ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

STATE PROJECT NO. 094-0109 RNV

85 RESERVOIR ROAD, NEWINGTON, CT
06111



VOLUME 2 OF 2 | PHASE 1 OF 3 | 1/14/2022

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BSC GROUP	BSC GROUP	CIVIL ENGINEER
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ACENTECH	ACENTECH ACOUSTICS AV/IT/SECURITY VIBRATION	ACOUSTICAL CONSULTANT
ARCHITX, LLC	architx	SPECIFICATION WRITER
GOOD HARBOR TECHMARK, LLC	GOOD HARBOR TECHMARK	SECURITY CONSULTANT

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ABBREVIATIONS

SEE THE LIST OF DRAWINGS FOR LOCATION OF ABBREVIATIONS RELATING TO OTHER DICIPLINES.

ABOVE FINISH FLOOR	A.F.F.
ABUSE RESISTANT GYPSUM BOARD	A.R.G.B.
ACOUSTIC, ACOUSTICAL	AC
ACOUSTICAL CEILING TILE	A.C.T.
ADDITION	ADDN
AIR CONDITIONING	A/C
AIR HANDLING UNIT	A.H.U.
ALTERNATE	ALT
ALUMINUM	ALUM.
AMERICANS WITH DISABILITIES ACT	A.D.A.
ANCHOR, ANCHORAGE	INCH
ANCHOR BOLTS	AB
AND	&
ANGLE	L
ANODIZED	ANOD.
APPROVED	APPR.
ARCHITECT, ARCHITECTURAL	ARCH.
ASBESTOS	ASB.
ASPHALT	ASPH.
ASSEMBLY	ASSY
ASSISTANT	ASST.
AT	@
AUTOMATIC	AUTO.
BEAM	BM
BEARING	BRG
BETWEEN	BET.
BEVEL, BEVELED	BEV.
BITUMINOUS	BIT.
BLOCK	BLK
BLOCKING	BLKG
BOARD	BD
BOTTOM	BOTT.
BOTTOM OF	B.O.
BRICK EXPANSION JOINT	B.E.J.
BUILDING	BLDG.
BUILT-UP ROOFING	B.U.R.
CABINET	CAB.
CABINUT UNIT HEATER	C.U.H.
CAPACITY	CAP.
CEILING	CLG
CEILING HEIGHT	CLG. HT.
CEMENT	CEM.
CENTER	CTR
CENTERLINE	CL
CERAMIC TILE	CER. T.
CHALKBOARD	C.BD.
CHANNEL	C
CLEAR	CLR.
CLOSET	CL.
COLUMN	COL.
CONCRETE	CONC.
CONFERENCE	CONF.
CONTROL/CONSTRUCTION JOINT	CJ
CONTINUOUS	CONT.
CONTRACTOR	CONTR.
CORNER	COR.
CORRIDOR	CORR.
COURSE, COURSES	CRS.
CUSTODIAL	CUST.
DAMPPROOFING	DMPFG.
DEGREE	DEG.
DEMOLITION	DEMO.
DEPARTMENT	DEPT.
DETAIL	DET.
DIAMETER	DIA.
DIMENSION	DIM.
DISTANCE	DIST.
DOOR	DR
DOUBLE	DBL.
DOUBLE HUNG	D.H.
DOWN	DN
DOWN SPOUT	D.S.
DRAWING	DWG
DRINKING FOUNTAIN	D.F.
EACH	EA.
ELECTRIC, ELECTRICAL	ELEC.
ELECTRIC WATER COOLER	EWC
ELECTRONIC RETRIEVAL BOARD	ERBD
ELEVATION	EL.
ELEVATOR	ELEV.
EMERGENCY	EMERG.
EMERGENCY EYEWASH/SHOWER	E.E.W.
EQUAL	EQ.
EQUIPMENT	EQUIP.
ETHYLENE-PROPYLENE-DIENE-MONOMER	E.P.D.M.
EXHAUST FAN	E.F.
EXISTING	EXIST.
EXISTING FAN COIL	E.F.C.
EXISTING FIRE BLANKET	EFB
EXISTING FIRE EXTINGUISHER	EFE
EXISTING ROOF DRAIN	E.R.D.
EXISTING TO REMAIN	E.T.R.
EXPANSION	EXP.
EXPANSION JOINT	E.J.
EXTERIOR	EXT.
EXTERIOR INSULATION AND FINISH SYSTEM	E.I.F.S.
FEET, FOOT	FT
FINISH, FINISHED	FIN.
FINISHED FLOOR	F.F.
FIRE BLANKET	FB
FIRE EXTINGUISHER	F.E.
FIRE RETARDANT TREATED	F.R.T.
FIREPROOFING	FPRFG.
FIXTURE	FIXT.
FLASHING	FLASH.
FLOOR	FLR
FLOOR DRAIN	F.D.
FLOOR FINISH	FLR. FIN.
FOOTING	FTG
FOUNDATION	FDN
FURNISH, FURNISHED	FURN.
FURRED, FURRING	FURR.
GAUGE	GA.
GALVANIZED	GALV.
GRAB BAR	G.B.
GYPSUM WALLBOARD	GYP. BD.
HAIR DRYER	HR.D.
HAND DRYER	HD.D.
HANDICAPPED	H.C.
HEIGHT	HGT
HIGH POINT	H.P.
HOLLOW METAL	H.M.
HOLLOW METAL FRAME	H.M.F.
HORIZONIZONTAL	HORIZ.
HOSE BIBB	H.B.
HOUR	HR.
INCH OR INCHES	IN. OR "
INCLUDE, INCLUDING	INCL.
INFORMATION	INFO.
INSIDE DIAMETER	I.D.
INSULATION	INSUL.
INTERIOR	INT.
KICK PLATE	K.P.
LABORATORY	LAB.
LAVATORY	LAV.
LEAD COATED COPPER	L.C.C.
LINEAR FEET	L/F
LIGHTING	LTG.
LOCKERS	LKRS
MACHINE	MACH.
MAINTENANCE	MAINT.
MANUFACTURER	MFR
MARKER BOARD	MBD
MASONRY	MAS.
MASONRY OPENING	M.O.
MATERIAL	MATL
MAXIMUM	MAX.
MECHANICAL	MECH.
METAL	MET.
MEZZANINE	MEZZ.
MINIMUM	MIN.
MIRROR WITH FRAME	M.W.F.
MISCELLANEOUS	MISC.
NORTH	N
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
NUMBER	NO. OR #
OFFICE	OFF.
ON CENTER	O.C.
OPPOSITE HAND	O.H.
OUNCE	OZ.
OUTSIDE DIAMETER	O.D.
PAINTED	PTD
PAIR	PR
PAPER TOWEL DISPENSER	P.T.D.
PARTIAL	PART.
PASSAGE	PASS.
PERPENDICULAR	PERP.
PLASTER	PLAS.
PLASTIC LAMINATE	PL. LAM.
PLATE	PL.
PLUMBING	PLBG
PLYWOOD	PLWD
POLYVINYL CHLORIDE	PVC
PRECAST	P/C
PRECAST EXPANSION JOINT	P.E.J.
PREFABRICATED	PREFAB.
PRESSURE TREATED	P.T.
QUANTITY	QT
QUARRY TILE	Q.T.
RADIUS	RAD.
RAIN WATER CONDUCTOR	R.W.C.
RAIN WATER LEADER	R.W.L.
RECEIVING	RECV.
REFRIGERATOR	REFR.
REINFORCE	REINF.
REQUIRED	REQ'D
REVISED, REVISION	REV.
RISER	R.
ROBE HOOK	R.H.
ROOF DRAIN	R.D.
ROOF TOP UNIT	R.T.U.
ROOM	RM
RUBBERIZED ASPHALT FABRIC LAMINATE	R.A.F.L.
SANITARY NAPKIN DISPENSER	S.N.D.
SANITARY NAPKIN RECEPTICAL	S.N.R.
SCHEDULE	SCHED.
SCUPPER	SC
SECTION	SECT.
SCUPPER	S.J./S.E.J.
SECTION	SHT
SEISMIC JOINT	SIM.
SHEET	S.D.
SIMILAR	S.T.C.
SOAP DISPENSER	SPEC.
SOUND TRANSMISSION CLASS	S.T.C.
SPECIFICATIONS	SPEC.
SPLASH BLOCK	S.B.
SQUARE	SQ.
SQUARE FEET (FOOT)	S.F.
STAINLESS STEEL	ST. STL.
STANDARD	STD
STEEL	STL
STONE THRESHOLD	S.T.
STORAGE	STOR.
STRUCTURAL	STRUCT.
STRUCTURAL GLAZED FACING TILE	SGFT
STRUCTURAL STEEL	S. STL.
SUSPEND, SUSPENSION	SUSP.
SWING UP GRAB BAR	S.G.B.
TACKBOARD	TBD
THROUGH	THRU
TOILET PAPER DISPENSER	T.P.D.
TOILET PARTITION	T.P.
TONGUE AND GROOVE	T.&G.
TOP OF	T.O.
TREAD	T.
TYPICAL	TYP.
UNDERWRITERS' LABORATORIES, INC.	UL
UNIT HEATER	U.H.
UNIT VENTILATOR	U.V.
UNLESS OTHERWISE NOTED	U.O.N.
URINAL SCREEN	U.S.
VENT THROUGH ROOF	VTR
VERIFY IN FIELD	V.I.F.
VERTICAL	VERT.
VESTIBULE	VEST.
VINYL COMPOSITION TILE	VCT
WATERPROOFING	WP
WELDED WIRE FABRIC	W.W.F.
WINDOW	WIN
WITH	W/
WOOD	WD
WORKROOM	WRKRM
ZINC COATED COPPER	Z.C.C.

FLOOR PLAN NOTES AND LEGEND

- EXISTING WALL TO REMAIN
- FACE BRICK VENEER
- CONCRETE MASONRY
- METAL STUD AND GYPSUM BOARD WALL
- A101A — DOOR NUMBER REFER TO DOOR SCHEDULE
- X — PLAN DETAIL REFER TO DWG SERIES A7.00
- SIM — WINDOW TYPE REFER TO DWG SERIES A8.00
- X / XXXX — BUILDING SECTION REFER TO DWG SERIES A6.00
- X / XXXX — WALL SECTION REFER TO DWG SERIES A6.00
- X / XXXX — DETAIL CALLOUT REFER TO DWG SERIES AS NOTED
- X — CASEWORK ELEVATION REFER TO DWG SERIES A11.00
- X — INTERIOR ELEVATION REFER TO DWG SERIES A10.00
- X — WALL TYPE REFER TO DWG SERIES R0.00
- X — REVISION MARK
- ROOM NAME / XXXX — ROOM NAME, ROOM NUMBER
- FIRE EXTINGUISHER
- HANDICAPPED ACCESSIBLE AREA OR EXIT
- AREA OF REFUGE OR AREA ASSEMBLY SEATING POSITION
- NEW DOOR AND FRAME ASSEMBLY
- X — PATCHING KEYNOTE REFER TO PATCHING KEYNOTE LEGEND ON A1.00 SERIES
- AREA OF NEW CONCRETE SLAB ON GRADE OR METAL DECK, SEE STRUCTURAL DRAWINGS.
- INFILL EXISTING FLOOR RECESS W/ HYDRAULIC CEMENT-BASED UNDERLAYMENT (UP TO 2"), FINISH TO MATCH ADJACENT SURFACES. COORD. W/ NEW FLOOR FINISH, SEE FINISH SCHEDULE.

DISPLAY BOARDS

- LED - LED TOUCH DISPLAY MONITOR WITH MOUNT (PROVIDE MOTORIZED HEIGHT ADJUSTABLE MOUNT IN PRE-K C108, PRE-K C111, SPECIAL EDUCATION C103, THERAPY (FUTURE SPED) C103, AND OT/PT (FUTURE PRE-K) C107
- PRJ - PROJECTOR
- TBD - TACK BOARD
- MBD - MARKER BOARD
- TBS - TACK BOARD SYSTEM

NOTE

1. REFER TO A12.00 SERIES FOR LOCATIONS OF ALL VISUAL DISPLAY SURFACES. REFER TO SECTION 101100 VISUAL DISPLAY BOARDS FOR FULL SPECIFICATIONS.
2. REFER TO A10.00 SERIES FOR TACK STRIP LOCATIONS AND HEIGHTS, TYP.

DISPLAY CASES - SEE DETAIL 1 / A9.03, AND A10.00 SERIES, TYP.

COLUMN NOTES

1. COLUMN DETAILS ARE INTENDED TO SHOW DIMENSIONAL RELATIONSHIP TO ADJACENT WALLS. REFER TO FLOOR PLANS AND WALL TYPES FOR ADJACENT WALL CONSTRUCTION.
2. FOR ALL EXTERIOR BRICK EXPANSION JOINTS AND MASONRY CONTROL JOINTS, REFER TO EXTERIOR ELEVATIONS.
3. PROVIDE CONTINUOUS MEMBRANE FLASHING AT ALL EXTERIOR COLUMNS EXPOSED IN CAVITY.
4. REFER TO MISCELLANEOUS DETAILS FOR ADDITIONAL INFORMATION AT EXTERIOR CORNER COLUMNS.
5. FOR SPRAYED-ON FIREPROOFING, REFER TO R1.00 DRAWING SERIES.

GENERAL NOTES

1. FOR SITE LEGEND REFER TO L-SERIES DRAWINGS.
2. FOR STRUCTURAL LEGEND REFER TO S-SERIES DRAWINGS.
3. FOR CONCRETE SLAB DEPRESSIONS, REFER TO STRUCTURAL DRAWINGS & FLOOR PLANS, DRAWING SERIES A1.00.
4. FOR SPRAY-ON FIREPROOFING REQUIREMENTS, REFER TO DRAWING SERIES R1.00.
5. FOR WALL TYPES, REFER TO DRAWING R0.02 & DRAWING SERIES A1.
6. FOR INTERIOR MASONRY CONTROL JOINTS, REFER TO COLUMN DETAILS AND FLOOR PLAN. IF CONTROL JOINT IS REQUIRED IN CONFORMANCE WITH SPECIFICATION SECTION 04 20 00 AND NOT SHOWN, CONSULT ARCHITECT FOR APPROVAL OF LOCATIONS.
7. FOR MASONRY REINFORCEMENT, REFER TO SPECIFICATIONS.
8. ALL DIMENSIONS ARE TO FACE OF MASONRY, FACE OF METAL STUD, AND TO THE CENTERLINE OF COLUMN, UNLESS OTHERWISE NOTED.
9. FOR CEILING LEGEND AND SOFFIT DETAILS REFER TO DRAWING SERIES A2.00.
10. FOR INTERIOR SUSPENDED CEILING CONTROL JOINT LOCATIONS, REFER TO REFLECTED CEILING PLANS. IF CONTROL JOINT IS REQUIRED IN CONFORMANCE WITH SPECIFICATION AND IS NOT SHOWN, CONSULT ARCHITECT FOR APPROVAL OF LOCATIONS.
11. FOR ROOF DETAILS, REFER TO A3-SERIES DRAWINGS.
12. FOR LARGE SCALE TOILET AND STAIR PLANS, REFER TO A4 SERIES DRAWINGS.
13. FOR ALL EXTERIOR BRICK EXPANSION JOINTS AND MASONRY CONTROL JOINTS, REFER TO EXTERIOR ELEVATIONS.
14. FOR COLUMN DETAILS AND PLAN DETAILS, REFER TO A7-SERIES DRAWINGS.
15. FOR DOOR NUMBERS AND DETAILS, REFER TO SPECIFICATION SECTION 08 06 00 AND A8-SERIES DRAWINGS.
16. ALL DOORS SHALL BE LOCATED WITH THE HINGE SIDE OF FRAME 4" OFF FINISHED WALL. (AT CORNER CONDITION), UNLESS OTHERWISE NOTED.
17. FOR OPENING DETAILS, REFER TO A8-SERIES DRAWINGS.
18. FOR INTERIOR ELEVATIONS, REFER TO A-10 SERIES DRAWINGS.
19. FOR CASEWORK ELEVATIONS, REFER TO A11-SERIES DRAWINGS.
20. FOR FINISH DESIGNATIONS AND FINISH LEGEND, REFER TO A12-SERIES DRAWINGS.
21. FOR PLUMBING LEGEND, REFER TO P-SERIES DRAWINGS.
22. FOR FIRE PROTECTION LEGEND, REFER TO FP-SERIES DRAWINGS.
23. FOR MECHANICAL LEGEND, REFER TO M-SERIES DRAWINGS.
24. FOR ELECTRICAL LEGEND, REFER TO E-SERIES DRAWINGS.
25. ALL NOTES AND DIMENSIONS DESIGNATED "TYPICAL" APPLY TO ALL LIKE OR SIMILAR CONDITIONS THROUGHOUT THE PROJECT.
26. REFER TO A9-SERIES DRAWINGS FOR PLACEMENT OF SIGNAGE. REFER TO SPECIFICATION SECTION 10 14 00 FOR SIGNAGE SCHEDULE.
27. CONTRACTOR(S) TO TAKE AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK AND BE RESPONSIBLE FOR COORDINATION OF THE SAME. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.

FINISH NOTES

1. REFER TO A9 SERIES DRAWINGS FOR FINISH INFORMATION, INCLUDING FINISH FLOOR PLANS AND FINISH LEGEND.
2. REFER TO REFLECTED CEILING PLANS FOR CEILING TYPES AND HEIGHTS.
3. REFER TO THE FINISH LEGEND AND FINISH FLOOR PLANS FOR DEFINITION, PATTERNS AND EXTENT OF COLORS USED.
4. IN AREAS DESIGNATED WITH NEW OR EXISTING CONCRETE FLOORS, PAINT MASONRY WALLS DOWN TO THE FLOOR WHERE NO RUBBER BASE IS PROVIDED. WHERE NO SUSPENDED CEILING IS INSTALLED, WALLS ARE TO BE PAINTED UP TO DECK.
5. ALL RAMPS TO HAVE RUBBER TILE FLOOR FINISH WITH A SLIP RESISTANCE RATING EQUAL TO OR GREATER THAN 0.08.
6. ALL NEW AND EXISTING GYPSUM BOARD SOFFITS AND CEILING SHOWN ON REFLECTED CEILING PLANS TO BE PAINTED. REFER TO FINISH NOTES FOR COLOR DESIGNATIONS.
7. ALL NEW AND EXISTING HOLLOW METAL FRAMES TO BE PAINTED. REFER TO FINISH NOTES FOR COLOR DESIGNATIONS.
8. ALL NEW AND EXISTING STAIR STRINGERS AND RAILINGS TO BE PAINTED. REFER TO FINISH NOTES FOR COLOR DESIGNATIONS.
9. AT ALL WALLS DESIGNATED TO RECEIVE TILED FINISH, TILE BACKING PANELS SHALL BE INSTALLED BEHIND ALL TILED AREAS PER DIVISION 9.

DEMOLITION LEGEND

- REMOVE EXISTING BUILDING IN IT'S ENTIRETY AS REQUIRED TO COMPLETE SCOPE OF WORK.
- REMOVE EXISTING WOOD FLOOR CONSTRUCTION, VERIFY EXTENT IN FIELD.
- REMOVE EXISTING FLOOR TILE AND MUDSET DOWN TO CONCRETE SLAB BELOW.
- EXISTING WALL TO REMAIN
- EXISTING WALL OR COMPONENT TO BE REMOVED
- REMOVE WALL APPLIED MATERIAL
- REMOVE EXISTING DOOR, FRAME AND FRAME ANCHORS, UNLESS NOTED W/ KEY NOTE

** REFER TO KEY NOTES ON DEMOLITION DWGS

- REMOVE EXISTING WINDOW AND FRAME ASSEMBLIES

GENERAL DEMOLITION & PATCHING NOTES

1. THE DEMOLITION SHOWN ON THE PLANS IS DIAGRAMMATIC AND INTENDED TO SHOW THE GENERAL EXTENT OF THE WORK ONLY. CONTRACTOR TO INCLUDE ALL DEMOLITION, WHETHER SPECIFICALLY CALLED FOR OR NOT, THAT IS NECESSARY TO ACCOMPLISH THE INTENT OF THE PLANS AND SPECIFICATIONS.
2. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND STRUCTURAL DRAWINGS FOR ALL DEVICES, EQUIPMENT, APPLIANCES, FIXTURES, ETC. SCHEDULED FOR DEMOLITION.
3. ALL OPENINGS IN FLOORS, WALL, OR ROOF WHERE EXISTING DUCTS, VENTS, PIPING OR ELECTRICAL CONDUIT HAVE BEEN REMOVED SHALL BE FILLED OR PATCHED TO MATCH EXISTING OR NEW FINISH DESIGNATION, INCLUDING FIRE RATINGS.
4. WHEREVER NEW OPENINGS ARE CREATED, ALL SURROUNDING FINISHES SHALL BE PATCHED TO MATCH ADJACENT FINISH, OR NEW FINISH DESIGNATED, INCLUDING ALL FLOOR PATCHING, REPAIR OR FILLING IS REQUIRED.
5. RELOCATE AS NECESSARY ANY PIPING, ELECTRICAL CONDUIT OR OTHER MECHANICALOR ELECTRICAL DEVICES EXPOSED WHEN EXISTING WALLS, CEILINGS OR FLOORS ARE ALTERED OR PUNCTURED FOR NEW OPENINGS.
6. ALL AREAS OF FLOORS, WALLS AND CEILINGS DISTURBED FROM DEMOLITION SHALL BE FILLED OR PATCHED TO MATCH EXISTING OR NEW FINISH DESIGNATED. SPECIAL ATTENTION SHALL BE GIVEN TO AREAS BEHIND CASEWORK, TACK & MARKER BOARDS, LOCKERS & PLUMBING CHASES WHICH ARE PRESENTLY CONCEALED.
7. CONTRACTOR TO COORDINATE & FIELD VERIFY THE EXTENT OF ALL NEW OPENINGS IN EXISTING ROOF, FLOORS, AND WALLS PRIOR TO ANY RELATED DEMOLITION.
8. ALL FLOOR AND ROOF AREAS IN EXISTING BUILDINGS REMOVED FOR THE INSTALLATION OF MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND STRUCTURAL INSTALLATIONS AND/OR MODIFICATIONS, SHALL BE PATCHED FLUSH WITH EXIST. SURFACES AND SHALL MAINTAIN ALL RATINGS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AS-BUILT DRAWINGS OR PERFORMING SITE INVESTIGATIONS TO AVOID CONFLICT WITH EXISTING BUILDING SYSTEMS. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, AND STRUCTURAL DRAWINGS.
9. CONTRACTOR TO SAW CUT ALL MASONRY OPENINGS IN EXISTING WALLS UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL COORDINATE W/ ABATEMENT CONTRACTOR FOR REMOVAL OF ALL HAZARDOUS MATERIALS.
11. REMOVE PORTIONS OF MASONRY WALLS AS REQUIRED FOR INSTALLATION OF NEW OPENINGS. OVERDEMOLISH AND TOOTH BACK IN MATERIAL TO MATCH EXISTING. COORDINATE WITH ARCHITECTURAL FLOOR PLANS FOR EXTENT OF DEMOLITION. (TYPICAL IN ALL EXTERIOR MASONRY WALLS)
12. REMOVE ALL EXISTING CARPET FINISH FLOOR AND ADHESIVE (TYP.) PREPARE ALL SURFACES TO RECEIVE NEW FINISHES.
13. REMOVE ALL EXISTING SUSPENDED ACOUSTICAL CEILING SYSTEMS, SOFFITS, ETC. SEE REFLECTED CEILING PLANS FOR ADDITIONAL INFORMATION (TYP. U.O.N.)
14. CONTRACTOR SHALL GIVE OWNER SUFFICIENT NOTIFICATION AND CLEAR IDENTIFICATION OF ITEMS REQUIRING RELOCATION PRIOR TO ANY DEMOLITION OR CONSTRUCTION IN THESE AREAS. CONTRACTOR TO DISCONNECT & MAKE SAFE ALL ELECTRICAL EQUIPMENT FOR OWNER'S STAFF TO REMOVE & RELOCATE.
15. DEMOLITION OF PLUMBING WHICH ARE SHOWN AS DASHED LINES IS TYPICAL FOR THE COMPLETE PROJECT AND SHALL BE REMOVED WHETHER IT IS SPECIFICALLY IDENTIFIED AS REMOVED WITH A DEMOLITION NOTE OR NOT.
16. REMOVE ALL WALL FLOOR OR CEILING MOUNTED ACCESSORIES INCLUDING: SPEAKERS, CLOCKS, PROJECTION SCREENS, WINDOW TREATMENTS, BELLS, FIRE PROTECTION EQUIPMENT, EXIT SIGNS, CHALK, MARKER & TACKBOARDS. PATCH & REPAIR WALLS TO RECEIVE NEW FINISHES.
17. ALL REMOVED ITEMS SHALL REMAIN THE OWNER'S PROPERTY OR BE DISPOSED OF BY THE G.C. AFTER OWNERS REVIEW.
18. CAP & MAKE SAFE ALL UTILITIES. - REFER TO M,E,P SERIES DOCUMENTS FOR DEMOLITION OF UTILITIES.
19. REMOVE ALL CONDUIT, PIPES, EQUIPMENT, AND DEVICES ATTACHED TO EXISTING STEEL SCHEDULED TO BE REMOVED AND/OR ABANDONED AND NOT USED FOR NEW WORK.
20. REMOVE AS NECESSARY ANY EXISTING PIPING, ELECTRICAL CONDUIT OR OTHER MECHANICAL/ELECTRICAL DEVICES EXPOSED WHEN EXISTING WALLS, CEILINGS, OR FLOORS ARE ALTERED OR PUNCTURED FOR NEW OPENINGS. COORDINATE WITH MEP DRAWINGS FOR SALVAGE REQUIREMENTS OF EXISTING SYSTEMS.
21. ALL AREAS OF FLOORS, WALLS, AND CEILINGS DISTURBED FROM DEMOLITION ARE TO BE FILLED OR PATCHED TO MATCH EXISTING OR NEW ADJACENT FINISH DESIGNATION, INCLUDING FIRE RATINGS.
22. CONTRACTOR TO REFER TO FLOOR PLANS AND DETAILS PRIOR TO CUTTING OPENINGS IN EXISTING WALLS.
23. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING BUILDING SYSTEMS PRIOR TO DEMOLITION OF FLOOR AND WALL AREAS REQUIRED FOR THE INSTALLATION OF NEW STRUCTURAL, FIRE PROTECTION, MECHANICAL, AND ELECTRICAL SYSTEMS.
24. WHERE NEW OPENINGS ARE CREATED IN EXISTING CONSTRUCTION, PATCH SURROUNDING FINISHES TO MATCH EXISTING OR NEW FINISH DESIGNATION, INCLUDING FIRE RATINGS.
25. REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR RESPECTIVE DEMOLITION REQUIREMENTS.
26. AT REMOVAL OF EXISTING CHALK/TACKBOARDS BY DEMO AND ABATEMENT CONTRACTORS, PATCH WALL SURFACE AT FASTENERS AND REMOVED GLUE DAUBS. UPON REMOVAL OF BOARDS: IF ENTIRE WALL SURFACE IS DETERMINED BY ARCHITECT TO BE UNACCEPTABLE, SKIMCOAT VENEER PLASTER ON A UNIT PRICE BASIS.
27. REMOVE ALL LOOSE FURNITURE, TYPICAL UNLESS TAGGED BY THE OWNER TO BE SALVAGED.
28. REMOVE ALL SIGNS, TYPICAL.
29. ANY ITEM TO BE SALVAGED WILL BE TAGGED BY THE OWNER PRIOR TO DEMOLITION.
30. TRENCHING IS REQUIRED FOR UNDERGROUND PIPING. REFER TO PLUMBING DRAWINGS FOR PIPING. REFER TO STRUCTURAL DRAWINGS FOR TYPICAL SLAB INFILL. PATCH ADJACENT FINISHES.
31. EXISTING CONCRETE SLABS REQUIRE CUTTING AND INFILL AT NEW COLUMN LOCATIONS WITHIN THE EXISTING BUILDING. REFER TO STRUCTUAL DRAWINGS FOR LOCATIONS AND DETAILS.

