



**CLEVELAND  
METROPOLITAN  
SCHOOL DISTRICT**

Purchasing Department 1111 Superior Avenue  
E, Suite 1800  
Cleveland, Ohio 44114  
Ph: (216) 838-0418 Fax: (216) 436-5118

July 15, 2020

To: All Vendors  
From: Seletha R. Thompson  
Purchasing Analyst  
Re: **Addendum #1 for RFP 21305 - Luis Munoz Marin**

*Below is **Addendum #1 for RFP 21305 - Luis Munoz Marin***

*This addendum supplements and amends the items in the Specifications. This addendum **must be noted** on the Addendum Acknowledgement Form found in the RFP. **Failing to acknowledge this Addendum on the Addendum Acknowledgement Form may cause the response to be rejected.***

This Addendum #1 reflects the following:

- Pre-Proposal Meeting Documents (see attached)
- Response to Questions (see attached)
- Project Specific Documents (see attached)
- Response Due Date Extension

This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

Each bidder shall acknowledge receipt of the Addendum in your bid response. **Failing to acknowledge this Addendum on the Addendum Acknowledgement Form may cause the response to be rejected.**

## **BID DUE DATE EXTENSION**

**Extended from July 24, 2020 to July 28, 2020 at 1:00 PM (EST)**

**REMINDER: Mailing of RFP responses are encouraged. However, hand deliveries will only be accepted from 11:00 AM to 1:00 PM on July 28, 2020.**

--End of Addendum #1--

## RFP 21305 - Luis Munoz Marin

### Response to Questions

1. Is airflow measurement a requirement for this opportunity  
**RESPONSE:** Test and Balance of System is required at end of project
2. What are the required opening dimensions for the installation site and what are the airflow velocities (min and max) for the AHU  
**RESPONSE:** Air velocities are to be determined by proposer and unit manufacturer
3. Can I submit a quote on Air Monitor (not currently listed in the specification)  
**RESPONSE:** Yes, if desired. District will evaluate all quotes and proposals

# **ADDENDUM**

# **No. 1**

***Cleveland Metropolitan School District***  
**Luis Muñoz Marín Elementary School**  
**AC-5 RTU Replacement Project 2020**

**Contents (in order of presentation):**

**General Instructions**  
**Scope Clarifications**  
**Reference Document Additions**  
**Drawing Document Clarifications**  
**Updated Pre-Proposal Meeting Agenda Notes**  
**Updated Drawing Sheets**  
**Roof Plan Drawing**



July 20, 2020

This Addendum supplements and amends the original and subsequent documents making up the Owner's Project Requirements (OPR) and shall be accounted for in preparing proposals and shall become part of the OPR/Contract Documents. This Addendum is issued to qualified proposers of record. It is the proposer's responsibility to forward this Addendum information to all affected suppliers and subcontractors and/or adjust relative to the proposal.

### **General Instructions:**

- This Addendum No. 1 is to be acknowledged on the proposal form provided in the Owner's Project Requirements (OPR) documents.
- The proposal date remains **Friday, July 24<sup>th</sup> no later than 1:00PM**. Refer to Instructions to Proposers document for specific delivery instructions.

### **Scope Clarifications:**

- Ceiling renovations which take place in classrooms where VAV's are being installed is to be included in the BASE Scope of Work. This includes any / all: lighting, grid/tile, and square diffusers. Any additional ceiling/lighting work not in these areas is to be included under the ALTERNATE ALT-1 Scope of Work.

### **Reference Documents Added:**

- Added Roof Plan drawing for contractor and warranty information. (Page 11)

### **Drawing Document Clarifications:**

- Sheet M.01 (Page 7):
  - Added note to refer to added sheet SC.01 for revised zone CFM totals and VAV schedule.
- Sheet M.02 (Page 8):
  - Revised HVAC Zone Designations in accordance with sheet SC.01.
- Sheet A.01 (Page 9):
  - Revised Lighting Zone Designations.
- ADDED Sheet SC.01 (Page 10):
  - Contains RTU HVAC Unit AC-5 zoning schematic, CFM totals and revised VAV schedule.



2305 E Aurora Rd. Unit A7  
Twinsburg, Ohio 44087  
Phone (330) 998-6695  
Fax (330) 998-6794

5577 Airport Hwy., Suite 202  
Toledo, Ohio 43615  
Phone (855) 272-2421  
Fax (419) 727-8600

## **Pre-Proposal Meeting Agenda – NOTES Version**

July 8, 2020 (July 15 NOTES)

### Project:

**Cleveland Metropolitan School Dist. (CMSD)**

**Luis Munoz Marin School – AC-5 RTU HVAC Replacement 2020**

1701 Castle Ave., CLEVELAND OH 44113

### Agenda:

#### **I. Introductions**

- a. Owner – CMSD Cleveland, Ohio
  - i. Bob Kasler, CMSD Trades Director (not in attendance)
  - ii. Seletha Thompson, CMSD Procurement Specialist (not in attendance)
  - iii. Henry Townshend, Site Coordinator
- b. Criterion Engineer/Owner's Advocate – AGM Energy Services
  - i. Andre' T. Goosby, President (not in attendance)
  - ii. Scott Hoffman, Principal
  - iii. Lucas Hoffman, Project Manager
- c. Potential Bidders – (refer to published Sign-in Sheet)

#### **II. Goals of Pre-Proposal Meeting – Prepare Proposers for Delivery of Qualified Proposals**

- a. Describe Expected Work - refer to Bid Form and Owner's Program of Requirements (OPR) Docs posted/distributed this meeting and subsequently distributed.
  - i. BASE Scope:
    1. Replacement of Existing Rooftop HVAC Unit with New Equipment/Systems.
    2. Includes an ALLOWANCE in the amount of \$10,000 (included w/ Bid)
  - ii. ALT 1 Scope:
    1. Provide Replacement of Designated Ceiling Tiles and Lighting Systems.
  - iii. ALT 2 Scope:
    1. Propose Three-year Manufacturer-recommended PREVENTATIVE MAINTENANCE Services for HVAC/Electrical Equipment installed.
- b. Describe Anticipated Timeframes
- c. Provide Pre-Proposal Communication pathways
  - i. RFI-style E-mail preferred: to Ms. Seletha Thompson at CMSD w/ copy to AGM Energy Services.
  - ii. Voice: not allowed.

iii. CMSD/AGM will publish all pertinent Non-PROPRIETARY info/answers to RFIs

**III. Scope of Work**

- a. BASE SCOPE Items Included:
  - i. Complete demolition, including any non-anticipated Asbestos, required prep for new unit and new HVAC VAV SYSTEMS Install as noted.
    - 1. Rooftop Packaged Multizone HVAC Unit (AC-5).
    - 2. New Variable Air Volume Terminals served by replaced AC-5.
- b. ALT-1: Replacement of Ceiling Tiles & Lighting Systems in area of upgraded Construction as specified.
- c. ALT-2: RTU HVAC Equipment /Systems Extended Preventative Maintenance – 3 years, contracted annually with options for renewal periods.
  - i. Provide MANUFACTURER-PUBLISHED/RECOMMENDED PREVENTATIVE MAINTENANCE Services for new HVAC/Electrical Equipment based on Manufacturer-recommended means for periods noted.
    - 1. Employ CMSD Work Access/Scheduling & Procedures as specified.
    - 2. Employ CMSD Documentation as specified.
    - 3. Employ CMSD Standard Service Record Labeling (furnished by District) as specified.

**IV. Project Framework and Delivery**

- a. Single Bid Performance Specification Project (This Project is NOT “Plan-&Spec” construction).
  - i. Mechanical Prime with appropriate Main Electrical, Structural, Roofing, Plumbing & Low Voltage Electrical, subject to CMSD/AGM reviews, and subsequent approvals.
  - ii. Design & Construction Coordination & full Project Management.
  - iii. Complete Turn-Key Installation Services AND provision of specified Documentation.
  - iv. CMSD DBE/WBE Goals apply.
  - v. CMSD requires Standard Bond for this Work/Proposal

**V. Owner’s Project Requirements (OPR)**

- a. Front-End Documents – furnished by CMSD
  - i. Instructions & Notices
  - ii. Proposal/Bid Forms
  - iii. Anticipated Forms of Agreement/Supplemental information
  - iv. Community Inclusion Program and other associated requirements documents
- b. Specifications
  - i. Overall Criteria, Descriptions and Boundaries
  - ii. Owner-provided Master Systems Integration/Temperature Controls Equipment for installation by Bidding Contractor.
  - iii. Applicable Supplemental information
- c. Drawings – Schematic Not-to-Scale
  - i. As current-as-possible As-Built or known Design documents

**VI. Anticipated Project Schedule items**

- a. Proposals Due July 24, 2020, 12:00 p.m., current local time.

