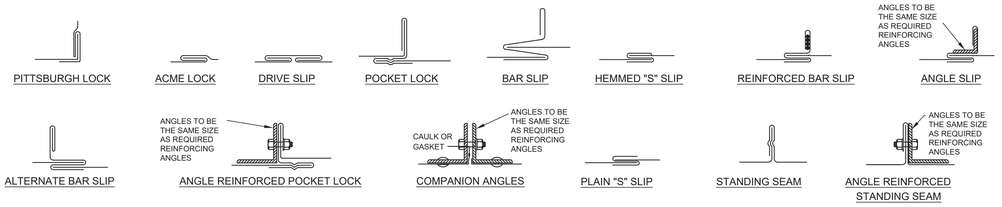
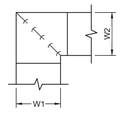
THICKNESS & REINFORCING SCHEDULE - * LOW PRESSURE DUCTWORK

* NOTE: LOW PRESSURE DUCTWORK SHALL BE DUCTWORK IN WHICH THE PRESSURE DOES NOT EXCEED 2" WATER GAUGE.

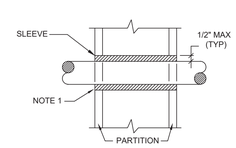
GREATEST DUCT DIMENSION	STEEL DUCTS U.S. STANDARD GAUGE	ALUMINUM DUCTS B & S GAUGE	LONGITUDINAL SEAM	TRANSVERSE JOINT SMALLEST DIMENSION	TRANSVERSE JOINT GREATEST DIMENSION	REINFORCING (ALL DUCTS 18" THRU 54" SHALL BE CROSSBROKEN)
12" OR LESS	26	24(0.020")	PITTSBURGH OR ACME LOCK	DRIVE SLIP OR POCKET LOCK OR BAR SLIP	PLAIN "S" SLIP OR POCKET LOCK OR BAR SLIP	NONE REQUIRED
13" THRU 18"	24	22(0.025")	PITTSBURGH OR ACME LOCK	DRIVE SLIP OR POCKET LOCK OR BAR SLIP	PLAIN "S" SLIP OR POCKET LOCK OR BAR SLIP	NONE REQUIRED
19" THRU 30"	24	22(0.025")	PITTSBURGH OR ACME LOCK	HEMMED "S" SLIP OR BAR SLIP OR DRIVE SLIP OR 1" POCKET LOCK	HEMMED "S" SLIP OR BAR SLIP OR 1" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
31" THRU 42"	22	20(0.032")	PITTSBURGH OR ACME LOCK	DRIVE SLIP 18" OR LESS BAR SLIP REINFORCED BAR SLIP OR POCKET LOCK	BAR SLIP OR REINFORCED BAR SLIP OR POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
43" THRU 54"	22	20(0.032")	PITTSBURGH LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
55" THRU 60"	20	18(0.040")	PITTSBURGH LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	1 1/4" BAR SLIP, OR REINFORCED BAR SLIP, OR 1 1/2" POCKET LOCK	IF TRANSVERSE JOINTS ARE LOCATED 4'-0" OR LESS ON CENTER NO REINFORCING IF ON 8'-0" CENTERS REINFORCE WITH 1"X1"X1/8" ANGLES AT 4 FT. O.C. FASTENED ON 8" CENTERS
61" THRU 84"	20	18(0.040")	PITTSBURGH LOCK	REINFORCED BAR SLIP, OR ANGLE SLIP, ALTERNATE BAR SLIP, OR ANGLE REINFORCED POCKET LOCK	REINFORCED BAR SLIP, OR ANGLE SLIP, ALTERNATE BAR SLIP, OR ANGLE REINFORCED POCKET LOCK	REINFORCE ALL SIDES OVER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. SIDES UNDER 60" NEED NO REINFORCING IF JOINTS ARE ON 4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X 1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.
85" THRU 96"	18	16(0.051") (LONGITUDINAL SEAM MAY BE STANDING SEAM)	PITTSBURGH LOCK	1 1/2" COMPANOIN ANGLES, OR ANGLE REINFORCED POCKET LOCK, OR 1 1/2" ANGLE SLIP OR REINFORCED BAR SLIP	1 1/2" COMPANOIN ANGLES, OR ANGLE REINFORCED POCKET LOCK, OR 1 1/2" ANGLE SLIP OR REINFORCED BAR SLIP	REINFORCE ALL SIDES OVER 84" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0" CENTERS. SIDES 61" THRU 84" REINFORCE WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. SIDES 60" OR LESS NEED NO REINFORCING IF JOINTS ARE ON 4'-0" CENTERS. IF JOINTS ARE ON 8'-0" CENTERS REINFORCE WITH 1 1/2"X 1 1/2"X1/8" ANGLES ON 4'-0" CENTERS.
OVER 96"	18	16(0.051") (LONGITUDINAL SEAM MAY BE STANDING SEAM)	PITTSBURGH LOCK	2" COMPANOIN ANGLE, OR 2"X2"X1/4" ANGLE SLIP, OR 2"X2"X1/4" ANGLE REINFORCED POCKET LOCK OR REINFORCED BAR SLIP	2" COMPANION ANGLE, OR 2"X2"X1/4" ANGLE SLIP, OR 2"X2"X1/4" ANGLE REINFORCED POCKET LOCK OR REINFORCED BAR SLIP	REINFORCE ALL SIDES OVER 96" WITH 2"X2"X1/4" ANGLES ON 2'-0" CENTERS REINFORCE ALL SIDES 85" THRU 96" WITH 1 1/2"X1 1/2"X3/16" ANGLES ON 2'-0" CENTERS. REINFORCE ALL SIDES 61" THRU 84" WITH 1 1/2"X1 1/2"X1/8" ANGLES ON 2'-0" CENTERS. REINFORCE ALL SIDES UNDER 60" WITH 1 1/2"X1 1/2"X1/8" ANGLES IF JOINTS ARE 8'-0" ON CENTER. NO REINFORCING IF JOINTS ARE 4'-0" ON CENTER.





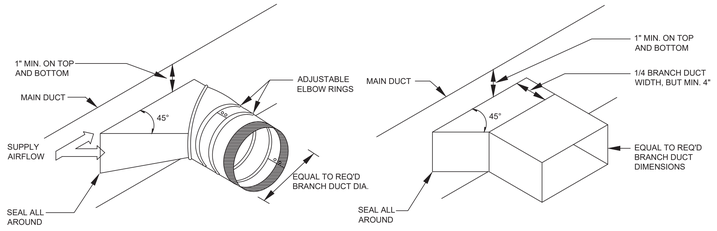
NOTE:
1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 IS NOT EQUAL TO W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE VANES SHALL HAVE A 2" RADIUS, 1-1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

2 M001 — Ductwork Squared Elbow Detail
N.T.S.

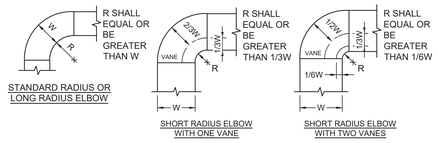


NOTES:
1. AT FIRE RATED PARTITIONS, ADD ADDITIONAL LAYER OF FIRE SAFING INSULATION AROUND PENETRATION SO AS TO FILL CAVITY.
2. DUCT AND PIPE PENETRATIONS THRU CORRIDOR WALLS ABOVE THE CEILING ARE TO BE FIRE STOPPED AROUND THE PENETRATION.

3 M001 — Pipe Penetrations Detail
N.T.S.

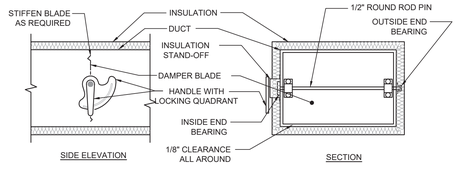


4 M001 — Typical Branch Take-Off Fitting Detail
N.T.S.



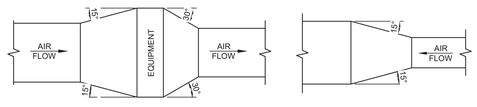
NOTE:
1. THE INTERIOR SURFACE OF ALL RADIUS ELBOWS SHALL BE MADE ROUND.
2. ALL STANDARD RADIUS ELBOWS CAN BE SUBSTITUTED WITH SHORT RADIUS ELBOWS. ALL SHORT RADIUS ELBOWS SHALL HAVE VANES. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA.

5 M001 — Ductwork Radius Elbow Detail
N.T.S.



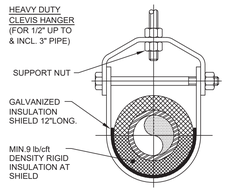
NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE-BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

6 M001 — Ductwork Volume Damper Detail
N.T.S.



NOTE:
UNLESS OTHERWISE INDICATED ON PLANS, MAXIMUM ANGLES SHOWN SHALL APPLY.

7 M001 — Ductwork Transition Detail
N.T.S.



NOTES:
1. PIPE 8" AND LARGER SHALL HAVE ROLLER SUPPORTED WITH DUAL RODS.
2. FOR CHW SERVICE OVER 3" REPLACE SADDLE WITH 12" LONG 14 GA SHIELD WITH RIGID INSULATION BETWEEN PIPE AND SHIELD.

PIPE Ø (IN.)	MAX. SPACING BETWEEN HANGERS (FT.)			MIN. ROD SIZE (IN.)
	STEEL PIPE	COPPER PIPE	CPVC	
1/2 THRU 1	7	5	5	3/8
1-1/2 THRU 2	9	8	6	3/8
2-1/2	11	9	7.5	1/2
3	12	10	7.5	1/2
4	14	12	8.5	5/8
6	17	14	9	3/4
8	19	16	10	7/8
10	22	18	10.5	7/8

1 M001 — Pipe Hanger Support
N.T.S.

Mechanical Legend :

- UP / DN — SUPPLY DUCT (UP & DOWN)
- UP / DN — EXHAUST DUCT (UP & DOWN)
- UP / DN — RETURN DUCT (UP & DOWN)
- ROUND AND SQUARE 4-WAY CEILING DIFFUSERS
- SQUARE 3-WAY CEILING DIFFUSERS
- SQUARE 2-WAY CEILING DIFFUSERS
- SQUARE 1-WAY CEILING DIFFUSERS
- LINEAR SLOT DIFFUSER
- SUPPLY TOP REGISTER OR GRILLE (WALL TYPE)
- EXHAUST OR RETURN CEILING REGISTER OR GRILLE
- EXHAUST OR RETURN BOTTOM REGISTER OR GRILLE (WALL TYPE)
- EXHAUST OR RETURN REGISTER OR TOP GRILLE (WALL TYPE)
- VANED ELBOW & AIR SPLIT TYPE DUCT TAKE-OFF
- MANUAL SPLITTER DAMPER
- 45° SUPPLY — STANDARD BRANCH SUPPLY OR RETURN, NO SPLITTER (45° TAP)
- 45° RETURN
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
- VANED ELBOW (SHORT RADIUS)
- STANDARD RADIUS ELBOW (LONG RADIUS); INSIDE RADIUS R TO BE EQUAL TO OR GREATER THAN W
- X"xX" — NEW DUCT (INSIDE DIMENSIONS: WIDTH x DEPTH)
- FLEXIBLE DUCTWORK (INSULATED)
- MANUAL VOLUME DAMPER
- FD — FIRE DAMPER
- FSD — COMBINATION FIRE SMOKE DAMPER
- S — DUCT SMOKE DETECTOR
- X / X — TERMINAL UNIT TAG / AIRFLOW (CUBIC FEET PER MINUTE)
- NG — NATURAL GAS PIPING
- CONCENTRIC REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45° OR 90°
- BOTTOM CONNECTION, 45° OR 90°
- SIDE CONNECTION
- CAPPED OUTLET
- RISE OR DROP IN PIPE
- UNION
- PIPE UP
- PIPE DOWN
- POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
- 3-WAY MODULATING CONTROL VALVE
- CHECK VALVE
- PRESSURE REDUCING VALVE (PRV)
- FULL PORT BALL VALVE
- (X GPM) — MANUAL BALANCE VALVE (CIRC. SETTER)
- (X GPM) — AUTOMATIC BALANCE VALVE (FLO-SETTER)
- FLEXIBLE PIPING CONNECTION
- WYE STRAINER W/ VALVE & HOSE CONN.
- INLINE PUMP
- THERMOMETER
- PRESSURE GAUGE
- TEMPERATURE & PRESSURE GAUGE
- DRAIN VALVE
- PRESSURE RELIEF VALVE

Mechanical Notes:

1. ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
2. THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
4. ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
5. ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
6. A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.
7. THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
8. ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2020 BUILDING CODE OF NEW YORK STATE, 2020 MECHANICAL CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
9. ALL PIPING SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPORT HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
10. ALL PIPING SHALL BE PITCHED SUCH THAT AIR IN THE SYSTEM CAN BE VENTED THROUGH MANUAL AIR VENTS.
11. TEST PIPING AND PROVE TIGHT FOR AT LEAST TWO HOURS TO TWICE THE SYSTEM WORKING PRESSURE. TEST SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND LOCAL INSPECTOR. TEST SHALL BE REPEATED IF NECESSARY UNTIL FINAL APPROVAL OF SYSTEM IS OBTAINED.
12. SUPPORT HORIZONTAL PIPING UTILIZING A SPACING PER PIPING MANUFACTURER'S REQUIREMENTS.
13. INSTALL VALVES ON THE ENTIRE DISTRIBUTION SYSTEM, SO LOCATED AS TO GIVE COMPLETE CONTROL TO ALL FIXTURES AND EQUIPMENT.
14. INSTALL DRAIN VALVES AT BASE OF ALL RISERS AND AT LOW POINTS OF PIPING SYSTEM. INSTALL MANUAL AIR VENT VALVE FACILITIES AT THE TOP OF ALL RISERS AND AT HIGH POINTS OF THE PIPING SYSTEM.
15. INSTALL ALL HYDRONIC PIPING AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.
16. THE ENTIRE HYDRONIC SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED WATER FLOWRATE REQUIREMENTS. A CERTIFIED BALANCING REPORT AND VERIFICATION IS TO BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE.
17. ALL DUCTWORK IS TO BE CONSTRUCTED OF GALVANIZED SHEET STEEL (EXCEPT WHERE OTHERWISE SPECIFIED) WITH GAUGES, BRACING AND CONSTRUCTION IN ACCORDANCE WITH THE LATEST SMACNA DUCT MANUAL STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
18. PROVIDE MANUAL DAMPERS AT EACH SPLIT OR TAP CONNECTION TO TRUNK DUCTS FOR BALANCING PURPOSES WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS. EACH DAMPER SHALL BE OF THE OPPOSED BLADE DAMPER TYPE INSTALLED WITH AN OPERATOR AND LOCKING DEVICE. ALL DAMPERS LOCATED ABOVE HARD OR INACCESSIBLE CEILINGS SHALL BE INSTALLED WITH REMOTE GEAR OPERATORS.
19. FURNISH & INSTALL FUSIBLE LINK FIRE DAMPERS AT ALL LOCATIONS WHERE DUCT PENETRATES FIRE-RATED FLOOR OR CEILING ASSEMBLY WHETHER OR NOT SPECIFICALLY SHOWN. INSTALL DUCTWORK CASING ACCESS DOORS AND FRAMES AHEAD OF EACH FIRE DAMPER FOR INSPECTION AND MAINTENANCE. DOORS SHALL BE A MINIMUM OF 20 GA. DOUBLE PANEL INSULATED TYPE.
20. INSTALL TURNING VANES ON ALL RECTANGULAR TURNS. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE CONSTRUCTED IN ACCORDANCE WITH SMACNA MANUAL.
21. ROUND SHEET STEEL ELBOWS ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL SUPPLY AIR DIFFUSERS. SHEET STEEL PLENUM BOXES ARE TO BE INSTALLED AT THE DUCT CONNECTION TO ALL RETURN AND EXHAUST AIR GRILLES. THE CONTRACTOR IS TO PAINT THE INSIDE OF THE SHEET STEEL PLENUM BOXES FLAT BLACK.
22. INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE PROVIDING RISERS, DROPS AND OFFSETS TO CLEAR STRUCTURAL MEMBERS, LIGHT FIXTURES, OTHER PIPING, AND OTHER OBSTRUCTIONS. WHERE CONFLICTS ARISE, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO PROCEEDING.
23. THE ENTIRE AIR DISTRIBUTION SYSTEM IS TO BE BALANCED TO WITHIN 10% OF THE SPECIFIED AIRFLOW REQUIREMENTS.
24. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, PIPING, FIXTURES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
25. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.
26. CONTRACTOR IS RESPONSIBLE TO CREATE AND SUBMIT RED-LINE "AS-BUILT" PLANS TO THE ENGINEER AT THE END OF THE PROJECT. AS-BUILT PLANS SHALL ACCURATELY REPRESENT THE SYSTEMS AS THEY WERE INSTALLED.

CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com
Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & DESIGN ENGINEERS

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

Project Title

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER
Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title
MECHANICAL NOTES, LEGEND, SCHEDULE & DETAILS

Sheet No.
IEYMS M001

CONSTRUCTION DOCUMENTS

PACKAGED HVAC UNIT SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AREA OF BUILDING SERVED	NOMINAL CAPACITY (TONS)	TOTAL SUPPLY AIRFLOW (CFM)	OUTSIDE AIR SUPPLIED (CFM)	SUPPLY FAN ESP (IN. H_2O)	EXHAUST FAN ESP (IN. H_2O)	COOLING CAPACITY @ 95°F OUTDOOR D.B.							GAS HEATING CAPACITY					ERV SUMMER PERFORMANCE				ERV WINTER PERFORMANCE				ENERGY RECOVERY				ELECTRICAL DATA														TOTAL WEIGHT (LB)	NOTES
									GROSS TOTAL CAPACITY (MBH)	GROSS SENSIBLE CAPACITY (MBH)	GROSS LATENT CAPACITY (MBH)	COIL E.A.T.		COIL L.A.T.		INPUT (MBH)	OUTPUT (MBH)	STAGES (QTY.)	E.A.T. DB (°F)	L.A.T. DB (°F)	AFUE (%)	OA DB (°F) / WB (°F)	SA DB (°F) / WB (°F)	RA DB (°F) / WB (°F)	EA DB (°F) / WB (°F)	OA DB (°F) / WB (°F)	SA DB (°F) / WB (°F)	RA DB (°F) / WB (°F)	EA DB (°F) / WB (°F)	SUMMER EFF.		WINTER EFF.		SUPPLY FAN MOTOR			EXH. FAN MOTOR			UNIT POWER										
												DB (°F)	WB (°F)	DB (°F)	WB (°F)																	LAT.	SENS.	LAT.	SENS.	EFF.	HP	RPM	EFF.	HP	RPM	VOLT.	PHASE	Hz.	FLA	MCA	MOCP		
DOAS-1	TRANE	OADG015C1	CLASSROOMS	15	4,850	4,850	2.00	1.50	191.6	138.1	53.5	79.2	66.2	52.7	52.7	300	243	MODULAT.	51.8	98	80	89.5 / 73.4	79.3 / 66.2	75.0 / 62.5	85.0 / 70.2	8.7 / 5.9	51.8 / 43.1	72.0 / 55.9	27.7 / 25.4	66	70	66	70	PREM	7.5	1760	PREM	5	1760	208	3	60	92.6	99	110	4,247	NOTES 1 THRU 12
DOAS-2	TRANE	OADG020C1	CLASSROOMS	20	6,125	6,125	2.00	1.50	233.3	168.1	65.2	80.0	66.8	54.4	54.1	300	243	MODULAT.	48.3	87.7	80	89.5 / 73.4	80.0 / 66.8	75.0 / 62.5	84.6 / 69.6	8.7 / 5.9	48.3 / 40.6	72.0 / 55.9	31.0 / 28.2	61	65	61	65	PREM	10	1760	PREM	5	1760	208	3	60	107.8	115.3	125	4,278	NOTES 1 THRU 12
DOAS-3	TRANE	OADG015C1	CLASSROOMS	15	5,570	5,570	2.00	1.50	197.9	149.4	48.5	79.7	66.6	54.7	54.7	300	243	MODULAT.	49.8	90	80	89.5 / 73.4	79.7 / 66.36	75.0 / 62.5	84.6 / 69.9	8.7 / 5.9	49.8 / 41.7	72.0 / 55.9	29.6 / 27.0	63	67	63	67	PREM	7.5	1760	PREM	5	1760	208	3	60	92.6	99	110	4,247	NOTES 1 THRU 12
DOAS-4	TRANE	OADG020C1	CLASSROOMS	20	6,200	6,200	2.00	1.50	234.1	169.2	64.9	80.1	66.9	54.7	54.3	350	283.5	MODULAT.	48.1	90.2	80	89.5 / 73.4	80.1 / 66.8	75.0 / 62.5	84.2 / 69.6	8.7 / 5.9	48.1 / 40.5	72.0 / 55.9	31.2 / 28.3	60	64	60	64	PREM	10	1760	PREM	5	1760	208	3	60	107.8	115.3	125	4,310	NOTES 1 THRU 12

1. ELECTRICAL CONNECTION TO BE SINGLE POINT
2. PROVIDE WITH FACTORY DISCONNECT SWITCH
3. PROVIDE CONDENSATE DRAIN WITH DEEP VENTED TRAP
4. FURNISH W/ ENERGY RECOVERY WHEEL W/ BYPASS DAMPER
5. PROVIDE W/ 2" PLEATED, MERV-13 FILTERS
6. PROVIDE W/ ECONOMIZER & POWERED EXHAUST
7. PROVIDE W/ AIRFLOW MEASUREMENT DEVICES TO MEASURE SUPPLY AND OUTSIDE AIR
8. PROVIDE W/ MODULATING HOT GAS REHEAT
9. PROVIDE W/ FACTORY WIRED 115V CONVENIENCE OUTLET
10. PROVIDE W/ 24" HIGH VIBRATION ISOLATED ROOF CURB
11. PROVIDE W/ FACTORY INSTALLED SUPPLY & RETURN SMOKE DETECTORS
12. PROVIDE WITHOUT FACTORY CONTROLS, TO BE FIELD INSTALLED & CONNECTED TO BMS

AIR GRILLE/DIFFUSER SCHEDULE

EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIR DEVICE TYPE	AIRFLOW (CFM)		MAX AIR PRESS. DROP (IN. W.C.)	MOUNTING	PANEL/FRAME SIZE (IN.)	NECK SIZE (IN.)	MAX NC	DAMPER	FINISH	NOTES
				MIN.	MAX.								
D-1	KRUEGER	5DMGDR-H-14-8-12-01-81	DUCT MOUNTED SUPPLY GRILLE	0	330	0.10	DUCT MTD.	15-3/8"x9-3/4"	14"x8"	20	OBD	CLEAR ANOD.	-
D-2	KRUEGER	PLQ-8-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	176	300	0.10	LAY-IN	24"x24"	8"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN
D-3	KRUEGER	PLQ-10-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	301	425	0.10	LAY-IN	24"x24"	10"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN
D-4	KRUEGER	PLQ-12-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	426	600	0.10	LAY-IN	24"x24"	12"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN
D-5	KRUEGER	880-H-18-10-F22-NONE-00-01-00-44	DOUBLE DEFLECTION SUPPLY GRILLE	0	700	0.10	WALL MTD. SUPPLY GRILLE	20"x12"	18"x10"	20	OBD	WHITE	-
R-1	KRUEGER	S80P-20x20-F23-24x24-00-00-00-44	PERFORATED FACE RETURN GRILLE	0	1,600	0.10	LAY-IN	24"x24"	20"x20"	25	-	WHITE	FURNISH & INSTALL FULL-SIZE SHEET METAL PLENUM BOX ON REAR OF GRILLE. PAINT INSIDE FLAT BLACK
R-2	KRUEGER	S80H-18x10-F22-NONE-00-00-00-44	35° DEFLECTION RETURN GRILLE	0	700	0.10	WALL SURFACE MTD.	20"x12"	18"x10"	25	-	WHITE	FURNISH & INSTALL FULL-SIZE SHEET METAL PLENUM BOX ON REAR OF GRILLE. PAINT INSIDE FLAT BLACK

VENTILATION SCHEDULE

SYSTEM	SPACE SERVED	SPACE TYPE	SPACE AREA (SQ. FT.)	OCCUPANTS PER 1000 SQ. FT.	# OF OCCUPANTS (NOTE 1)	CFM PER PERSON	CFM PER SQ. FT.	CALCULATED VENTILATION RATE (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ADJUSTED VENTILATION RATE (CFM)	PROVIDED VENTILATION RATE (CFM)	EA CFM PER FIXTURE	EA CFM PER SQ. FT.	MIN. EA RATE (CFM)	EA PROVIDED (CFM)
DOAS-1	CLASSROOM 104	CLASSROOM	1100	20	22	10	0.18	418	0.8	523	550	-	0.5	550	550
	CLASSROOM 108	CLASSROOM	1185	20	24	10	0.18	453	0.8	567	600	-	0.5	592	600
	CORRIDOR C102	CORRIDOR	1650	-	-	-	0.06	99	0.8	124	125	-	-	-	125
	CLASSROOM 204	CLASSROOM	667	35	30	10	0.12	380	0.8	475	475	-	-	-	475
	CLASSROOM 205	CLASSROOM	556	35	30	10	0.12	367	0.8	458	475	-	-	-	475
	CLASSROOM 211	CLASSROOM	558	35	30	10	0.12	367	0.8	459	475	-	-	-	475
	CLASSROOM 212	CLASSROOM	558	35	30	10	0.12	367	0.8	459	475	-	-	-	475
	CORRIDOR C202	CORRIDOR	1597	-	-	-	0.06	96	0.8	120	125	-	-	-	125
	READERS NOOK 300A	CLASSROOM	458	35	30	10	0.12	355	0.8	444	475	-	-	-	475
	CLASSROOM 307	CLASSROOM	558	35	30	10	0.12	367	0.8	459	475	-	-	-	475
	CLASSROOM 308	CLASSROOM	556	35	30	10	0.12	367	0.8	458	475	-	-	-	475
	CORRIDOR C302	CORRIDOR	1616	-	-	-	0.06	97	0.8	121	125	-	-	-	125
DOAS-2	CLASSROOM 148	CLASSROOM	697	35	30	10	0.12	384	0.8	480	500	-	-	-	500
	CLASSROOM 149	CLASSROOM	363	35	13	10	0.12	174	0.8	217	250	-	-	-	250
	CLASSROOM 150	CLASSROOM	316	35	12	10	0.12	158	0.8	197	200	-	-	-	200
	CLASSROOM 166	CLASSROOM	586	35	30	10	0.12	370	0.8	463	475	-	-	-	475
	CLASSROOM 168	CLASSROOM	771	35	30	10	0.12	393	0.8	491	500	-	-	-	500
	CORRIDOR C102	CORRIDOR	1314	-	-	-	0.06	79	0.8	99	100	-	-	-	100
	CLASSROOM 240	CLASSROOM	498	35	18	10	0.12	240	0.8	300	325	-	-	-	325
	CLASSROOM 241	CLASSROOM	515	35	19	10	0.12	252	0.8	315	325	-	-	-	325
	CLASSROOM 266	CLASSROOM	510	35	30	10	0.12	361	0.8	452	475	-	-	-	475
	CLASSROOM 267	CLASSROOM	554	35	30	10	0.12	366	0.8	458	475	-	-	-	475
	CLASSROOM 268	CLASSROOM	564	35	30	10	0.12	368	0.8	460	475	-	-	-	475
	CORRIDOR C207	CORRIDOR	858	-	-	-	0.06	51	0.8	64	100	-	-	-	100
	CLASSROOM 330	CLASSROOM	559	35	30	10	0.12	367	0.8	459	475	-	-	-	475
	CLASSROOM 331	CLASSROOM	265	35	10	10	0.12	132	0.8	165	175	-	-	-	175
	CLASSROOM 332	CLASSROOM	204	35	8	10	0.12	104	0.8	131	150	-	-	-	150
	CLASSROOM 352	CLASSROOM	737	35	30	10	0.12	388	0.8	486	500	-	-	-	500
	CLASSROOM 353	CLASSROOM	889	35	30	10	0.12	407	0.8	508	525	-	-	-	525
	CORRIDOR C307	CORRIDOR	865	-	-	-	0.06	52	0.8	65	100	-	-	-	100
DOAS-3	CLASSROOM 164	CLASSROOM	1324	20	27	10	0.18	508	0.8	635	680	-	0.5	662	680
	CLASSROOM 242	CLASSROOM	688	35	30	10	0.12	383	0.8	478	500	-	-	-	500
	CLASSROOM 246	CLASSROOM	603	35	30	10	0.12	372	0.8	465	465	-	-	-	465
	CLASSROOM 248B	CLASSROOM	403	35	15	10	0.12	198	0.8	248	250	-	-	-	250
	CLASSROOM 256	CLASSROOM	814	35	30	10	0.12	398	0.8	497	500	-	-	-	500
	CLASSROOM 257	CLASSROOM	590	35	30	10	0.12	371	0.8	464	465	-	-	-	465
	CLASSROOM 258	CLASSROOM	557	35	30	10	0.12	367	0.8	469	460	-	-	-	460
	CORRIDOR C207	CORRIDOR	1139	-	-	-	0.06	68	0.8	85	85	-	-	-	100
	CLASSROOM 338	CLASSROOM	644	35	15	10	0.12	377	0.8	472	475	-	-	-	475
	CLASSROOM 339	CLASSROOM	874	35	30	10	0.12	405	0.8	506	510	-	-	-	510
	CLASSROOM 349	CLASSROOM	1400	35	30	10	0.12	468	0.8	585	585	-	-	-	585
	CLASSROOM 350	CLASSROOM	943	35	30	10	0.12	413	0.8	520	520	-	-	-	520
	CORRIDOR C307	CORRIDOR	1139	-	-	-	0.06	68	0.8	85	100	-	-	-	100
DOAS-4	CLASSROOM 249	CLASSROOM	761	35	30	10	0.12	391	0.8	489	500	-	-	-	500
	CLASSROOM 250	CLASSROOM	732	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 251	CLASSROOM	731	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 253	CLASSROOM	732	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 254	CLASSROOM	730	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 255	CLASSROOM	761	35	30	10	0.12	391	0.8	489	500	-	-	-	500
	CORRIDOR C208	CORRIDOR	1174	-	-	-	0.06	70	0.8	88	100	-	-	-	100
	CLASSROOM 249	CLASSROOM	761	35	30	10	0.12	391	0.8	489	500	-	-	-	500
	CLASSROOM 250	CLASSROOM	732	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 251	CLASSROOM	731	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 253	CLASSROOM	732	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 254	CLASSROOM	730	35	30	10	0.12	388	0.8	485	500	-	-	-	500
	CLASSROOM 255	CLASSROOM	761	35	30	10	0.12	391	0.8	489	500	-	-	-	500
	CORRIDOR C308	CORRIDOR	1174	-	-	-	0.06	70	0.8	88	100	-	-	-	100