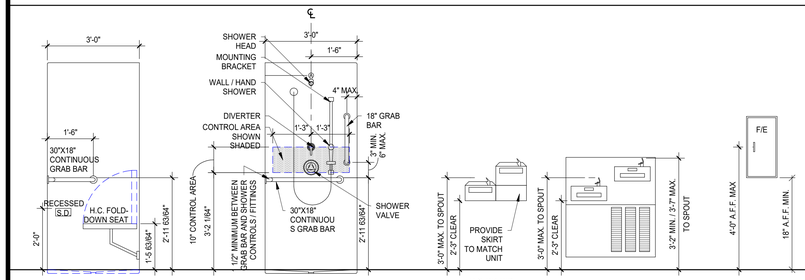
CEILING PLAN NOTES

1. REFLECTED CEILING PLANS ARE INTENDED FOR COORDINATION PURPOSES FOR MECHANICAL, ELECTRICAL, FIRE PROTECTION, AND ARCHITECTURAL ELEMENTS. REFER TO RESPECTIVE DRAWINGS FOR SPECIFIC REQUIREMENTS.
2. REFER TO FIRE PROTECTION DRAWINGS FOR ADDITIONAL REQUIREMENTS FOR LOCATION OF SPRINKLER PIPING AND ADDITIONAL SPRINKLER HEADS. ALL SPRINKLER PIPING IS TO BE LOCATED ABOVE FINISHED CEILING UNLESS NOTED OTHERWISE.
3. SPRINKLER HEADS TO BE LOCATED IN THE CENTER OF A 2X2 CEILING PANEL OR A 1X1 CEILING TILE. HEADS MAY BE CENTER IN A 2X4 CEILING PANEL, OR ONE HALF OF A 2X4 CEILING PANEL.
4. FOR REGISTER AND DIFFUSER SCHEDULE, REFER TO MECHANICAL DRAWINGS.
5. LIGHT FIXTURE SYMBOLS ON REFLECTED CEILING PLANS ARE DIAGRAMMATIC. FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS FOR TYPE OF LIGHT FIXTURES. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR QUANTITY OF LIGHT FIXTURES AS INDICATED ON THE ELECTRICAL DRAWINGS.
6. FOR CEILING HEIGHTS AND TYPES, REFER TO REFLECTED CEILING PLAN DRAWING SERIES A2.00.
7. NO SUSPENDED LOADS SHALL BE SUPPORTED BY THE ROOF DECK. THIS INCLUDES PIPING, DUCTWORK, MECHANICAL EQUIPMENT, STAGE RIGGING, CEILING, ETC. ALL STEEL FRAMING MEMBERS PREFERABLY UTILIZING A SYSTEM OF UNISTRUTS, BEAM CLAMPS, AND THREADED RODS. ALL ATTACHMENT DEVICES SHALL BE SUBMITTED FOR REVIEW AND ARE SUBJECT TO APPROVAL OF THE MECHANICAL ENGINEER. NOTE THAT AREAS A, B, C, E, AND F ARE MAINLY POURED GYPSUM DECK SUPPORTED BY BULB TEES.

LIST OF DRAWINGS

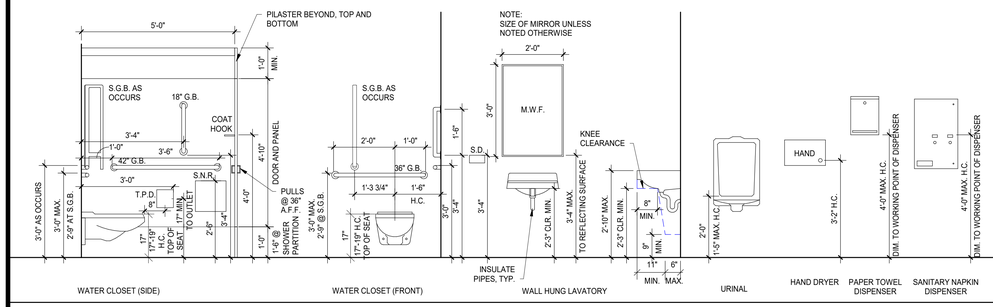
.	PROJECT COVER VOLUME 1
R0.01	GENERAL INFORMATION I
R0.02	GENERAL INFORMATION II
R0.03	CODE REFERENCE SHEET
R0.04	BUILDING DIAGRAMS
R1.01	CODE PLANS
CLP1.01	SITE CONSTRUCTION LOGISTICS PLAN
CLP1.02	SITE CONSTRUCTION PHASING PLAN
SS1.01	SITE SURVEY
OSP1.01	OVERALL SITE PLAN
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EAP1.01	EMERGENCY ACCES PLAN
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SAP1.01	SITE ACCESSIBILITY PLAN
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C3.01	SITE GRADING PLAN
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C4.01	SITE DRAINAGE PLAN
C4.02	SITE DRAINAGE PLAN - ENLARGEMENT
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C5.01	CIVIL SITE UTILITIES PLAN
C6.01	CIVIL DETAILS
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ESU1.01	ELECTRICAL SITE UTILITIES PLAN
L1.01	SITE PREPARATION & DEMOLITION PLAN
L2.01	SITE LAYOUT PLAN
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L4.02 (ALT.)	SITE ALTERNATE BID IMPROVEMENT PLAN
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L6.03	SITE SPECIALTY DETAILS
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A2.02	MAIN LEVEL REFLECTED CEILING PLAN - AREA A
A2.03	MAIN LEVEL REFLECTED CEILING PLAN - AREAS B & C
A2.04	MAIN LEVEL REFLECTED CEILING PLAN - AREA D
A2.05	MAIN LEVEL REFLECTED CEILING PLAN AREAS E & F
A2.06	UPPER LEVEL REFLECTED CEIL

MOUNTING HEIGHTS AND LOCATIONS FOR FIXTURES - GENERAL



SHWR. ELEV. (FRONT) | SHWR. ELEV. (SIDE) | H.C. WATER COOLER / DRINKING FOUNTAIN | H.C. WATER COOLER / DRINKING FOUNTAIN - RECESSED | FIRE EXTINGUISHER CABINET

MOUNTING HEIGHTS AND LOCATIONS FOR FIXTURES - ADULTS

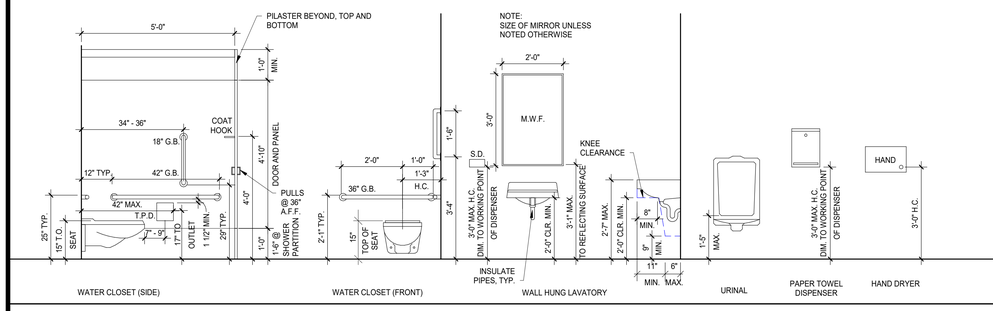


WATER CLOSET (SIDE) | WATER CLOSET (FRONT) | WALL HUNG LAVATORY | URINAL | HAND DRYER | PAPER TOWEL DISPENSER | SANITARY NAPKIN DISPENSER

MOUNTING HEIGHTS AND LOCATIONS FOR FIXTURES - PRE-K (3-4)

WATER CLOSET (SIDE) | WATER CLOSET (FRONT) | WALL HUNG LAVATORY | PAPER TOWEL DISPENSER

MOUNTING HEIGHTS AND LOCATIONS FOR FIXTURES - CHILDREN (5-12)



WATER CLOSET (SIDE) | WATER CLOSET (FRONT) | WALL HUNG LAVATORY | URINAL | PAPER TOWEL DISPENSER | HAND DRYER

TYP. DEVICE MOUNTING HEIGHTS

ELECTRICAL EQUIPMENT MOUNTING HEIGHTS
ALL DIMENSIONS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED

- RECEPTACLES: 18" A.F.F. AT LOCATIONS ABOVE CASEWORK, MOUNT BOTTOM OF RECEPTACLE AT 2" ABOVE BACKSPLASH. AT LOCATIONS BELOW CASEWORK, MOUNT AT 24" A.F.F.
- EXTERIOR RECEPTACLES: 24" A.F.F.
- SWITCHES: 48" A.F.F.
- BOILER EMERGENCY SWITCH: 60" A.F.F.
- VOICE/DATA OUTLETS: 18" A.F.F.
- WALL PHONE OUTLETS: 44" A.F.F.
- WALL MOUNTED CLOCKS AND SPEAKERS: COORDINATE LOCATION ABOVE DOOR WITH CEILING HEIGHT. IF THE CLOCK AND SPEAKER DOES NOT FIT, PLACE 7'-6" A.F.F. NEXT TO DOOR. COORDINATE WITH BLOCK COURSING AS OCCURS. CONSULT ARCHITECT IF CONDITIONS DIFFER.
- FIRE ALARM PULL STATIONS: 48" A.F.F.
- AREA OF REFUGE CALL STATION: 48" A.F.F.
- EMERGENCY SHUT-OFF SWITCH/PUSH BUTTON: 48" A.F.F.
- EMERGENCY CALL SWITCH: 36" A.F.F.
- EMERGENCY CALL BELL/LIGHT: 7'-6" A.F.F.
- FIRE ALARM VISUAL/AUDIO INDICATING UNITS: 6'-8" TO BOTTOM OF DEVICE.
- WALL MOUNTED EXIT SIGNS: 8" ABOVE DOOR OR 7'-6" A.F.F.
- EMERGENCY CALL SYSTEM FOR TOILET ROOMS: LOCATE ALARM PULL SWITCH WITHIN 3' OF WATERCLOSET. EXTEND PULL CORD TO WITHIN 12" OF THE FLOOR.

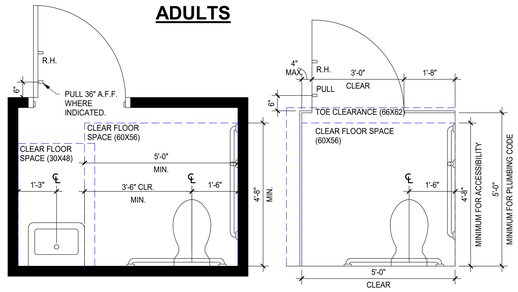
DOOR HARDWARE MOUNTING HEIGHTS
ALL DIMENSIONS ARE TO CENTER OF HARDWARE

- PULL: 42"
- PUSH PLATE: 45"

MOUNTING HEIGHTS FOR THE CLASSROOM - GENERAL

LED DISPLAY BOARD | WHITEBOARD

ADULTS



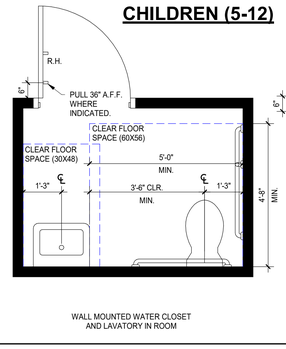
WALL MOUNTED WATER CLOSET AND LAVATORY IN ROOM

WALL MOUNTED WATER CLOSET IN STALL

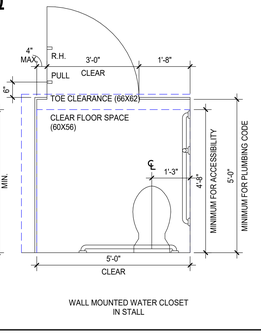
PRE-K (3-4)

WALL MOUNTED WATER CLOSET AND LAVATORY IN ROOM

CHILDREN (5-12)



WALL MOUNTED WATER CLOSET AND LAVATORY IN ROOM



WALL MOUNTED WATER CLOSET IN STALL

WALL TYPES

TYPE	DESCRIPTION
1A	4" CONCRETE BLOCK 8" ABOVE FINISH CEILING
1B	4" CONCRETE BLOCK TO THE UNDERSIDE OF THE DECK
2B	6" CONCRETE BLOCK TO THE UNDERSIDE OF THE DECK
3B	8" CONCRETE BLOCK TO THE UNDERSIDE OF THE DECK
4B	10" CONCRETE BLOCK TO THE UNDERSIDE OF THE DECK.
5B	12" CONCRETE BLOCK TO THE UNDERSIDE OF THE DECK.
10A	2 1/2" METAL STUD WITH 5/8" GYPSUM BOARD ONE SIDE.
10B	2 1/2" METAL STUD WITH 5/8" GYPSUM BOARD ONE SIDE WITH SOUND ATTENUATION BLANKET.
10C	2 1/2" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE.
10D	2 1/2" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE WITH SOUND ATTENUATION BLANKET.
11A	3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD BOTH SIDES.
11G	3 5/8" METAL STUD WITH 5/8" GYPSUM BOARD ONE SIDE.
12A	3 5/8" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES
12B	3 5/8" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES, WITH SOUND ATTENUATION BLANKET, STC #50.
12G	3 5/8" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE.
12H	3 5/8" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE, WITH SOUND ATTENUATION BLANKET.
13B	3 5/8" METAL STUD WITH ONE LAYER 5/8" A.R.G.B. ONE SIDE AND ONE LAYER 5/8" GYPSUM BOARD ONE SIDE, WITH SOUND ATTENUATION BLANKET, STC #50.
14G	6" METAL STUD WITH 5/8" GYPSUM BOARD ONE SIDE.
15A	6" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES.
15B	6" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES, WITH SOUND ATTENUATION BLANKET, STC #50.
15G	6" METAL STUD WITH 5/8" GYPSUM BOARD ONE SIDE.
15H	6" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE, WITH SOUND ATTENUATION BLANKET, STC #50.
18A	8" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES.
18B	8" METAL STUD WITH 5/8" A.R.G.B. BOTH SIDES, WITH SOUND ATTENUATION BLANKET, STC #50.
51D	1 1/2" METAL STUD WITH 5/8" A.R.G.B. ONE SIDE WITH SOUND ATTENUATION BLANKET.
51F	7/8" FURRING CHANNEL WITH 5/8" A.R.G.B. ONE SIDE.
80G	3 5/8" METAL STUD WITH ONE LAYER 5/8" A.R.G.B. OVER ONE LAYER 5/8" GYPSUM BOARD BOTH SIDES, WITH SOUND ATTENUATION BLANKET, STC #50.
80J	6" METAL STUD WITH ONE LAYER 5/8" A.R.G.B. OVER ONE LAYER 5/8" GYPSUM BOARD BOTH SIDES, WITH SOUND ATTENUATION BLANKET, STC #50.
80R	5/8" A.R.G.B. GLUED TO EXISTING MASONRY WALL

WALL TYPE NOTES

1. WALL TYPES LISTED REPRESENT SEVERAL TYPES OF WALL CONSTRUCTION, ALL OF WHICH MAY NOT BE USED ON THIS PROJECT. REFER TO FLOOR PLANS FOR WALL TYPE DESIGNATIONS.
2. EXTEND ALL WALL STUDS AND GYPSUM BOARD TO UNDERSIDE OF DECK. WHERE ABUSE RESISTANT GYPSUM BOARD (A.R.G.B.) IS USED, EXTEND A.R.G.B. TO A MINIMUM OF 4" ABOVE FINISH CEILING, CONTINUING WITH GYPSUM BOARD TO UNDERSIDE OF DECK.
3. AT ALL NON-FIRE RATED WALLS, FILL VOIDS WITH SMOKE AND ACOUSTIC SPRAY AND SEALANT, INCLUDING, BUT NOT LIMITED TO, FLUTES IN METAL FLOOR/ROOF DECK, VOIDS BETWEEN WALLS AND STRUCTURAL MEMBERS, PENETRATIONS OF DUCTWORK, ELECTRICAL CONDUIT, PIPING, ETC. PROVIDE MINERAL WOOL BACKING TO REQUIRED DEPTH.
4. GYPSUM BOARD AND A.R.G.B. USED IN A ONE, TWO, OR THREE HOUR FIRE-RESISTANCE RATED PARTITION MUST BEAR THE U.L. CLASSIFICATION MARKING.
5. PROVIDE MINERAL WOOL THERMAL BATT INSULATION BETWEEN TOP OF EXTERIOR MASONRY WALLS AND BOTTOM OF STRUCTURAL FRAMING SYSTEM, UNLESS OTHERWISE NOTED. FILL VOIDS SOLID AND COMPRESS TO FIT.
6. PROVIDE TILE BACKING PANELS IN LIEU OF GYPSUM BOARD AT ALL LOCATIONS WHERE WALL TILE IS INDICATED. REFER TO THE FINISH AND COLOR SCHEDULE AND INTERIOR ELEVATIONS, AS OCCURS, FOR LOCATIONS AND EXTENT OF WALL TILE.

SMOKE PARTITIONS

1. NON-FIRE-RESISTANCE RATED PARTITIONS REQUIRED TO RESIST THE PASSAGE OF SMOKE ARE DESIGNATED AS "SMOKE RESISTANT" WITH AN ASTERISK (*) LOCATED BELOW THE WALL TYPE DESIGNATION. EXTEND ALL SMOKE PARTITIONS TO THE UNDERSIDE OF METAL FLOOR/ROOF DECK AND/OR STRUCTURE ABOVE. PENETRATIONS AND VOIDS SHALL BE FIRESTOPPED IN ACCORDANCE WITH DIVISION 07 SPECIFICATION SECTION "PENETRATION FIRESTOPPING." ALL HEAD-OF-WALL JOINTS AND FLOOR-TO-WALL JOINTS SHALL BE SEALED IN ACCORDANCE WITH DIVISION 07 SPECIFICATION SECTION "FIRE-RESISTIVE JOINT SYSTEMS."

SMOKE BARRIERS

1. FOR THE PURPOSE OF SUBDIVIDING BUILDING SPACES, SMOKE BARRIERS ARE FIRE-RESISTANCE RATED PARTITIONS, DESIGNATED WITH AN "S" LOCATED ADJACENT TO THE WALL TYPE DESIGNATION.
2. PROVIDE SMOKE DAMPERS AT DUCTWORK PENETRATIONS IN ALL ONE, TWO, AND THREE HOUR FIRE-RESISTANCE RATED SMOKE BARRIERS.
3. REFER TO FIRE-RESISTANCE RATED CONSTRUCTION FOR ADDITIONAL REQUIREMENTS.

FIRE-RESISTANCE RATED CONSTRUCTION

1. ALL FIRE-RESISTANCE RATED PARTITIONS RESIST THE PASSAGE OF SMOKE AND ARE CONSIDERED SMOKE RESISTANT WITHOUT THE ASTERISK DESIGNATION. EXTEND ALL FIRE-RESISTANCE RATED PARTITIONS TO THE UNDERSIDE OF METAL FLOOR/ROOF DECK AND/OR STRUCTURE ABOVE. PENETRATIONS AND VOIDS SHALL BE FIRESTOPPED IN ACCORDANCE WITH DIVISION 07 SPECIFICATION SECTION "PENETRATION FIRESTOPPING." ALL HEAD-OF-WALL JOINTS AND FLOOR-TO-WALL JOINTS SHALL BE SEALED IN ACCORDANCE WITH DIVISION 07 SPECIFICATION SECTION "FIRE-RESISTIVE JOINT SYSTEMS."

KAESTLE BOOS associates, inc

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: NCB

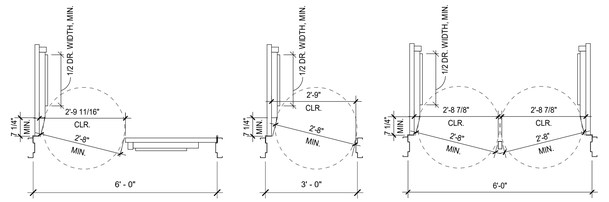
GENERAL INFORMATION II

DRAWING NO.:

R0.02

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DOOR EGRESS WIDTH SCALE: 1/2" = 1'-0"



KBA Egress Capacity Standard - CT — last modified: 10/29/2020

DOOR SIZE feet-inches		inches	CLEAR WIDTH inches	ALL USE GROUPS, SPRINKLERED & NON-SPRINKLERED BUILDINGS†
				Inches required per person 0.2
			*	MAXIMUM OCCUPANT CAPACITY FOR EGRESS DOORS
2'-10"	Single (existing only)	34	30.875	154
3'-0"	Single	36	32.875	164
3'-2"	Single	38	34.875	174
3'-4"	Single	40	36.875	184
3'-6"	Single	42	38.875	194
3'-8"	Single	44	40.875	204
3'-10"	Single	46	42.875	214
4'-0"	Single	48	44.875	224
			**	MAXIMUM OCCUPANT CAPACITY FOR EGRESS DOORS
2'-10"	Pair (existing only)	68	63.000	315
3'-0"	Pair	72	67.000	335
3'-2"	Pair	76	71.000	355
3'-4"	Pair	80	75.000	375
3'-6"	Pair	84	79.000	395
3'-8"	Pair	88	83.000	415
3'-10"	Pair	92	87.000	435
4'-0"	Pair	96	91.000	455
			***	MAXIMUM OCCUPANT CAPACITY FOR EGRESS DOORS
2'-10"	Pair with removable mullion (existing only)	68	61.500	307
3'-0"	Pair with removable mullion	72	65.500	327
3'-2"	Pair with removable mullion	76	69.500	347
3'-4"	Pair with removable mullion	80	73.500	367
3'-6"	Pair with removable mullion	84	77.500	387
3'-8"	Pair with removable mullion	88	81.500	407
3'-10"	Pair with removable mullion	92	85.500	427
4'-0"	Pair with removable mullion	96	89.500	447

* Actual Net Unobstructed clear width of the door opening in inches (subtract .625 inches for stop and 2.5 inches for door thickness and hinge from door opening size). At 34 inches and above, projections up to 4 inches, i.e. panic devices, are permitted.

