT PRICE TO CLEAN EXISTING MAIN DUCTWORK FOR EACH UNIT. PRICE IS PER LINEAR FOOT.
 UNIT PRICE NO. 2:
 PROVIDE UNIT PRICE TO REPLACE EXISTING SUPPLY AND RETURN PIPING AND INSULATION FOR EACH UNIT. PRICE IS PER LINEAR FOOT.

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, TO ALTER AN ITEM IN ANY WAY.

0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

No.	Date	Revisions
4	04-13-21	ADDENDUM NO. 2
3	03-25-21	THAC & STRUCT REVISIONS
1	11-10-20	BIDDING DOCUMENTS

Drawn by: MAL/JR
 Checked by: MS/JC
 Project No.: 39062G
 Scale: AS NOTED
 Date: 11-10-20

GREENMAN-PEDERSON, INC.
 Mechanical & Electrical Engineer
 400 Rella Boulevard, Suite 207
 Montabello, NY 10901

MICHAEL SHILA ARCHITECTS, LLP.
 Architect
 140 Park Avenue, New City, NY 10956
 Tel: 845-708-6200
 Fax: 845-708-6200

COVER SHEET

A-000

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GENERAL NOTES

- THE CONTRACTOR SHALL BE HELD TO HAVE VISITED THE PREMISES AND TO HAVE COMPARED THEIR OBSERVATIONS WITH THE DRAWINGS AND SPECIFICATIONS, AND TO HAVE VERIFIED THE EXISTING CONDITIONS THROUGHOUT THE BUILDING. LATER CLAIMS MADE BY THE CONTRACTOR FOR HAVING INCURRED EXTRA COSTS SHALL NOT BE CONSIDERED WITHOUT FIRST SECURING SUFFICIENT PROOF IN SUPPORT OF EVIDENCE OF SUCH EXTRA CLAIMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AREAS WHERE INSUFFICIENT INFORMATION IS AVAILABLE, OR WHERE IT CAN BE DOCUMENTED WITH PHOTOS, AND OTHER SUPPORTING INFORMATION THAT SUCH EVIDENCE WAS BEYOND THE MEANS OF THE CONTRACTOR AS JUDGED BY THE OWNER. FINAL JUDGMENT FOR SUCH CLAIMS SHALL BE BY THE OWNER.
- VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD, AND BE RESPONSIBLE FOR THE SAME PRIOR TO COMMENCING WORK. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER, THE ARCHITECT AND THE ENGINEER ON RECORD.
- ALL ELECTRICAL WIRING SHALL ADHERE TO THE LATEST REVISION OF BOTH NATIONAL ELECTRICAL CODE AND THE NEW YORK STATE BUILDING CODES.
- ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE AND MOST RECENT EDITION OF THE STATE AND LOCAL CODES AND SHALL MEET THE REQUIREMENTS OF ALL OTHER AUTHORITIES, ORGANIZATIONS AND GOVERNMENT AGENCIES HAVING JURISDICTION.
- THE WORK OF THIS CONTRACT IS TO BE PERFORMED WITH A HIGH LEVEL OF QUALITY. WORK WHICH IS, IN THE OPINION OF DESIGNATED REPRESENTATIVE NOT IN COMPLIANCE WITH THE HIGHEST RECOGNIZED INDUSTRY STANDARD FOR WORKMANSHIP OR WORK WHICH HAS BEEN DAMAGED BY FACILITY WORKMANSHIP, WILL BE REMOVED AND REPLACED, OR REPAIRED TO THE SATISFACTION OF THE OWNER.
- PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE THE WORK DESCRIBED HEREIN AND/OR AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR THE PROPER CONSTRUCTION SHALL BE INCLUDED AS IF THEY WERE ON THE DRAWINGS.
- THE LOCATIONS SHOWN ON THE DRAWINGS INDICATE INTENT AND SHALL BE VERIFIED IN THE FIELD.
- ALL HOLES MADE BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE PROPERLY PATCHED AND REPAIRED. ALL CONDUIT PENETRATIONS THROUGH FLOORS AND WALLS SHALL BE SEALED.
- THE CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING AS REQUIRED TO PERFORM ALL WORK INDICATED ON THE DRAWINGS, AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.
- THE CONTRACTOR SHALL PROVIDE ALL PHYSICAL PROTECTION REQUIRED TO PROTECT ALL EQUIPMENT DURING CONSTRUCTION.
- WHERE CONDUIT ROUTING HAS NOT BEEN SHOWN ON THE DRAWINGS, THE ROUTING OF POWER BRANCH CIRCUITS WILL BE AT THE CONTRACTOR'S DISCRETION AND THE OWNER APPROVAL IN ACCORDANCE WITH CODES AND SPECIFICATIONS.