NOTES:
1. QUANTITY OF OCCUPANTS FOR STANDARD SIZE CLASSROOMS ARE 30 OCCUPANTS BASED ON NYSED STATISTICAL DATA. ALL OTHER OCCUPANCIES ARE BASED UPON OCCUPANT DENSITIES FROM THE 2015 INTERNATIONAL MECHANICAL CODE

19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com
CSARCH

Consultant

BLAKE ENGINEERING PLLC
445 HAMILTON AVENUE, SUITE 1102, WHITE PLAINS, NEW YORK 10601

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 092039 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION
1		

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

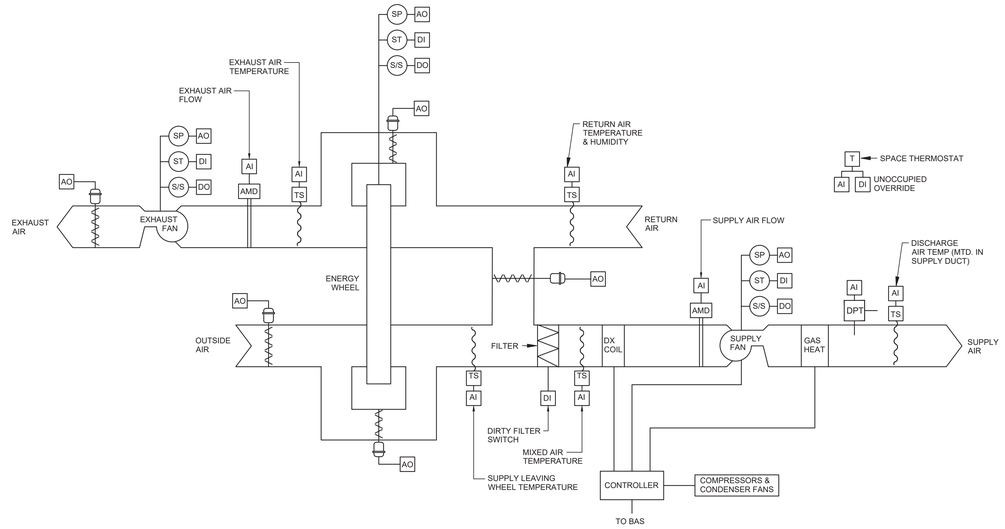
Sheet Title

MECHANICAL SCHEDULES

Sheet No.

IEYMS M002

CONSTRUCTION DOCUMENTS



1 M003 Dedicated Outdoor Air System Control Schematic

N.T.S.

DDC Temperature Control Notes:

1. HVAC CONTROLS SHALL BE FURNISHED & INSTALLED BY THE OWNER. ALL HARDWARE, WIRING AND PROGRAMMING TO BE PROVIDED BY OWNER. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER'S VENDOR THROUGHOUT THE PROJECT TO SUPPORT INSTALLATION, TESTING AND COMMISSIONING. MECHANICAL CONTRACTOR TO INSTALL ALL DEVICES MOUNTED IN OR ON THE PIPING AND/OR DUCTWORK INCLUDING BUT NOT LIMITED TO HYDRONIC CONTROL VALVES, TEMPERATURE SENSORS, FLOW SENSORS, ETC. MECHANICAL CONTRACTOR TO PROVIDE ALL NECESSARY PORTS/THERMOWELLS FOR SENSORS, GAUGES, ETC. COORDINATE WITH OWNER'S VENDOR FOR QUANTITY AND LOCATIONS.
2. OWNER SHALL EXPAND EXISTING BUILDING AUTOMATION SYSTEM TO PROVIDE THE CONTROL SEQUENCES SPECIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS. THE SYSTEM SHALL PROVIDE CONTROL AND MONITORING OF THE EQUIPMENT INDICATED.
3. OWNER SHALL PROVIDE CONTROLLERS AND COMMUNICATIONS INFRASTRUCTURE TO MATCH EXISTING CAMPUS-WIDE BUILDING AUTOMATION SYSTEM. PROVIDE SEAMLESS INTEGRATION WITH EXISTING CONTROL NETWORK AND USER INTERFACES. NETWORK GATEWAYS AND PROTOCOL INTERFACE EQUIPMENT ARE NOT ACCEPTABLE UNLESS OTHERWISE NOTED.
4. OWNER SHALL PROVIDE INSTRUMENTATION, SENSORS, VALVES, DAMPERS, ACTUATORS AND WIRING AS REQUIRED TO PROVIDE SPECIFIED OPERATING SEQUENCES.
5. OWNER SHALL MODIFY EXISTING GRAPHIC USER INTERFACES TO INCLUDE ALL EQUIPMENT AND SYSTEMS INCLUDED IN THIS PROJECT.
6. OWNER SHALL REPLACE THE EXISTING RAS SERVER HARDWARE AND UPGRADE THE SOFTWARE TO THE LATEST VERSION OF WEB-ENABLED GRAPHICAL USER INTERFACE WITH A SEAMLESS INTEGRATION OF THE NEW AND EXISTING CONTROL POINTS.
7. OWNER SHALL BE RESPONSIBLE FOR POWER THAT IS NOT SHOWN ON THE ELECTRICAL DRAWINGS, TO CONTROLS FURNISHED BY THIS CONTRACTOR. IF POWER CIRCUITS ARE SHOWN ON THE ELECTRICAL DRAWINGS, OWNER SHALL CONTINUE THE POWER RUN TO THE CONTROL DEVICE. IF POWER CIRCUITS ARE NOT SHOWN, OWNER SHALL PROVIDE BREAKERS AT DISTRIBUTION PANELS FOR POWER TO CONTROLS AND PROVIDE POWER FROM THE DISTRIBUTION PANEL TO THE CONTROL DEVICES.
8. OWNER SHALL FURNISH & INSTALL ALL REQUIRED END DEVICES, POWER SUPPLY, LOW VOLTAGE TRANSFORMERS, CONTROL WIRING & CONDUITS, ETC. FOR A COMPLETE & OPERATIONAL DDC CONTROL SYSTEM.
9. NEW WIRING & CONDUITS SHALL BE RUN CONCEALED ABOVE CEILING. ALL EXPOSED WIRING & CONDUITS SHALL BE RUN CONCEALED IN EMT IN UTILITY SPACES AND WIREMOLD IN FINISHED AREAS.
10. OWNER TO FIELD INSTALL SENSORS, CONTROLLERS, ETC. WHICH ARE NOT FACTORY-INSTALLED BY EQUIPMENT MANUFACTURERS.
11. ANY EQUIPMENT FURNISHED WITH FACTORY CONTROLS SHALL BE PROVIDED WITH BACNET MSTP INTEGRATION CAPABILITIES AND INCLUDE ON-SITE FACTORY CONTROLS INTEGRATION START-UP IN COORDINATION WITH OWNER'S BUILDING AUTOMATION SYSTEM.

DDC Temperature Control Legend:

AI	ANALOG INPUT
AO	ANALOG OUTPUT
AQ	AQUASTAT (SPDT)
AMD	AIR FLOW MEASUREMENT DEVICE (ANALOG)
FS	FLOW SWITCH (DIGITAL)
A	CONTROL ACTUATOR CONTROL DAMPER OR VALVE
DPS	DIFFERENTIAL PRESSIRE SWITCH (SPDT)
DPT	DIFFERENTIAL PRESSIRE TRANSDUCER (ANALOG)
IAQ	INDOOR AIR QUALITY
MS	MAGNETIC STARTER
VFD	VARIABLE FREQUENCY DRIVE
R	CONTROL RELAY (24VAC-SPDT)
CT	CURRENT TRANSDUCER (ANALOG)
CS	CURRENT SWITCH (DIGITAL)
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
ES	END SWITCH (SPST)
RH	RELATIVE HUMIDITY SENSOR
CO	CARBON-MONOXIDE SENSOR
CO2	CARBON-DIOXIDE SENSOR
SW	WALL-MOUNTED SWITCH
TS	TEMPERATURE SENSOR (PROBE/IMMERSION)
TS	TEMPERATURE SENSOR (AVERAGING)
LLS	LOW-LIMIT TEMPERATURE SWITCH (SPDT)
SD	SMOKE DETECTOR (DUCT)
TC	THERMOSTAT SWITCH (SPDT)
XFMR	120/24VAC TRANSFORMER

CSARCH
19 Front St. - Newburgh - New York 12550-7601
845 - 561 - 3179 www.csarchpc.com
Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENERGY SERVICES

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

Project Title

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · LICENSED PROFESSIONAL ENGINEER · 089039

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title

TEMPERATURE CONTROLS NOTES, LEGEND & SCHEMATICS

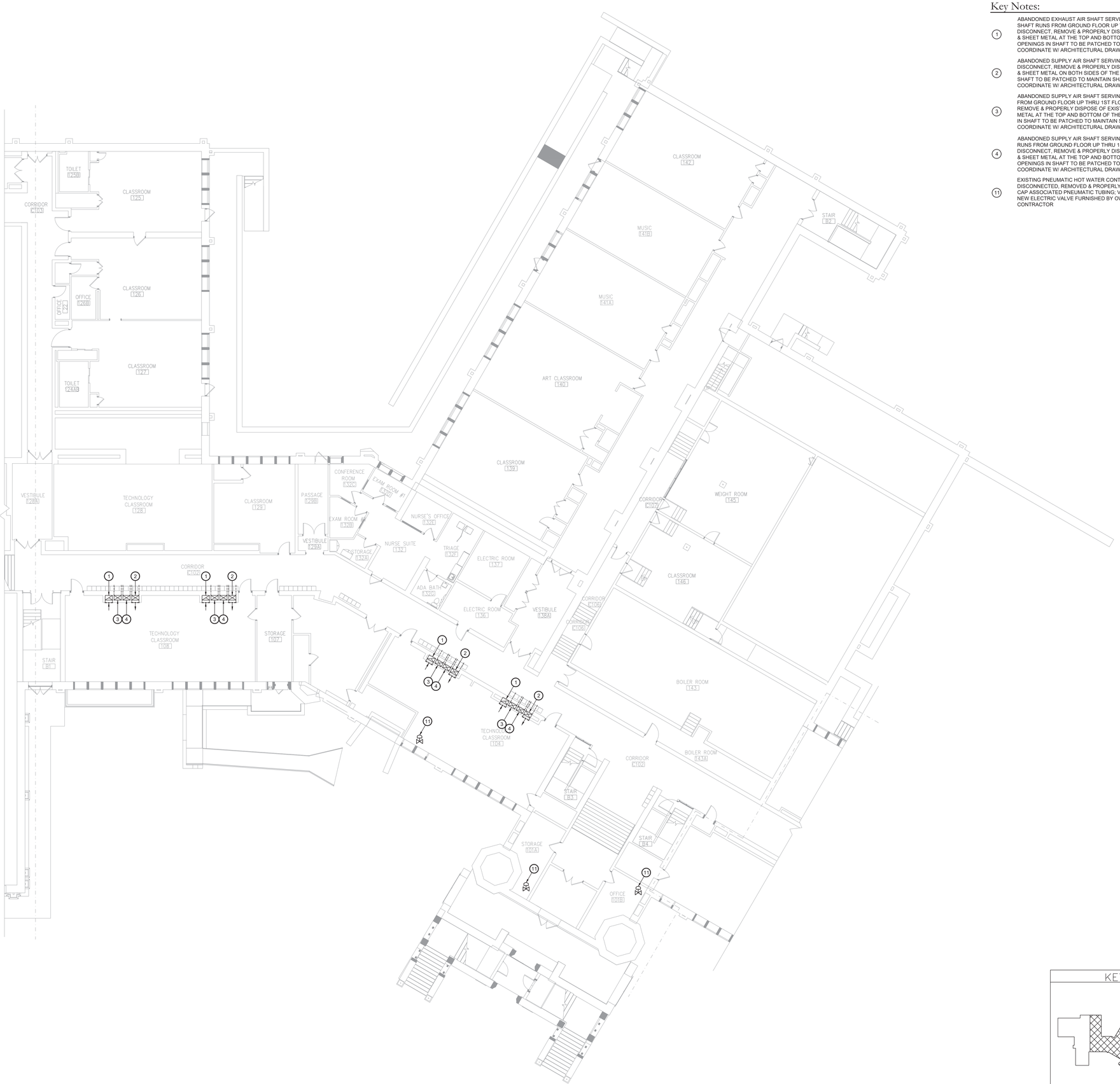
Sheet No.