** Actual Net Unobstructed clear width of the door opening in inches (subtract 2 times 2.5 inches for door thickness and hinge from door opening size). At 34 inches and above, projections up to 4 inches, i.e. panic devices, are permitted.

*** Actual Net Unobstructed clear width of the door opening in inches (subtract 2 times 2.5 inches for door thickness and hinge and 1.5 inches for removable mullion from door opening size). At 34 inches and above, projections up to 4 inches, i.e. panic devices, are permitted.

Code References:
2018 Connecticut State Building Code with Amendments to 2015 International Building Code; 2018 Connecticut State Fire Safety Code with Amendments to 2015 International Fire Code and 2015 NFPA 101; 2018 Connecticut State Fire Prevention Code

PLUMBING FIXTURES
EDUCATIONAL/ASSEMBLY SIMULTANEOUS USE, COURTYARD NON-SIMULTANEOUS USE

EDUCATIONAL PROJ. ENROLLMENT = 443 STUDENTS + 80 STAFF = 523 TOTAL PROJECTED ACTUAL OCCUPANTS

TOTAL DESIGN LOAD = 2,306 CCUPANTS (1,153 GIRLS & 1,153 BOYS)
NOTE THAT COURTYARD IS SHOWN AS NON-SIMULTANEOUS AND REQUIRES REVIEW AND ACCEPTANCE BY LOCAL AUTHORITIES HAVING JURISDICTION

TOILET ROOMS INCLUDED IN PLUMBING COUNT LOCATED IN CORRIDORS:
MALE: A136, D110, F108, F112
FEMALE: A120, A137, D111, D121, F117

OCCUPANCY		WATER CLOSETS				LAVATORIES				DRINKING FOUNTAINS		SERVICE SINK
		MALE		FEMALE		MALE		FEMALE				
USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	DF	
ASSEMBLY A-2 (KIT./CAF/PLAT.)	403 202 MALE 202 FEMALE	1 PER 75	2.69	1 PER 75	2.69	1 PER 200	1.01	1 PER 200	1.01	1 PER 500	0.80	1 PER FLOOR
ASSEMBLY A-3 (GYM. & MEDIA CTR.)	456 228 MALE 228 FEMALE	1 PER 125	1.82	1 PER 65	3.50	1 PER 200	1.14	1 PER 200	1.14	1 PER 500	0.91	
EDUCATIONAL E	1,438 719 MALE 719 FEMALE	1 PER 50	14.38	1 PER 50	14.38	1 PER 50	14.38	1 PER 50	14.38	1 PER 100	14.38	
STORAGE S-1 (LOWER)	9 5 MALE 5 FEMALE	1 PER 100	0.05	1 PER 100	0.05	1 PER 100	0.05	1 PER 100	0.05	1 PER 1000	0.01	
SUBTOTALS			18.94		20.62		16.58		16.58		16.1	3
REQUIRED TOTALS			19		21		17		17		17	3
PROVIDED			15		16		15		16		12	3

TOILET ROOMS NOT INCLUDED IN PLUMBING COUNT (SPACES INCLUDE DEDICATED RESTROOMS; HOWEVER, OCCUPANTS ARE INCLUDED IN TABLE ABOVE):
HC TOILET A131 (NURSE), HC TOILET B114 (LEARNING CENTER I), HC TOILET B118 (KINDERGARTEN), HC TOILET B120 (KINDERGARTEN), HC TOILET B122 (KINDERGARTEN), HC TOILET B119 (KINDERGARTEN), HC TOILET B124 (KINDERGARTEN), HC TOILET C104 (THERAPY), HC TOILETC106 (OT/PT), HC TOILET C109 (PRE-K), HC TOILET C112 (PRE-K)
THE TOTAL OCCUPANT LOAD OF THESE EDUCATIONAL SPACES = 425
THE RESTROOMS INDICATED HERE, THOUGH NOT INCLUDED IN THE PLUMBING COUNT, PROVIDE FIXTURES FOR 425 OCCUPANTS.

NOTE:
- IN PUBLIC MENS TOILETS AT LEAST 1 URINAL IS PROVIDED & URINALS ARE NOT SUBSTITUTED FOR MORE THAN 67% OF THE REQUIRED NUMBER OF WATER CLOSETS.

- REQUIRED H.C. TOILETS 1 PER TOILET ROOM. 1 + AN ADDITIONAL AMBULATORY-ACCESSIBLE COMPARTMENT IF 6 OR MORE.

- ALL DRINKING FOUNTAINS ARE ACCESSIBLE. MIN. OF 50% REQUIRED TO BE ACCESSIBLE, BUT NOT LESS THAN ONE ACCESSIBLE DRINKING FOUNTAIN IS PROVIDED ON EACH FLOOR, WITH THE EXCEPTION OF THE UPPER LEVEL WHERE THERE IS NO OCCUPANCY.

FACILITY INFORMATION

PROJECT NUMBER:	094-0109 RNV
BUILDING:	ANNA REYNOLDS ELEMENTARY SCHOOL
LOCATION:	120 NEWINGTON AVE., NEWINGTON
DATE OF ORIGINAL CONSTRUCTION:	1954
DATES OF ADDITIONS:	~1956, 1999

CODE INFORMATION - BUILDING #1

DATE OF ORIGINAL CONSTRUCTION: 1954
DATES OF ADDITIONS: ~1956, 1999
1. GROUP CLASSIFICATION (Chapter 3)
PRIMARY: A-2, A-3, E
ACCESSORY: S-1, B
2. CONSTRUCTION TYPE (Chapter 6)
MINIMUM TYPE REQUIRED: NONCONFORMING
ACTUAL TYPE PROVIDED: (EXISTING) IIB, EXCEPT WOOD FRAMING AT PLATFORM
(NEW) IIB
3. BUILDING HEIGHT (Chapter 5)
ALLOWABLE STORIES / HEIGHT: 3 STORIES / 75'
ACTUAL STORIES / HEIGHT: 3 STORIES / 28'
STORIES ABOVE GRADE: 3 STORIES
4. BUILDING AREA (Chapter 5)

BUILDING AREA: (EACH FLOOR)	LOWER LEVEL	MAIN LEVEL	UPPER LEVEL
EXIST. CONSTRUCTION (S.F.)	2,500 SF	48,473 SF	896 SF
NEW CONSTRUCTION (S.F.)	225 SF	225 SF	0 SF
TOTAL FLOOR AREA (S.F.)	2,725 SF	48,698 SF	896 SF
TOTAL BUILDING AREA (S.F.)			52,319 SF

5. AREA MODIFICATIONS TO TABLE 503
(for each seperate building as defined by fire walls and/or exterior walls)

TOTAL FRONTAGE (F) 410'-10" (building perimeter which fronts on a public way or open space having 20 feet open min. width)
PERIMETER (P) 805'-6 1/2" (total building perimeter)
WIDTH OF OPEN SPACE (W) = 30

$I_f = \left(\frac{F}{P} - 0.25\right)\frac{W}{30}$

$I_f = \left(\frac{1240'-1"}{2067'-4"} - 0.25\right)\frac{30}{30}$

$I_f = \left(.60 - 0.25\right)1$

$I_f = 0.35$

NOTE: CALCULATIONS REQUIRED BECAUSE TOTAL PERIMETER IS INCREASED BY ELEVATOR ADDITION. THIS IS CONSIDERED CLOSED PERIMETER.

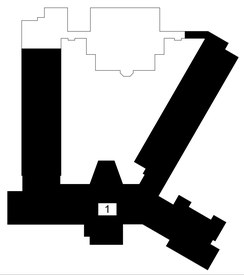
% FRONTAGE INCREASE (I_f) = 35% (506.2)
Note: see code reference sheet for total and open perimeter dimensions

6. CASE 1 - SINGLE OCCUPANCY / NONSEPARATED USES - NOT USED
7. CASE 2 - MIXED OCCUPANCY SEPARATED USES (Allowable Area 506.4)

NOTE:
A MODIFICATION IS REQUIRED TO PERMIT ELEVATOR ADDITION AS THE EXISTING BUILDING EXCEEDS ALLOWABLE AREA. CALCULATIONS WILL BE REVIEWED WITH THE LOCAL BUILDING OFFICIAL PRIOR TO SUBMITTING A MODIFICATION.
- THERE IS NO CHANGE OF OCCUPANCY.
- THE ELEVATOR IS REQUIRED TO PROVIDE ACCESSIBILTY THROUGHOUT THE FACILITY WITHIN A REASONABLE TRAVEL DISTANCE.

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601)

1. PRIMARY STRUCTURE		0 HR(S)
2. BEARING WALLS:	(Higher of Tables 601 and 602) EXTERIOR	0 HR(S)
	INTERIOR	0 HR(S)
3. NONBEARING WALLS AND PARTITIONS	(Table 602) EXTERIOR	0,1 HR(S)
4. NONBEARING WALLS AND PARTITIONS	INTERIOR	0 HR(S)
5. FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		0 HR(S)
6. ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		X HR(S)



CODE INFORMATION - BUILDING #2

DATE OF ORIGINAL CONSTRUCTION: 1999
DATES OF ADDITIONS: NONE
1. GROUP CLASSIFICATION (Chapter 3)
PRIMARY: E
ACCESSORY: -
2. CONSTRUCTION TYPE (Chapter 6)
MINIMUM TYPE REQUIRED: VB
ACTUAL TYPE PROVIDED: (EXISTING) IIB
(NEW) IIB
3. BUILDING HEIGHT (Chapter 5)
ALLOWABLE STORIES / HEIGHT: 3 STORIES / 75'
ACTUAL STORIES / HEIGHT: 1 STORY / 16'
STORIES ABOVE GRADE: 1 STORY
4. BUILDING AREA (Chapter 5)

BUILDING AREA: (EACH FLOOR)	LOWER LEVEL	MAIN LEVEL	UPPER LEVEL
EXIST. CONSTRUCTION (S.F.)	0 SF	13,335 SF	0 SF
NEW CONSTRUCTION (S.F.)	0 SF	0 SF	0 SF
TOTAL FLOOR AREA (S.F.)	0 SF	13,335 SF	0 SF
TOTAL BUILDING AREA (S.F.)			13,335

5. AREA MODIFICATIONS TO TABLE 503
(for each seperate building as defined by fire walls and/or exterior walls)

THIS BUILDING IS REMAINING.

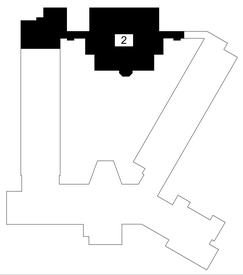
THE SQUARE FOOTAGE REMAINS THE SAME (NO ADDITIONS ARE PROPOSED, NO DEMOLITION IS ANTICIPATED).

THE OCCUPANCY OF THIS BUILDING REMAINS THE SAME.

THE PERIMETER REMAINS THE SAME.

8. FIRE-RESISTANCE RATED REQUIREMENTS FOR BUILDING ELEMENTS (Table 601)

1. PRIMARY STRUCTURE		0 HR(S)
2. BEARING WALLS:	(Higher of Tables 601 and 602) EXTERIOR	0 HR(S)
	INTERIOR	0 HR(S)
3. NONBEARING WALLS AND PARTITIONS	(Table 602) EXTERIOR	0,1 HR(S)
4. NONBEARING WALLS AND PARTITIONS	INTERIOR	0 HR(S)
5. FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		0 HR(S)
6. ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS		X HR(S)



9. OCCUPANCY LOAD (REFER TO CODE PLAN)
DESIGN TOTAL FOR EACH FLOOR (list all floors)
LOWER LEVEL 9 NOTE: DOES NOT INCLUDE 231
MAIN LEVEL 2,297 OCCUPANTS IN COURTYARD
UPPER LEVEL 0 (NON-SIMULTANTEOUS)

EXIT CAPACITY FOR EACH FLOOR (list all floors)
LOWER LEVEL 0 NOTE: LOWER LEVEL
MAIN LEVEL 3,609 EXITS THROUGH MAIN
UPPER LEVEL 0 LEVEL AT GYMNASIUM

DESIGN TOTAL FOR FACILITY 2,306

TOTAL EXIT CAPACITY FOR FACILITY 3,944 (LOWER LEVEL EXITS THROUGH MAIN LEVEL AT GYMNASIUM)

10. MODIFICATIONS
PROVIDE MODIFICATION NUMBER AND CODE SECTION NUMBER BEING MODIFIED.
(a) APPROVED -
-
(b) PENDING PLUMBING COUNT (MIN. FIXTURES)
ADDITION TO NON-CONFORMING BUILDING
EXISTING STAIR AT LOWER AND UPPER LEVELS
HORIZONTAL ASSEMBLY BETWEEN A/E AND S
WOOD-FRAMING, EXTERIOR WALL COLUMNS IN TYPE IIC (EXISTING CONDITION)
(c) EXISTING NO EXISTING MODIFICATIONS TO THE CT STATE BUILDING CODE

11. ACCESSIBLE BUILDING X DESIGNATED
NON-DESIGNATED

12. MINIMUM PLUMBING FIXTURE COUNT (I.P.C. Chapter 4) for each type of occupancy in each seperate building or entire facility.
(SEE PLUMBING FIXTURE TABLE THIS SHEET)

13. SPRINKLER PROTECTION X ENTIRE BUILDING
LIMITED AREA

14. CODES TO WHICH THIS PROJECT WAS DESIGNED:
2018 CONNECTICUT BUILDING CODE (CSBC) INCLUDING:
- 2015 INTERNATIONAL BUILDING CODE (IBC)
- 2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC) - WORK AREA COMPLIANCE METHOD, ALTERATION - LEVEL 3 AND ADDITIONS
- 2015 INTERNATIONAL MECHANICAL CODE (IMC)
- 2015 INTERNATIONAL PLUMBING CODE (IPC)
- 2017 NFPA 70, NATIONAL ELECTRICAL CODE (NEC)
- 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
- 2009 ICC/ANSI A117.1 - ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

2018 CONNECTICUT FIRE SAFETY (CSFSC) INCLUDING:
- 2015 INTERNATIONAL FIRE CODE (IFC) INCLUDING ALL REFERENCED STANDARDS

2018 CONNECTICUT FIRE PREVENTION CODE INCLUDING:
- 2015 NFPA, 1 FIRE CODE

CURRENT CONNECTICUT PUBLIC HEALTH CODE (2009)

CURRENT OSHA

CONNECTICUT GENERAL STATUTES

TITLE II OF THE AMERICAN WITH DISABILITIES ACT (ADA) INCLUDING THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGNterior face of exterior wall)

SECTION 504, REHABILITATION ACT 1973 INCLUDING 504 REGULATIONS

15. THRESHOLD BUILDING CONDITIONS NO

16. BUILDING AREAS FOR GRANT CALCULATION (ENTIRE FACILITY)
EXISTING CONSTRUCTION PRIOR TO THIS PROJECT 65,204 S.F.
EXISTING BEING DEMOLISHED AND REMOVED 0 S.F.
(MEDIA CENTER, BOILER ROOM, PORTABLE)
TOTAL NEW CONSTRUCTION FOR THIS PROJECT 450 S.F.
TOTAL BUILDING AREA 65,654 S.F.
*SPACE WAIVER REQUEST PENDING

OPEN AREAS; FLOOR OPENINGS AND AREAS UNDER PROJECTIONS
MAIN ENTRANCE CANOPY 500 S.F.
SERVICE ENTRANCE CANOPY (EXISTING AREA) 308 S.F.
COURTYARD CANOPY (EXISTING AREA) 525 S.F.
GYMNASIUM ENTRANCE CANOPY 214 S.F.

TOTAL CONSTRUCTED BUILDING AREA (TO EXTERIOR FACE OF EXTERIOR WALLS, A.K.A. "CONTRACTOR BUILDING AREA") 69,308 S.F.

CODE PLAN NOTES FOR INTERIOR FINISHES

INTERIOR FINISHES (FOR A FULLY SPRINKLERED BUILDING) SHALL BE PROVIDED AND CONFIRMED TO HAVE THE FOLLOWING CLASSIFICATION RATINGS :

WALLS AND CEILINGS (OTHER THAN TEXTILE)
BUSINESS AND EDUCATIONAL OCCUPANCIES:
- VERTICAL EXITS AND EXIT PASSAGEWAYS - CLASS B (CLASS C IF < 3 STORIES)
- EXIT ACCESS CORRIDORS AND OTHER EXIT WAYS - CLASS C
- ROOMS AND ENCLOSED SPACES - CLASS C

ASSEMBLY OCCUPANCIES:
- VERTICAL EXITS AND EXIT PASSAGEWAYS - CLASS B (CLASS C IF < 3 STORIES)
- EXIT ACCESS CORRIDORS AND OTHER EXIT WAYS - CLASS B
- ROOMS AND ENCLOSED SPACES - CLASS C

WALLS - TEXTILE
CLASS A OR IBC 803.6.1.1 OR 803.6.1.2

CEILINGS - TEXTILE
CLASS A

FLOOR FINISH
OCCUPANCIES A, B, E, H, I-4, M, R-1, R-2, S
- DOC FF-1 (CPSC 16 CFR, PART 1630)

OCCUPANCIES I-2, I-3
- VERTICAL EXITS, EXIT PASSAGEWAYS, AND EXIT ACCESS CORRIDORS - CLASS II
- OTHER AREAS - DOC FF-1 (CPSC 16 CFR, PART 1630)

MEANS OF EGRESS

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT (TABLE 1004.1.2)

		FLOOR AREA IN S.F. PER OCCUPANT
1.	CLASSROOMS	20 S.F. NET
2.	SHOPS & VOCATIONAL	50 S.F. NET
3.	ASSEMBLY	
	WITHOUT FIXED SEATING	7 S.F. NET
	TABLES AND CHAIRS	15 S.F. NET
4.	LIBRARY	50 S.F. @ READING
		100 S.F. @ STACKS
5.	MECHANICAL AREAS	300 S.F. GROSS
6.	BUSINESS AREAS	100 S.F. GROSS

MAXIMUM LENGTH OF EXIT TRAVEL

1. I.B.C. & I.F.C. TABLE 1017.2 SPRINKLERED FEET 250' FEET

CODE NOTES

2018 CSBC SECTION 1025.6 INCLUDES AN EXCEPTION TO MEANS OF EGRESS ILLUMINATION PURSUANT TO CGS 29-256d. AS AN EXISTING BUILDING UNDERGOING A REPAIR, ADDITION, AND ALTERATION, LUMINOUS EGRESS PATH MARKING SYSTEMS OR DEVICES ARE NOT REQUIRED IN EXIT ACCESS CORRIDORS. NOR ARE THEY ARE NOT REQUIRD IN THE NEW CONSTRUCTION OF THE ADDITION. REFER TO 1025.6 EXCEPTION 3.

ENERGY CODE CALCULATIONS

U-FACTOR CALCULATIONS
NEW BRICK VENEER WITH CMU BACKUP

OUTSIDE AIR VALUE:	00.17
BRICK:	00.44
RIGID INSULATION / CAVITY INSULATION - 3":	16.80
8" CMU:	1.11
INSIDE AIR FILM:	00.68
R-VALUE:	19.20
MINIMUM R-VALUE (TABLE C402.1.3):	15.62
U-FACTOR (1/R):	0.052
MAXIMUM U-FACTOR (TABLE C402.1.4):	0.064

U-FACTOR CALCULATIONS
NEW BRICK VENEER WITH METAL STUD BACKUP

OUTSIDE AIR VALUE:	00.17
BRICK:	00.44
RIGID INSULATION / CAVITY INSULATION - 3":	16.80
1/2" GYPSUM BOARD SHEATHING:	00.40
6" METAL STUDS:	0
5/8" GYPSUM BOARD:	00.56
INSIDE AIR FILM:	00.68
R-VALUE:	19.05
MINIMUM R-VALUE (TABLE C402.1.3):	15.62
U-FACTOR (1/R):	0.052
MAXIMUM U-FACTOR (TABLE C402.1.4):	0.064

U-FACTOR CALCULATIONS
INSULATED METAL PANEL WITH CMU BACKUP

OUTSIDE AIR VALUE:	00.17
3" INSULATED METAL PANEL:	20.00
8" CMU:	1.11
INSIDE AIR FILM:	00.68
R-VALUE:	21.96
MINIMUM R-VALUE (TABLE C402.1.3):	15.62
U-FACTOR (1/R):	0.045
MAXIMUM U-FACTOR (TABLE C402.1.4):	0.064

U-FACTOR CALCULATIONS
INSULATED METAL PANEL WITH METAL STUD BACKUP

OUTSIDE AIR VALUE:	00.17
3" INSULATED METAL PANEL:	20.00
1/2" GYPSUM BOARD SHEATHING:	00.40
6" METAL STUD WITH INSULATION (EFF.):	4.10
5/8" GYPSUM BOARD:	00.56
INSIDE AIR FILM:	00.68
R-VALUE:	25.91
MINIMUM R-VALUE (TABLE C402.1.3):	15.62

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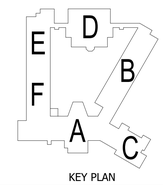
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

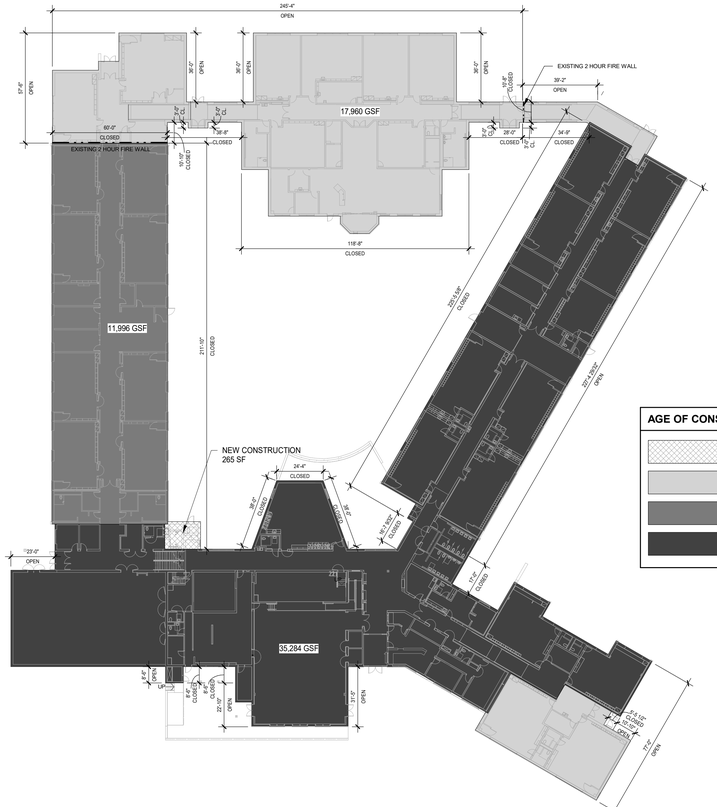
STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: NCB

CODE REFERENCE SHEET

DRAWING NO.:
R0.03

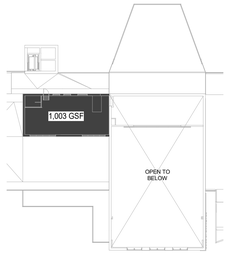
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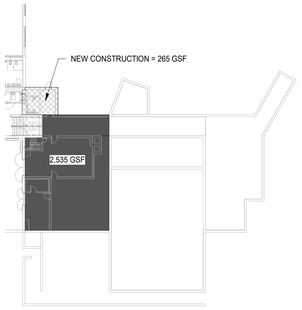
1 MAIN LEVEL - BUILDING PERIMETER AND AGE OF CONSTRUCTION PLAN
1/32" = 1'-0"

AGE OF CONSTRUCTION LEGEND

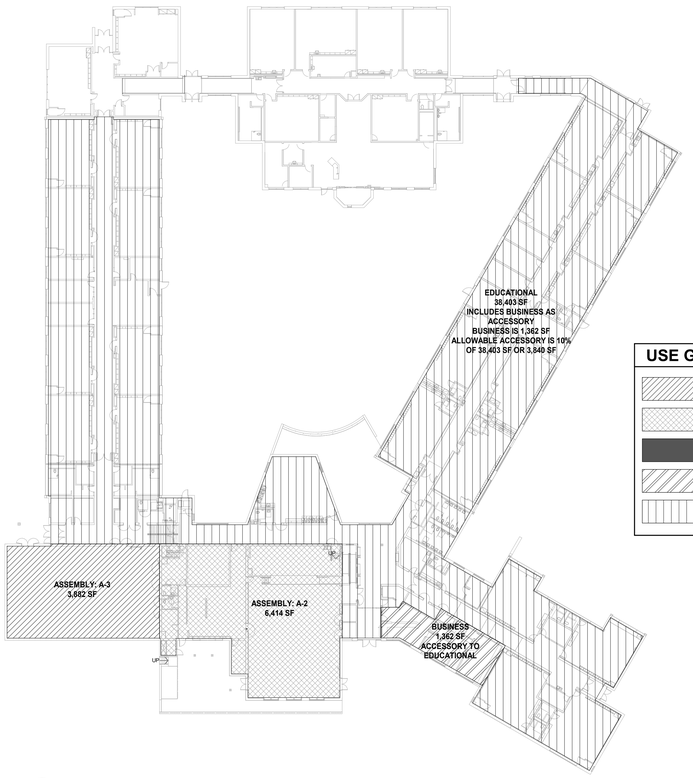
- NEW PROPOSED CONSTRUCTION
- 1999
- UNKNOWN, ~1956
- 1954