- i. Lump Sum Pricing for SPECIFIC Scope & Terms as specified by CMSD Docs.
- ii. Technical Proposal Items – Refer to OVERALL Specification Section
  - 1. Equipment/Sub-Contractor Declarations
- b. Pre-Proposal Meeting & Walk-Thrus
  - i. Initial Meeting July 8, 2020
  - ii. Planned Subsequent Times – to be determined
    - 1. Others as arranged/pre-approved by CMSD/AGM.
- c. Proposal Evaluations completed – July 30, 2020
  - i. Selection Criteria: Best Value of Price, Schedule & Scope/Solution.
- d. Recommendation/Selection of Best VALUE Proposal- Target: July 30, 2020
- e. Target Implementation Phase
  - i. Begin, Upon CMSD Approvals & Valid Notice-to-Proceed – by August 20, 2020
  - ii. Complete specified RTU HVAC Replacement work by November 30, 2020.
  - iii. Evaluate Extension of PREVENTATIVE MAINTENANCE Agreement by July 1, 2021 [ALT Service Proposal for execution in 2020-21]
  - iv. Complete DOCUMENTATION for BASE Project Installation by December 31, 2020.

**VII. Important Discussion Items:**

- a. Work Access: building is partially occupied until Memorial Day and fully occupied after August 13, 2020. Field-Construction activities prior to Memorial Day and after August 13 are possible, but limited to days/times/AREAS when standard staff/cleaning/children-occupied schedules allow. Non-standard Field-Construction activity Schedules will need to be worked-around (no free access can be planned for, but District is committed to coordination to help process/results)
  - i. Overtime/Shutdown/Weekend Efforts are allowed/expected to complete Scope of Work in time.
  - ii. Parking – “limited” at jobsite, unless children are dismissed for calendar breaks.
- b. Security: Background checks and Screening/Badging are required for all personnel anticipated to participate.
- c. Specific Field-Construction & subsequent PREVENTATIVE MAINTENANCE Items:
  - i. Adherence to planned Schedules and Call-Ahead procedures is required.
  - ii. Adherence to known, usual & customary SAFETY procedures is required.
  - iii. Cleanliness – daily requirement for all affected areas
  - iv. Adherence to specified DOCUMENTATION procedures is required, including use of Standard CMSD Service Record Labeling.
  - v. Project Meetings
    - 1. Periodic Progress/Update Meetings with District & Key Staff may be required.

**VIII. Questions**

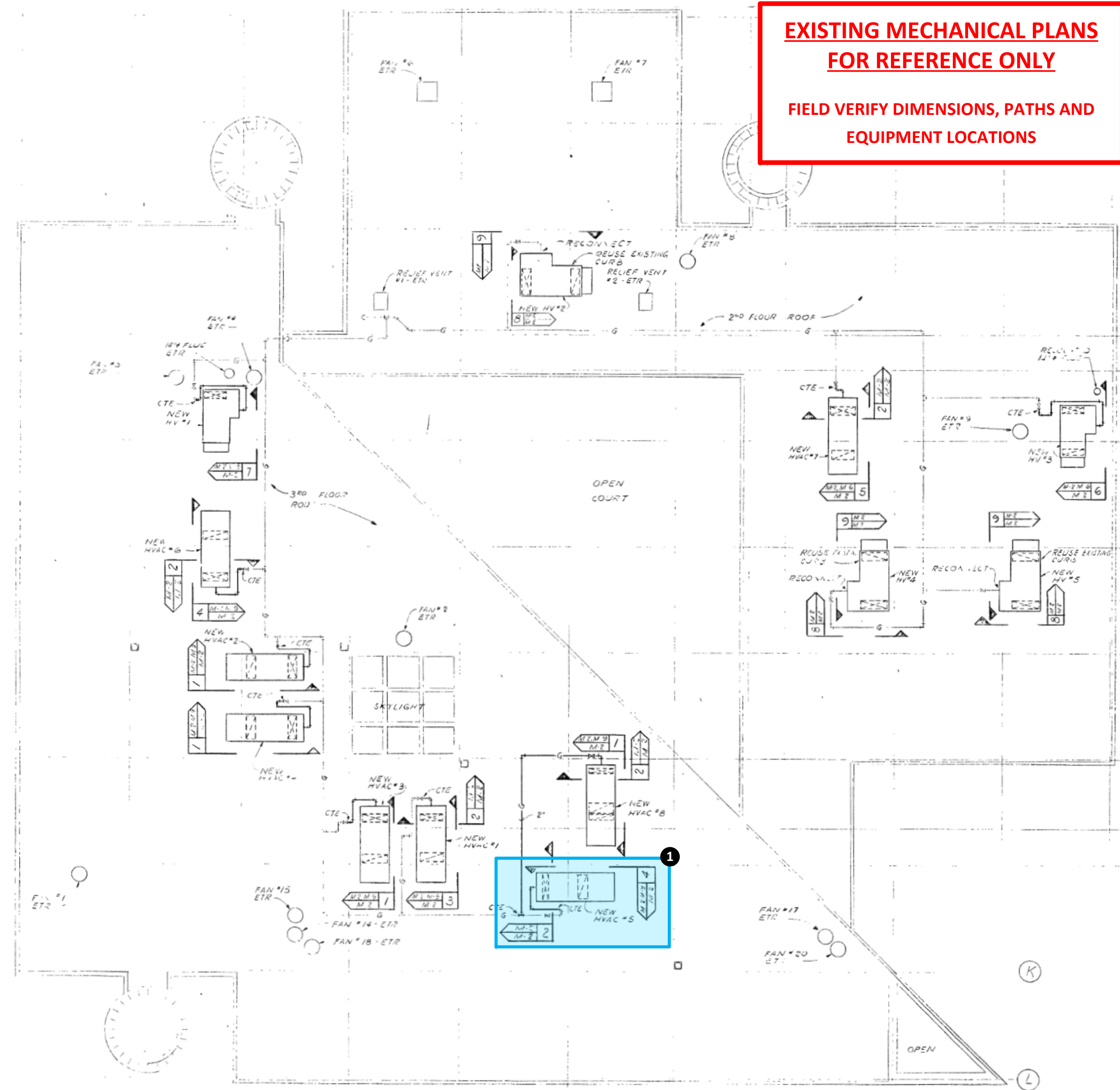
**IX. Subsequent Access to School – to be confirmed**

**This Meeting Agenda is to be considered a part of the OPR Documents being used to prepare the specified Bids and Documentation required. Please notify the writer if any items are not clear enough as stated or omitted as understood from the discussions.**