IEYMS M003

CONSTRUCTION DOCUMENTS

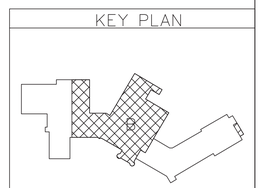
Key Notes:

1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
11. EXISTING PNEUMATIC HOT WATER CONTROL VALVE TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REMOVE & CAP ASSOCIATED PNEUMATIC TUBING; VALVE TO BE REPLACED W/ NEW ELECTRIC VALVE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR



1 MD102 Area B Ground Floor Mechanical Demolition Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC

Project Title
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title
AREA B GROUND FLOOR MECHANICAL DEMOLITION PLAN

Sheet No.
IEYMS MD102

CONSTRUCTION DOCUMENTS

Key Notes:

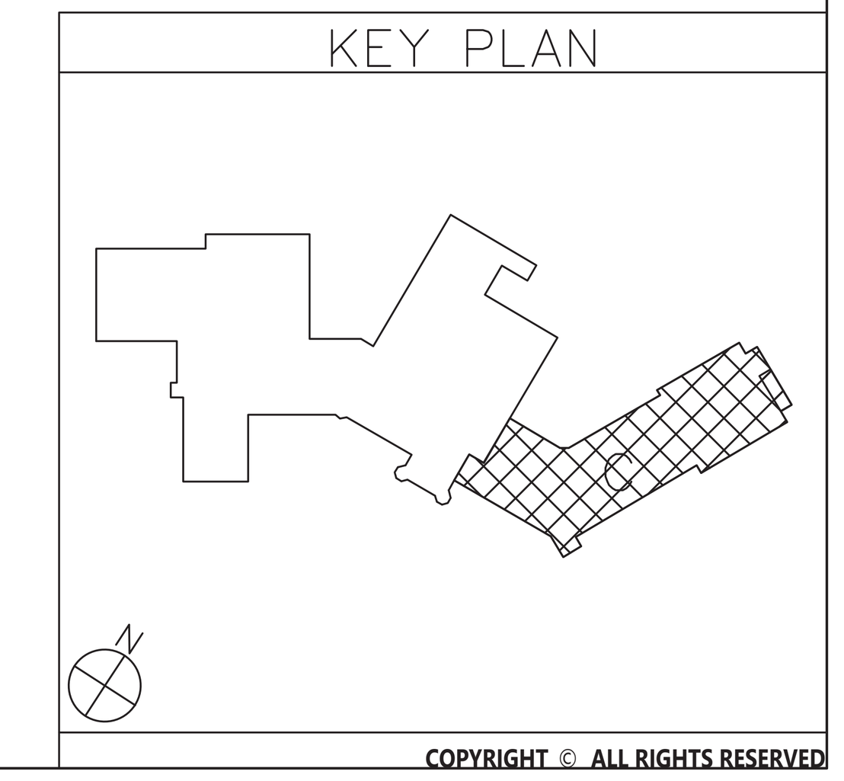
1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS

11. EXISTING PNEUMATIC HOT WATER CONTROL VALVE TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REMOVE & CAP ASSOCIATED PNEUMATIC TUBING; VALVE TO BE REPLACED W/ NEW ELECTRIC VALVE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR

1 / MD103 — Area C Ground Floor Mechanical Demolition Plan

Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant: BLAKE ENGINEERING PLLC

Project Title:
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · LICENSED PROFESSIONAL ENGINEER · 089039

Expiration Date: 05-31-2025

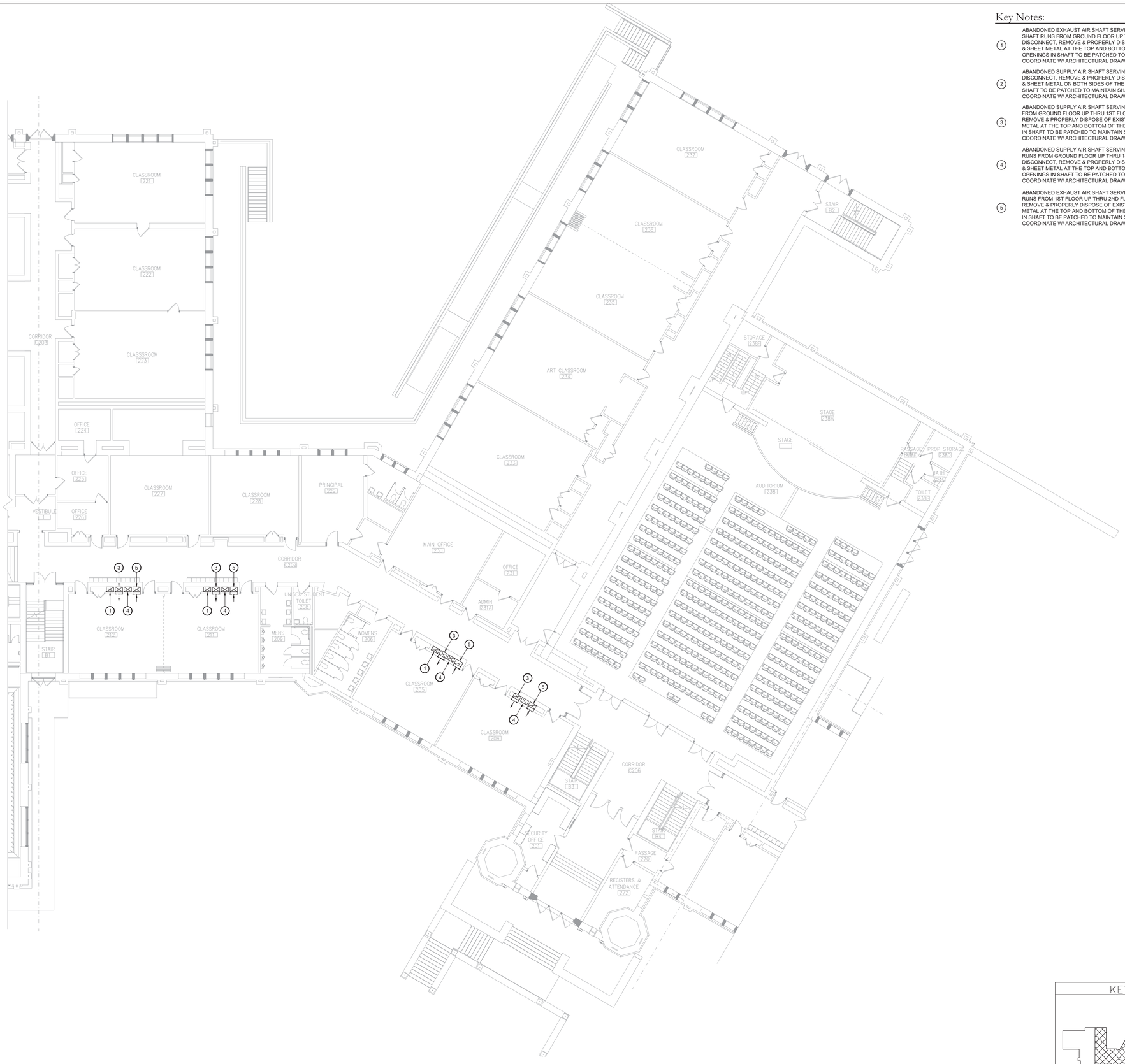
#	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title: AREA C GROUND FLOOR MECHANICAL DEMOLITION PLAN

Sheet No.: IEYMS MD103

CONSTRUCTION DOCUMENTS

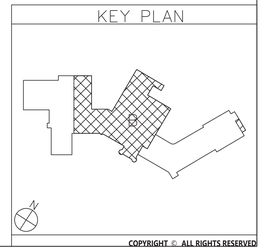


Key Notes:

1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
5. ABANDONED EXHAUST AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM 1ST FLOOR UP THRU 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS

1 MD112 Area B 1st Floor Mechanical Demolition Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. - Newburgh - New York 12550-7601
845 - 561 - 3179 www.csarchpc.com

Consultant

BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING SERVICES

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK MATTHEW GEORGE BLAKE 076860 LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

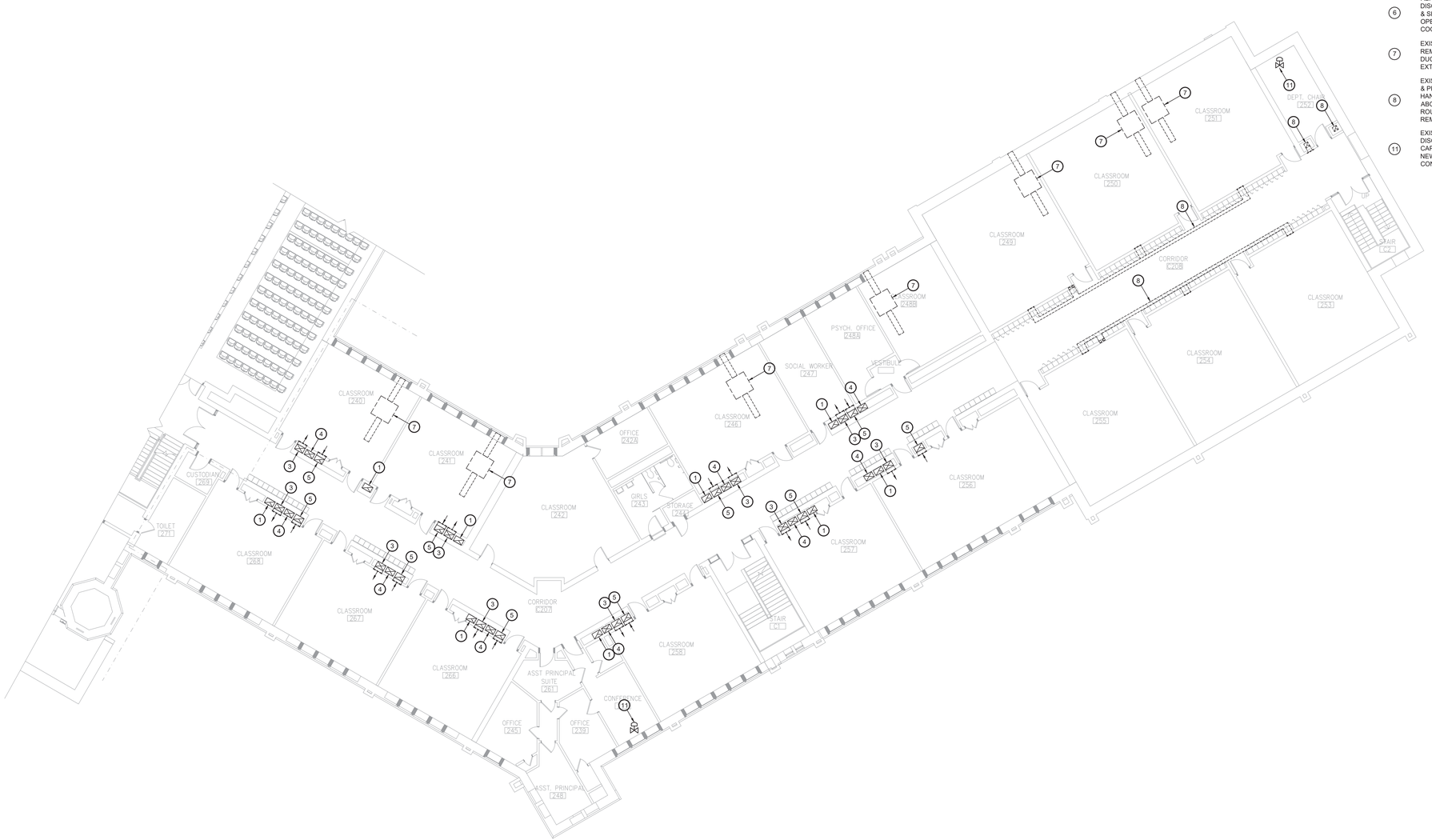
Sheet Title
AREA B
1ST FLOOR
MECHANICAL
DEMOLITION
PLAN

Sheet No.
IEYMS
MD112

CONSTRUCTION DOCUMENTS

Key Notes:

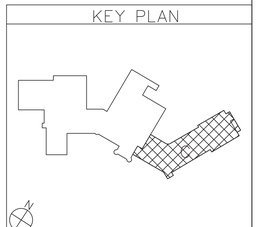
1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
5. ABANDONED EXHAUST AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM 1ST FLOOR UP THRU 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
6. ABANDONED EXHAUST AIR SHAFT SERVING 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
7. EXISTING ENERGY RECOVERY VENTILATOR TO BE DISCONNECTED, REMOVED & TURNED OVER TO OWNER; REMOVE ALL ASSOCIATED DUCTWORK, HANGERS, CONTROLS, ACCESSORIES, ETC.; EXTERIOR WALL PANEL TO BE PATCHED
8. EXISTING EXHAUST DUCTWORK TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED INCLUDING ALL DAMPERS, ACCESSORIES, HANGERS, ETC.; THE MAJORITY OF THE DUCTWORK IS CONCEALED ABOVE HARD CEILINGS OR WITHIN CHASES; FIELD VERIFY EXACT ROUTING & EXTENTS OF DUCTWORK AFTER CEILING DEMOLITION & REMOVE DUCTWORK IN ENTIRETY
11. EXISTING PNEUMATIC HOT WATER CONTROL VALVE TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REMOVE & CAP ASSOCIATED PNEUMATIC TUBING; VALVE TO BE REPLACED W/ NEW ELECTRIC VALVE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR



1 MD113 Area C 1st Floor Mechanical Demolition Plan

Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP / FP CONSULTING & ENGINEERING

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

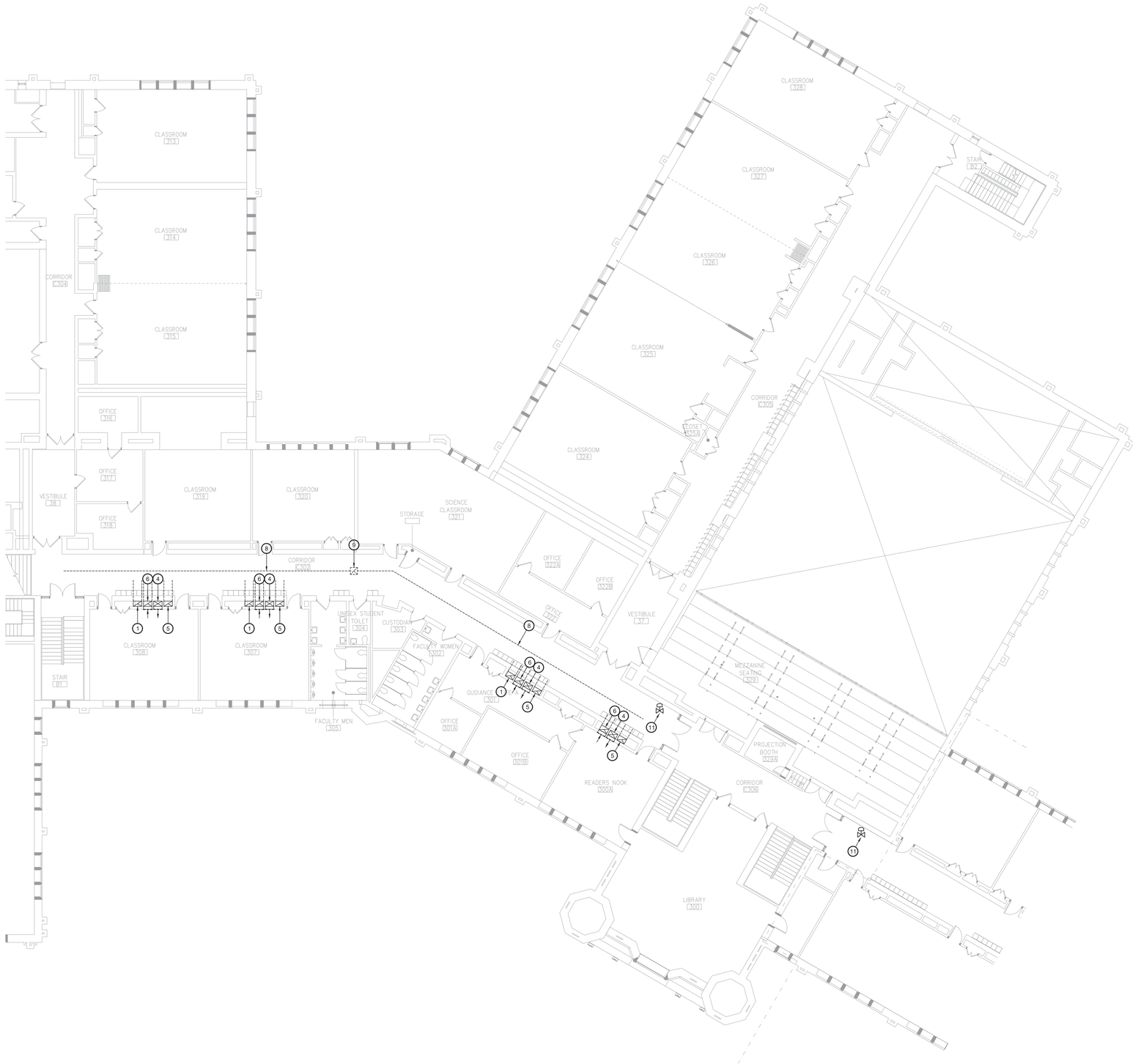
Sheet Title

AREA C
1ST FLOOR
MECHANICAL
DEMOLITION
PLAN

Sheet No.

IEYMS
MD113

CONSTRUCTION DOCUMENTS



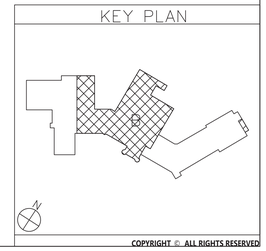
1 MD122 Area B 2nd Floor Mechanical Demolition Plan

Scale: 3/32" = 1'-0"

Key Notes:

1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
5. ABANDONED EXHAUST AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM 1ST FLOOR UP THRU 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
6. ABANDONED EXHAUST AIR SHAFT SERVING 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
7. EXISTING ENERGY RECOVERY VENTILATOR TO BE DISCONNECTED, REMOVED & TURNED OVER TO OWNER; REMOVE ALL ASSOCIATED DUCTWORK, HANGERS, CONTROLS, ACCESSORIES, ETC.; EXTERIOR WALL PANEL TO BE PATCHED
8. EXISTING EXHAUST DUCTWORK TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED INCLUDING ALL DAMPERS, ACCESSORIES, HANGERS, ETC.; THE MAJORITY OF THE DUCTWORK IS CONCEALED ABOVE HARD CEILINGS OR WITHIN CHASES; FIELD VERIFY EXACT ROUTING & EXTENTS OF DUCTWORK AFTER CEILING DEMOLITION & REMOVE DUCTWORK IN ENTIRETY
9. EXISTING DUCT DROP DN. FROM ROOF MOUNTED EXHAUST FAN; DISCONNECT, REMOVE & PROPERLY DISPOSE OF ALL DUCTWORK INCLUDING ALL DAMPERS, ACCESSORIES, HANGERS, ETC.
11. EXISTING PNEUMATIC HOT WATER CONTROL VALVE TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REMOVE & CAP ASSOCIATED PNEUMATIC TUBING; VALVE TO BE REPLACED W/ NEW ELECTRIC VALVE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR

KEY PLAN



CSARCH
19 Front St. - Newburgh - New York 12550-7601
845 - 561 - 3179 www.csarchpc.com

Consultant

BLAKE ENGINEERING PLLC
445 HAMILTON AVENUE, SUITE 1102, WHITE PLAINS, NEW YORK 10601

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK MATTHEW GEORGE BLAKE 088080 LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title

AREA B
2ND FLOOR
MECHANICAL
DEMOLITION
PLAN

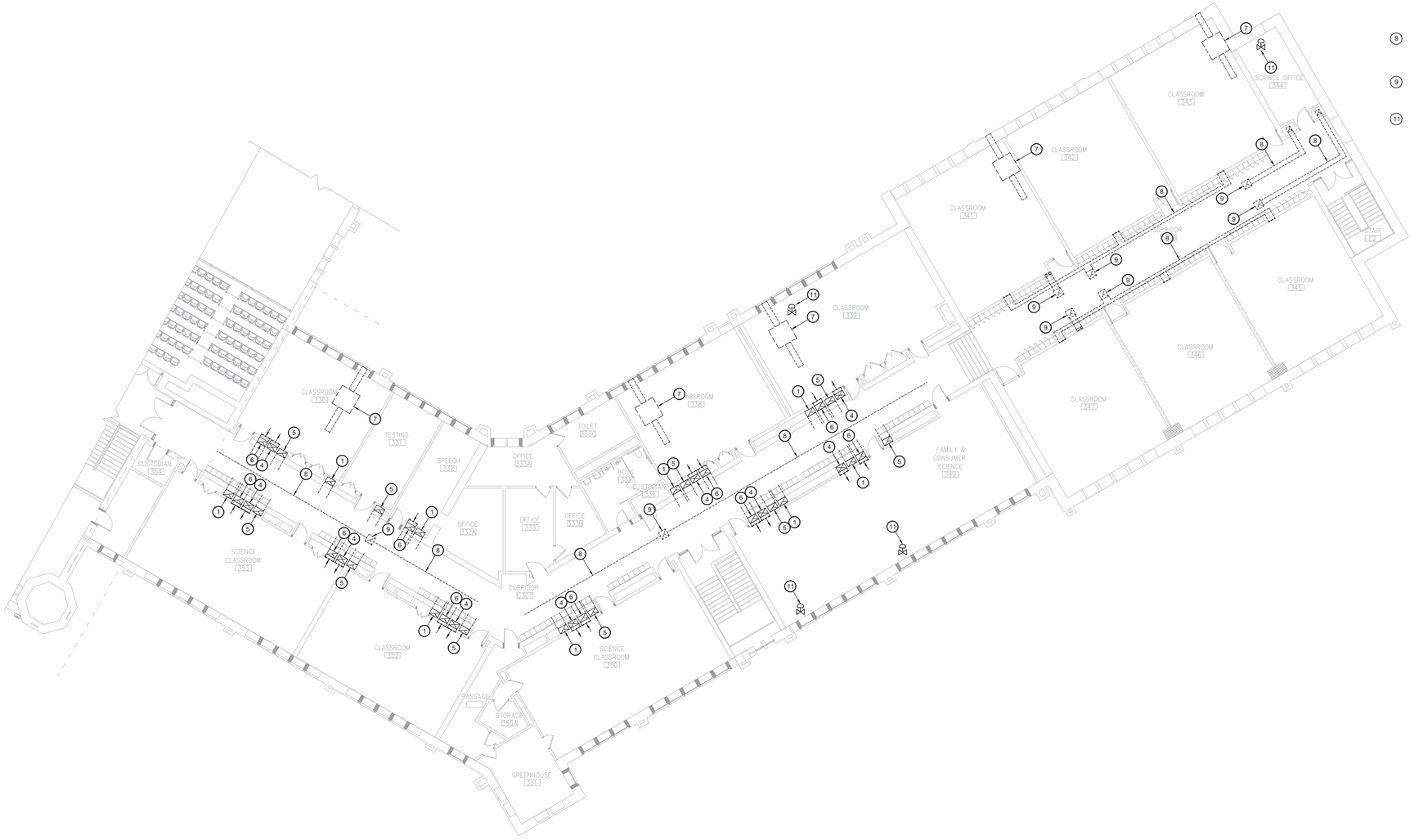
Sheet No.

IEYMS
MD122

CONSTRUCTION DOCUMENTS

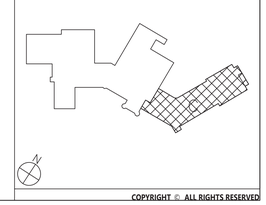
Key Notes:

1. ABANDONED EXHAUST AIR SHAFT SERVING GROUND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
2. ABANDONED SUPPLY AIR SHAFT SERVING GROUND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL ON BOTH SIDES OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
3. ABANDONED SUPPLY AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
4. ABANDONED SUPPLY AIR SHAFT SERVING 2ND FLOOR; SHAFT RUNS FROM GROUND FLOOR UP THRU 1ST & 2ND FLOORS; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
5. ABANDONED EXHAUST AIR SHAFT SERVING 1ST FLOOR; SHAFT RUNS FROM 1ST FLOOR UP THRU 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
6. ABANDONED EXHAUST AIR SHAFT SERVING 2ND FLOOR; DISCONNECT, REMOVE & PROPERLY DISPOSE OF EXISTING GRILLE & SHEET METAL AT THE TOP AND BOTTOM OF THE SHAFT; WALL OPENINGS IN SHAFT TO BE PATCHED TO MAINTAIN SHAFT RATINGS, COORDINATE W/ ARCHITECTURAL DRAWINGS
7. EXISTING ENERGY RECOVERY VENTILATOR TO BE DISCONNECTED, REMOVED & TURNED OVER TO OWNER; REMOVE ALL ASSOCIATED DUCTWORK, HANGERS, CONTROLS, ACCESSORIES, ETC.; EXTERIOR WALL PANEL TO BE PATCHED
8. EXISTING EXHAUST DUCTWORK TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED INCLUDING ALL DAMPERS, ACCESSORIES, HANGERS, ETC.; THE MAJORITY OF THE DUCTWORK IS CONCEALED ABOVE HARD CEILINGS OR WITHIN CHASES; FIELD VERIFY EXACT ROUTING & EXTENTS OF DUCTWORK AFTER CEILING DEMOLITION & REMOVE DUCTWORK IN ENTIRETY
9. EXISTING DUCT DROP DN. FROM ROOF MOUNTED EXHAUST FAN; DISCONNECT, REMOVE & PROPERLY DISPOSE OF ALL DUCTWORK INCLUDING ALL DAMPERS, ACCESSORIES, HANGERS, ETC.
11. EXISTING PNEUMATIC HOT WATER CONTROL VALVE TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF; REMOVE & CAP ASSOCIATED PNEUMATIC TUBING; VALVE TO BE REPLACED W/ NEW ELECTRIC VALVE FURNISHED BY OWNER & INSTALLED BY CONTRACTOR



1 MD123 Area C 2nd Floor Mechanical Demolition Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING SERVICES

Project Title
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE KRAAE · 090839 · LICENSED PROFESSIONAL ENGINEER
Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