2 UPPER LEVEL - BUILDING PERIMETER AND AGE OF CONSTRUCTION PLAN
1/32" = 1'-0"



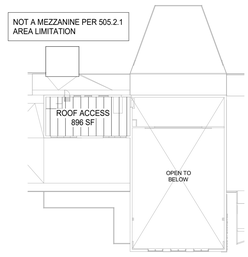
3 LOWER LEVEL - BUILDING PERIMETER AND AGE OF CONSTRUCTION PLAN
1/32" = 1'-0"



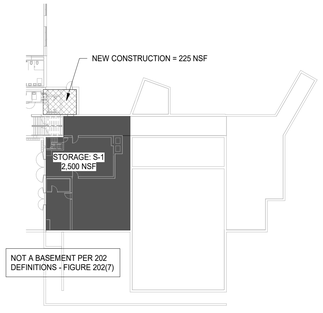
4 MAIN LEVEL USE GROUP AND OCCUPANCY PLAN - BUILDING #1
1/32" = 1'-0"

USE GROUP LEGEND

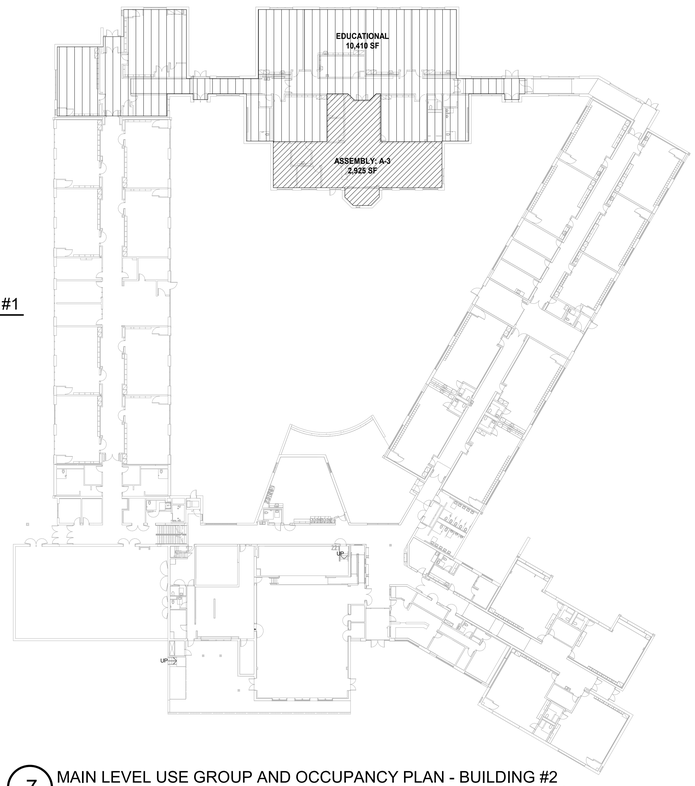
- A-2 ASSEMBLY
- A-3 ASSEMBLY
- S-1 STORAGE
- B BUSINESS
- E EDUCATIONAL



5 UPPER LEVEL USE GROUP AND OCCUPANCY GROUP PLAN - BUILDING #1
1/32" = 1'-0"



6 LOWER LEVEL USE GROUP AND OCCUPANCY PLAN - BUILDING #1
1/32" = 1'-0"



7 MAIN LEVEL USE GROUP AND OCCUPANCY PLAN - BUILDING #2
1/32" = 1'-0"

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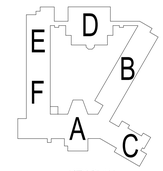
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

0' 16' 32' 64'
SCALE: 1/32" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: NCB

BUILDING DIAGRAMS

DRAWING NO.:
R0.04

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CODE PLAN NOTES AND LEGEND

EXIT CAPACITY

- ACTUAL EGRESS OF DOOR OR STAIR
- MAXIMUM ALLOWABLE EGRESS CAPACITY OF DOOR OR STAIR

ROOM NAME (A101) — 150 SQ/SF — 3P

- ROOM NUMBER
- MAXIMUM NUMBER OF ALLOWABLE OCCUPANTS
- AREA IN NET SQUARE FEET (GROSS SQUARE FEET)
- OCCUPANCY LOAD FACTOR

115' — PATH OF MAXIMUM TRAVEL DISTANCE TO EXIT

15 — DIRECTION OF TRAVEL TO EXIT

HANDICAPPED ACCESSIBLE AREA OR EXIT

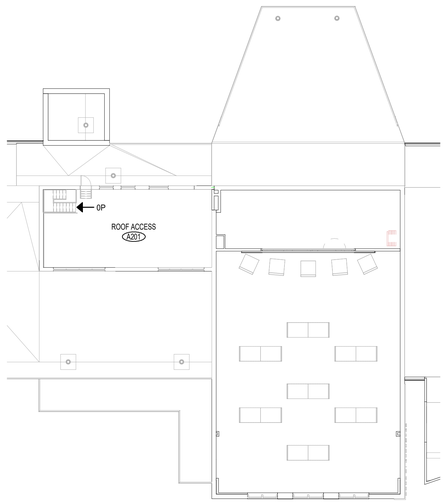
A = 33" x 48"	D = 36" x 60"
B = 33" x 60"	E = 30" x 48"
C = 36" x 48"	F = 30" x 50"

F.E. — FIRE EXTINGUISHER

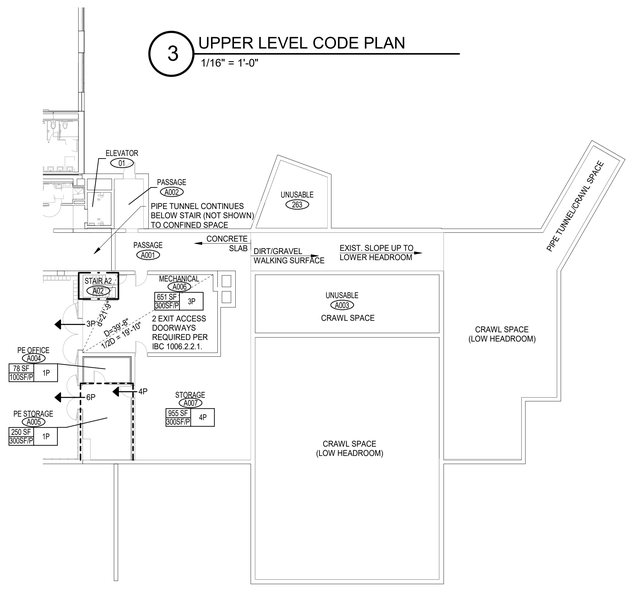
NSO — NON - SIMULTANEOUS OCCUPANCY

SEPARATIONS ARE DESIGNATED AS FOLLOWS:

- IMAGINARY LOT LINE
- 2 HOUR FIRE-RESISTANCE RATED FIRE BARRIER
- 1 HOUR FIRE-RESISTANCE RATED FIRE BARRIER
- SMOKE RESISTANT SEPARATION

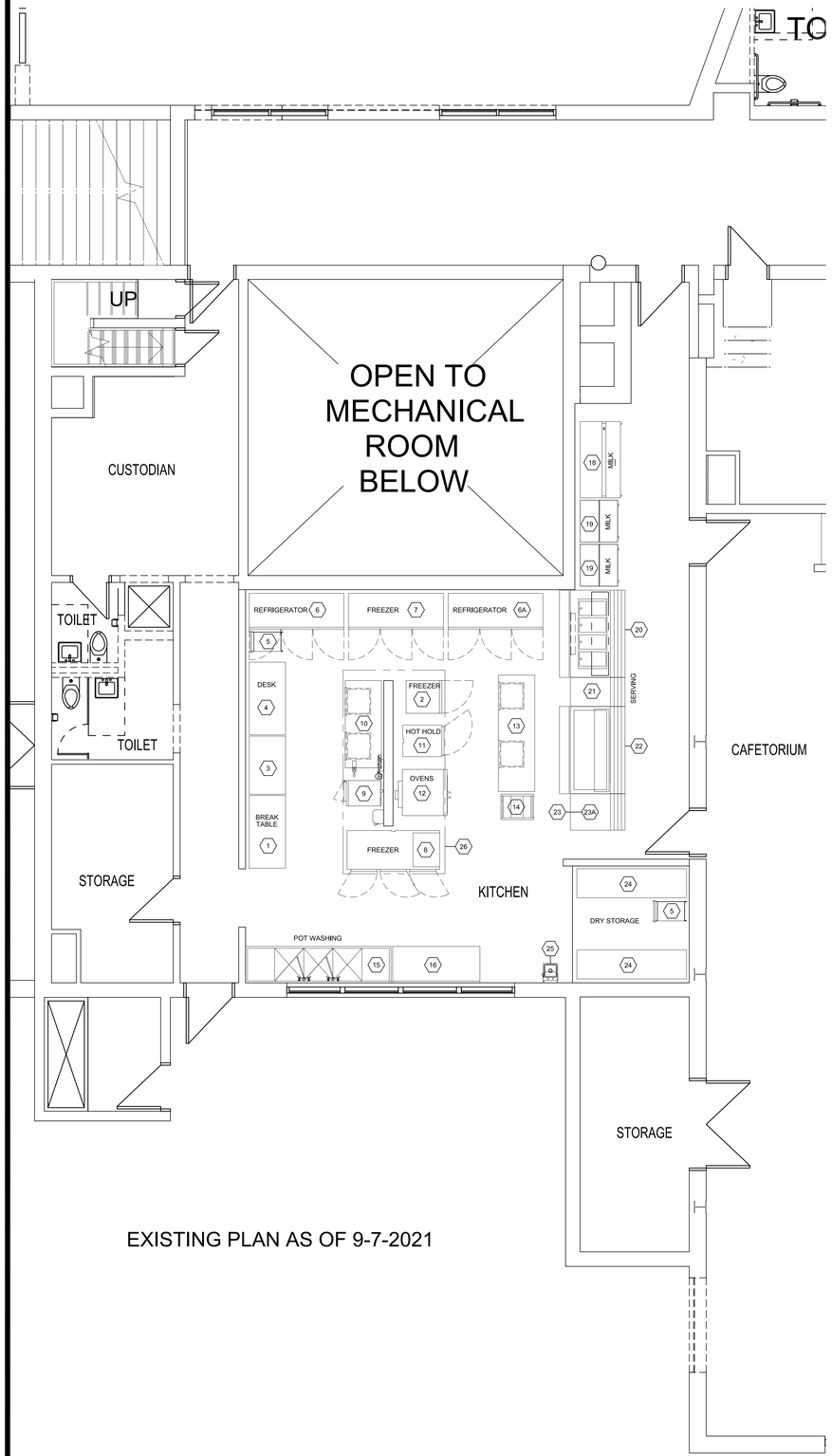


3 UPPER LEVEL CODE PLAN
1/16" = 1'-0"



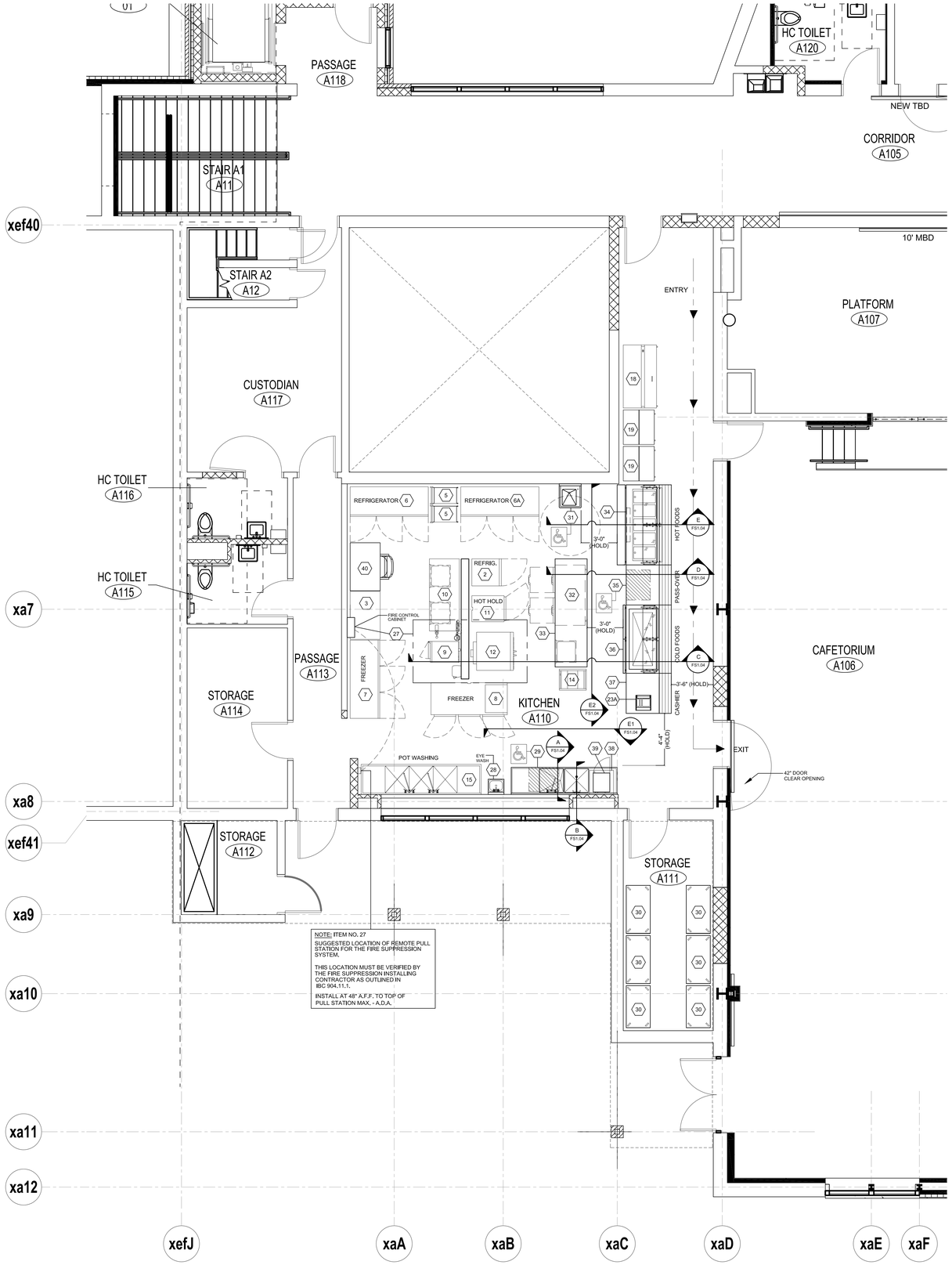
2 LOWER LEVEL CODE PLAN
1/16" = 1'-0"


ART CLASSROOM E110
1005 SF 50SF/P 21P
ACTUAL=25P
STORAGE E112
KILN E111
64 SF 300SF/P 1P
LEARNING CENTER II E102
759 SF 20SF/P 38P
CORRIDOR E107
CORRIDOR E103
CUSTODIAN E114
23 SF 300SF/P 1P
MEETING ROOM E113
196 SF 15SF/P 13P
THIRD GRADE CLASSROOM E106
776 SF 20SF/P 39P
THIRD GRADE CLASSROOM E105
776 SF 20SF/P 39P
CORRIDOR E104
THIRD GRADE CLASSROOM E108
777 SF 20SF/P 39P
THIRD GRADE CLASSROOM E109
777 SF 20SF/P 39P
ZEN F123
84 SF 50SF/P 2P
TEACHER PLANNING F122
266 SF 15SF/P 18P
INTERVENTIONIST F124
175 SF 20SF/P 9P
VESTIBULE F104
BREAKOUT F125
263 SF 20SF/P 14P
BREAKOUT F126
264 SF 20SF/P 14P
LEARNING COMMONS F128
520 SF 20SF/P 26P
FOURTH GRADE CLASSROOM F120
777 SF 20SF/P 39P
FOURTH GRADE CLASSROOM F119
775 SF 20SF/P 39P
FOURTH GRADE CLASSROOM F105
777 SF 20SF/P 39P
FOURTH GRADE CLASSROOM F106
784 SF 20SF/P 40P
CORRIDOR F103
ELECTRICAL F118
91 SF 300SF/P 1P
CUSTODIAN / STORAGE F107
88 SF 300SF/P 1P
RELATED SERVICES F116
131 SF 100SF/P 2P
RELATED SERVICES F115
144 SF 100SF/P 2P
GIRL'S TOILET F117
BOY'S TOILET F108
HC TOILET F112
ELEVATOR 01
PE STORAGE F110
125 SF 100SF/P 2P
ELEV. MECH. ROOM F109
46 SF 300SF/P 1P
PASSAGE A118
CORRIDOR F101
STAIR A2 A12
OPEN FLOOR AREA MINUS 42" AISLES = 2,850 NET SF
2,850 SF / 7 SF/P = 408P
GYMNASIUM = 408P
FROM LOWER LEVEL AREA A = 9P
TOTAL = 417P
2/3 (417P) = 279P CAPACITY AT MAIN EXIT
1/2 (417P) = 209P CAPACITY AVAILABLE AT OTHER EXITS
2 EXITS REQUIRED
2 EXITS PROVIDED
MAIN ENTRANCE DENOTED BY ASTERISK *
GYMNASIUM F113
3P FROM BELOW
CUSTODIAN A113
201 SF 100SF/P 3P
HC TOILET A116
HC TOILET A112
7P FROM BELOW
KITCHEN A110
555 SF 300SF/P 5P
OPEN TO MECHANICAL BELOW
STORAGE A114
126 SF 300SF/P 1P
STORAGE A112
63 SF 300SF/P 1P
STORAGE A111
131 SF 300SF/P 1P
CAFETORIUM A106
OPEN FLOOR AREA MINUS 42" AISLES = CAFETORIUM = 2,134 NET SF
2,134 NSF / 7 SF/P = 305P
CAFETORIUM = 305P
PLATFORM = 90P
STORAGE = 1P
STORAGE = 1P
TOTAL = 397P
2/3 (397P) = 265P CAPACITY AT MAIN EXIT
1/2 (397P) = 199P CAPACITY AVAILABLE AT OTHER EXITS
2 EXITS REQUIRED
2 EXITS PROVIDED
MAIN ENTRANCE NOTED BY ASTERISK*
PLATFORM A107
WORST CASE: PERFORMANCE (PARTITION OPEN)
OPEN FLOOR AREA MINUS 36" AISLES = 572P
572 NSF / 15 SF/P = 38P
ACTUAL 90 PEOPLE
STORAGE A109
61 SF 300SF/P 1P
PTO STORAGE A109
57 SF 300SF/P 1P
VESTIBULE A101
MUSIC CLASSROOM A121
1084 SF 20SF/P 55P
HC TOILET A120
MULTIPURPOSE ROOM A134
198 SF 15SF/P 14P
CORRIDOR A103
ELECTRICAL A135
48 SF 300SF/P 1P
GIRL'S TOILET A137
BOY'S TOILET A136
CORRIDOR A105
LOBBY A102
H.C. TOILET A131
ACTUAL = 5P
O.L.=2P
MDF A128
MAIN OFFICE A122
447 SF 100SF/P 5P
ACTUAL = 5P
PRINCIPAL'S OFFICE A125
176 SF 100SF/P 2P
CONFERENCE A126
321 SF 15SF/P 22P
HEALTH SERVICES A130
251 SF 100SF/P 3P
NURSE A129
132 SF 100SF/P 2P
CORRIDOR A104
HC TOILET A127
STORAGE A126
THERAPY (FUTURE SPED) C103
883 SF 20SF/P 45P
HC TOILET C104
HC TOILET C106
RELATED SERVICES C105
137 SF 20SF/P 3P
OT/PT (FUTURE PRE-K) C107
883 SF 20SF/P 45P
CORRIDOR C102
TESTING C110
121 SF 50SF/P 3P
PRE-K C111
909 SF 20SF/P 47P
HC TOILET C109
HC TOILET C112
PRE-K C108
942 SF 20SF/P 47P
INTERVENTIONIST B106
257 SF 20SF/P 13P
INTERVENTIONIST B105
257 SF 20SF/P 13P
TEACHER PLANNING B104
258 SF 20SF/P 13P
BREAKOUT B103
361 SF 20SF/P 18P
KINDERGARTEN B123
858 NSF 20SF/P 43P
KINDERGARTEN B124
853 NSF 20SF/P 43P
KINDERGARTEN B122
853 NSF 20SF/P 43P
KINDERGARTEN B119
853 NSF 20SF/P 43P
CORRIDOR B101
HC TOILET B118
HC TOILET B122
HC TOILET B124
FIRST GRADE CLASSROOM B108
766 SF 20SF/P 39P
FIRST GRADE CLASSROOM B107
769 SF 20SF/P 39P
FIRST GRADE CLASSROOM B109
769 SF 20SF/P 39P
FIRST GRADE CLASSROOM B110
767 SF 20SF/P 39P
CORRIDOR B102
LEARNING CENTER I B115
576 SF 20SF/P 29P
ZEN B115
75 SF 50SF/P 2P
HC TOILET B114
VESTIBULE B112
STUDENT COMMONS B116
226 NSF 20SF/P 12P
HC TOILET B117
HC TOILET B121
HC TOILET B123
HC TOILET B125
HC TOILET B126
HC TOILET B127
STAIR A1 A01
STAIR A3 A03
ELEVATOR 02
ELEVATOR 03
ELEVATOR 04
ELEVATOR 05
ELEVATOR 06
ELEVATOR 07
ELEVATOR 08
ELEVATOR 09
ELEVATOR 10
ELEVATOR 11
ELEVATOR 12
ELEVATOR 13
ELEVATOR 14
ELEVATOR 15
ELEVATOR 16
ELEVATOR 17
ELEVATOR 18
ELEVATOR 19
ELEVATOR 20
ELEVATOR 21
ELEVATOR



EXISTING PLAN AS OF 9-7-2021

1 EXISTING - FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN
1/4" = 1'-0"



2 RENOVATIONS - FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN
1/4" = 1'-0"

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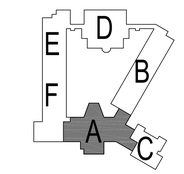
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

SCALE: 1/4" = 1'-0" PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: JMS

FOOD SERVICE EQUIPMENT ARRANGEMENT AREA A

DRAWING NO.:

FS1.01

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GENERAL NOTES & LEGENDS

NO. - Number	KW - Kilowatt	FS - Floor Sink Recommended size approximately 12"x12"x5" deep with removable sediment basket and floor grate. All grates to be cut-out slightly larger than tail piece drain diameter They serve to eliminate splash-over. Provide minimal pitch toward floor sinks.	AFF + Height above finished floor (approximate point of final connection)
QTY. - Quantity	AMPS - Amperage		
HW - Hot Water	GAS - Natural		E.C. - ELECTRICAL CONTRACTOR
CW - Cold Water	BTU - British Thermal Unit		P.C. - PLUMBING CONTRACTOR
W - Waste (solid connection)	CFM - Cubic Feet Per Minute	EO - Electrical Outlet (solid connection)	HVAC - HEATING/VENTILATION CONTRACTOR
IW - Indirect Waste (open)	EXT - Exhaust Air	DR - Duplex Receptacle	K.E.C. - KITCHEN EQUIPMENT CONTRACTOR
HP - Horsepower	SUP - Return (Supply) Air	SR - Single Receptacle	N.I.K.E.C. - Not In Kitchen Equipment Contract

SCHEDULE OF FOOD SERVICE EQUIPMENT

NO.	QTY.	DESCRIPTION	EXISTING TO REMAIN	EXISTING RELOCATED	EXISTING REMOVED	NEW	HW	CW	W	IW	HP	KW	AMPS	VOLTS	GAS CONN.	B.T.U.'S	CFM EXH	CFM SUP	REMARKS
1	1	BREAK TABLE			X														
2	1	REACH-IN REFRIGERATOR	X																SINGLE SECTION
3	1	WORK TABLE	X																
4	1	DESK			X														
5	2	MOBILE UTILITY CARTS		X															
6	1	REACH-IN REFRIGERATOR	X																THREE SECTION
6A	1	REACH-IN REFRIGERATOR		X							3/4		6,9	120-1Ø					THREE SECTION, SR NEMA PLUG# 5-15P
7	1	REACH-IN FREEZER		X							3/4		14,0	120-1Ø					THREE SECTION, SR NEMA PLUG# 5-20P
8	1	REACH-IN FREEZER	X																THREE SECTION
9	1	CONVECTION STEAMER	X																WITH STAND AND FILTER
10	1	WORK TABLE W/ DRAWERS	X																WITH CAN OPENER
11	1	HOT HOLDING CABINET	X																HOBART
12	1	DOUBLE DECK CONVECTION OVEN	X																HOBART
13	1	COOK'S TABLE WITH DRAWERS			X														
14	1	BAKER'S RACK	X																
15	1	3-COMPARTMENT POT SINK	X																MOBILE
16	1	WORK TABLE W/ UNDERSHELF			X														
17	-	SPARE NO.																	
18	1	MILK CABINET (63" LONG)	X																
19	2	MILK CABINETS (34" LONG)	X																
20	1	HOT FOOD COUNTER (4-WELL)			X														
21	1	PASS-OVER COUNTER			X														
22	1	DISPLAY FOOD COUNTER			X														
23	1	CASHIER COUNTER			X														
23A	1	CASH REGISTER/P.O.S. SYSTEM	X										* / 20,0	* / 120-1Ø					(N.I.K.E.C. BY OWNER); DR (DEDICATED CIRCUIT) * EMPTY COMPUTER CONDUIT BY ELECTRICAL CONTRACTOR
24	1/LOT	STORAGE SHELVING			X														
25	1	HAND SINK			X														
26	1	VENTILATOR WITH LIGHTS &			X														
	1	FIRE SUPPRESSION SYSTEM			X														
27	1	VENTILATOR WITH LIGHTS &				X						0,14		120-1Ø			2,660	1,400	EO (REFER TO ROUGH-IN DWGS. FOR ELECTRICAL INTERWIRING)
	1	FIRE SUPPRESSION SYSTEM				X							20,0	120-1Ø					EO (REFER TO ROUGH-IN DWGS. FOR ELECTRICAL INTERWIRING)
28	1	HAND SINK WITH EYE WASH				X	1/2" (TEMPERED)	1/2"	1 1/2"										HW, CW (TEMPERED FOR EYE WASH), MIXING VALVE BY P.C., WASTE
29	1	PREPARATION TABLE W/ SINKS (A.D.A.)				X	2) 1/2"	2) 1/2"		2) 2"									ONE (1) UNIT A.D.A. ACCESSIBLE HWs, CWs, IWs TO FS, DR (CONVENIENCE OUTLET)
30	6	STOREROOM SHELVING SECTIONS				X													MOBILE
31	1	HAND SINK (A.D.A.)				X	1/2"	1/2"	1 1/2"										HW, CW, W
32	1	UNDERCOUNTER REFRIGERATOR				X					1/4		4,0	120-1Ø					MOBILE, DRAWERS, SR
33	1	COOK'S TABLE WITH DRAWER				X													MOBILE
34	1	HOT FOOD COUNTER W/ FOOD PROTECTOR				X				5) 1"			42,0	120/208-1Ø					MOBILE, LIGHTS & HEAT LAMPS, WORKSHELF IW TO FD (MANIFOLDED TO (1) 1" IW BY MFR.), SR
35	1	TRAY PASS-OVER COUNTER (A.D.A.)				X													
36	1	COLD FOOD COUNTER W/ DISPLAY CASE				X				1"	1/4		14,0	120-1Ø					MOBILE, LIGHTS, WORKSHELF, SR
37	1	CASHIER COUNTER				X							20,0	120-1Ø					DR (DEDICATED CIRCUIT)
38	1	MICROWAVE WALL SHELF				X													
39	1	MICROWAVE OVEN				X						1,2	17,7	120-1Ø					SR
40	1	DESK (N.I.K.E.C.)				X													NOT IN KITCHEN CONTRACT: BY OWNER/ARCHITECT

NOTE: ALL ROUGH-IN VALUES SHOWN ABOVE FOR EACH UNIT.