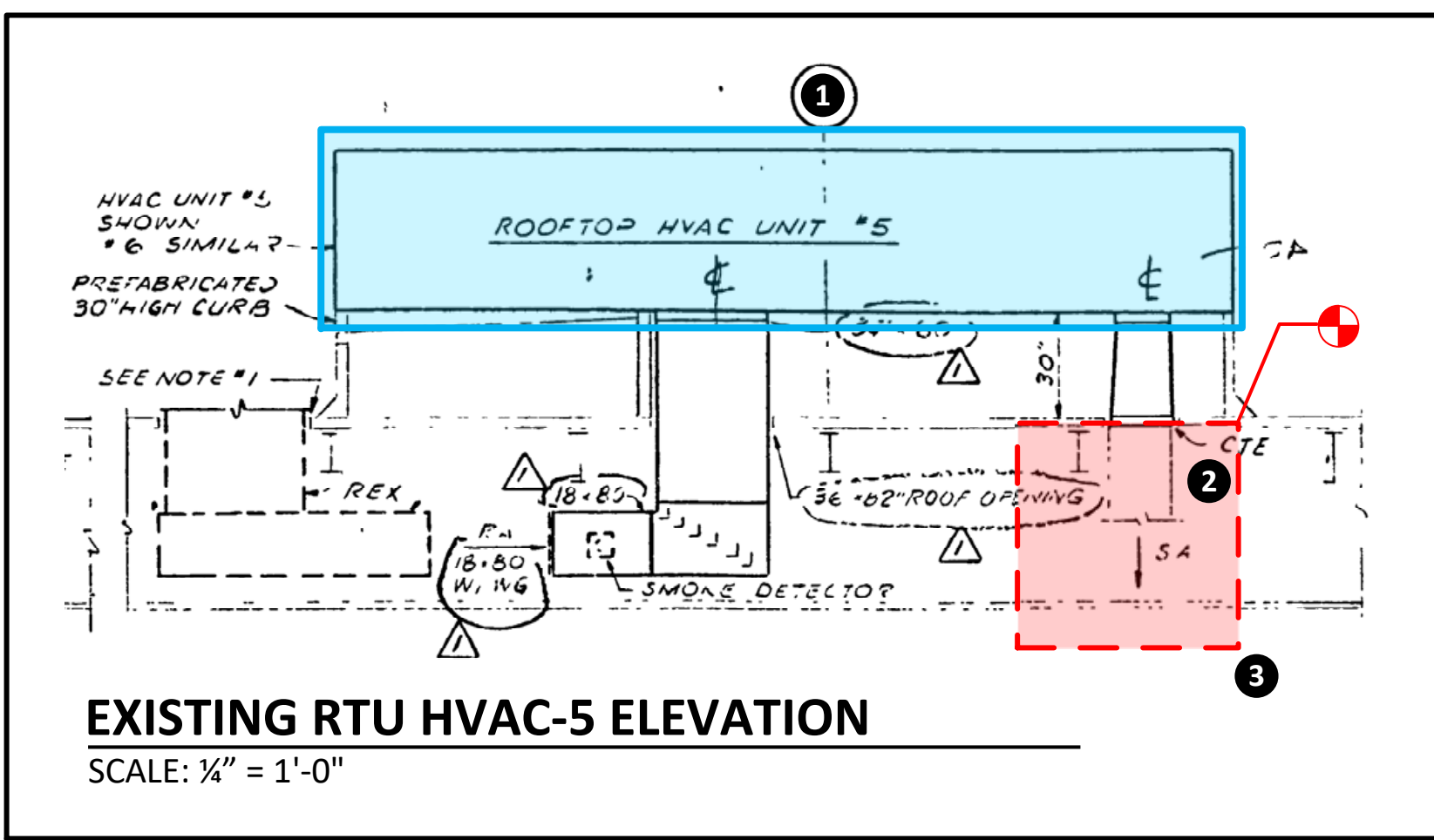
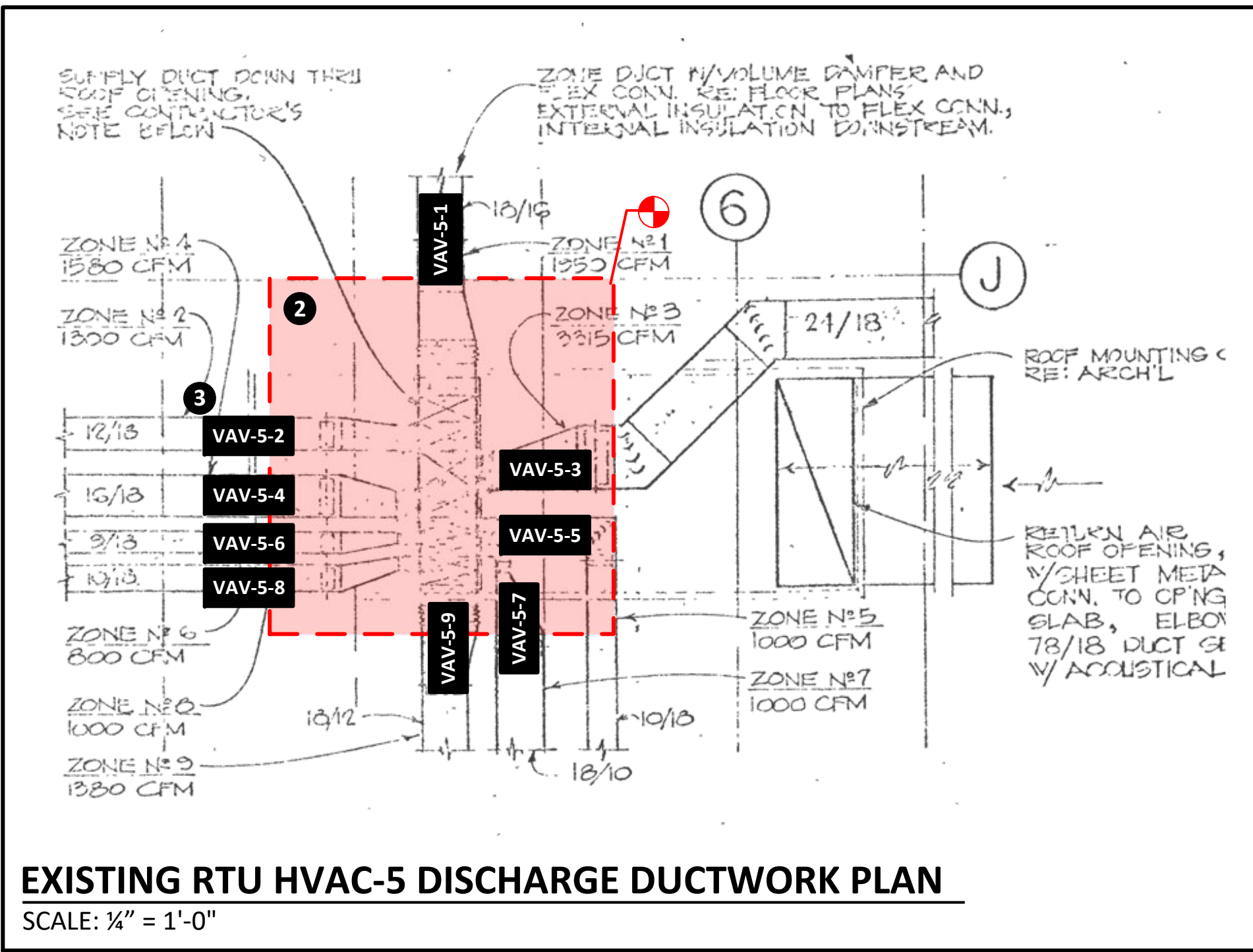
Lucas Hoffman, Project Manager  
AGM Energy Services, LLC  
5577 Airport Highway, Suite 202  
Toledo, Ohio 43615  
419-320-0336 mobile  
lhoffman@agmenenergyservices.co

Scott B. Hoffman, Jr., P.E., Principal  
AGM Energy Services, LLC  
5577 Airport Highway, Suite 202  
Toledo, Ohio 43615  
419-297-6863 mobile  
shoffman@agmenenergyservices.com





**EXISTING MECHANICAL PLANS FOR REFERENCE ONLY**  
**FIELD VERIFY DIMENSIONS, PATHS AND EQUIPMENT LOCATIONS**



- SHEET KEYNOTES:**
- 1 PROVIDE AND INSTALL NEW VARIABLE AIR VOLUME ROOFTOP AIR HANDLING UNIT (AC-5). DEMOLISH EXISTING UNIT AND SYSTEMS NOT-TO-REMAIN. INTENT IS TO REUSE AS MUCH EXISTING DUCTWORK AS POSSIBLE. COORDINATE SIZING AND PROVISION OF NEW MATCHING ROOF CURB.
  - 2 REWORK EXISTING SUPPLY AIR MAIN DISTRIBUTION TRUNK DUCTWORK FOR NEW VARIABLE AIR VOLUME TERMINALS.
  - 3 SIZE, PROVIDE AND INSTALL NEW VARIABLE AIR VOLUME TERMINALS, WITH ELECTRIC REHEAT, OFF THE MAIN DUCT DISTRIBUTION BELOW NEW HVAC-5 UNIT.

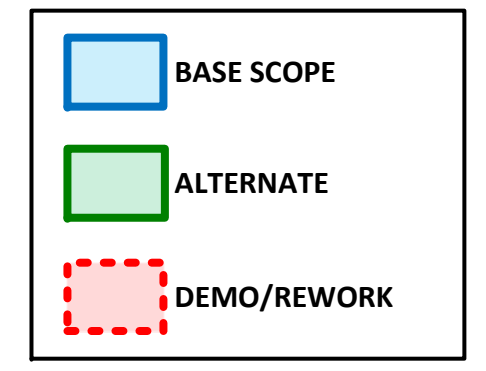
- MECHANICAL NEW WORK GENERAL NOTES:**
- INSTALL ALL NEW EQUIPMENT AND ASSOCIATED DEVICES PER MANUFACTURER'S RECOMMENDATIONS, MAINTAINING REQUIRED CLEARANCES.
  - PROVIDE ALL HANGERS, SUPPORTS AND MISCELLANEOUS COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.
  - REFER TO SHEET M.02 FOR ADDITIONAL GENERAL MECHANICAL AND VAV INSTALLATION NOTES AND DETAILS.

- ELECTRICAL WORK GENERAL NOTES:**
- DISCONNECT AND MAKE SAFE EXISTING ELECTRICAL FEEDS TO EQUIPMENT OR DEVICES PRIOR TO WORK.
  - THE PROPOSER IS RESPONSIBLE FOR DESIGNING AND IMPLEMENTING ANY ELECTRICAL SYSTEM MODIFICATIONS REQUIRED FOR POWERING HVAC EQUIPMENT AND SYSTEM CONTROLS.
  - WHILE THE PROVIDED EXISTING MECHANICAL PLAN BACKGROUNDS ARE BELIEVED TO BE ACCURATE, THE PROPOSER IS TO FIELD VERIFY DEPICTED ELECTRICAL INFRASTRUCTURE FOR ACCURACY.
  - ELECTRICAL INSTALLATIONS AND MODIFICATIONS ARE TO BE ACCOMPLISHED UTILIZING INDUSTRY-STANDARD MEANS/METHODS AND IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRIC CODES.