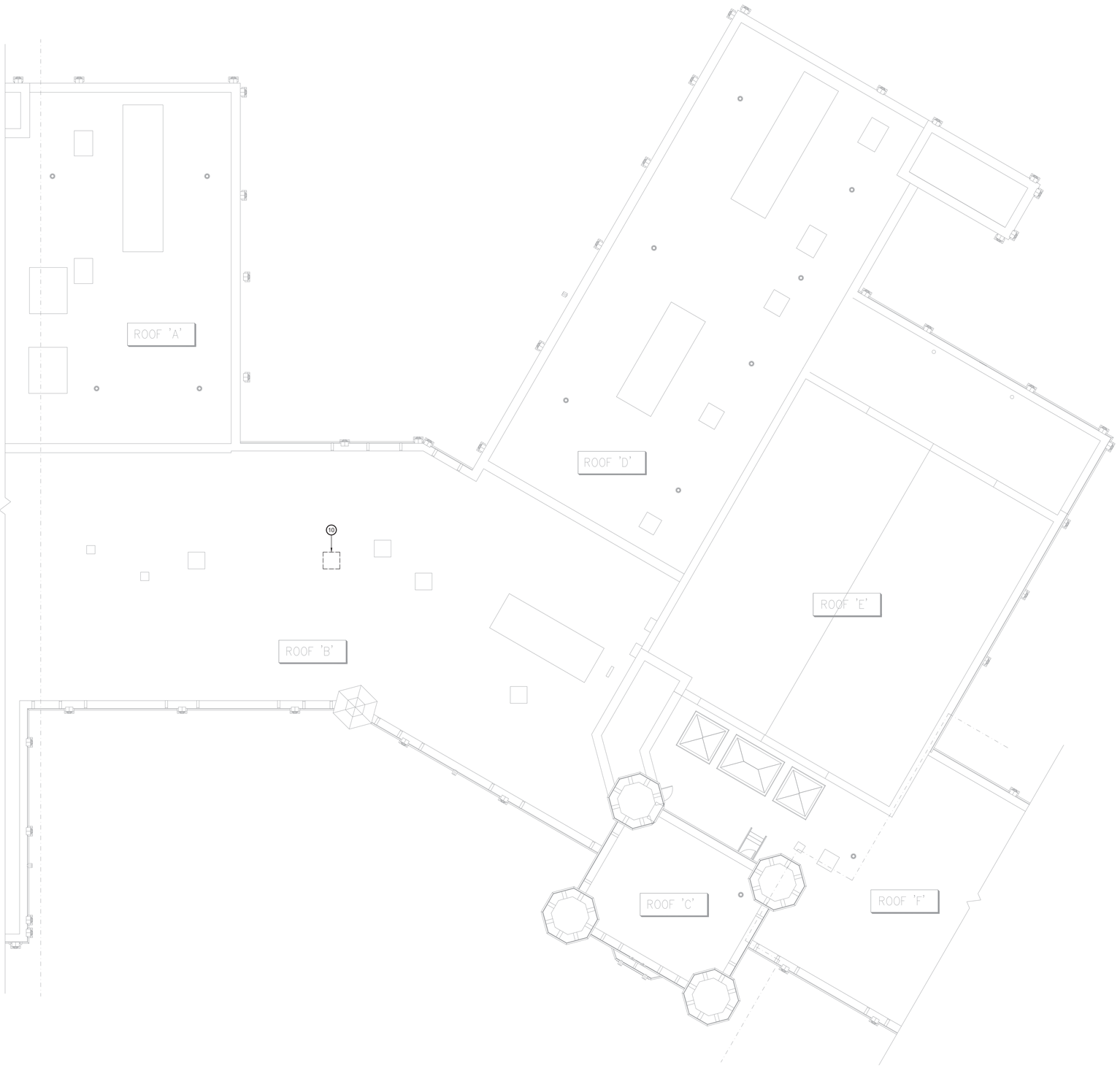
Sheet Title
AREA C
2ND FLOOR
MECHANICAL
DEMOLITION
PLAN

Sheet No.
IEYMS
MD123

CONSTRUCTION DOCUMENTS

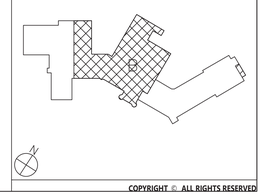
Key Notes:

(10) EXISTING EXHAUST FAN TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY DUCTWORK, GRILLES, CONTROLS, ACCESSORIES, ETC.; ROOF CURB TO BE REMOVED & ROOF PATCHED



1 / MD132 Area B Roof Mechanical Demolition Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. - Newburgh - New York 12550-7601
845 - 561 - 3179 www.csarchpc.com

Consultant

BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING SERVICES, PLLC

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK
MATTHEW GEORGE BLAKE
090680
LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION
1		

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.00
Issued for Bid:	05/30/2025

Sheet Title

AREA B
ROOF
MECHANICAL
DEMOLITION
PLAN

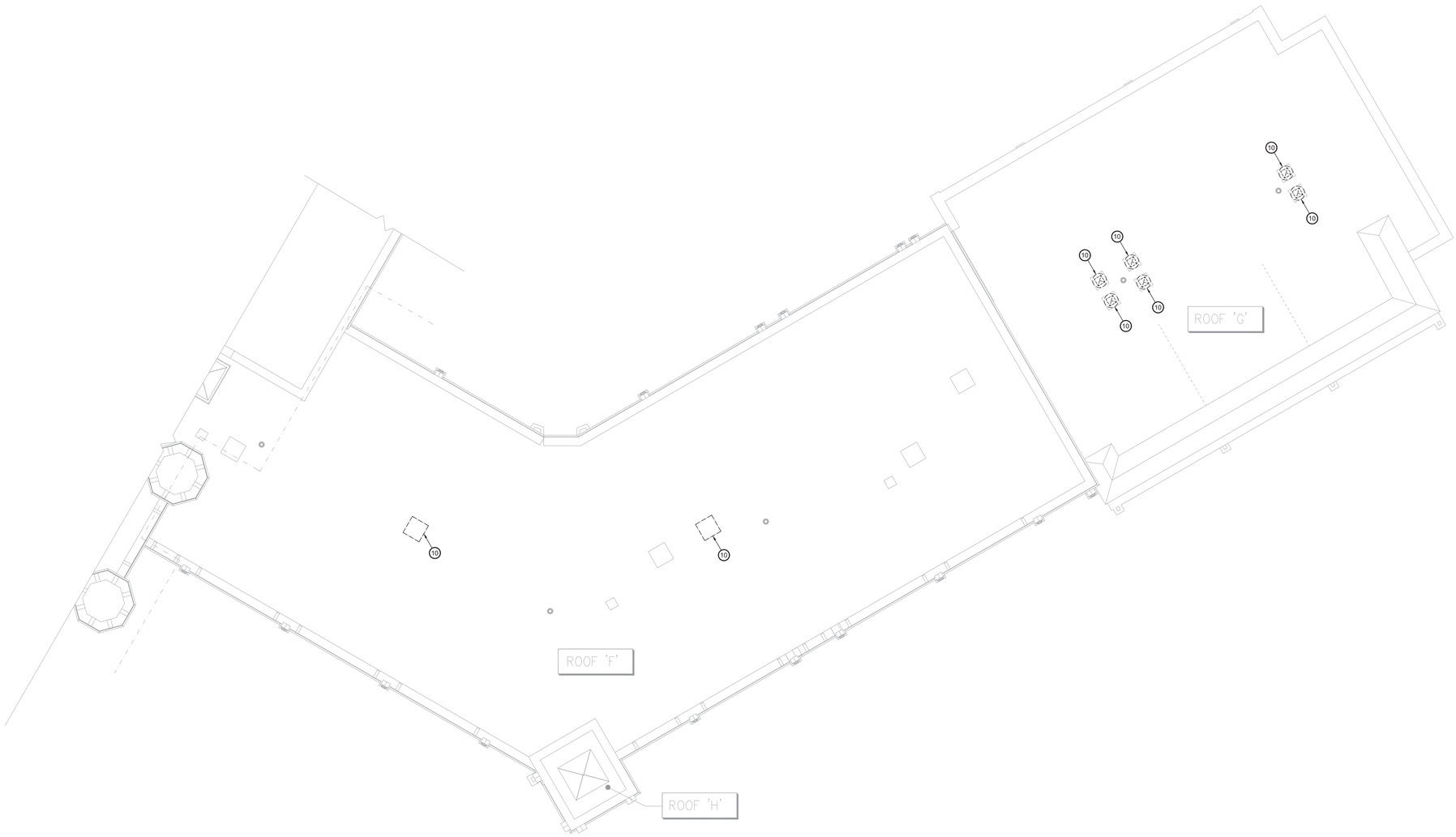
Sheet No.

IEYMS
MD132

CONSTRUCTION DOCUMENTS

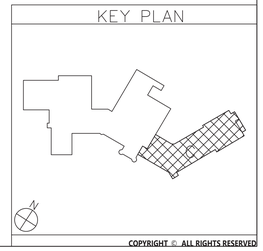
Key Notes:

(10) EXISTING EXHAUST FAN TO BE DISCONNECTED, REMOVED & PROPERLY DISPOSED OF INCLUDING ANY DUCTWORK, GRILLES, CONTROLS, ACCESSORIES, ETC.; ROOF CURB TO BE REMOVED & ROOF PATCHED



1 MD133 Area C Roof Mechanical Demolition Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. - Newburgh - New York 12550-7601
845 - 561 - 3179 www.csarchpc.com

Consultant

BLAKE ENGINEERING PLLC
MEP/FP DESIGN & CONSULTING SERVICES

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 090869 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.00
Issued for Bid:	05/30/2025

Sheet Title

AREA C
ROOF
MECHANICAL
DEMOLITION
PLAN

Sheet No.

IEYMS
MD133

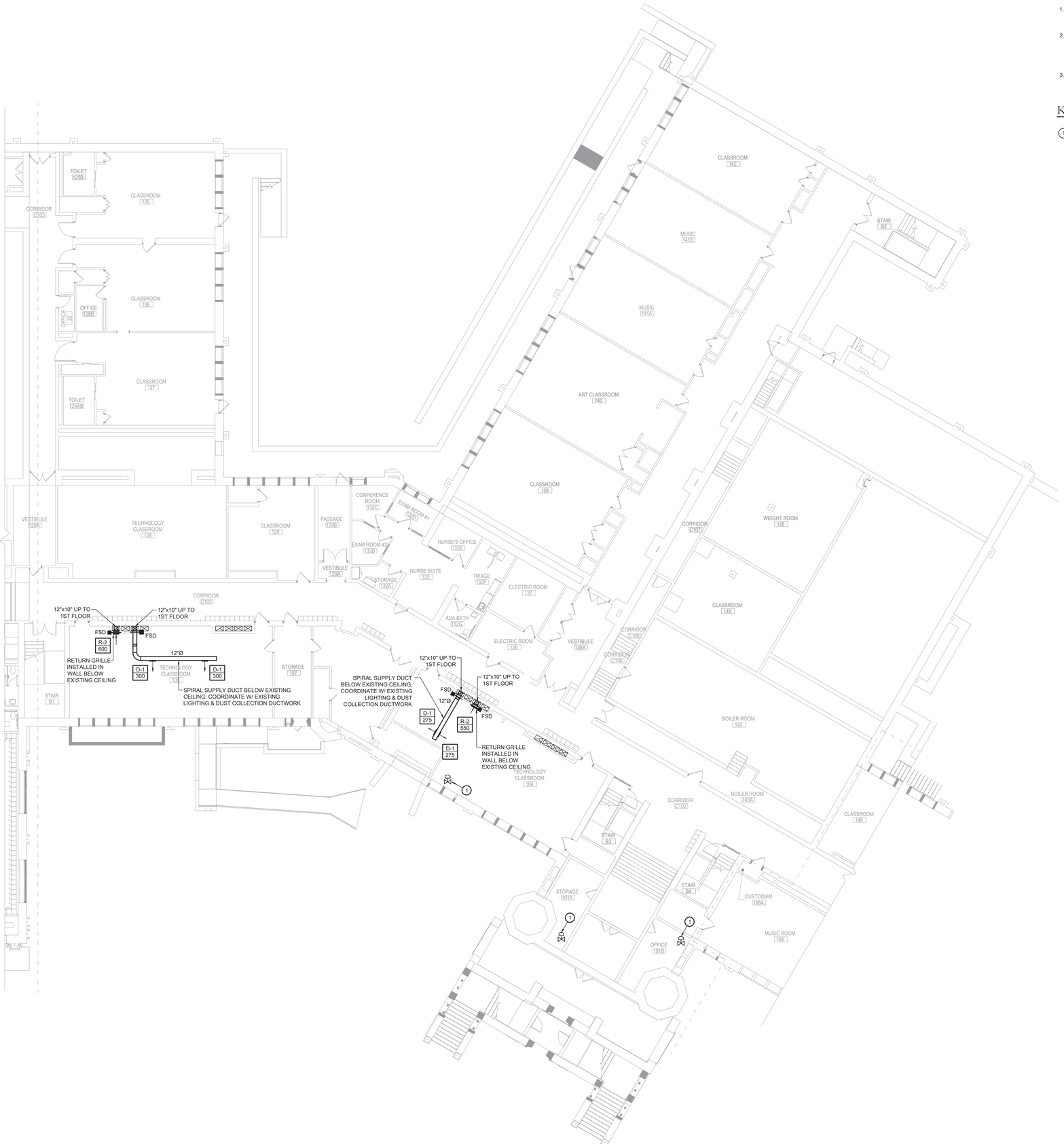
CONSTRUCTION DOCUMENTS

Sheet Notes:

1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.

Key Notes:

(1) NEW ELECTRIC HOT WATER CONTROL VALVE TO REPLACE EXISTING PNEUMATIC HOT WATER CONTROL; VALVE FURNISHED & WIRED BY OWNER; VALVE INSTALLED IN HOT WATER PIPING BY CONTRACTOR



1 M102 Area B Ground Floor Mechanical Plan
Scale: 3/32" = 1'-0"

19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com
CSARCH

Consultant

BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING SERVICES

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

Project Title

STATE OF NEW YORK · MATTHEW GEORGE · BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

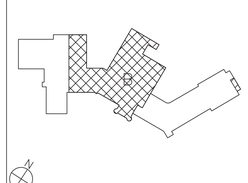
Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title
AREA B GROUND FLOOR MECHANICAL PLAN

Sheet No.
IEYMS M102

CONSTRUCTION DOCUMENTS

KEY PLAN



Sheet Notes:

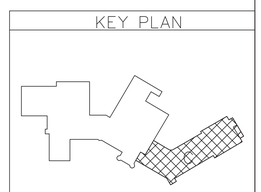
1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.