ITEM NO. 27 - VENTILATOR WITH LIGHTS & WET CHEMICAL FIRE SUPPRESSION SYSTEM

SEE DETAILS - SHEET NO. FS1.03

1. Electrical Contractor to provide all interwiring between fire suppression system and roof-top exhaust/supply fan machinery.
2. Electrical Contractor to interwire fire suppression system relay and system alarm bells, and interwire to building alarm system.
3. Wiring of fan controls and fire suppression system to be in accordance with applicable national and/or local codes.
4. Fire Suppression system shall be furnished and set-in-place by the Kitchen Equipment Contractor, ready for final connections by the trades.
5. All Remote Pull Stations shown on plans are suggested location(s) only. Remote Pull Station(s) shall be located and installed by the Kitchen Equipment Contractor's Fire Suppression Installer in accordance with all codes & Local Fire Authorities, and as outlined in IBC 904.11.1.

NOTE: KITCHEN EQUIPMENT CONTRACTOR & HIS FIRE SUPPRESSION INSTALLER TO VERIFY WITH THE FIRE AUTHORITY HAVING JURSIDICATION - THE USE OF DAMPERS.

IN ADDITION, VERIFY THE NEED FOR FIRE SUPPRESSION NOZZLES AND PROVIDE IF REQUIRED FOR PLENUM & DUCT PROTECTION IN ADDITION TO SURFACE PROTECTION.

KITCHEN EQUIPMENT CONTRACTOR NOTE

1. The Kitchen Equipment Vendors are responsible for the cost of electrical upgrades associated with specified substitutions.
2. The Kitchen Equipment Contractor must provide all faucets capable of submersion with back-flow prevention.

ITEM NO. 23A - CASH REGISTER/P.O.S.

ELECTRICAL CONTRACTOR

1. Cash Register/P.O.S. system is not in the Kitchen Equipment Contract.
2. The Electrical Contractor shall furnish empty conduit and pull-boxes for network drops between register locations and Food Service Desk, Item No. 4.

GENERAL CONTRACTOR NOTES:

1. It is the General Contractor's responsibility to protect and store all existing kitchen equipment intended for re-use during renovations.
2. After renovations are completed, General Contractor shall set all existing in to place where shown on plans and make all final utility connections.
3. Refer to MEP plans for all existing equipment utilities and any modifications to thereof.

MISCELLANEOUS

1. Convenience electrical outlets, phone and intercom lines etc. to be located by A/E and furnished by respective trades.
2. Locations of all services shown on Food Service Contract Drawings are approximate only; no allowances are made for traps, valves, etc.
3. All dimensions shown on Food Service Contract Drawings are from finished floors, walls, etc.
4. All plumbing, electrical, and H.V.A.C. services are to be brought to the approximate points of connections shown within walls, chases, and other architectural elements provided.
5. All electric equipment furnished at 3 phase must have balanced legs where applicable. Kitchen Equipment Contractor to verify requirements with Electrical Engineers.

PLUMBING CONTRACTOR

1. Furnish and install remote main shut-off valves for hot water and cold water services.
2. Furnish and install all supply pipes, traps, strainers, valves, pressure regulartors and other fittings required by equipment, or shipped loose with equipment.
3. Extend all indirect wastes to nearest floor receptacle keeping equipment interiors as clear as possible.
4. All piping exposed to view to be chrome plated.

ALL CONTRACTORS NOTES:

1. All floor sinks shown must be set-in-place flush with finished floor. Pitch to floor sinks to be minimal.
2. All floor sinks shown to be new.
3. Do not provide floor sinks in Food Service areas other than those shown on these contract drawings.
4. All utility services including any required drain vents must be brought to equipment connection locations within architectural elements such as chased walls, etc. Exposed main service lines and vents will be unacceptable.

1 EXISTING - FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN

1/4" = 1'-0"

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Additional offices located in Massachusetts and Rhode Island
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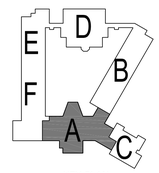
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DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

STATE PROJECT NO. 094-0109 RNV

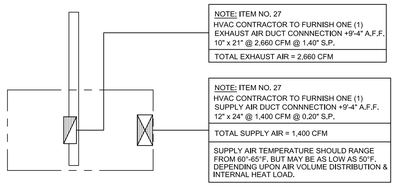
PROJECT NO.: 21011.00 DRAWN BY: JMS

FOOD SERVICE SCHEDULE OF EQUIPMENT AREA A

DRAWING NO.:

FS1.02

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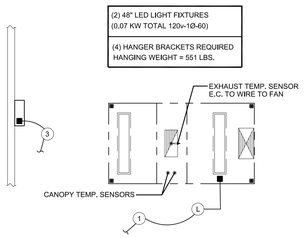
1 FOOD SERVICE EQUIPMENT HVAC PLAN
1/4" = 1'-0"

DETAILED ROUGH-IN FOR ITEM NO. 27:
ONE (1) VENTILATOR WITH LIGHTS & FIRE SYSTEM

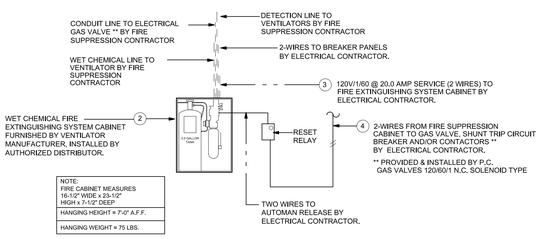
NOT TO SCALE

WIRING NOTES FOR ITEM NO. 27:

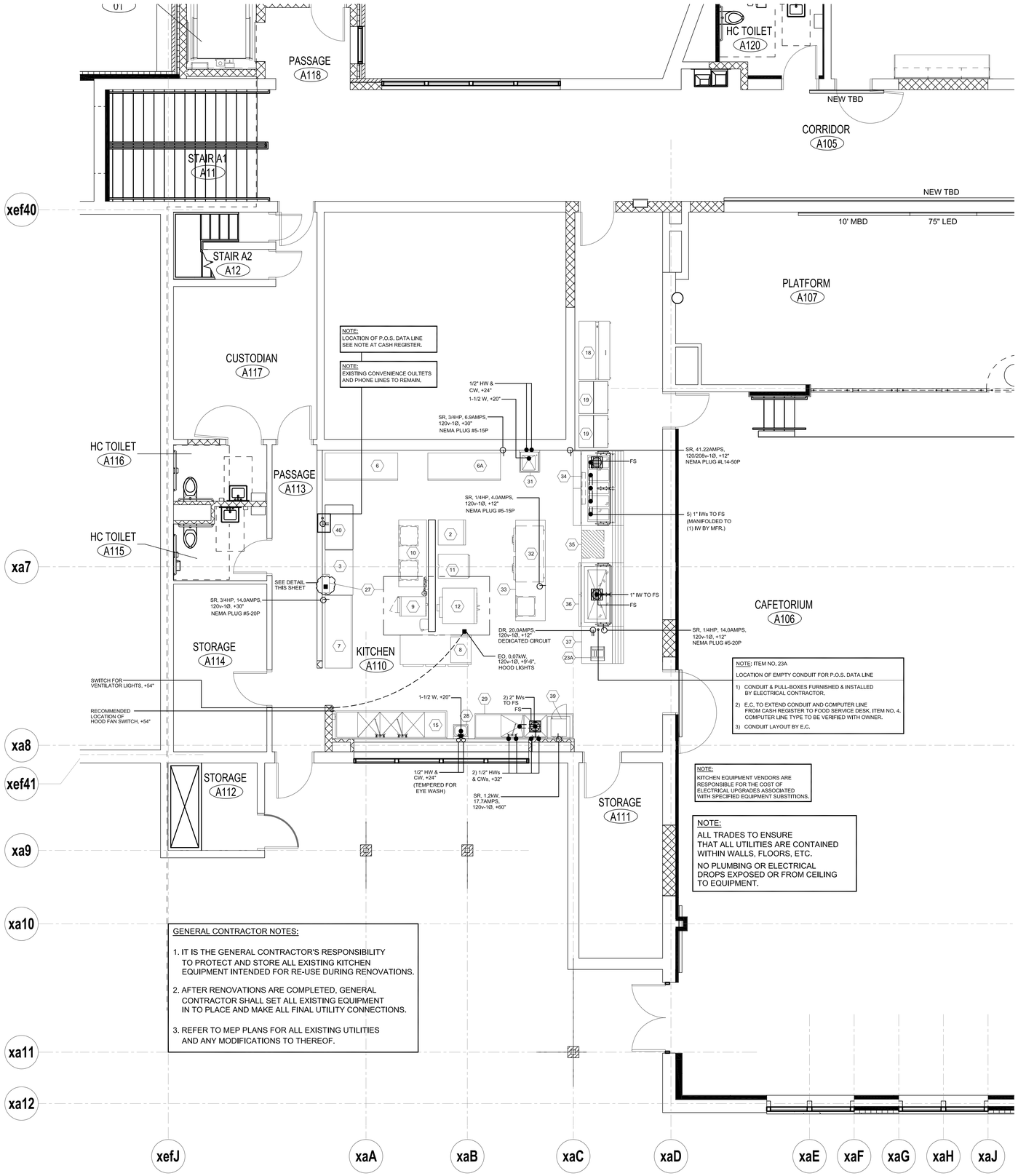
1. 2-WIRES FROM FINAL LIGHTS J-BOX (L) TO LIGHT SWITCH. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
2. WET CHEMICAL FIRE SUPPRESSION SYSTEM CABINET FURNISHED BY VENTILATOR MANUFACTURER, INSTALLED BY AUTHORIZED DISTRIBUTOR.
3. 120V/1/60 20,0AMP SERVICE (2-WIRES) TO FIRE SUPPRESSION SYSTEM CABINET BY ELECTRICAL CONTRACTOR.
4. 2-WIRES FROM FIRE SUPPRESSION SYSTEM CABINET TO GAS VALVE, SHUNT TRIP CIRCUIT BREAKER AND/OR CONTACTORS BY ELECTRICAL CONTRACTOR.



ANSUL CABINET #27



REMOTE PULL LOCATIONS TO BE COORDINATED BY FIRE SUPPRESSION CONTRACTOR AND LOCAL FIRE AUTHORITIES.



NOTE: ITEM NO. 23A
LOCATION OF EMPTY CONDUIT FOR P.O.S. DATA LINE
1) CONDUIT & PULL-BOXES FURNISHED & INSTALLED BY ELECTRICAL CONTRACTOR.
2) E.C. TO EXTEND CONDUIT AND COMPUTER LINE FROM CASH REGISTER TO FOOD SERVICE DESK, ITEM NO. 4, COMPUTER LINE TYPE TO BE VERIFIED WITH OWNER.
3) CONDUIT LAYOUT BY E.C.

NOTE:
KITCHEN EQUIPMENT VENDORS ARE RESPONSIBLE FOR THE COST OF ELECTRICAL UPGRADES ASSOCIATED WITH SPECIFIED EQUIPMENT SUBSTITIONS.

NOTE:
ALL TRADES TO ENSURE THAT ALL UTILITIES ARE CONTAINED WITHIN WALLS, FLOORS, ETC.
NO PLUMBING OR ELECTRICAL DROPS EXPOSED OR FROM CEILING TO EQUIPMENT.

GENERAL CONTRACTOR NOTES:

1. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROTECT AND STORE ALL EXISTING KITCHEN EQUIPMENT INTENDED FOR RE-USE DURING RENOVATIONS.
2. AFTER RENOVATIONS ARE COMPLETED, GENERAL CONTRACTOR SHALL SET ALL EXISTING EQUIPMENT IN TO PLACE AND MAKE ALL FINAL UTILITY CONNECTIONS.
3. REFER TO MEP PLANS FOR ALL EXISTING UTILITIES AND ANY MODIFICATIONS TO THEREOF.

2 RENOVATIONS - FOOD SERVICE EQUIPMENT ROUGH-IN PLAN
1/4" = 1'-0"

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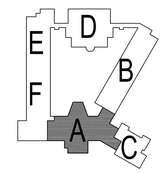
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KEY PLAN

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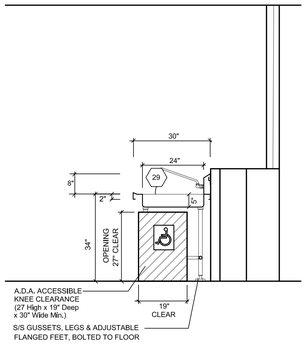
STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: JMS

FOOD SERVICE HVAC & ROUGH-IN PLAN AREA A

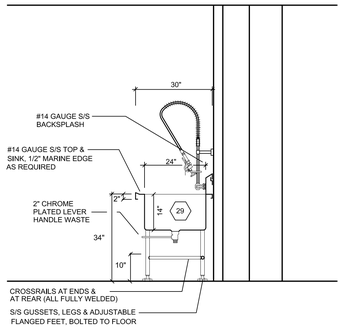
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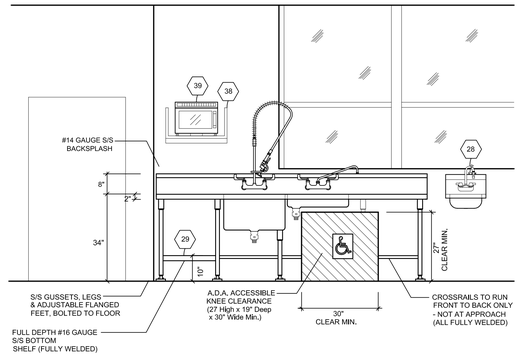
SECTION - A

PREPARATION TABLE WITH SINKS



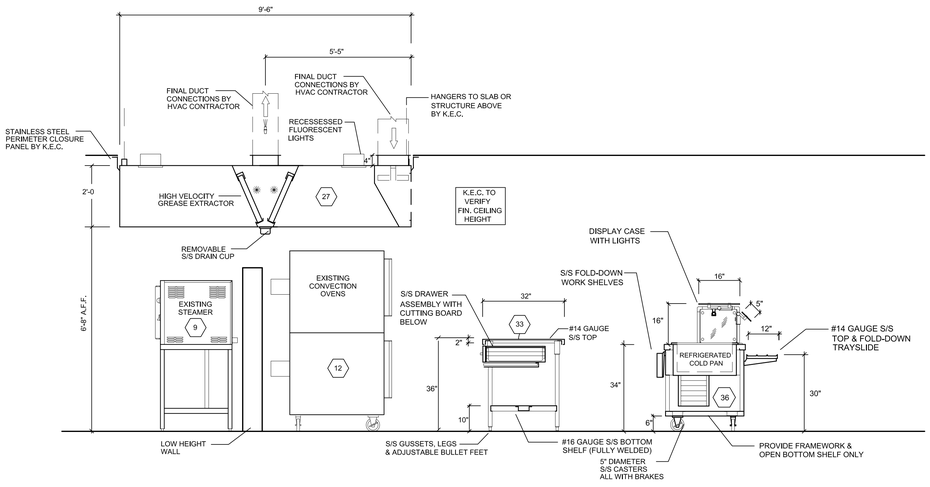
SECTION - B

PREPARATION TABLE WITH SINKS



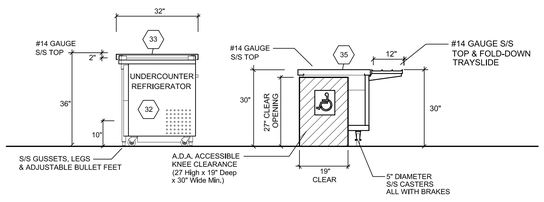
ELEVATION - E1

A.D.A. ACCESSIBLE PREPARATION TABLE



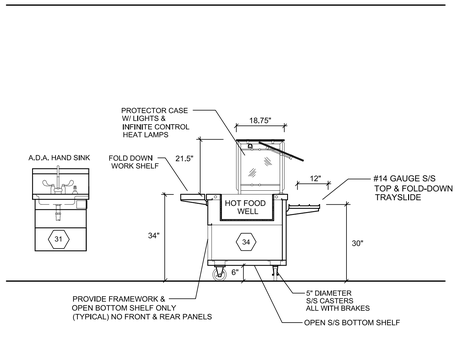
SECTION - C

COOKING BATTERY THROUGH SERVING LINE



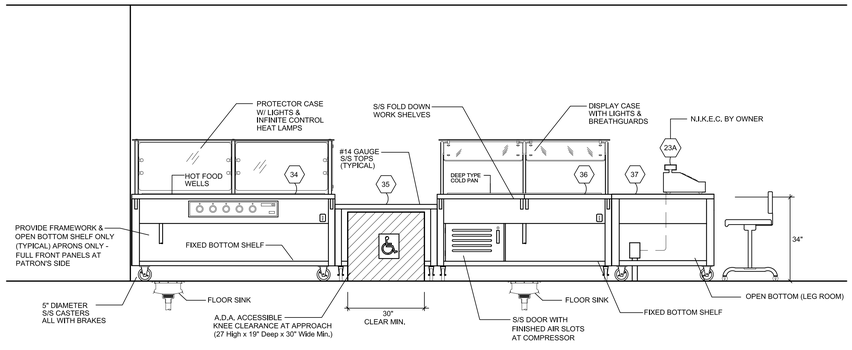
SECTION - D

COOK'S TABLE THROUGH PASS-OVER COUNTER



SECTION - E

HOT FOOD SERVING COUNTER



ELEVATION - E2

SERVING LINE AT OPERATOR'S SIDE

1 EXISTING - FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN

1/4" = 1'-0"

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Schiavone Designs, LLC
FOOD FACILITIES PLANNERS & CONSULTANTS
112 Saddle Rock Road, Holbrook, New York 11741
Phone: (631) 403-4268 Fax: (631) 403-4269
Email: jms@schiavonedesigns.com

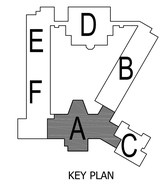
ISSUE DATE

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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



KEY PLAN

SCALE: 1/4" = 1'-0" PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD, NEWINGTON, CT 06111

STATE PROJECT NO. 094-0109 RNV

PROJECT NO.: 21011.00 DRAWN BY: JMS

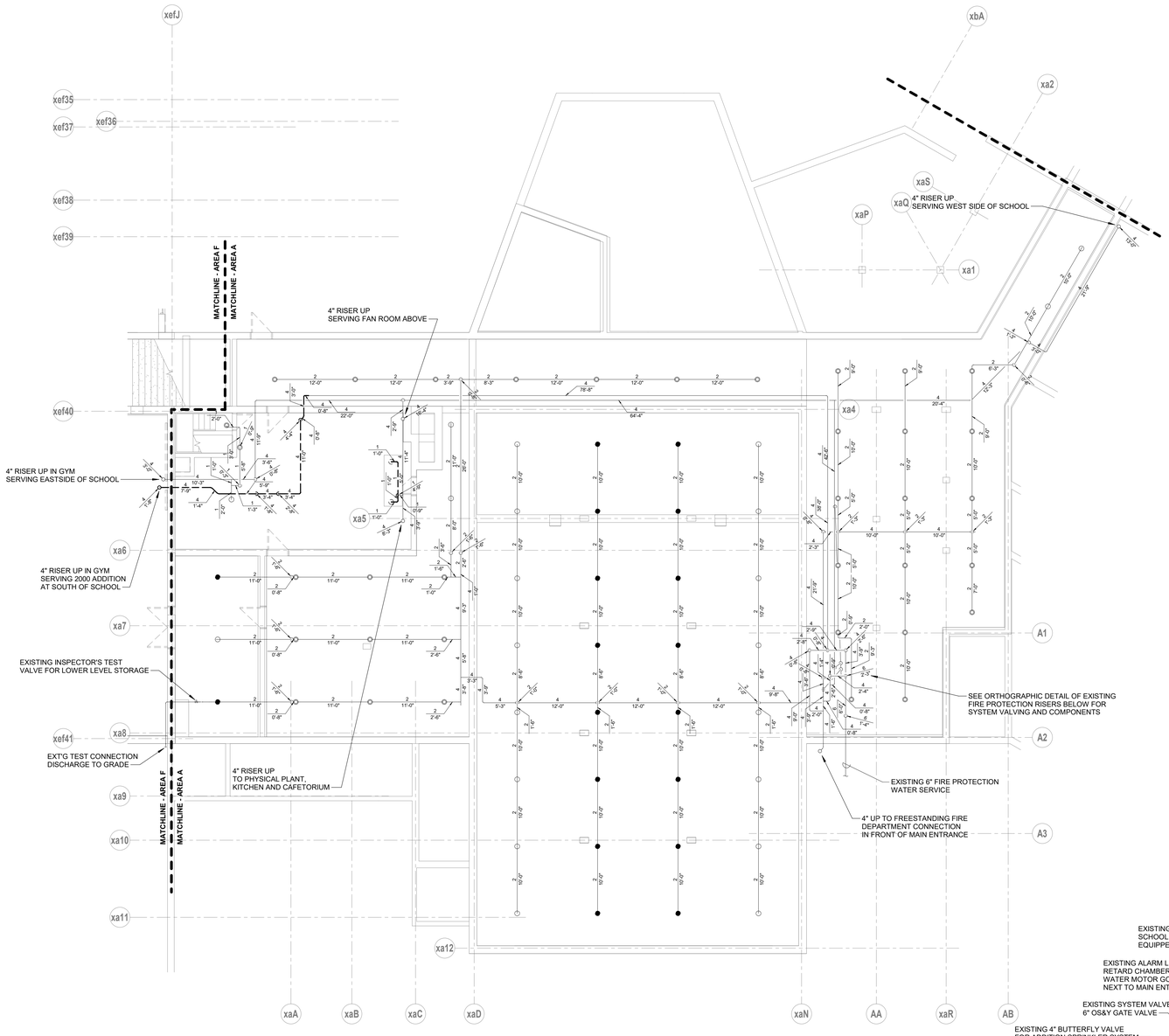
FOOD SERVICE EQUIPMENT DETAILS AREA A

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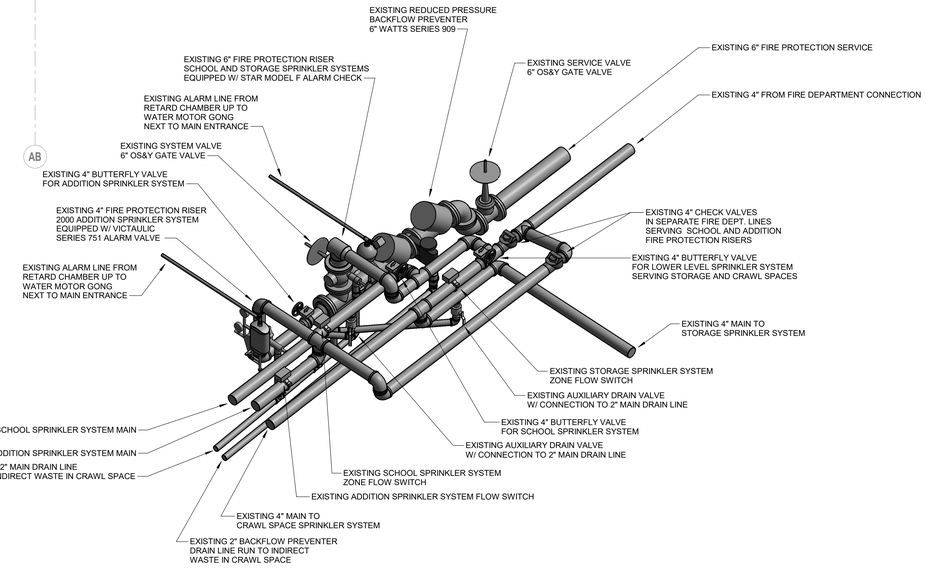
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FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD



1 LOWER LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA A
1/8" = 1'-0"



2 EXISTING FIRE PROTECTION RISERS DETAIL

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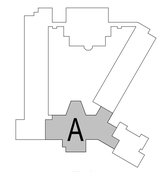
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

LOWER LEVEL FIRE PROTECTION DEMO PLAN - AREA A

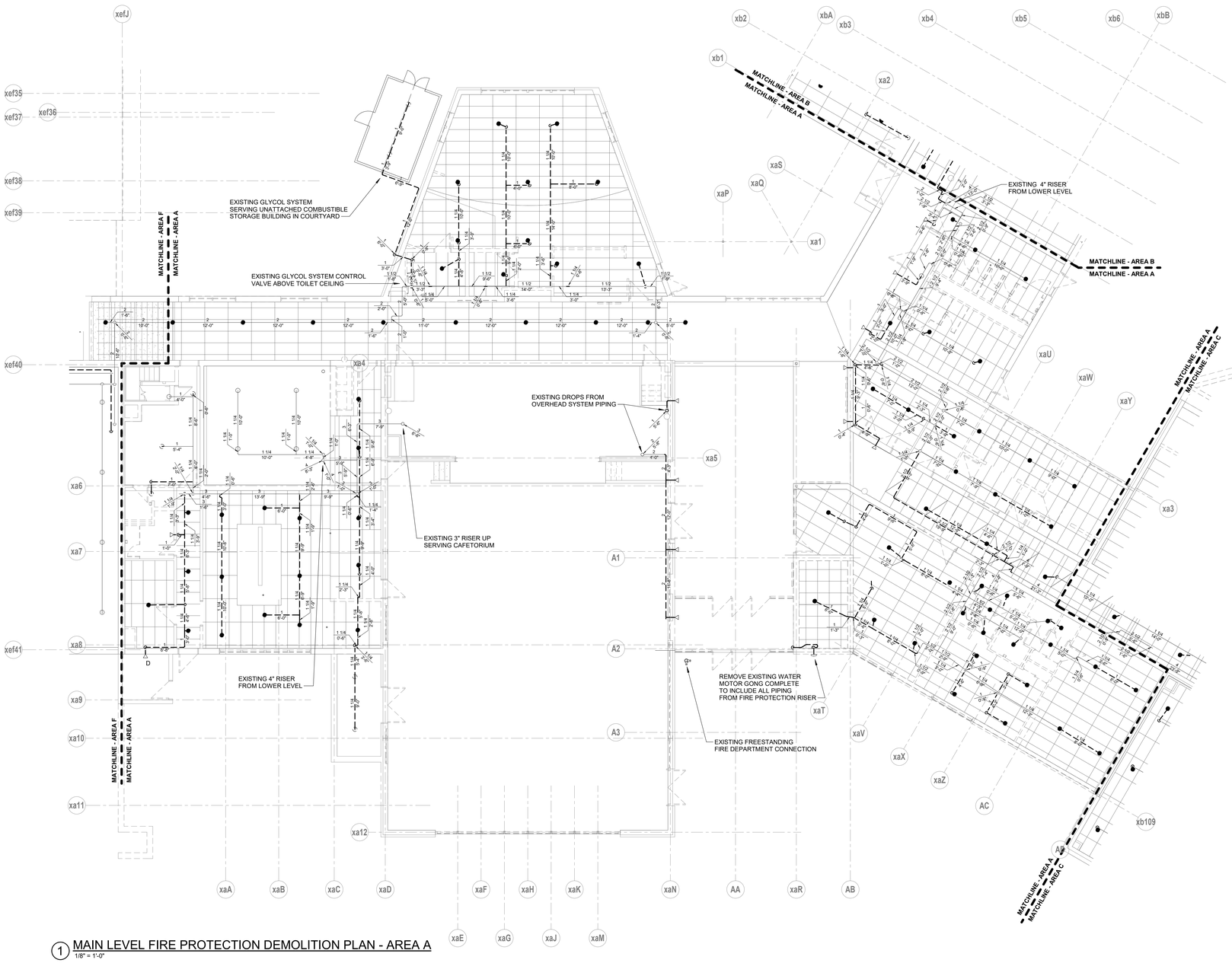
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FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD
◁ D	EXT'G DRY SIDEWALL SPRINKLER HEAD



1 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

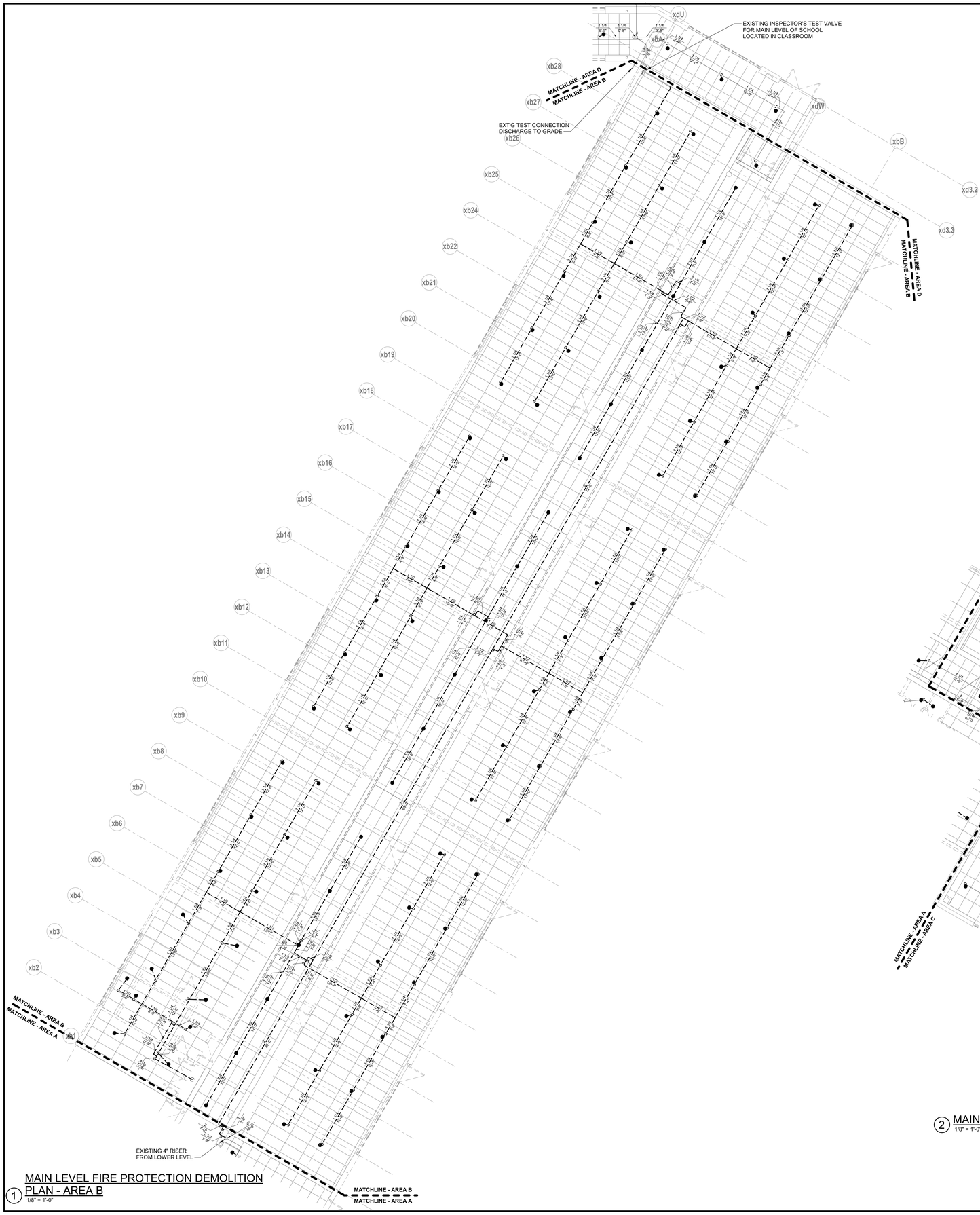
PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION DEMO PLAN - AREA A

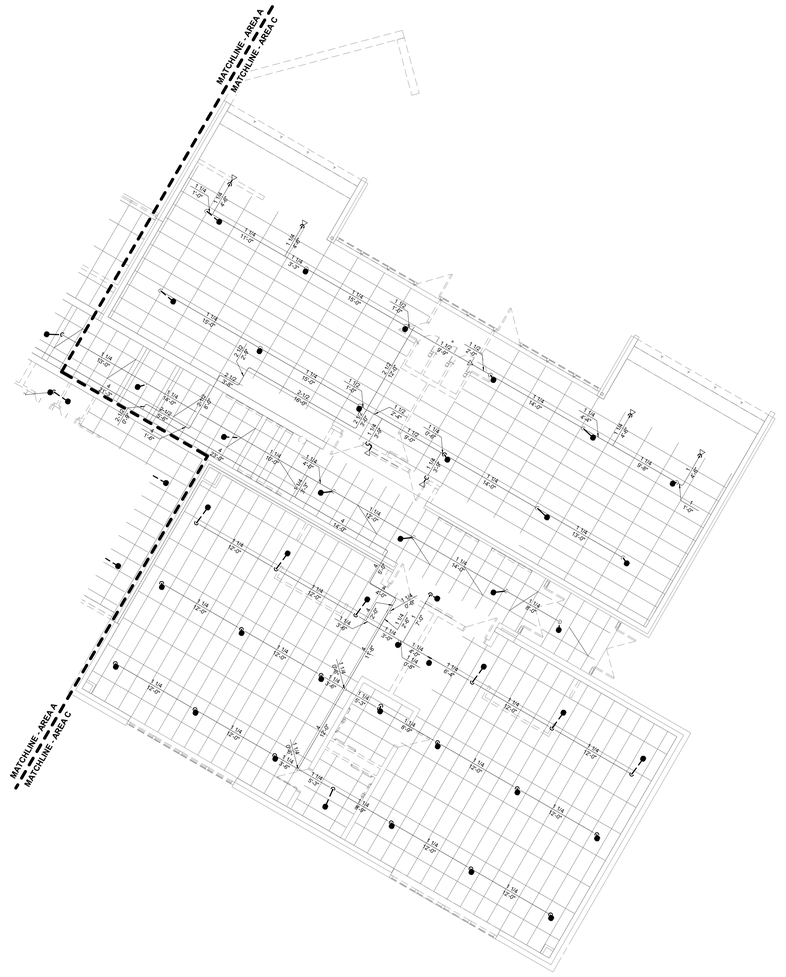
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1 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA B
1/8" = 1'-0"



2 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA C
1/8" = 1'-0"

FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD

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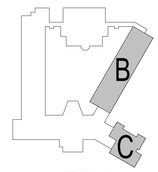
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION DEMO PLANS - AREAS B & C

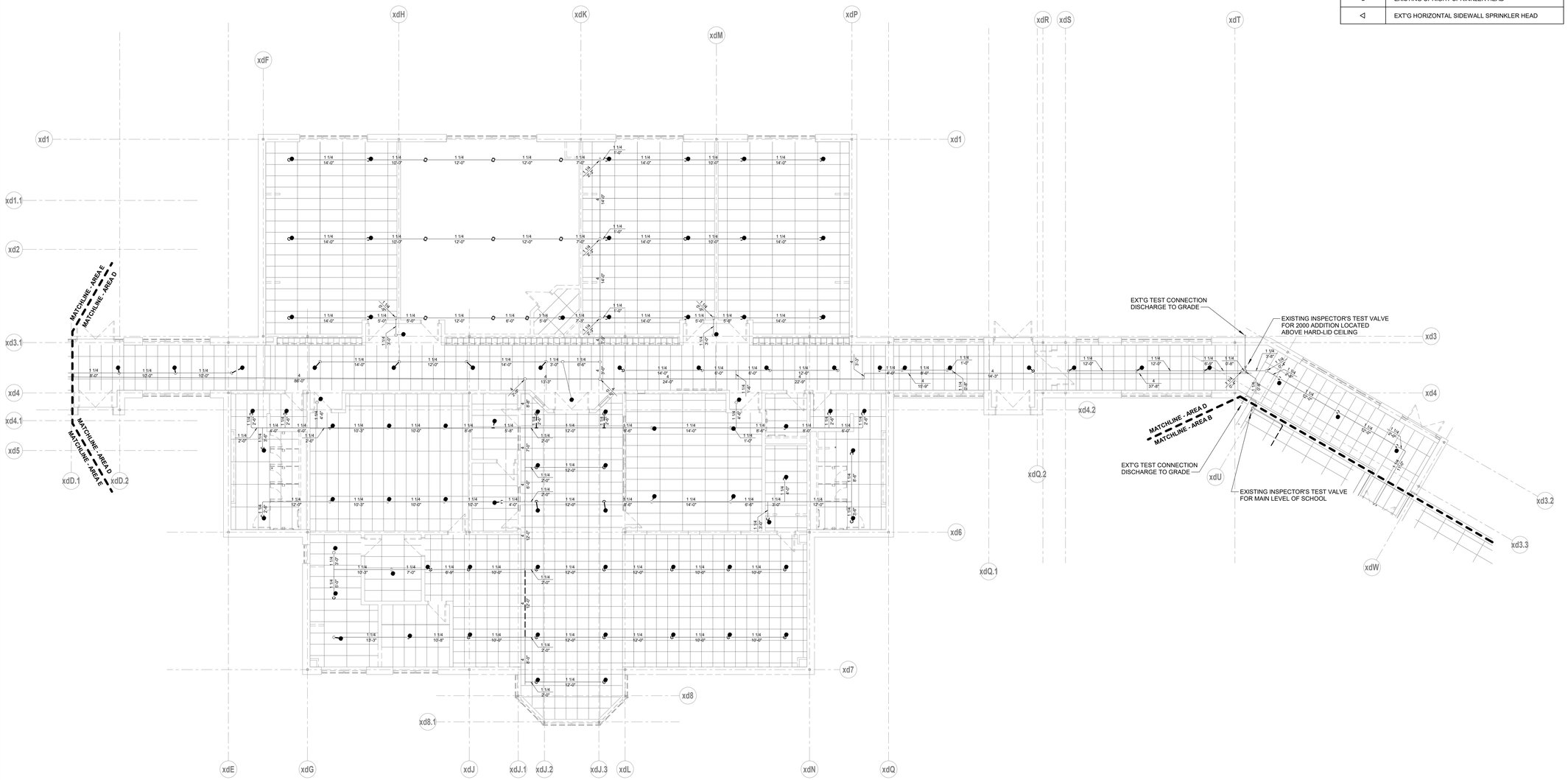
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FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD



1 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA D
1/8" = 1'-0"

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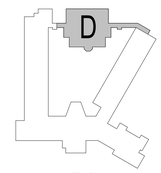
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

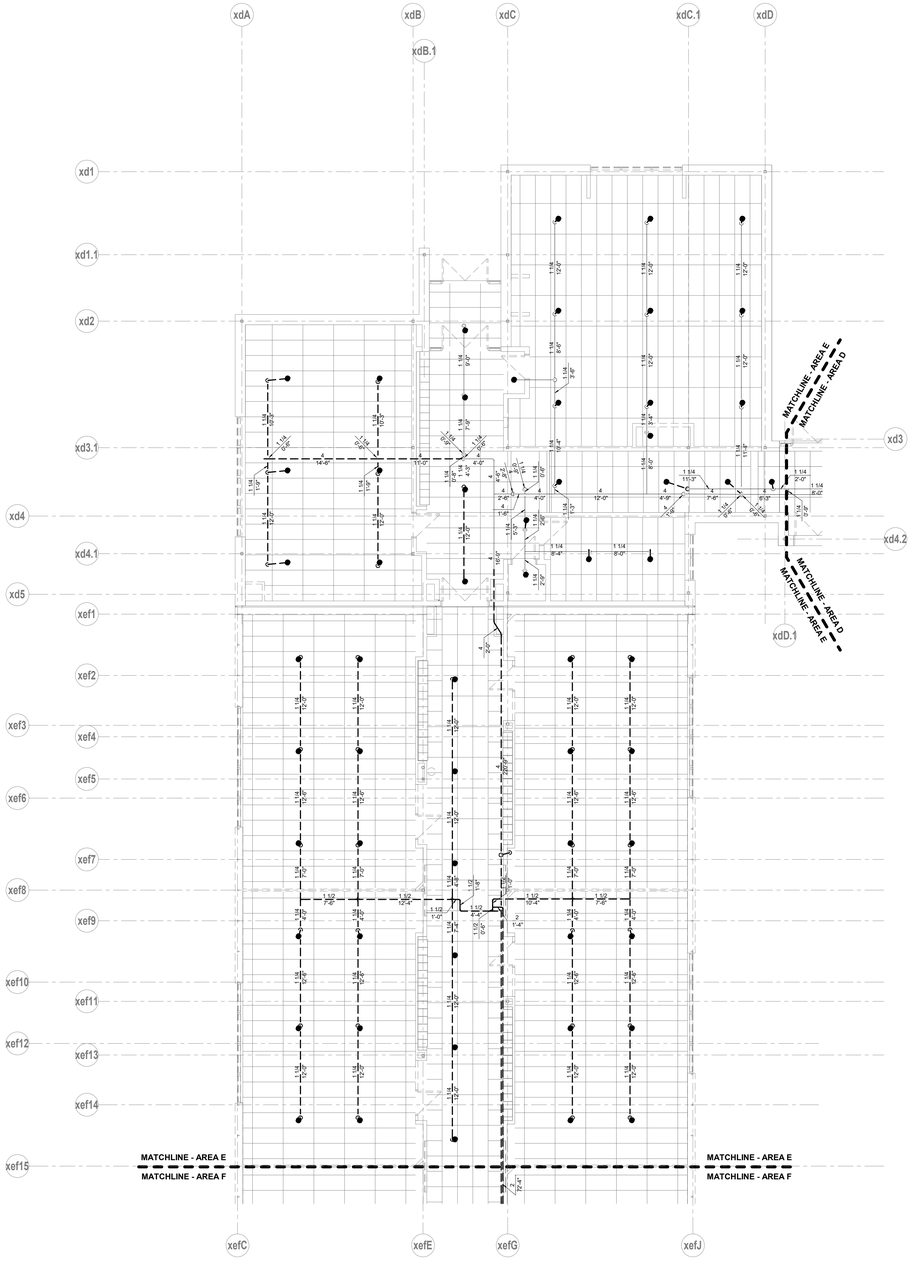
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MAIN LEVEL FIRE PROTECTION DEMO PLAN - AREA D

DRAWING NO.:

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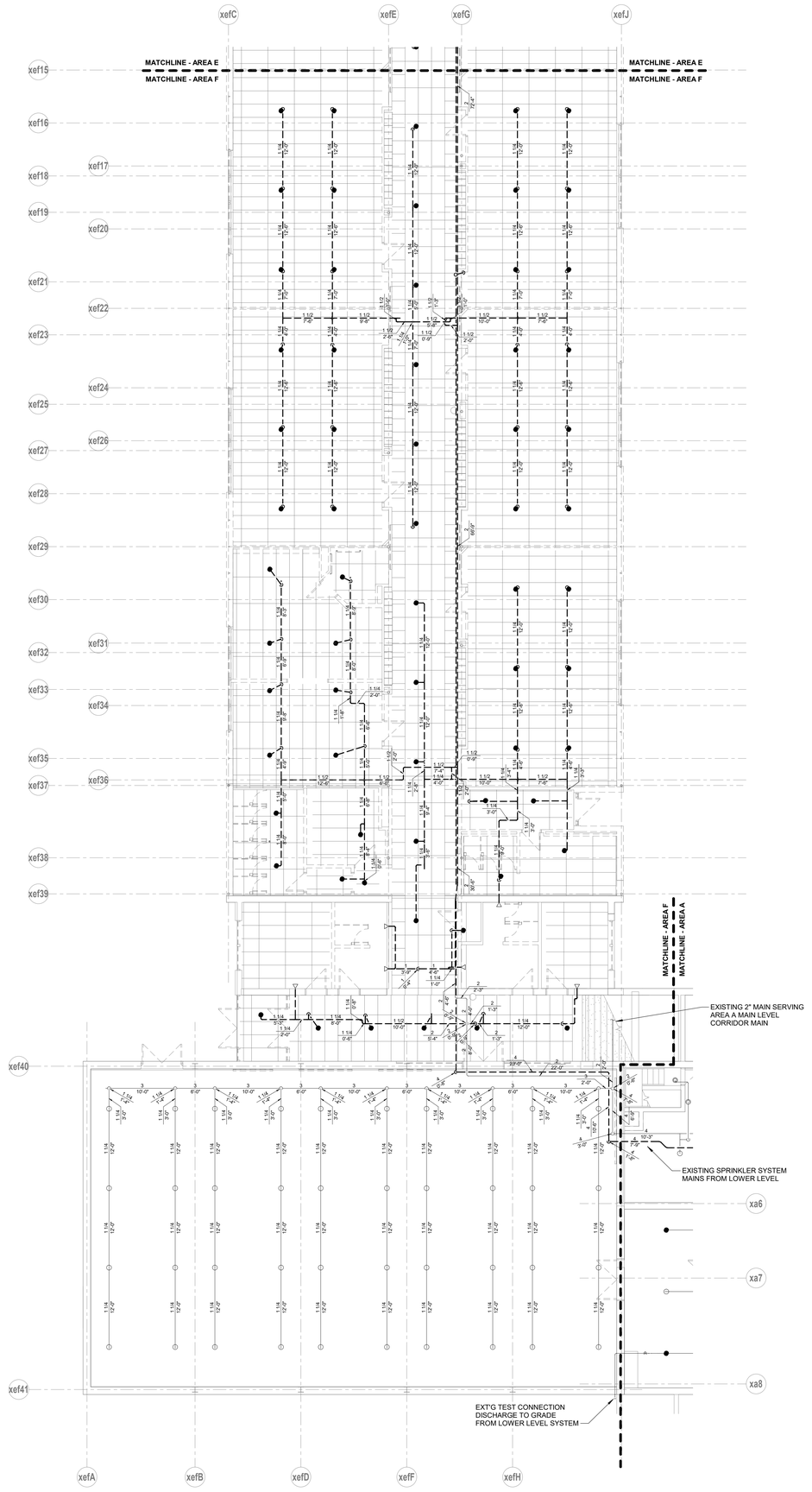
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1 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA E
1/8" = 1'-0"

FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD



2 MAIN LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA F
1/8" = 1'-0"

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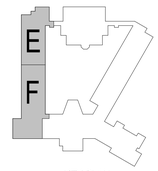
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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION DEMO PLANS - AREAS E & F