**HVAC-5 VAV SCHEDULE**

TAG	CFM	SIZE
VAV-5-01	3315	VERIFY
VAV-5-02	1655	VERIFY
VAV-5-03	1000	VERIFY
VAV-5-04	800	VERIFY
VAV-5-05	1000	VERIFY
VAV-5-06	1000	VERIFY
VAV-5-07	1380	VERIFY

REFER TO SHEET SC.01 FOR REVISED ZONE CFM TOTALS



**EXISTING MECHANICAL ROOF PLAN**  
 SCALE: 1/16" = 1'-0"

**ROOF TOP UNIT SCHEDULE**

UNIT MARK	SUPPLY FAN PERFORMANCE				RETURN FAN PERFORMANCE				GAS FUELED				REFRIGERATION CAPACITY				ELECTRICAL CHARACTERISTICS				ZONE AIR QUANTITIES												SPLITTING METHOD NO.										
	AREA	TOTAL	EFFICIENT	EFFICIENCY	TYPE	CFM	HP	W/HP	TYPE	CFM	HP	W/HP	TOTAL	CONDENSER	EVAPORATOR	OUTSIDE DESIGN	SUPPLY	RETURN	INITIAL	VOLTAGE	PHASE	NO. OF ZONES	1	2	3	4	5	6	7	8	9	10		11	12								
HVAC#1	1ST FLOOR NORTH	4,500	20%	1.0	---	---	---	---	---	---	---	---	---	---	---	---	10	---	76.3	460	3 $\phi$	12	HVAC#1	800	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	RMA-280							
HVAC#2	2ND FLOOR SOUTH	13,500	---	0.8	CENT.	8100	0.4	682	20	104	---	---	341	278	---	---	15	3	100.9	---	---	7	HVAC#2	1200	1000	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	RMA-300						
HVAC#3	2ND FLOOR NORTH	13,500	---	0.6	---	---	---	---	---	---	---	---	263	263	---	---	---	---	41.9	---	---	11	HVAC#3	1200	900	1300	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	RMA-250			
HVAC#4	2ND FLOOR SOUTH	13,500	---	0.8	---	---	---	---	---	---	---	---	263	263	---	---	---	---	41.9	---	---	8	HVAC#4	1000	1200	1260	1270	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	---			
HVAC#5	2ND FLOOR NORTH	13,500	---	0.4	---	---	---	---	---	---	---	---	263	263	---	---	---	---	41.9	---	---	9	HVAC#5	2550	1800	3315	1855	1000	900	1000	1000	1500	---	---	---	---	---	---	---	---	---		
HVAC#6	2ND FLOOR SOUTH	13,500	---	0.4	---	---	---	---	---	---	---	---	263	263	---	---	---	---	41.9	---	---	10	HVAC#6	1000	1000	990	1000	1000	1100	900	1000	1500	1650	---	---	---	---	---	---	---	---		
HVAC#7	MUSIC DEPT KITCHEN HOOD	13,500	20%	0.4	CENT.	8100	0.4	682	20	104	---	---	298	263	80.0	67.0	61.9	60.3	89.0	---	---	6	HVAC#7	4500	4170	465	1465	1465	---	---	---	---	---	---	---	---	---	---	---	---	---	---	RMA-290
HV#1	4TH FLOOR LOCKER ROOMS	4,500	100%	0.8	---	---	---	---	---	---	---	---	---	---	---	---	10	---	14.7	---	---	---	HV#1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	RSH-2EM				
HV#2	4TH FLOOR LOCKER ROOMS	20,000	50%	---	CENT.	10000	0.6	975	45	62.6	---	---	---	---	---	---	25	5	43.9	---	---	---	HV#2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	RSH-20M				
HV#3	4TH FLOOR LOCKER ROOMS	4,500	60%	---	CENT.	7600	0.4	682	60	104	---	---	---	---	---	---	10	5	18.6	---	---	---	HV#3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	RCH-2EM				
HV#4	GYM	20,000	20%	---	CENT.	16000	0.8	975	60	104	---	---	---	---	---	---	25	10	49.7	---	---	---	HV#4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	REH-20M			
HV#5	GYM	20,000	20%	---	CENT.	16000	0.6	975	60	104	---	---	---	---	---	---	25	10	49.7	460	3 $\phi$	---	HV#5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	REH-20M			

**EXISTING RTU SCHEDULE**  
 NO SCALE



ROOFTOP UNIT AC-5

**AGM Energy Services**  
 2305 E. AURORA RD.  
 TWINSBURG, OH 44087  
 PHONE: 216-904-2855  
 www.agmenergyservices.com

PROJECT NUMBER: 80763  
 DATE DRAWN: 10/9/2019  
 BY: RDM  
 REVISION: 1 FOR PROPOSAL  
 DATE: 6/23/20  
 ADDENDUM NO. 1  
 SCALE: AS NOTED

PROJECT TITLE:  
 CLEVELAND METROPOLITAN SCHOOL DISTRICT:  
**LUIS MUÑOZ MARIN ELEMNETARY SCHOOL**  
**AC-5 RTU REPLACEMENT 2020**  
 1701 Castle Ave.  
 Cleveland, OH 44113

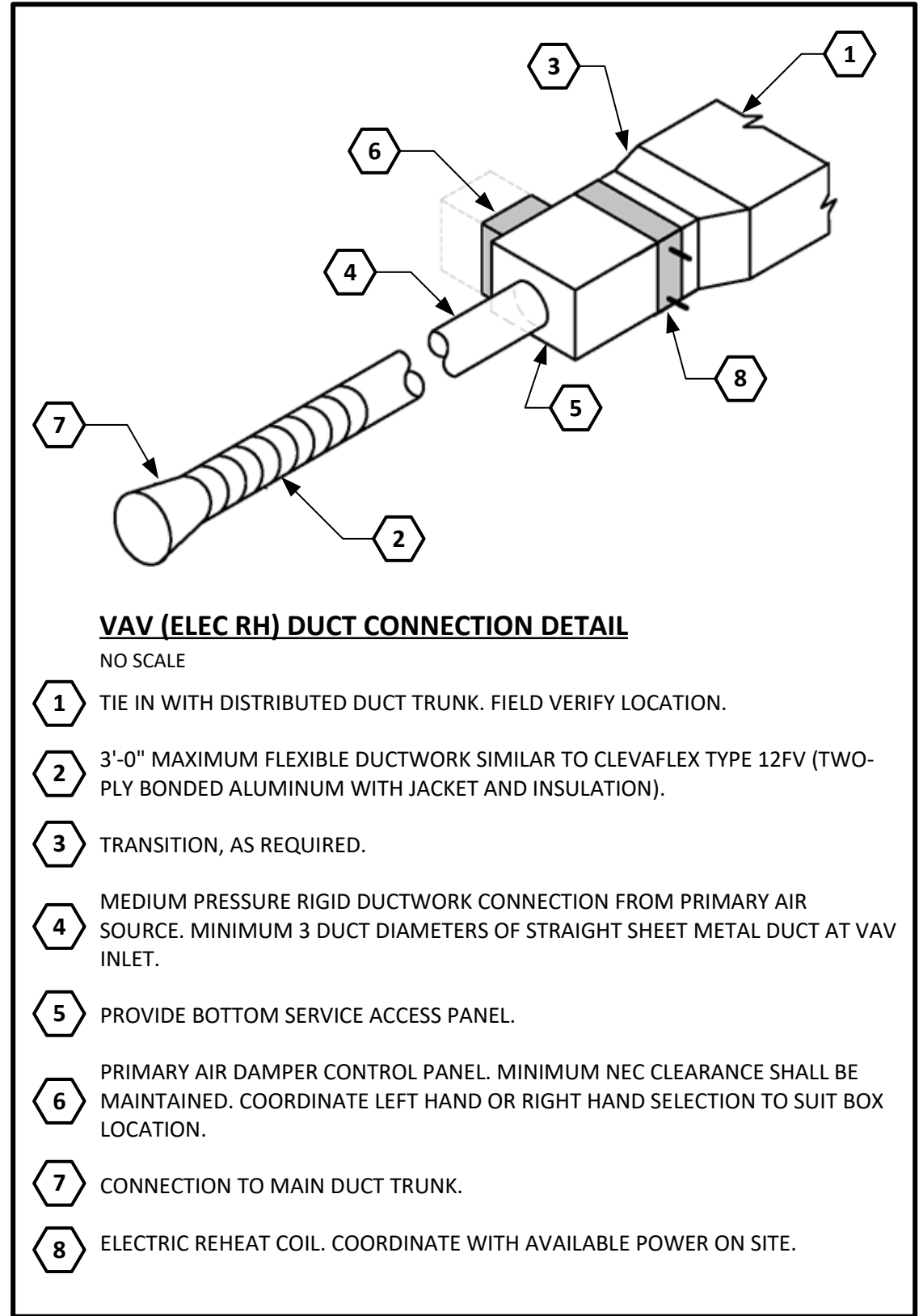
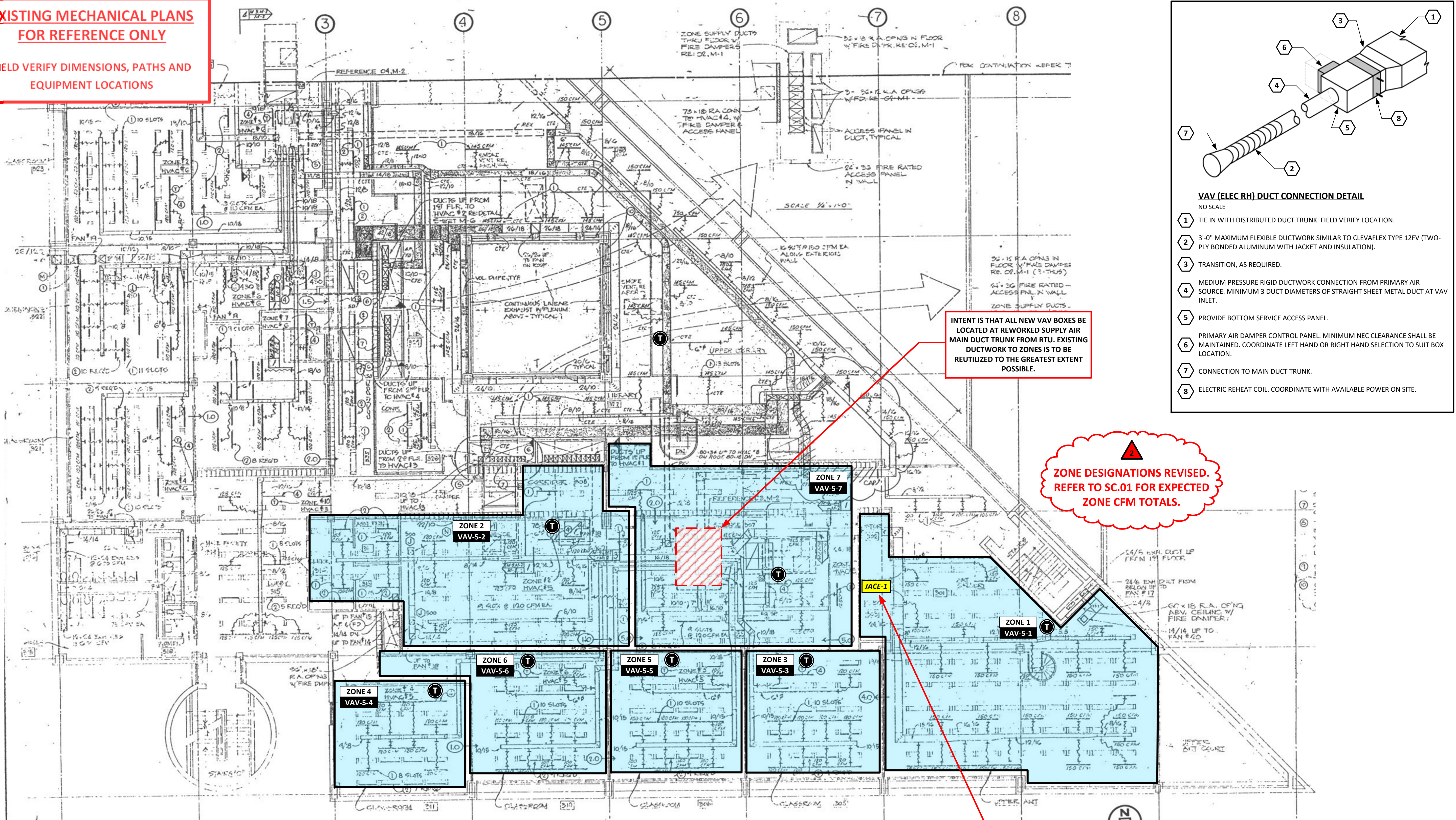