Key Notes:

(1) NEW ELECTRIC HOT WATER CONTROL VALVE TO REPLACE EXISTING PNEUMATIC HOT WATER CONTROL; VALVE FURNISHED & WIRED BY OWNER; VALVE INSTALLED IN HOT WATER PIPING BY CONTRACTOR

1 M103 Area C Ground Floor Mechanical Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING

Project Title
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER
Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

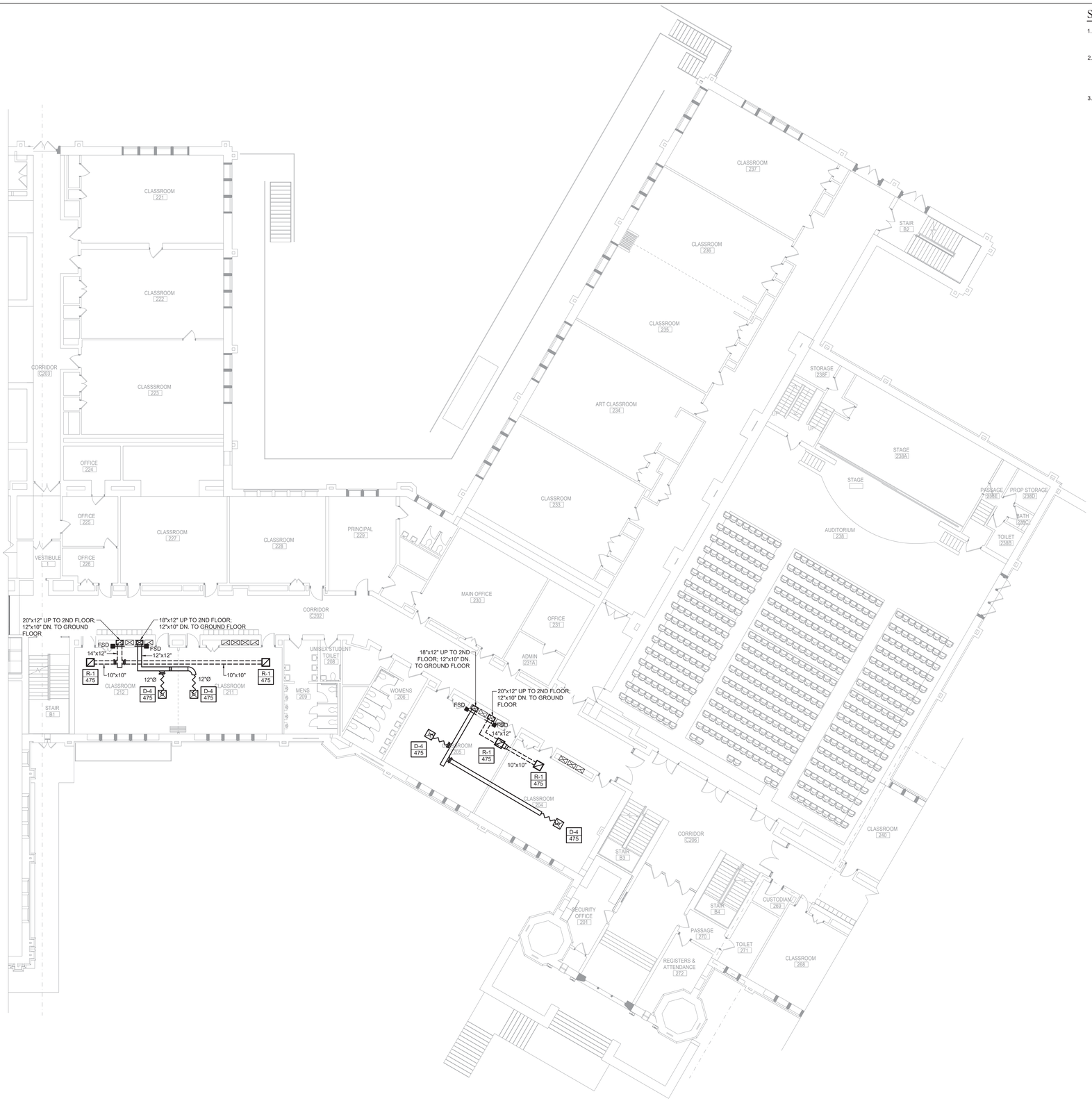
Sheet Title
AREA C GROUND FLOOR MECHANICAL PLAN

Sheet No.
IEYMS M103

CONSTRUCTION DOCUMENTS

Sheet Notes:

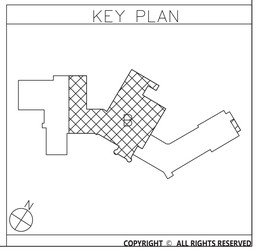
1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.



1 / M112 Area B 1st Floor Mechanical Plan

Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP / FP CONSULTING & ENGINEERING SERVICES
www.blakeengineering.com

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 076880 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title

AREA B
1ST FLOOR
MECHANICAL
PLAN

Sheet No.

IEYMS
M112

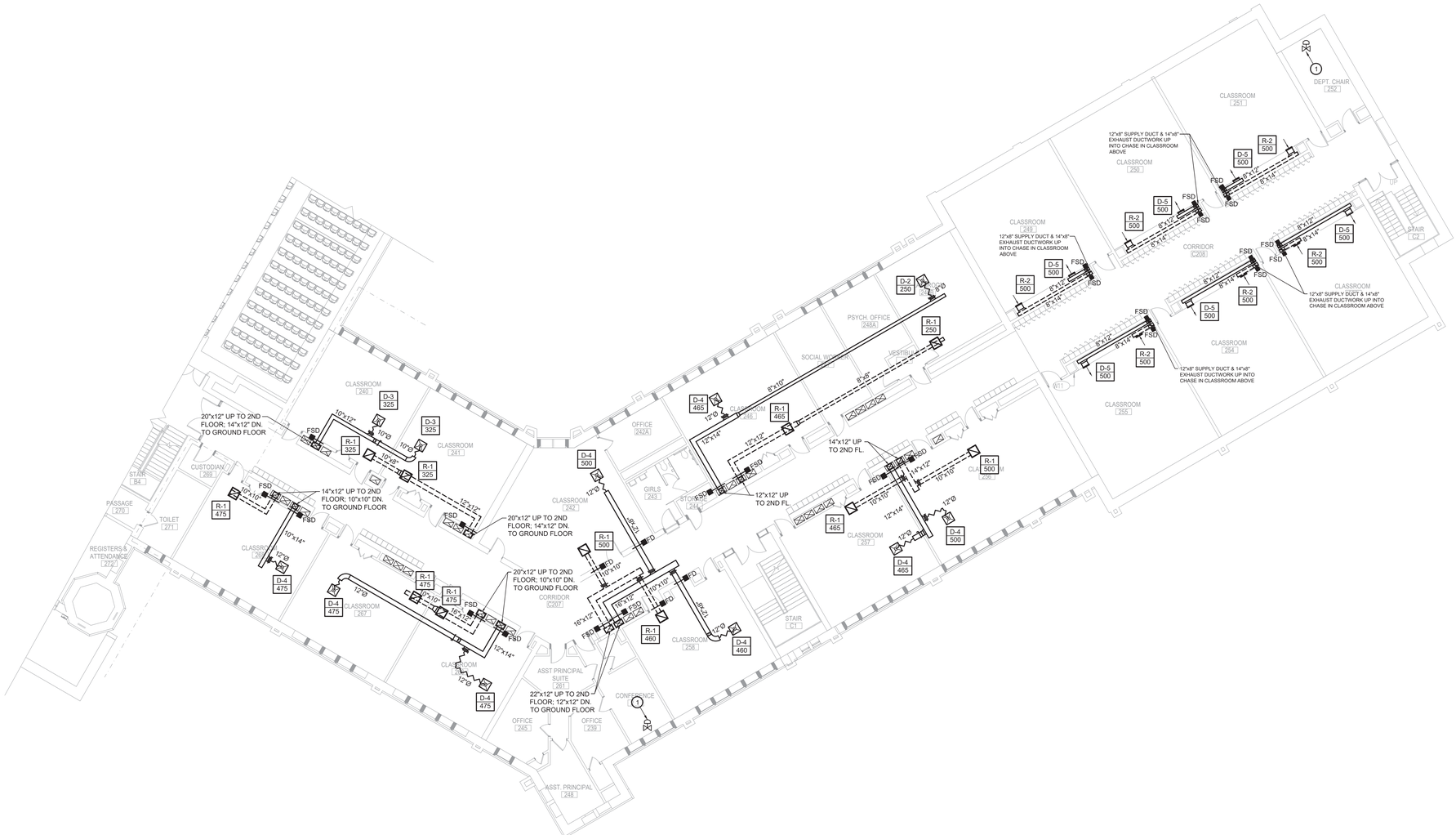
CONSTRUCTION DOCUMENTS

Sheet Notes:

1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.

Key Notes:

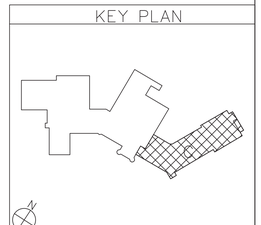
(1) NEW ELECTRIC HOT WATER CONTROL VALVE TO REPLACE EXISTING PNEUMATIC HOT WATER CONTROL; VALVE FURNISHED & WIRED BY OWNER; VALVE INSTALLED IN HOT WATER PIPING BY CONTRACTOR



1 M113 Area C 1st Floor Mechanical Plan

Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

MATTHEW GEORGE BLAKE
089039
LICENSED PROFESSIONAL ENGINEER
STATE OF NEW YORK

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title

AREA C
1ST FLOOR
MECHANICAL
PLAN

Sheet No.

IEYMS
M113

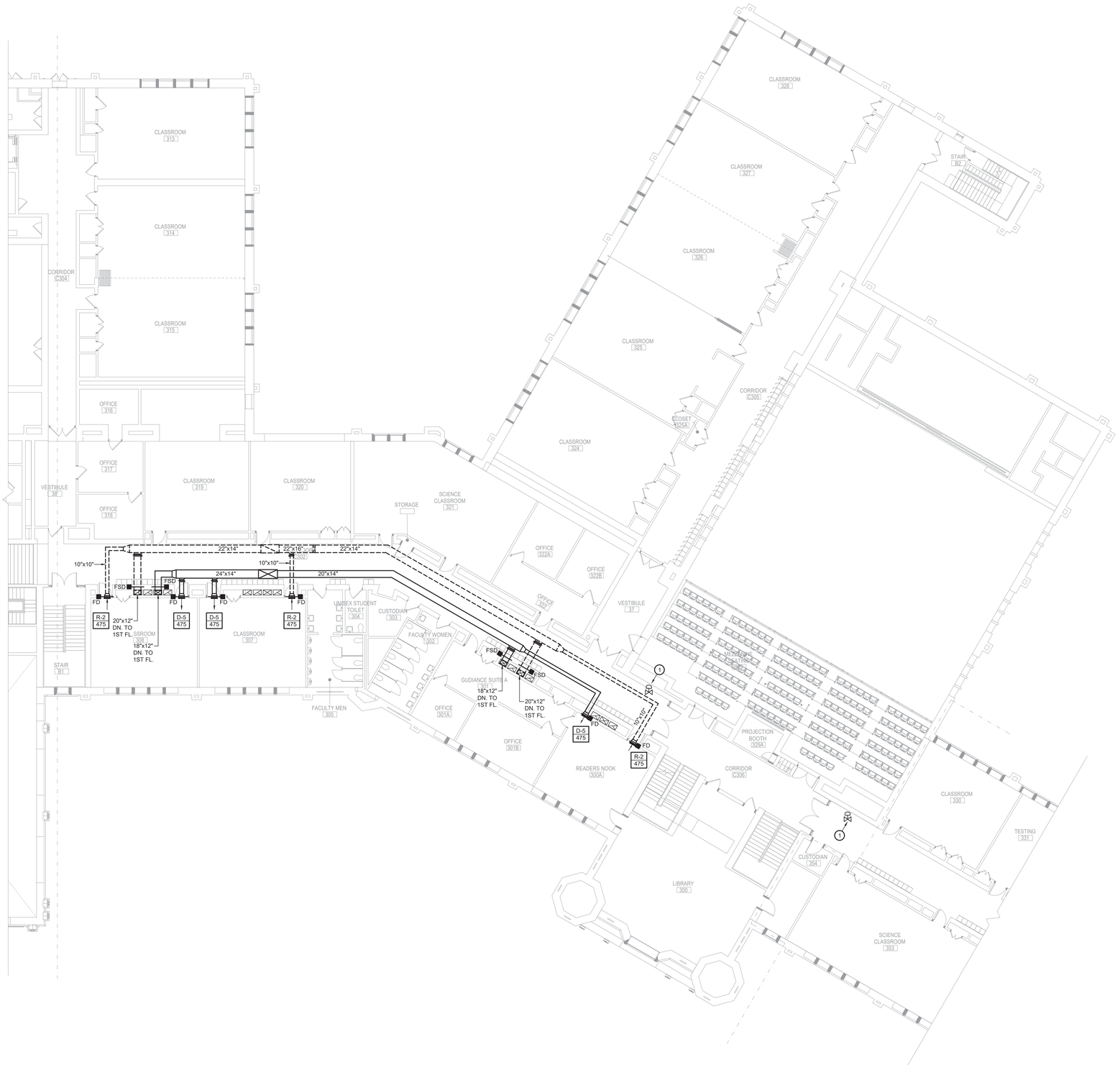
CONSTRUCTION DOCUMENTS

Sheet Notes:

1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.