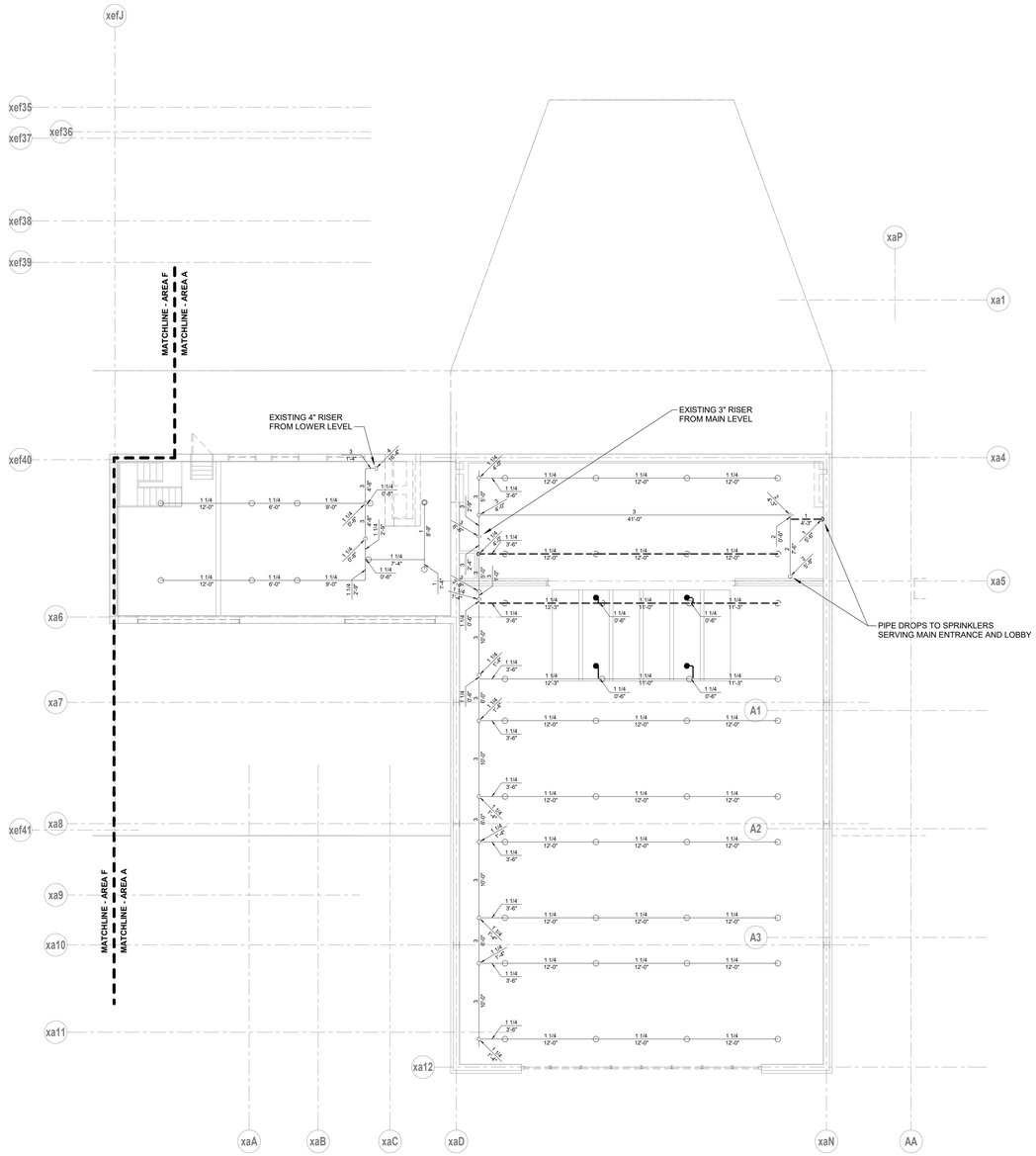
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FIRE PROTECTION LEGEND

1 1/4 6'-9"	EXISTING SPRINKLER SYSTEM PIPING WITH SIZE AND LENGTH
	DEMOLISH FIRE PROTECTION PIPING
●	EXISTING PENDENT SPRINKLER HEAD
○	EXISTING UPRIGHT SPRINKLER HEAD
◁	EXT'G HORIZONTAL SIDEWALL SPRINKLER HEAD



1 UPPER LEVEL FIRE PROTECTION DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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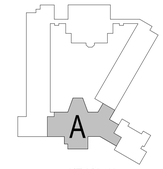
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

UPPER LEVEL FIRE PROTECTION DEMO PLAN - AREA A

DRAWING NO.:

FPD1.06

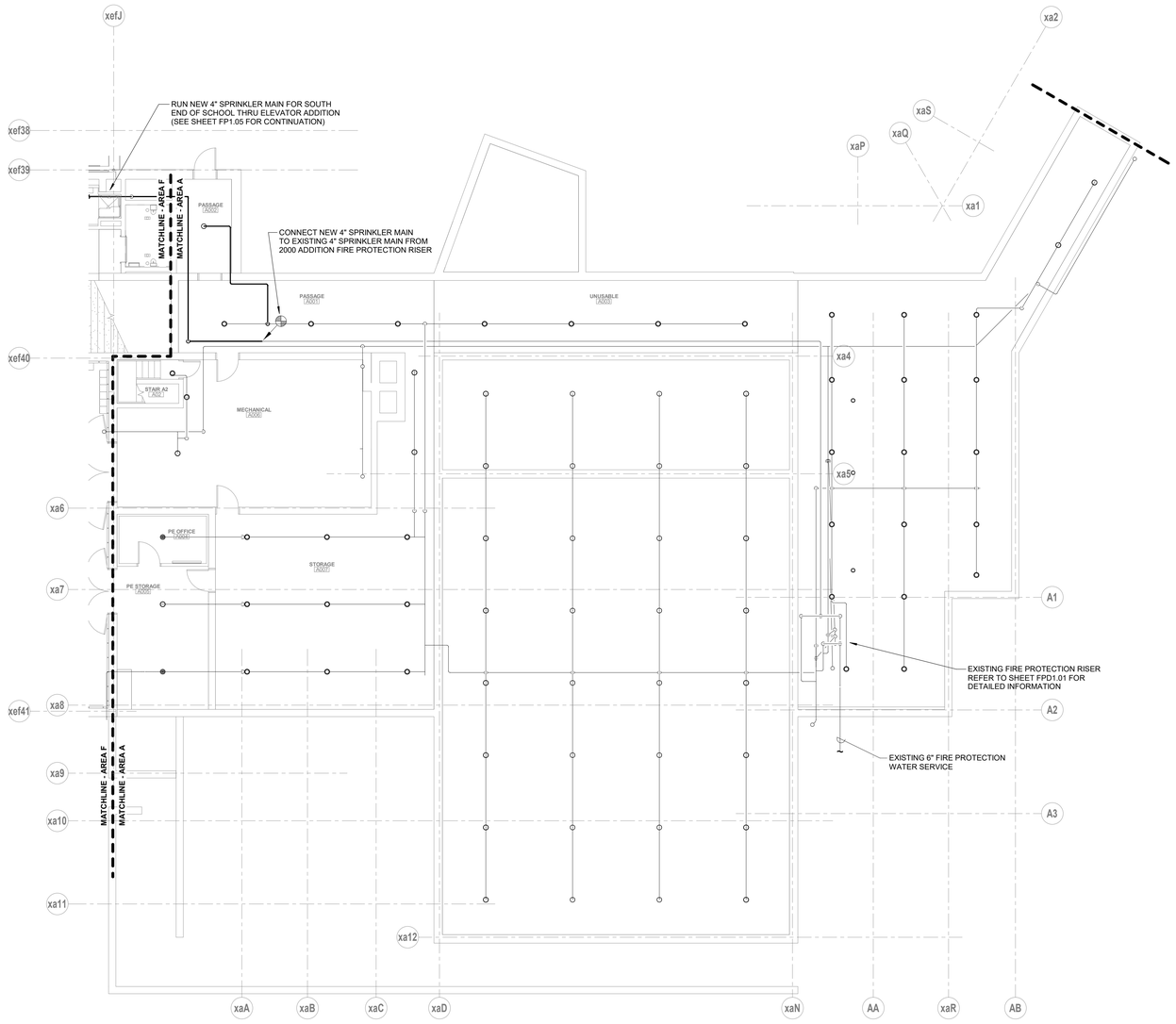
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GENERAL NOTES:

1. REPLACE ALL EXISTING SPRINKLERS THROUGHOUT THE LOWER LEVEL MECHANICAL, STORAGE AND CRAWL SPACES.
2. COORDINATE THE CONNECTION OF THE EXISTING TAMPER AND FLOW SWITCHES FOR THE EXISTING FIRE PROTECTION RISERS AND SERVICE ENTRANCE VALVES TO THE NEW FIRE ALARM PANEL. REFER TO THE EXISTING FIRE PROTECTION RISERS DETAIL ON SHEET FPD1.01.
3. EXTEND BRANCH LINE IN PASSAGE A001 TO FED SPRINKLER IN PASSAGE A002 OF ELEVATOR ADDITION.

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD



1 LOWER LEVEL FIRE PROTECTION PLAN - AREA A
1/8" = 1'-0"

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KEY PLAN

SCALE: 1/8" = 1'-0" (0', 4', 8', 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

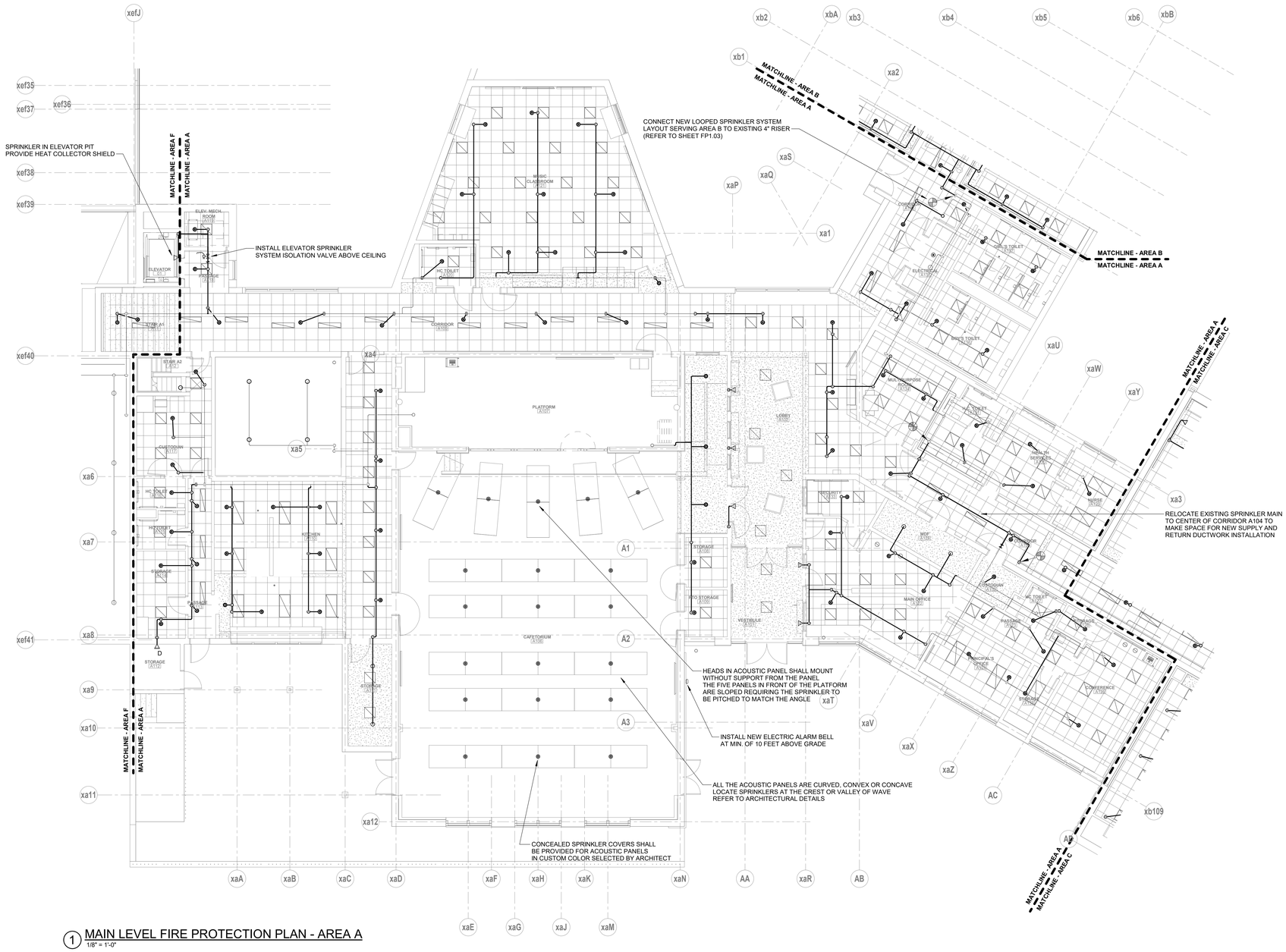
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PROJECT NO.: 18-000 DRAWN BY: GFL

LOWER LEVEL FIRE PROTECTION PLAN - AREA A

DRAWING NO.:
FP1.01

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1 MAIN LEVEL FIRE PROTECTION PLAN - AREA A
1/8" = 1'-0"

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD
$◁_D$	NEW DRY SIDEWALL SPRINKLER HEAD

GENERAL NOTES:

1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWING APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR LOBBY A102
4. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR MUSIC CLASSROOM A121
5. PROVIDE CALCULATION FOR ORDINARY HAZARD SPRINKLER SYSTEM FOR KITCHEN A110.
6. EXTEND BRANCH LINE IN CORRIDOR A105 TO FED SPRINKLERS IN ELEVATOR ADDITION.
7. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE, WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.

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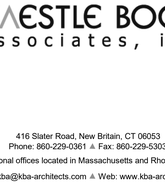
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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION PLAN - AREA A

DRAWING NO.:

FP1.02

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2 MAIN LEVEL FIRE PROTECTION PLAN - AREA B
1/8" = 1'-0"



1 MAIN LEVEL FIRE PROTECTION PLAN - AREA C
1/8" = 1'-0"

GENERAL NOTES:

1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWING APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR REMOTE CLASSROOMS IN AREA B.
4. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE, WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD

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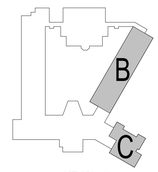
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KEY PLAN

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PROJECT TRUE

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85 RESERVOIR ROAD
NEWINGTON, CT 06111

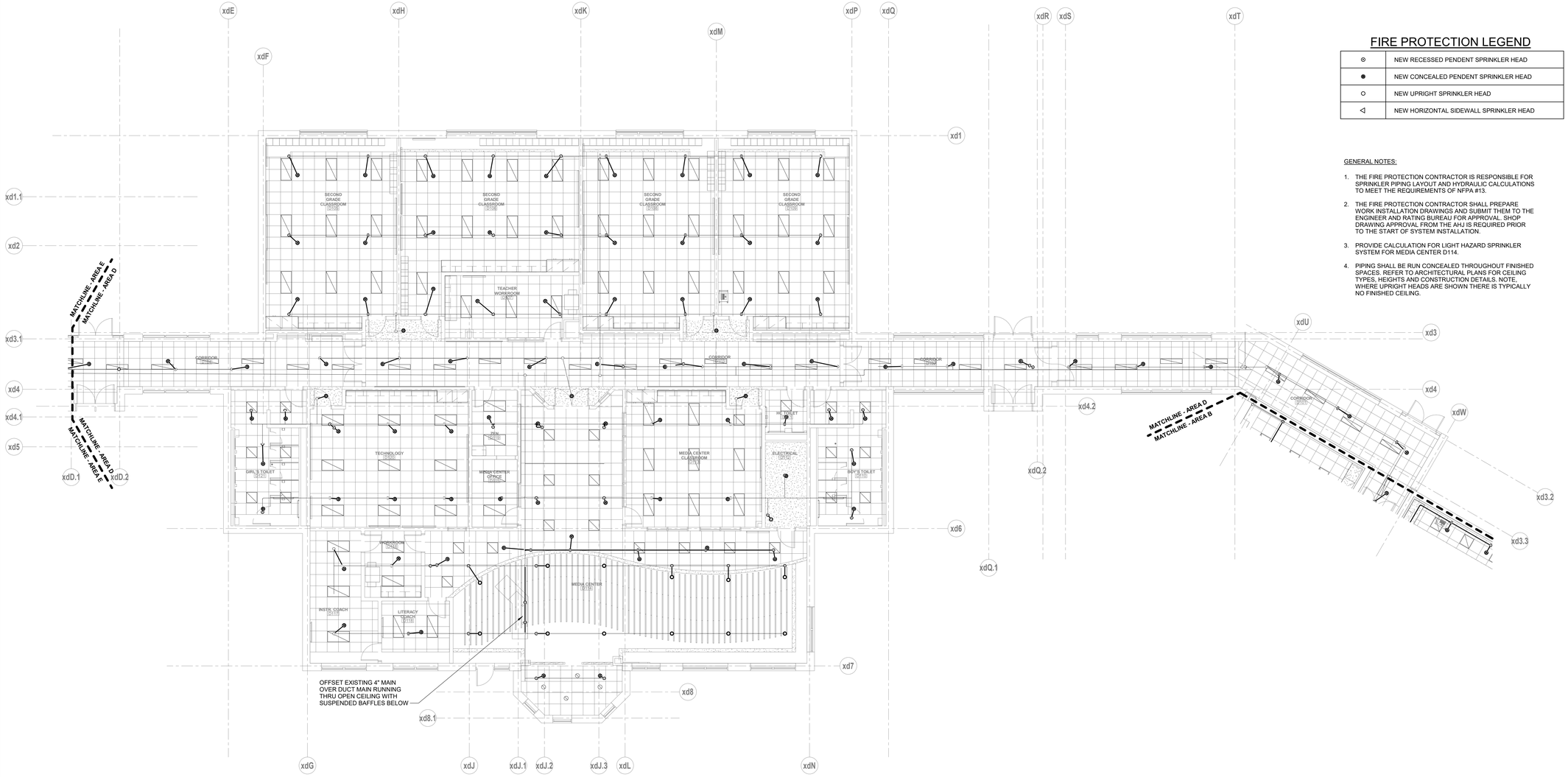
PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION PLANS - AREAS B & C

DRAWING NO.:

FP1.03

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1 MAIN LEVEL FIRE PROTECTION PLAN - AREA D
1/8" = 1'-0"

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD

GENERAL NOTES:

1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWING APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR MEDIA CENTER D114.
4. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE, WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.

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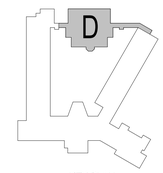
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

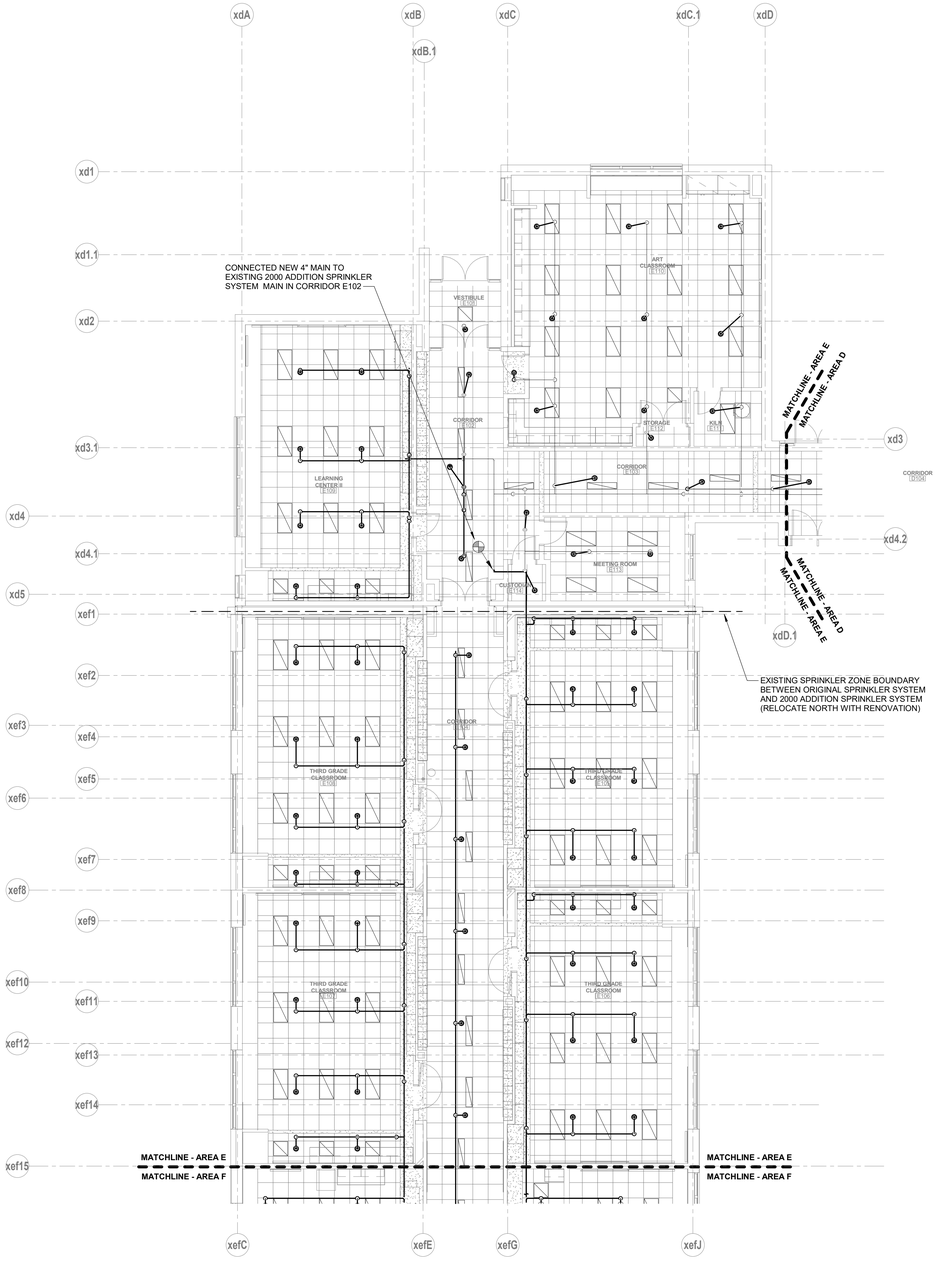
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MAIN LEVEL FIRE PROTECTION PLAN - AREA D

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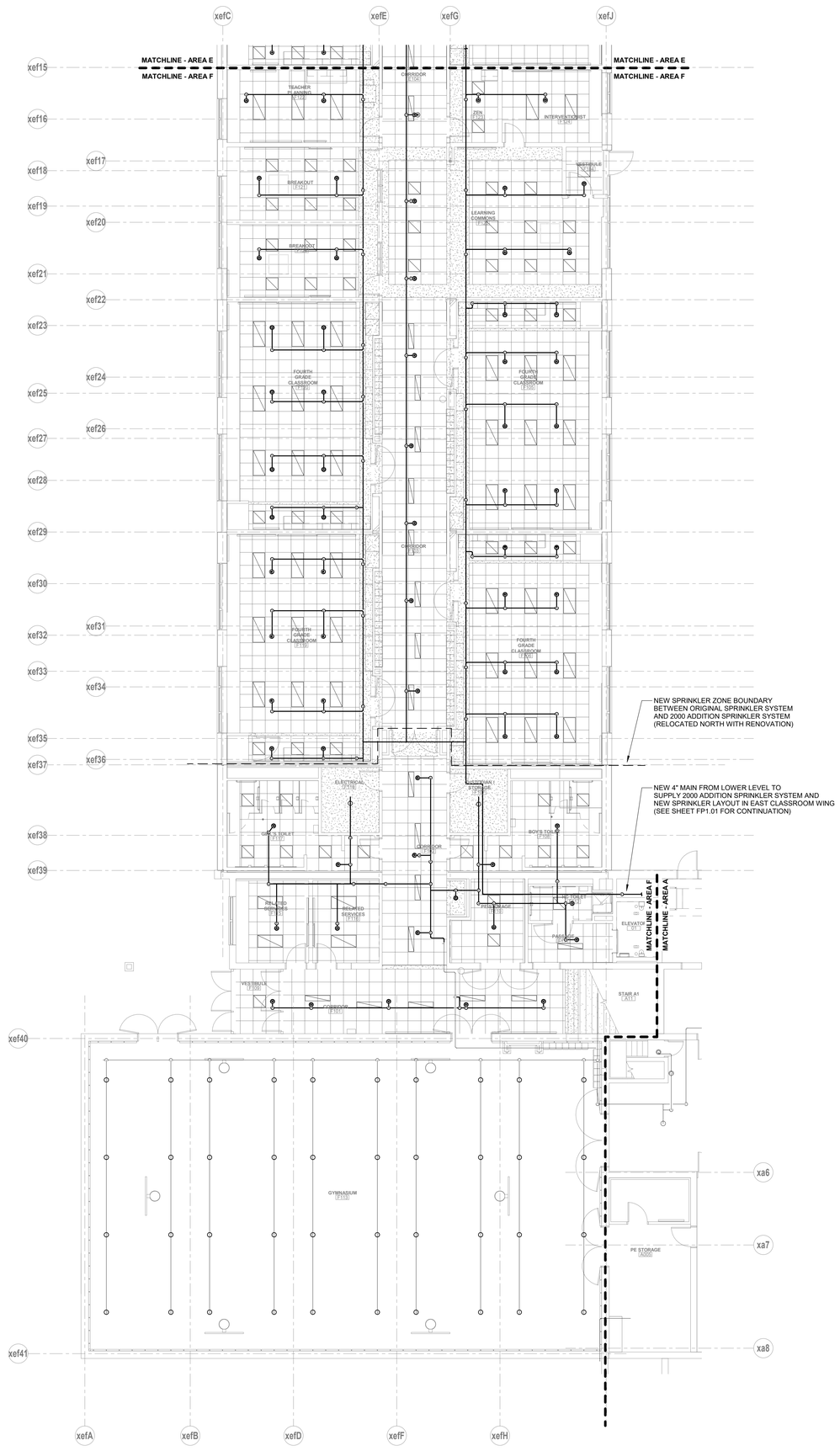
1 MAIN LEVEL FIRE PROTECTION PLAN - AREA E
1/8" = 1'-0"

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD

GENERAL NOTES:

1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWING APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATIONS FOR LIGHT HAZARD SPRINKLER SYSTEM FOR REMOTE CLASSROOMS IN AREA E.
4. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE, WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.