DRAWING TITLE:  
**RTU AC-5 DETAILS AND ROOF PLAN**

DRAWING NUMBER:  
**M.01**  
 PAGE: 2 of 10

**EXISTING MECHANICAL PLANS FOR REFERENCE ONLY**

FIELD VERIFY DIMENSIONS, PATHS AND EQUIPMENT LOCATIONS



INTENT IS THAT ALL NEW VAV BOXES BE LOCATED AT REWORKED SUPPLY AIR MAIN DUCT TRUNK FROM RTU. EXISTING DUCTWORK TO ZONES IS TO BE REUTILIZED TO THE GREATEST EXTENT POSSIBLE.

ZONE DESIGNATIONS REVISED. REFER TO SC.01 FOR EXPECTED ZONE CFM TOTALS.

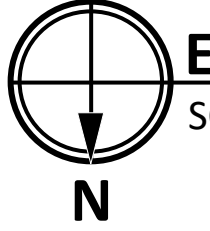
LOCATION OF EXISTING JACE PANEL. REFER TO SHEET SI.01 FOR BACNET SERIAL COMMUNICATION CHAIN TO VAV CONTROLLERS AND RTU HVAC-S CONTROLLER.

**GENERAL MECHANICAL-ELECTRICAL NOTES:**

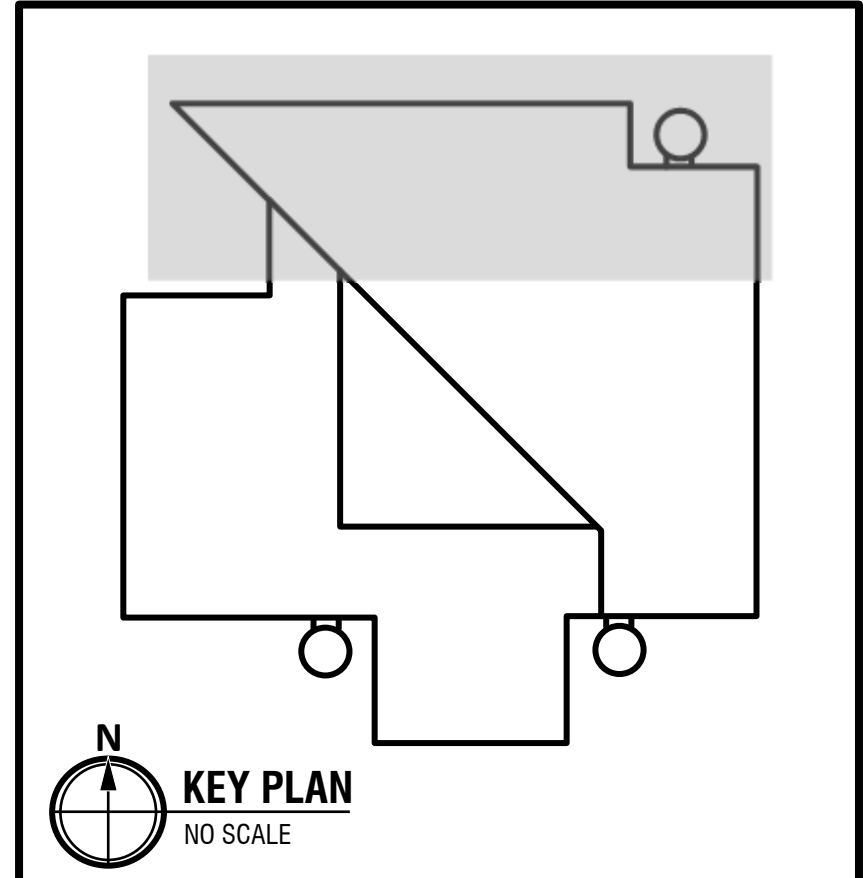
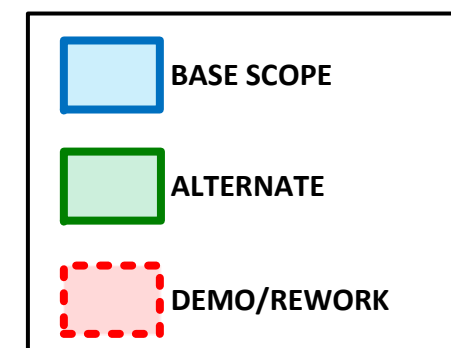
- THE DRAWINGS ARE TO BE USED AS A GUIDELINE FOR DEMOLITION. THE MECHANICAL CONTRACTOR MUST VISIT THE SITE PRIOR TO BIDDING TO VERIFY ALL WORK REQUIRED FOR A COMPLETE JOB AND INCLUDE THE COST OF SUCH WORK IN THEIR BID.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE LOSS OF EXISTING SERVICES TO THE EXISTING AREA AS REQUIRED.
- IF NECESSARY, THE MECHANICAL CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES IN THE EXISTING AREAS BEING SERVED BY UNIT BEING REPLACED.
- ANY MECHANICAL EQUIPMENT AND DEVICES SHOWN AS BEING REMOVED SHALL BE REMOVED COMPLETELY INCLUDING TEMPERATURE CONTROLS.
- ALL WALLS, CEILING, FLOORS, ETC. BEING DISTURBED BY THE WORK SHALL BE RETURNED TO FINISHED CONDITIONS TO MATCH EXISTING. CUTTING, PATCHING AND PAINTING ARE TO BE INCLUDED, AS NECESSARY.
- EXISTING EQUIPMENT AND MATERIALS BEING REMOVED SHALL BE TURNED OVER TO THE OWNER. IF NOT REQUIRED BY OWNER, THE CONTRACTOR SHALL REMOVE SAID EQUIPMENT AND MATERIALS FROM THE PREMISES AND DISPOSE OF IN A LEGAL MANNER.
- CONTRACTOR TO VERIFY ALL EXISTING FIELD CONDITIONS BEFORE COMMENCING WORK.
- INSTALL ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN ACCESSIBLE LOCATIONS.
- PRIOR TO DEMOLITION AND REPLACEMENT WORK, PREPARE WORK AREAS TO BE SAFE AND PROTECT ADJACENT EQUIPMENT AND FINISHES NOT BEING REPLACED.
- MECHANICAL CONTRACTOR TO PROVIDE COMPLETE TEST AND BALANCE SERVICES TO SET PERFORMANCE PARAMETERS OF NEW EQUIPMENT AND SYSTEMS BEING UPDATED.
- CONTRACTOR EQUIPMENT SHALL COORDINATE SIZES OF EXISTING SUPPORTS AND FOOTPRINT OF EACH REPLACED OR NEW UNIT. MODIFY PADS, RAILS, CURBS, SUPPORTS, HANGERS, ETC AS REQUIRED FOR PROPER SUPPORT AND SERVICEABILITY.