ELECTRICAL DEMOLITION NOTES:

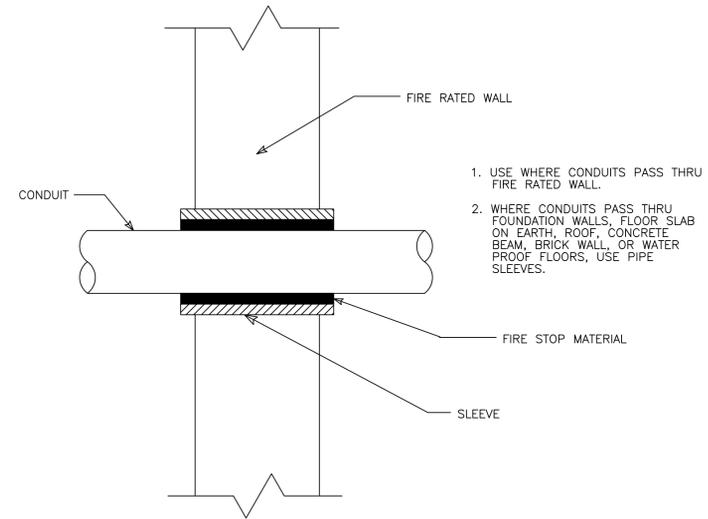
- THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS ASSOCIATED WITH REMOVALS AND RELOCATIONS OF ELECTRICAL WORK AS DESCRIBED IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXPECTED OR UNFORESEEN DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO CLAIMS FOR ADDITIONAL WORK ASSOCIATED WITH DEMOLITION WILL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT.
- THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING ELECTRICAL WORK WHICH INTERFERES WITH THE NEW ARCHITECTURAL AND ELECTRICAL LAYOUTS IN FULL COORDINATION WITH THE ARCHITECT'S DEMOLITION PLANS. ALL SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE DE-ENERGIZED AND DISCONNECTED AT THE SOURCE OF POWER SUPPLY.
- THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING ELECTRICAL SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
- DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL OUTLETS, SWITCHES AND OTHER DEVICES, COMPLETE WITH ASSOCIATED WIRING, CONDUITS, ETC., FROM PARTITIONS THAT ARE TO BE REMOVED. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING WIRING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION. OTHERWISE, WIRING SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO PANELBOARD.
- ALL RACEWAYS WHICH BECOME EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- ALL UNUSED OUTLET BOXES OR CAPPED FLOOR OUTLETS SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
- EXISTING PANEL DIRECTORIES AFFECTED BY THE ALTERATION WORK SHALL BE MODIFIED TO REFLECT THE BRANCH CIRCUIT WIRING CHANGES.
- PORTIONS OF FEEDER RUNS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CABLE TYPE, CONDUCTOR AMPACITY, CONDUIT SIZES, ETC.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF AFFECTED UTILITIES MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS. THE CONTRACTOR SHALL FOLLOW CLOSELY THE ARCHITECT'S DEMOLITION AND PHASING SCHEDULE AND PROCEED IN THE SPECIFIED SEQUENCE.
- ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR, AS DIRECTED BY THE OWNER.
- ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME ACTUALLY REQUIRED TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.
- THE SHUTDOWN OF EXISTING BUILDING ELECTRICAL SERVICES SHALL BE COORDINATED WITH THE OWNER. MAKE ARRANGEMENTS AT LEAST 5 BUSINESS DAYS PRIOR TO A SHUTDOWN.

ABBREVIATIONS

A	AMPERE	LP	120/200V PANEL
AC	ALTERNATING CURRENT	LS	LOUDSPEAKER
ACS	ADMINISTRATIVE CONTROL STATION	LTG	LIGHTING
ADA	AMERICANS WITH DISABILITIES ACT	MTV	MASTER TELEVISION
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
ARCH	ARCHITECTURAL	MECH	MECHANICAL
ATS	AUTOMATIC TRANSFER SWITCH	MER	MECHANICAL EQUIPMENT ROOM
A/C	AIR CONDITIONING	MIC	MICROPHONE
C	CONDUIT	MTD	MOUNTED
CAB	CABINET	N	NEUTRAL
CLG	CEILING	N.C.	NORMALLY CLOSED
CB	CIRCUIT BREAKER	N.O.	NORMALLY OPEN
CKT(S)	CIRCUIT(S)	O & R	ORANGE AND ROCKLAND
COL	COLUMN	P	FOLE(S)
DWG	DRAWING	FB	FULL BOX
EC	EMPTY CONDUIT	FINL	PANEL
ELEC	ELECTRIC	FP	211/480V PANEL
EMR	ELEVATOR MECHANICAL ROOM	RC	REMOTE CONTROL
EMT	ELECTRIC METALLIC TUBING	SP	SFARE
EXH	EXHAUST	SSB	SOLID STATE BALLAST
EXIST	EXISTING	STD	STANDARD
FATB	FIRE ALARM TERMINAL BOX	SW	SWITCH
FL	FLOOR	SWBD	SWITCHBOARD
G	GUARD	TEL	TELEPHONE
GND	GROUND	TV	TELEVISION
GFI	GROUND FAULT INTERRUPTER	TYP	TYPICAL
GRC	GALVANIZED RIGID CONDUIT	V	VOLT
IG	ISOLATED GROUND	W	WATT
JB	JUNCTION BOX	WP	WEATHERPROOF
KVA	KILOVOLT AMPERE		
KW	KILOWATT		
KWH	KILOWATT HOUR		