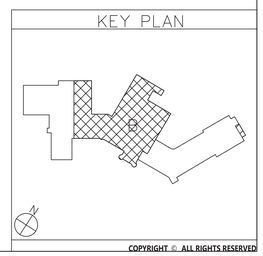
Key Notes:

(1) NEW ELECTRIC HOT WATER CONTROL VALVE TO REPLACE EXISTING PNEUMATIC HOT WATER CONTROL; VALVE FURNISHED & WIRED BY OWNER; VALVE INSTALLED IN HOT WATER PIPING BY CONTRACTOR



1 M122 Area B 2nd Floor Mechanical Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

Project Title

MATTHEW GEORGE BLAKE 080039 LICENSED PROFESSIONAL ENGINEER STATE OF NEW YORK

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title
AREA B
2ND FLOOR
MECHANICAL
PLAN

Sheet No.
IEYMS
M122

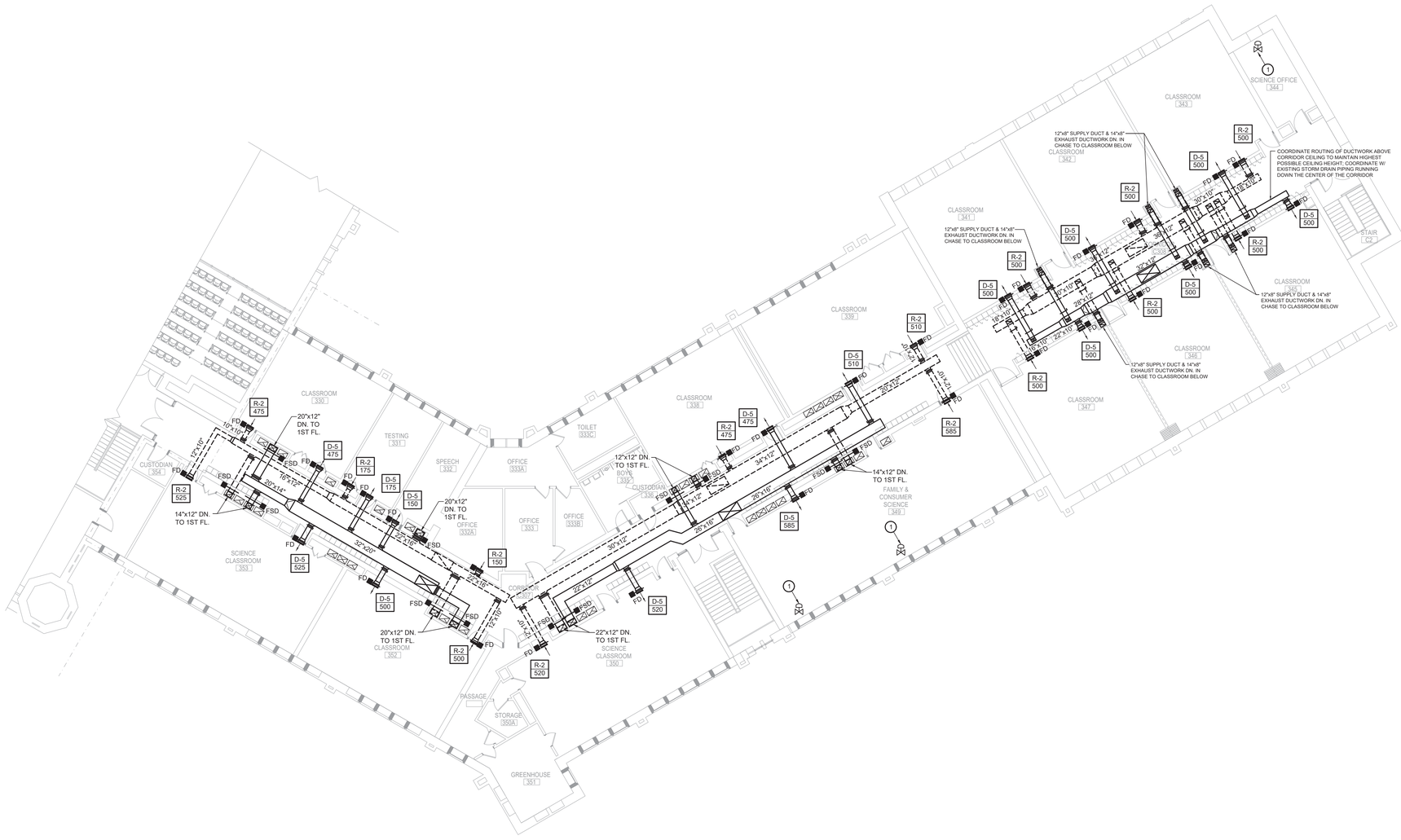
CONSTRUCTION DOCUMENTS

Sheet Notes:

1. NEW DUCT RISERS TO BE INSTALLED INSIDE OF EXISTING AIR SHAFTS. COORDINATE W/ ARCHITECTURAL DRAWINGS REGARDING THE OPENING & CLOSING OF EXISTING WALLS AND CHASES.
2. DUCT PENETRATIONS OF SHAFTS SHALL INCLUDE A COMBINATION FIRE SMOKE DAMPER. PROVIDE 2 HOUR FIRE RATED ACCESS PANEL IN CHASE WALL & DUCT ACCESS DOOR TO PROVIDE FULL ACCESS TO FSD FOR INSPECTION AND MAINTENANCE. COORDINATE SIZES AND LOCATIONS WITH ARCHITECT AND ENGINEER BASED ON FIELD CONDITIONS.
3. EXISTING CEILINGS TO REMAIN IN CLASSROOMS, CONTRACTOR IS RESPONSIBLE TO REMOVE & REINSTALL CEILING TILES AND GRID AS REQUIRED TO COMPLETE THE SCOPE OF WORK.

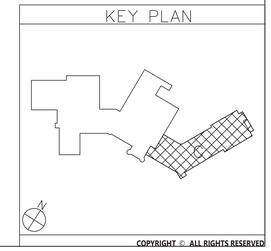
Key Notes:

(1) NEW ELECTRIC HOT WATER CONTROL VALVE TO REPLACE EXISTING PNEUMATIC HOT WATER CONTROL; VALVE FURNISHED & WIRED BY OWNER; VALVE INSTALLED IN HOT WATER PIPING BY CONTRACTOR



1 M123 Area C 2nd Floor Mechanical Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP / FP CONSULTING & ENGINEERING SERVICES

Project Title
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 088039 · LICENSED PROFESSIONAL ENGINEER
Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

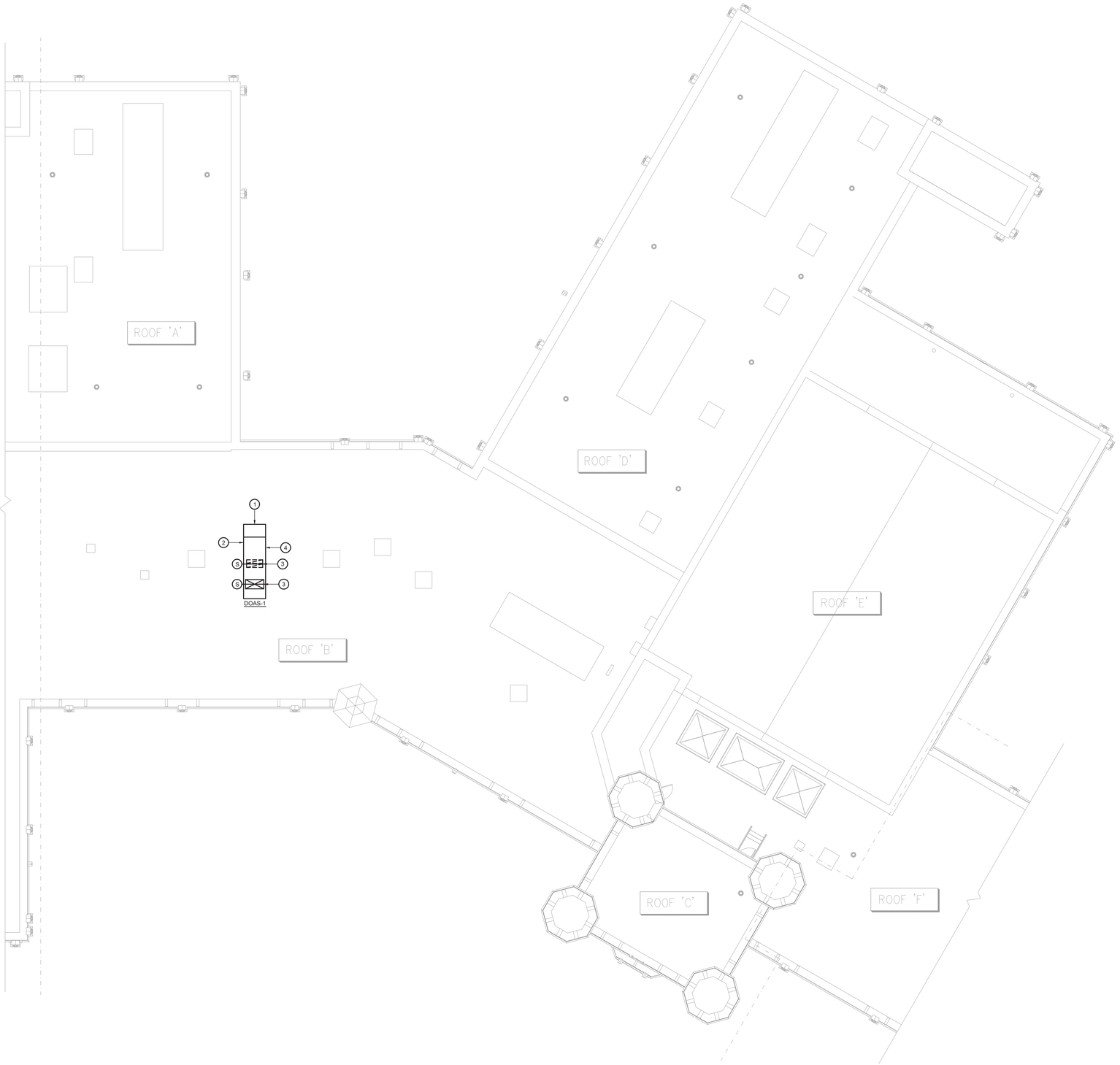
Sheet Title
AREA C
2ND FLOOR
MECHANICAL
PLAN

Sheet No.
IEYMS
M123

CONSTRUCTION DOCUMENTS

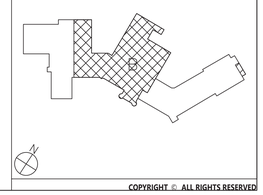
Key Notes:

1. MAINTAIN A MIN. OF 10'-0" OF CLEARANCE FROM ANY EXHAUST DISCHARGE OR PLUMBING VENTS
2. PROVIDE 24" HIGH INSULATED ROOF CURB; PROVIDE W/ 2" CURB ISOLATION RAIL TYPICAL OF KINETICS NOISE CONTROL KSR 3.0 OR ACCEPTABLE EQUAL; SEE ARCHITECTURAL DRAWINGS FOR CURB DETAILS; PROVIDE IN CURB ACOUSTICAL TREATMENT TYPICAL OF KINETICS NOISE CONTROL RT-7 (STC 37) OR ACCEPTABLE EQUAL; 2" FIBERGLASS ABSORPTION PANELS & 5/8" ACOUSTICALLY DAMPENED SHEETROCK; FIELD INSTALL RT-7 PANELS AFTER CURB ASSEMBLY PER MANUFACTURER REQUIREMENTS
3. FULL SIZE S.A. & R.A. PLENUM DN. FROM DOAS UNIT INTO CEILING SPACE BELOW THRU ROOF CURB; PROVIDE FLEXIBLE DUCT CONNECTORS AT UNIT OR WITHIN CURB
4. PROVIDE UNIT W/ FACTORY INSTALLED SUPPLY & RETURN SMOKE DETECTORS



1 / M132 Area B Roof Mechanical Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant

BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & ENGINEERING SERVICES

Project Title

CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089039 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title

AREA B ROOF MECHANICAL PLAN

Sheet No.

IEYMS M132

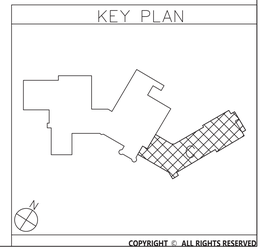
CONSTRUCTION DOCUMENTS

Key Notes:

1. MAINTAIN A MIN. OF 10'-0" OF CLEARANCE FROM ANY EXHAUST DISCHARGE OR PLUMBING VENTS
2. PROVIDE 24" HIGH INSULATED ROOF CURB; PROVIDE W/ 2" CURB ISOLATION RAIL TYPICAL OF KINETICS NOISE CONTROL KSR 3.0 OR ACCEPTABLE EQUAL; SEE ARCHITECTURAL DRAWINGS FOR CURB DETAILS; PROVIDE IN CURB ACOUSTICAL TREATMENT TYPICAL OF KINETICS NOISE CONTROL RT-7 (STC 37) OR ACCEPTABLE EQUAL; 2" FIBERGLASS ABSORPTION PANELS & 5/8" ACOUSTICALLY DAMPENED SHEETROCK; FIELD INSTALL RT-7 PANELS AFTER CURB ASSEMBLY PER MANUFACTURER REQUIREMENTS
3. FULL SIZE S.A. & R.A. PLENUM DN. FROM DOAS UNIT INTO CEILING SPACE BELOW THRU ROOF CURB; PROVIDE FLEXIBLE DUCT CONNECTORS AT UNIT OR WITHIN CURB
4. PROVIDE UNIT W/ FACTORY INSTALLED SUPPLY & RETURN SMOKE DETECTORS

1 / M133 Area C Roof Mechanical Plan
Scale: 3/32" = 1'-0"

KEY PLAN



CSARCH
19 Front St. · Newburgh · New York 12550-7601
845 · 561 · 3179 www.csarchpc.com

Consultant
BLAKE ENGINEERING PLLC
MEP/FP CONSULTING & DESIGN ENGINEERS

Project Title
CITY SCHOOL DISTRICT OF NEW ROCHELLE
ISAAC E YOUNG MIDDLE SCHOOL
2023 CAPITAL PROJECTS - PHASE 2B

STATE OF NEW YORK · MATTHEW GEORGE BLAKE · 089068 · LICENSED PROFESSIONAL ENGINEER

Expiration Date: 05-31-2025

	DATE	DESCRIPTION

Drawn By:	BJK
Checked By:	BJK
Proj. #:	66-11-00-01-0-003-018
CSArch Proj. #:	188-2301.02
Issued for Bid:	05/30/2025

Sheet Title
AREA C ROOF MECHANICAL PLAN

Sheet No.
IEYMS M133

CONSTRUCTION DOCUMENTS