**TERMINAL BOX AND DUCTWORK INSTALLATION NOTES:**

- ALL DUCT SIZES ON DRAWINGS REPRESENT INTERNAL NET DIMENSIONS. DUCTWORK SIZE SHALL BE INCREASED AS REQUIRED TO ACCOMMODATE INTERNAL SOUND LINING, DOUBLE-WALL CONSTRUCTION, INSULATION, ETC.
- DUCTWORK CONSTRUCTION, INCLUDING SHEET METAL GAUGES AND SEAM CONSTRUCTIONS METHODS, SHALL CONFORM TO SMACNA STANDARDS.
- SEAMS AND JOINTS SHALL BE CONSTRUCTED WITH LIQUID-TIGHT, CONTINUOUS WELDS ON THE EXTERNAL SURFACE OF THE DUCT.
- REFER TO SPECIFICATIONS FOR ADDITIONAL DUCTWORK REQUIREMENTS.
- PROVIDE ALL HANGERS, SUPPORTS AND MISC. STEEL FOR THE INSTALLATION OF DUCTWORK.
- FIELD VERIFY ABOVE CEILING CLEARANCES AND OBSTACLE AVOIDANCE BEFORE FABRICATING DUCTWORK.
- **ALT-1 ONLY:** COORDINATE NEW SUPPLY AIR DIFFUSERS WITH NEW SIMULTANEOUS CEILING WORK.
- CONTRACTOR IS RESPONSIBLE FOR RELOCATING OR REWORK OF EXISTING INFRASTRUCTURE TO ACCOMMODATE NEW DUCTWORK AND VAV BOXES. INCLUDING, BUT NOT LIMITED TO, DUCTWORK, PIPING, CONDUIT, LIGHT FIXTURES, CEILING GRID/TILES, ETC.
- REFER TO VAV DUCT CONNECTION DETAIL ON THIS SHEET AND INSTALL VAV BOX PER MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE 120-1-60 POWER TO EACH VAV BOX.
- LOCATE ZONE THERMOSTATS IN SPACES NOTED ON DRAWINGS. FIELD VERIFY BEST LOCATION WITH EXISTING CONDITIONS.
- PROVIDE COMPLETE TEST AND BALANCE SERVICES AT END OF PROJECT.



**EXISTING THIRD FLOOR NORTH MECHANICAL PLAN**  
SCALE: NONE



PROJECT TITLE:  
**CLEVELAND METROPOLITAN SCHOOL DISTRICT:  
LUIS MUÑOZ MARIN  
ELEMENTARY SCHOOL  
AC-5 RTU REPLACEMENT 2020**

1701 Castle Ave.  
Cleveland, OH 44113

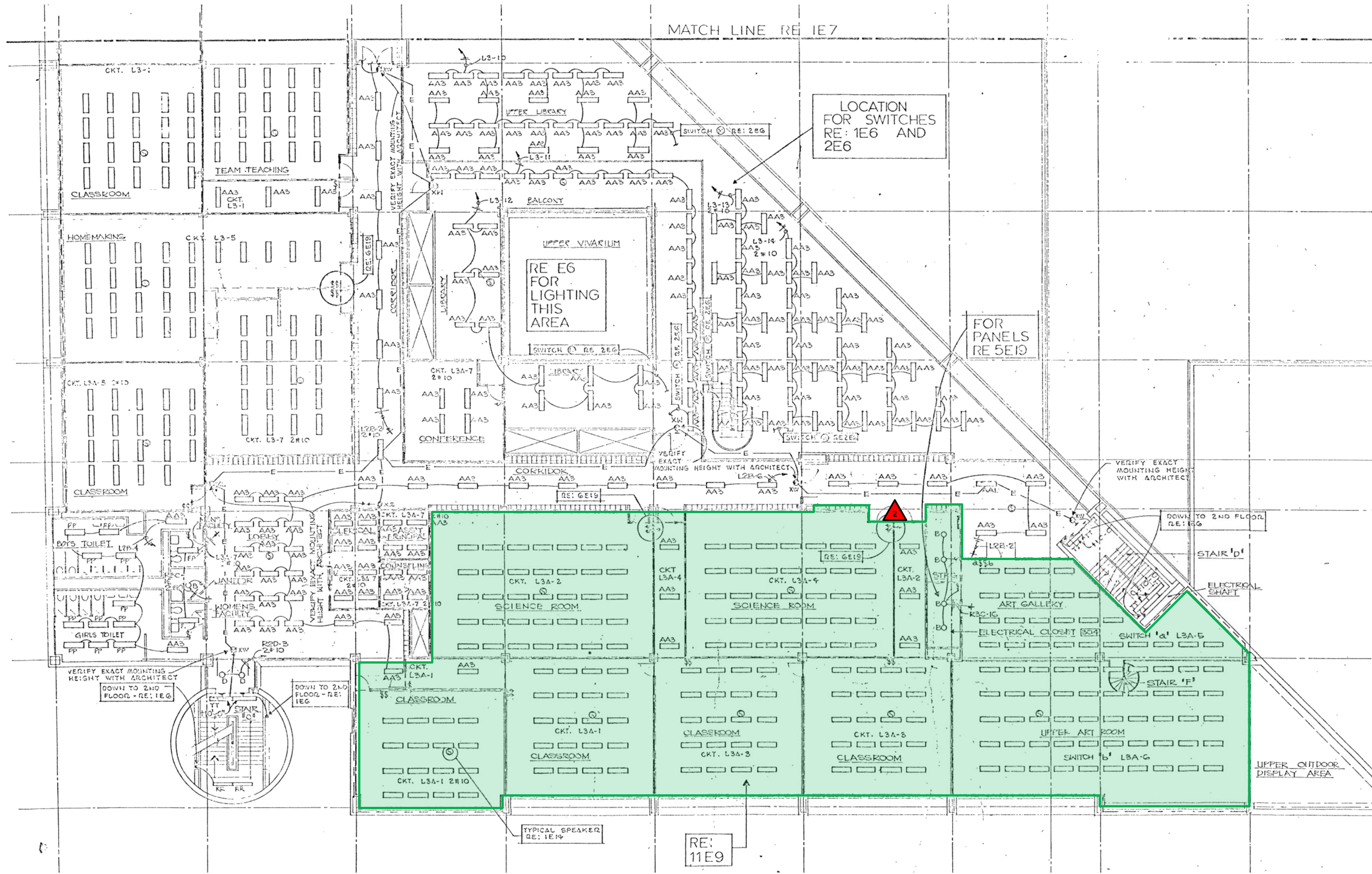
DRAWING TITLE:  
**3RD FLOOR  
MECHANICAL  
PLAN AND ZONING**

DRAWING NUMBER:

**M.02**

PROJECT NUMBER: 80763  
DATE DRAWN: 10/9/2019  
BY: RDM  
REVISION # 1  
DATE 6/23/20  
FOR PROPOSAL  
ADDENDUM NO. 1  
SCALE: AS NOTED

**AGM** Energy Services  
2305 E. AURORA RD.  
TWINSBURG, OH 44087  
PHONE: 216-904-2855  
www.agmenergyservices.com  
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MATCH LINE RE: 1E7