INSTALLATION NOTES

- CONTRACTOR SHALL PERMANENTLY FASTEN ALL THE EQUIPMENT AS INDICATED ON THE DRAWINGS IN AN APPROVED MANNER, WITH ALL NECESSARY HARDWARE.
- CONTRACTOR SHALL PROVIDE ALL CONDUITS, WIRING, OUTLET BOXES AND ALL ACCESSORIES NECESSARY TO COMPLETE THE WIRING TO ALL COMPONENTS OF THE SYSTEM. ALL CONNECTIONS SHALL BE MADE COMPLETE AND TESTED.



1 CONDUIT PENETRATION THROUGH FIRE RATED WALL

SCALE: N.T.S.

0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

No.	Date	Revisions
4	04-13-21	ADDENDUM 2

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Drawn by	MEP
Checked by	RJS
Project No.	39062G
Scale	AS NOTED
Date	11-10-20

MECHANICAL & ELECTRICAL ENGINEER:	GREENMAN PEDERSEN INC 1000 MONTELEONE BLVD HOUSTON, TX 77002
STRUCTURAL ENGINEER:	---

NRHS ROOFTOP HVAC AND ANNEX UV REPLACEMENT	SHEET # 50-05-01-06-0-01-0-029 108 HANCOCK BL THIRTY-NINE COUNTY OF ROCKLAND
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MSA MICHAEL SHILALE ARCHITECTS, L.L.P. 140 Park Avenue New City, NY 10958 Tel: 845-708-9200 www.shilale.com
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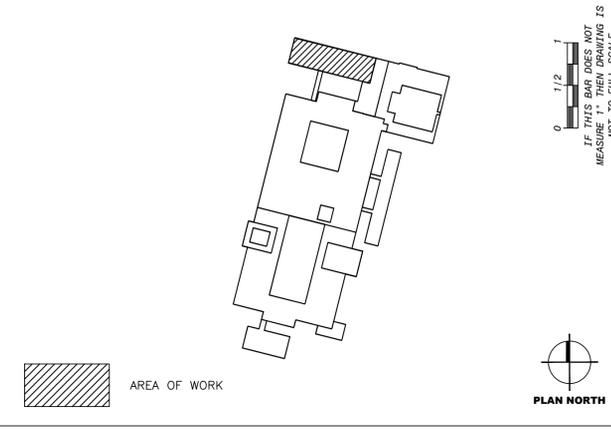
Drawing Title ELECTRICAL NOTES AND DETAILS
Drawing No. E-011