LOCATION FOR SWITCHES RE: 1E6 AND 2E6

RE: E6 FOR LIGHTING THIS AREA

FOR PANELS RE: 5E19

RE: 11E9

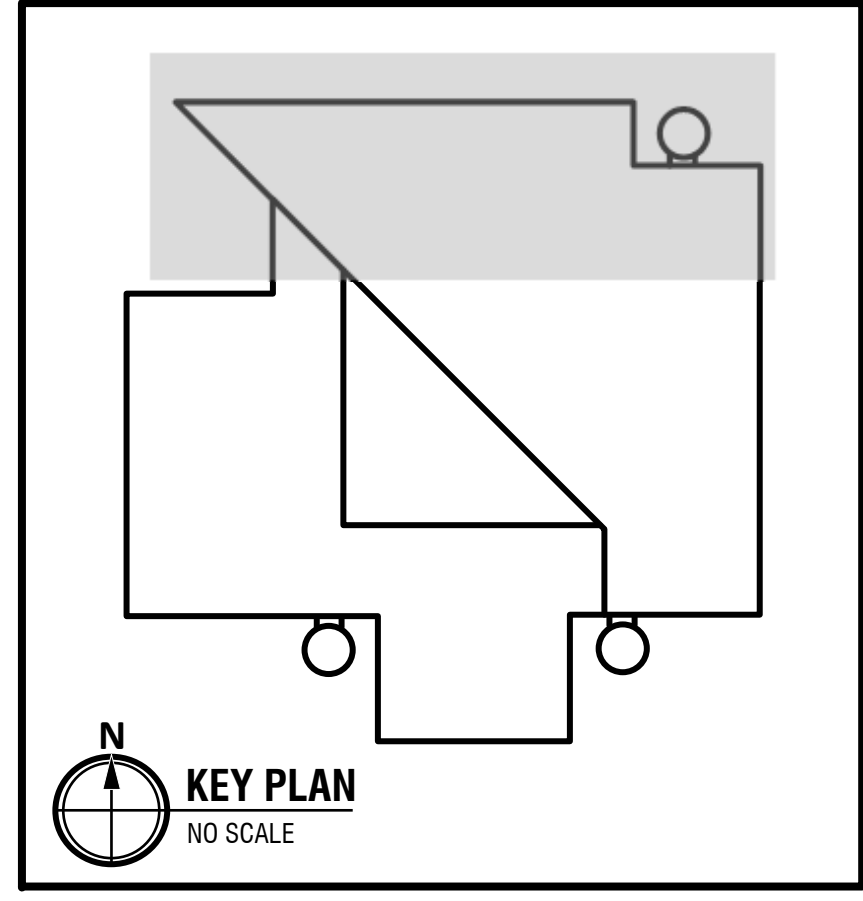
**EXITING THIRD FLOOR NORTH LIGHTING PLAN**  
SCALE: NONE



- DRAWING NOTES:**
- GREEN SHADED AREAS DENOTE ALTERNATE SCOPE FOR LIGHTING AND CEILING GRID REPLACEMENT. PROPOSER IS TO COMPLETELY DESIGN NEW GRID LAYOUT, INCLUDING AIR DISTRIBUTION AND LIGHTING PHOTOMETRICS. DESIGNS SHOULD CONFORM TO OHIO SCHOOL DESIGN MANUAL STANDARDS.
  - DEMOLISHED MATERIALS INCLUDING CEILING TILES/GRIDS, DIFFUSERS, LIGHT FIXTURES, LAMPS, BALLASTS, ETC. ARE TO BE COMPLETELY REMOVED AND PROPERLY DISPOSED OF. CMSD IS TO BE GIVEN SALVAGE RIGHTS ON ANY MATERIAL PRIOR TO DISPOSAL.
  - AIR DISTRIBUTION REVISIONS SHALL INCLUDE NEW 24" SQUARE DIFFUSERS/RETURNS AND ANY REQUIRED DUCTWORK MODIFICATIONS TO ACCOMMODATE NEW DIFFUSER LAYOUT.
  - NEW LIGHT FIXTURES SHALL BE 2X4 OR 2X2 FLAT PANEL LED. CLASSROOMS SHALL BE 0-10V DIMMING AND HAVE NEW WALL TOUCHPAD CONTROL. ADDITIONAL SPACE OR FIXTURE-INTEGRATED SENSORS REQUIRED ARE TO BE DETERMINED BY PROPOSER BASED ON THE NATURE OF THE REPLACEMENT APPLICATION AND ENFORCED ENERGY CODES.
  - EXISTING LIGHTING PLANS, SCHEDULES AND OTHER ELECTRICAL PLANS ARE PROVIDED FOR REFERENCE ONLY. THESE PLANS REPRESENT AVAILABLE CMSD RECORDS AND MAY CONSTITUTE A COMBINATION OF CONSTRUCTION AND AS-BUILT DOCUMENTS. FINAL FIXTURE COUNTS, CONFIGURATIONS, MEASUREMENTS, LOCATIONS, PATHS, ETC. FOR THIS PROJECT MUST BE FIELD VERIFIED BY PROPOSER/CONTRACTOR.
  - CONTRACTOR WILL CREATE FINAL DESIGN FOR NOTED ELECTRICAL SYSTEMS BASED ON PROJECT GOALS, OVERALL BENEFITS TO SYSTEM OPERATION & MAINTENANCE AND SITE LIMITATIONS.
  - EXIT SIGNS ONLY NEED TO BE REPLACED IF NOT ALREADY LED. EMERGENCY AND CONSTANT OPERATION CIRCUIT FIXTURES SHOULD RETAIN THAT FUNCTION.
  - REFER TO OVERALL SPECIFICATION FOR LED LIGHTING SELECTION GUIDELINES.
  - PROPOSERS WILL BE REQUIRED TO PRESENT DESIGNS FOR REFLECTED CEILING AND LIGHTING LAYOUTS DURING THE SUBMITTAL PHASE. PRELIMINARY DESIGN INFORMATION FOR EXPECTED TILE, DIFFUSER AND FIXTURE SELECTION ARE REQUESTED TO BE INCLUDED WITH PROPOSALS.

- GENERAL INSTALLATION NOTES:**
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  - PENETRATIONS THROUGH SUBSTRATE (WALLS, CEILINGS, FLOORS) SHOULD BE DONE TO MINIMIZE DISTURBANCE AND REPAIR, SEAL OR PAINT/PATCH AS REQUIRED TO MAINTAIN ENVIRONMENT AESTHETICS.
  - ALL WIRING SHALL BE IN ACCORDANCE WITH THE ELECTRICAL SPECIFICATIONS, NATIONAL ELECTRIC CODE AND ANY APPLICABLE STATE OR LOCAL CODES. WHERE PLENUM RATED CABLE IS PERMITTED, IT SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES TO THE STRUCTURE, BE PROPERLY SUPPORTED OR ANCHORED AND IN A NEAT, WORKMAN-LIKE MANNER.
  - THE CONTRACTOR SHALL SUPPLY ALL MATERIAL REQUIRED FOR THE INSTALLATIONS, EXCEPT THAT WHICH IS SPECIFICALLY NOTED AS 'BY THE OWNER'.