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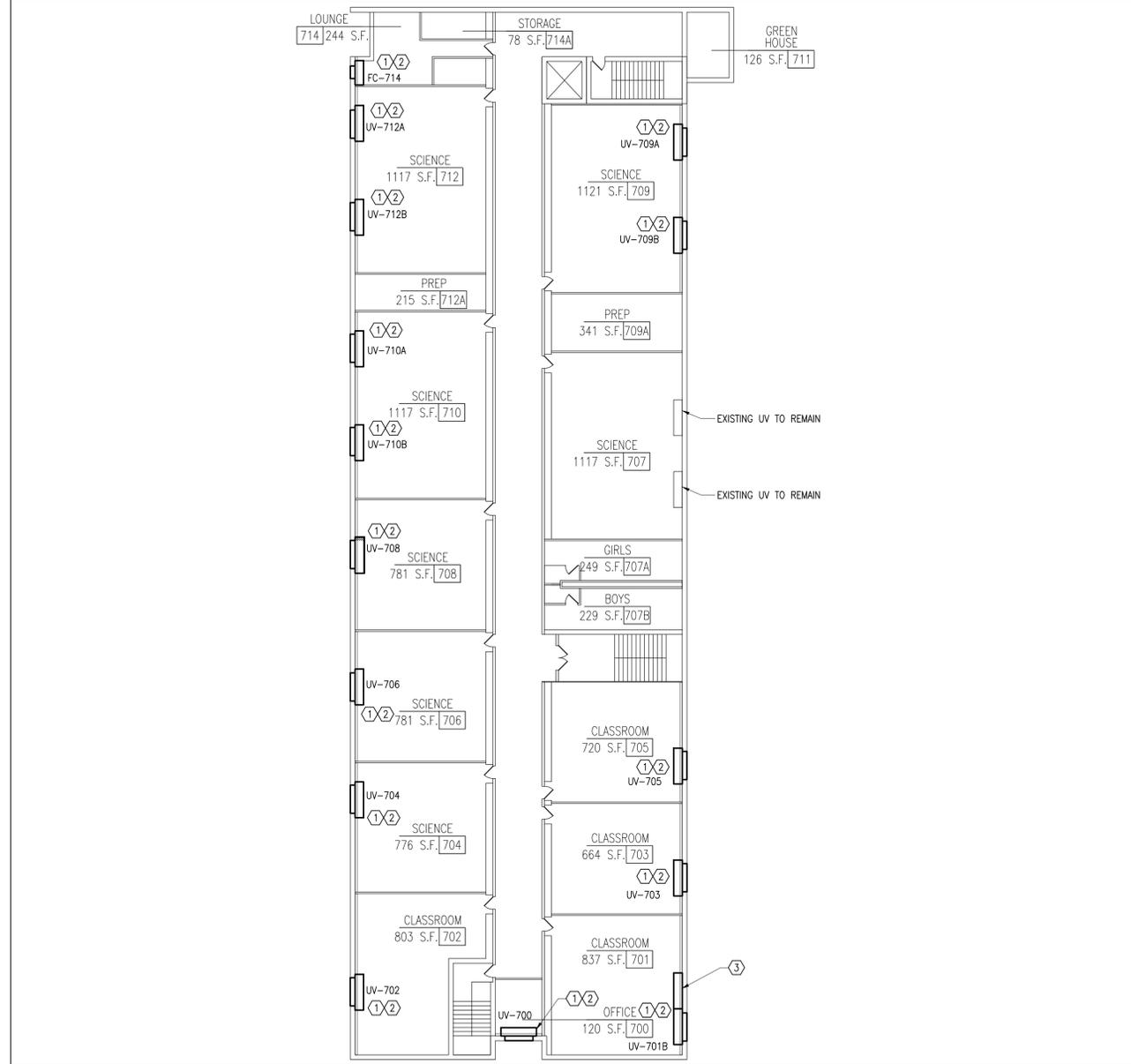
- KEY NOTES:**
- DISCONNECT AND REMOVE EXISTING POWER CONNECTION TO EXISTING UNIT VENTILATOR AND/OR FAN COIL UNIT. MAINTAIN EXISTING CIRCUITRY AND CONDUIT FOR REUSE. RECONNECT NEW UNIT TO EXISTING POWER CONNECTION. PROVIDE ALL ADDITIONAL JUNCTION BOXES, WIRING AND CONDUIT AS REQUIRED.
 - PROVIDE ALL NECESSARY TEMPORARY ELECTRICAL SUPPORTS AND FITTINGS AS REQUIRED TO PROPERLY PROTECT EXISTING CABLES DURING DEMOLITION.
 - DISCONNECT AND REMOVE EXISTING POWER CONNECTION TO EXISTING UNIT VENTILATOR AND/OR FAN COIL UNIT. PROVIDE NEW JUNCTION BOX AND TERMINATE EXISTING CABLING WITHIN BOX FOR FUTURE USE.

- GENERAL NOTES:**
- COORDINATE EXACT LOCATION OF ALL NEW UNITS WITH MECHANICAL CONTRACTOR.
 - UPDATE ALL PANEL DIRECTORIES AFFECTED BY SCOPE OF WORK.
 - COORDINATE ALL POWER REQUIREMENTS FOR NEW UNITS PRIOR TO MAKING FINAL CONNECTIONS.

NOTES



KEY PLAN



1 PARTIAL THIRD FLOOR PLAN
SCALE: 1/16" = 1'-0"



No.	Date	Revisions
4	04-13-21	ADDENDUM 2

Drawn by	AW
Checked by	RJS
Project No.	39062G
Scale	AS NOTED
Date	11-10-20

GREENMAN PEDERSEN INC. Mechanical & Electrical Engineer	11111 11111 11111
GREENMAN PEDERSEN INC. Structural Engineer	11111 11111 11111

NRHS ROOFTOP HVAC AND ANNEX UV REPLACEMENT
SER# 50-05-01-06-0-010-029
108 Haverhill Rd.
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STATE OF CLAY COUNTY
COUNTY OF ROCKLAND

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Drawing Title
PARTIAL 3RD FLR PLAN - ELECTRICAL

Drawing No.
E-112

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