BASE SCOPE  
 ALTERNATE  
 DEMO/REWORK



**AGM Energy Services**  
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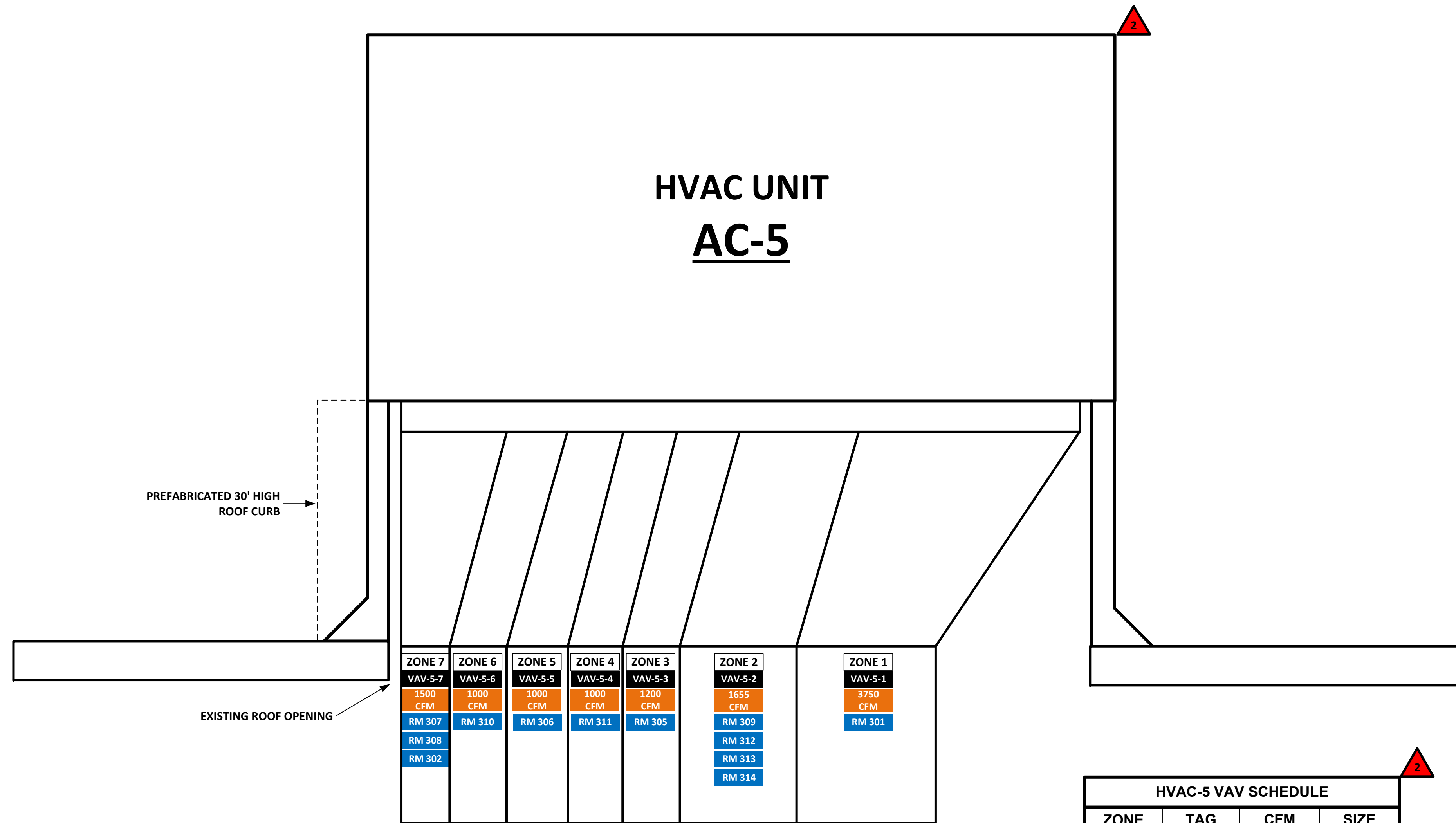
PROJECT NUMBER:	80857	DATE DRAWN:	02/18/20	DATE:	6/23/20
BY:	LSH	REVISION #:	1	FOR PROPOSAL	7/10/20
ADDENDUM NO. 1					
SCALE:	3				AS NOTED

PROJECT TITLE:  
**CLEVELAND METROPOLITAN SCHOOL DISTRICT:  
LUIS MUÑOZ MARÍN  
ELEMENTARY SCHOOL  
AC-5 RTU REPLACEMENT 2020**  
1701 Castle Ave.  
Cleveland, OH 44113



DRAWING TITLE:  
**ALT-1 LIGHTING AND CEILING REPLACEMENTS**

DRAWING NUMBER:  
**A.01**  
PAGE: 4 of 10



**EXITING HVAC UNIT AC-5 SCHEMATIC**  
 SCALE: NOT TO SCALE

HVAC-5 VAV SCHEDULE			
ZONE	TAG	CFM	SIZE
1	VAV-5-01	3750	VERIFY
2	VAV-5-02	1655	VERIFY
3	VAV-5-03	1200	VERIFY
4	VAV-5-04	1000	VERIFY
5	VAV-5-05	1000	VERIFY
6	VAV-5-06	1000	VERIFY
7	VAV-5-07	1500	VERIFY
<b>TOTAL:</b>		11105	

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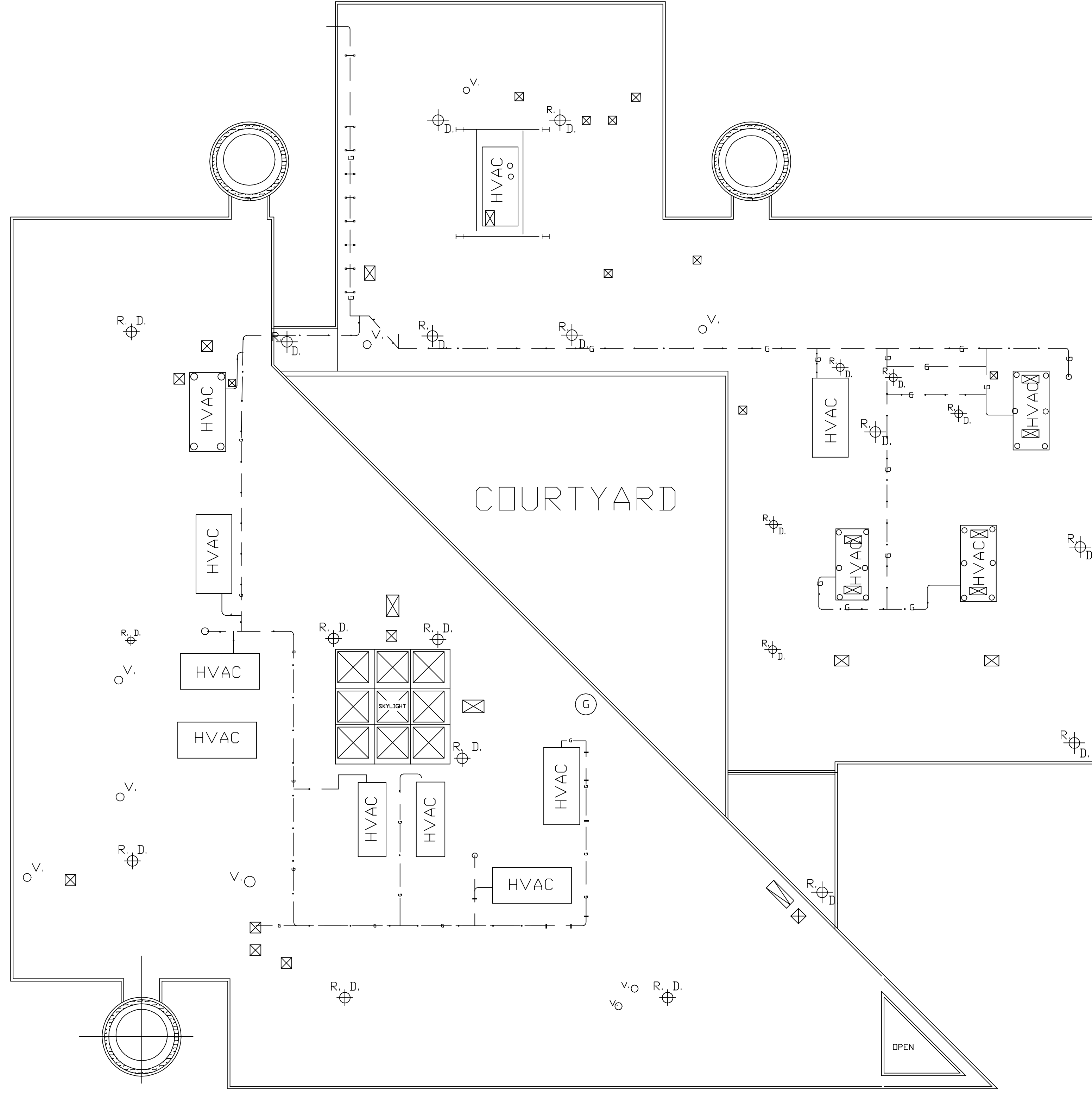
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3	
SCALE:	AS NOTED

PROJECT TITLE:  
 CLEVELAND METROPOLITAN SCHOOL DISTRICT:  
**LUIS MUÑOZ MARÍN  
 ELEMNETARY SCHOOL**  
**AC-5 RTU REPLACEMENT 2020**  
 1701 Castle Ave.  
 Cleveland, OH 44113

DRAWING TITLE:  
**AC-5 SCHEMATIC  
 DUCT AND ZONING  
 SECTION**

DRAWING NUMBER:  
**SC.01**  
 PAGE: 5 of 10



ROOF AND ROOF DECK CONST:

FULLY ADHERED FIRESTONE EPDM ROOF MEMBRANE ADHERED TO ISO INSULATION OVER METAL ROOF DECK, INSTALLED IN 1989.

- LEGEND
- ⊕ ROOF DRAIN
  - VENT PIPE
  - ⊠ ROOF CURB
  - ⊙ HOT STACK
  - PIPE FLASHING
  - ▴ PITCH POCKET

THE BUILDING WAS RE-ROOFED IN AUG. OF 2012 WITH PUR (POLYURETANE FOAM ROOFING) OVER MECH. ATTACHED RECOVERY BOARD AND HAS A 10 YEAR NDL WARRANTY.

CONTRACTOR: WEST ROOFING  
PH: 1-440-355-9929

REVISIONS

DESCRIPTION:	ROOF PLAN
JOB NAME	LUIS M. MARIN
LOCATION	1701 CASTLE AVE.
DATE:	3-31-05
PREPARED BY:	CMSD - FACILITIES-CONST. MGMT. GROUP
JOB NO.	SHEET NO. 1 OF 1
	BY J. P.

**CLEVELAND MUNICIPAL SCHOOL DISTRICT**  
 1380 EAST SIXTH ST. CLEVELAND, OHIO 44114  
 FACILITIES - CONSTRUCTION MANAGEMENT GROUP