2 MAIN LEVEL FIRE PROTECTION PLAN - AREA F
1/8" = 1'-0"

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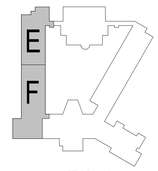
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: GFL

MAIN LEVEL FIRE PROTECTION PLANS - AREA E & F

DRAWING NO.:
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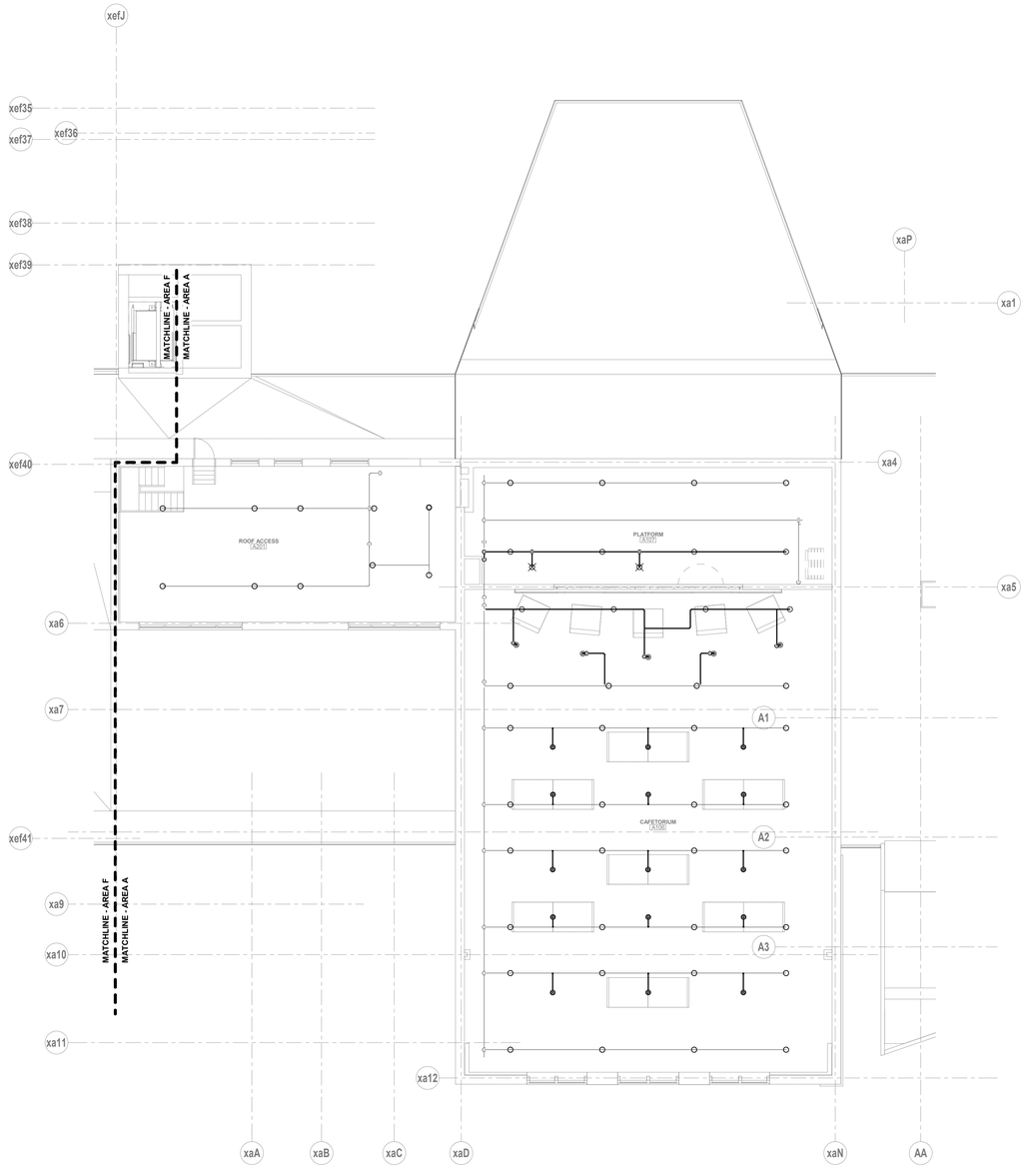
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GENERAL NOTES:

1. REPLACE ALL EXISTING SPRINKLER THROUGHOUT THE UPPER LEVEL, TO INCLUDE CAFETORIUM A106, PLATFORM A107 AND STORAGE A201 (FORMER FAN ROOM).
2. RELOCATE OR REPLACE EXISTING BRANCH LINES IN THE CAFETORIUM AND PLATFORM AS REQUIRE FOR THE NEW PACKAGED ROOF TOP EQUIPMENT SERVING THE AREA.
3. ADD DROPS TO THE EXISTING CAFETORIUM BRANCH PIPING FOR SPRINKLERS IN THE ACOUSTIC SUSPENDED PANELS.

FIRE PROTECTION LEGEND

⊙	NEW RECESSED PENDENT SPRINKLER HEAD
●	NEW CONCEALED PENDENT SPRINKLER HEAD
○	NEW UPRIGHT SPRINKLER HEAD
◁	NEW HORIZONTAL SIDEWALL SPRINKLER HEAD
⊠	UPRIGHT SPRINKLER BELOW DUCTWORK W/ GUARD



1 UPPER LEVEL FIRE PROTECTION PLAN - AREA A
1/8" = 1'-0"

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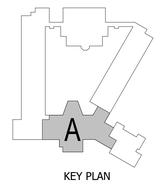
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PROJECT NO.: 18-000 DRAWN BY: GFL

UPPER LEVEL FIRE PROTECTION PLAN - AREA A

DRAWING NO.:
FP1.06

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ABBREVIATIONS

A	GENERAL SERVICE COMPRESSED AIR
A/AMP	AMPERE
AC	AIR COMPRESSOR
ACU	AIR CONDITIONING UNIT(S)
AD	ACCESS DOORS
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AMB	AMBIENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
AS	AIR SEPARATOR
AV	ACID VENT (CHEMICAL)
AVTR	ACID VENT THRU ROOF
AW	ACID WASTE
BFW	BOILER FEED WATER
BHP	BRAKE HORSEPOWER
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS/HOUR
C	CONNDESATE
C/B	CIRCUIT BREAKER
CER/CEG	CEILING EXHAUST REG./GRILLE
CFM	CUBIC FEET PER MINUTE
CFP	CHEMICAL FEED PUMPS
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CLG	CEILING
CLPS	CLEAN LOW PRESSURE STEAM
CMPS	CLEAN MEDIUM PRESSURE STEAM
CMV	CEILING MOUNTED VENTILATOR
CO	CLEANOUT
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
CP	CONDENSATE PUMP
CRU	COMPUTER ROOM UNIT
CT	COOLING TOWER
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CV	COEFFICIENT, VALVE FLOW
CW	COLD WATER
D	DEPTH
dB	DECIBEL
DC	DIRECT CURRENT
DCV	DOUBLE CHECK VALVE
DE	DEIONIZED PROCESS WATER
DEG or °	DEGREE
DI	DISTILLED WATER
DIA	DIAMETER
DN	DOWN
DWBP	DOMESTIC WATER BOOSTER PUMP
DWG	DRAWING
EF	EXHAUST FAN
EFF	EFFICIENCY
EHC	ELECTRICAL HEATING CABLES
ELEC	ELECTRICAL
ELEV	ELEVATOR
ETP	ELECTRIC TRAP PRIMER
EUH	ELECTRIC UNIT HEATER
EVAP	EVAPORATOR
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXH	EXHAUST
EXP	EXPANSION
F	FAHRENHEIT
FA	FIRE ALARM
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FHC	FIRE HOSE CABINET
FM	FLOW METER
FP	FIRE PUMP
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FOOR OR FEET
FVC	FIRE VALVE CABINET
G	GAS
GA	GAUGE
GAL	GALLONS
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRU	GREASE RECOVERY UNIT
GW	GREASE WASTE
H	HEIGHT
HD	HEAD
HP	HORSEPOWER
HPG	HIGH PRESSURE GAS
HPS	HIGH PRESSURE STEAM
HR	HOUR(S)
HT	HEAT
HTR	HEATER
HUM	HUMIDIFIER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER
HWR	HOT WATER RETURN

ABBREVIATIONS

HWRP	HOT WATER RETURN PUMP
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGE
ID	INSIDE DIAMETER
IEF	IN-LINE EXHAUST FAN
IN	INCHES
IN WG	INCHES OF WATER, GAUGE (PRESSURE)
IW	INDIRECT WASTE
JP	JOCKEY PUMP
KEF	KITCHEN EXHAUST FAN
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KITCHEN WATER HEATER
L	LENGTH
LA	LABORATORY COMPRESSED AIR
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
LF	LINEAR FEET
LG	LABORATORY GAS
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LV	LABORATORY VACUUM
MA	MEDICAL COMPRESSED AIR
MAGP	MASTER ALARM GAS PANEL
MAX	MAXIMUM
MBH	BTU PER HOUR (THOUSAND)
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MPS	MEDIUM PRESSURE STEAM
MUAU	MAKE UP AIR UNIT
MV	MEDICAL VACUUM
N2	NITROGEN
N2O	NITROUS OXIDE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	OXYGEN
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW RAIN LEADER
P	POLE
PH / Ø	PHASE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RD	ROOF DRAIN
REF	ROOF EXHAUST FAN
RM	ROOM
RO	REVERSE OSMOSIS WATER
RPD/RPZ	REDUCED PRESSURE DEVICE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
RV	RADON VENT
RL	RAIN LEADER
S	SOIL
SAC	SHOP AIR COMPRESSOR
SCP	STEAM CONDENSATE PUMP
SEP	SEWAGE EJECTOR PUMP
SP	STATIC PRESSURE
SP	SUMP PUMP
SPEC	SPECIFICATION
SQ	SQUARE
SS	SOIL/STACK
ST	STORM
STD	STANDARD
SWH	STEAM WATER HEATER
TAG	IDENTIFICATION OF EQUIPMENT
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
TW	TEMPERED WATER
TWR	TEMPERED WATER RETURN
TYP	TYPICAL
UH	UNIT HEATER
UR	URINAL
V	VENT
VAC	VACUUM
VEL	VELOCITY
VFC	VARIABLE FREQUENCY CONTROLLER
VIF	VERIFY IN FIELD
VOL	VOLUME
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WG	WIREGUARD
WH	WALL HYDRANT (HOSE BIBB)
WHA	WATER HAMMER ARRESTER
WI	WIDTH
WP	WEATHERPROOF
WTG	WALL TRANSFER GRILLE
WV	WASTE AND VENT COMBINATION

PLUMBING SYMBOLS

- COLD WATER
- HOT WATER
- HOT WATER RECIRCULATING
- VENT
- SOIL OR WASTE PIPE
- RADON VENT
- COMBINATION WASTE & VENT
- GREASE WASTE
- INDIRECT WASTE
- OVERFLOW RAIN LEADER
- RAIN LEADER
- STORM DRAIN
- CONDENSATE DRAIN
- GAS PIPE
- HEAT TRACED PIPE
- WATER METER ASSEMBLY
- GAS METER ASSEMBLY
- FLOOR DRAIN
- ROOF DRAIN
- TRAP PRIMER
- ELECTRONIC TRAP PRIMER

FITTINGS AND VALVES

- BALL VALVE
- DIRECTION OF FLUID FLOW
- GATE VALVE
- BUTTERFLY VALVE
- CALIBRATED BALANCING VALVE
- GAS COCK
- CHECK VALVE
- PRESSURE REDUCING VALVE
- THERMOSTATIC MIXING VALVE
- SOLENOID VALVE
- DRAIN VALVE WITH HOSE END, CAP & CHAIN OR HOSE BIBB
- WALL HYDRANT
- PIPE DROP WITH VALVE
- TAKEOFF FROM TOP OF MAIN PIPE
- TAKEOFF FROM BOTTOM OF MAIN PIPE
- UNION
- PIPE ELBOW UP OR PIPE TEE UP
- PIPE ELBOW DOWN
- PIPE TEE DOWN
- WALL CLEANOUT OR BLIND FLANGE
- FLOOR CLEANOUT
- "P" TRAP
- STRAINER OR STRAINER WITH BLOW-DOWN VALVE HOSE END, CAP AND CHAIN
- BACKFLOW PREVENTER (2" AND SMALLER)
- BACKFLOW PREVENTER (2 1/2" AND LARGER)
- PUMP
- WATER HAMMER ARRESTOR
- 2-WAY CONTROL VALVE
- 3-WAY CONTROL VALVE
- PIPE CAP OR CAPPED END OF PIPE
- STEEL PENETRATION / PIPE SLEEVE
- PIPE GUIDES
- AIR VENT
- PRESSURE RELIEF SAFETY VALVE
- AQUASTAT
- TEMPERATURE SENSOR WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
- TEMPERATURE GAUGE WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
- THERMOMETER WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
- PRESSURE GAUGE
- FLEXIBLE CONNECTOR

PLUMBING GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED PLUMBING SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TOP DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS, OFFSETS, ETC. AS REQUIRED TO INSTALL PIPING, EQUIPMENT, MAINTAINING PROPER CLEARANCES AND TO AVOID ANY CONFLICTS WITH OTHER TRADES, AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ELECTRICAL ROOMS, DATA ROOMS, ELEVATOR MACHINE ROOM, STAIRWELL OR STAIRWELL WALLS THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW INDIVIDUAL BRANCH PIPING TO EACH PLUMBING FIXTURE; ONLY THE BRANCH PIPING TO GROUPS OF FIXTURES IS INDICATED. EACH AND EVERY FIXTURE SHALL BE PROPERLY PIPED TO WATER, WASTE, AND VENT PIPING SYSTEMS. REFER TO THE PLUMBING SCHEDULES FOR INDIVIDUAL PIPE SIZES TO EACH FIXTURE.
11. PROVIDE PROPER PIPING SYSTEM IDENTIFICATION LABELS, SLOPES FOR DRAIN PIPING, CLEANOUTS, HANGERS, ETC. IN ACCORDANCE WITH THE PLUMBING CODE.
12. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES OR EQUIPMENT, ALL SUCH EQUIPMENT AND EQUIPMENT COLORS AND FINISHES SHALL BE COORDINATED WITH THE ARCHITECT. MOUNTING HEIGHTS SHALL BE APPROVED BY THE ARCHITECT.
13. INSTALL WATER HAMMER ARRESTORS (WHA) AT ALL QUICK CLOSING VALVES (FLUSH VALVES, SOLENOID VALVES, ETC.); SIZE SHALL BE BASED ON FIXTURE UNITS PER PDI STANDARDS AND INSTALLED PER MANUFACTURER'S RECOMMENDATION.
14. ALL PIPING, DRAINS, STRAINERS, FAUCETS, FAUCET AERATORS, FILTERS, ETC. SHALL BE THOROUGHLY CLEANED AND FLUSHED IMMEDIATELY BEFORE PROJECT COMPLETION. PROVIDE CERTIFICATION ON CONTRACTOR'S LETTER HEAD THAT THIS WORK HAS BEEN COMPLETED.
15. DOMESTIC WATER DROPS AND RISERS INSTALLED IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF INSULATION AND THE LOCATION SHALL BE MADE INFILTRATION FREE.
16. BEFORE INSTALLATION, COORDINATE THE WORK WITH OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, FACTORY START UPS AND INSTALLATION OF FIELD DEVICES.
17. PIPE ALL CONDENSATE DRAINS FROM MECHANICAL EQUIPMENT COOLING COILS, BY GRAVITY (INTERIOR AIR HANDLING UNITS, FAN COIL UNITS, AC UNITS, ETC.) TO FLOOR DRAINS, JANITOR'S SINKS OR OTHER APPROVED LOCATION THROUGH AN AIR GAP. EACH CONDENSATE DRAIN SHALL BE TRAPPED AT THE EQUIPMENT DRAIN OUTLET, REFER TO TRAP DETAILS ON DRAWINGS. COORDINATE EXACT LOCATION OF EQUIPMENT WITH THE HVAC CONTRACTOR AND ADJUST AS NECESSARY.
18. INSULATE ALL WASTE ABOVE SLAB RECEIVING CONDENSATE FROM EQUIPMENT INCLUDING "P" TRAPS AND BRANCH WASTE PIPING
19. ALL INDIRECT WASTE DRAINS SHALL BE PIPED TO FLOOR DRAINS, FUNNELS OR FIXED AIR GAP FITTINGS, THROUGH AIR GAP OR TO A SINK DRAIN TAILPIECE.
20. INSTALL TRAP PRIMERS OR TRAP GUARD SEALER FOR FLOOR DRAINS, HUB DRAINS AND FIXED AIR GAP FITTINGS, WHERE TRAP IS SUBJECT TO LOSS OF SEAL BY EVAPORATION, CONNECT TRAP PRIMER TO COLD WATER LINE. PROVIDE ISOLATION VALVES AND EXTEND SLOPED PRIMING LINE TO DRAIN TRAPS.
21. COORDINATE ALL PLUMBING EQUIPMENT REQUIRING POWER, FOR EXACT LOCATION AND POWER REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
22. ALL EXTERIOR EXPOSED GAS PIPING SHALL BE PRIMED AND PAINTED.
23. FLOOR MOUNTED PLUMBING EQUIPMENT SHALL BE INSTALLED ON A 6" CONCRETE HOUSE-KEEPING PAD. COORDINATE SIZE AND FINAL LOCATION OF ALL CONCRETE PADS WITH THE STRUCTURAL ENGINEER. PADS SHALL BE MINIMUM 6" LARGER THAN THE EQUIPMENT IN BOTH HORIZONTAL DIRECTIONS.
24. COORDINATE EXACT LOCATION OF PLUMBING SERVICES ENTERING THE BUILDING WITH THE SITE CONTRACTOR AND UTILITY DRAWINGS PRIOR TO INSTALLATION. COORDINATE ALL FOUNDATION WALL PENETRATIONS AND INVERT ELEVATIONS WITH THE GENERAL CONTRACTOR AND/OR CONSTRUCTION MANAGER BEFORE COMMENCING WORK.
25. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.
26. PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.

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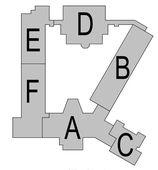
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DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

PLUMBING GENERAL INFORMATION

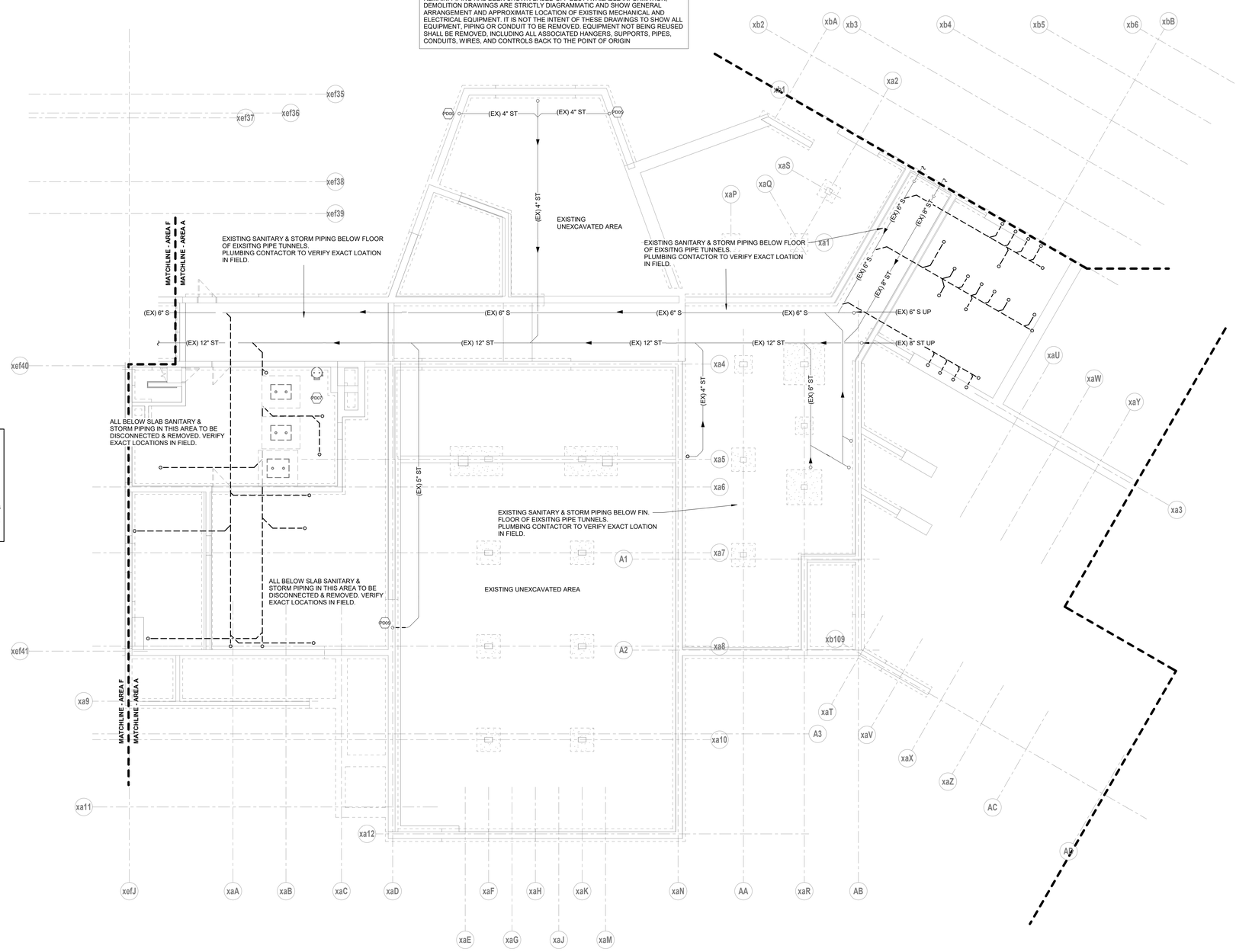
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P0.01

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GENERAL NOTE:

EXISTING SANITARY SEWER AND STORM WATER PIPING MAINS ARE EXISTING TO REMAIN. PIPING HAS BEEN SHOWN BASED OFF BEST AVAILABLE INFORMATION, DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN



1 LOWER LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA A
1/8" = 1'-0"

PLUMBING DEMOLITION KEYNOTES

PD03 EXISTING 4" DOMESTIC COLD WATER SERVICE ENTRANCE TO BE REUSED. ALL INTERIOR DOMESTIC WATER DISTRIBUTION PIPING SHALL BE DISCONNECTED AND REMOVED.

PD05 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

PD07 ALL EXISTING PLUMBING EQUIPMENT, WATER HEATERS, PUMPS, EXT, PIPING SHALL BE DISCONNECTED AND REMOVED IN COMPLETE. PLUMBING CONTRACTOR TO FIELD VERIFY THE ENTIRE SYSTEMS PRIOR TO BEGINNING ANY DEMOLITION WORK.

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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
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PROJECT NO.: 18-000 DRAWN BY: JB

LOWER LEVEL PLUMBING UNDERSLAB DEMO PLAN - AREA A

DRAWING NO.:

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PLUMBING DEMOLITION KEYNOTES

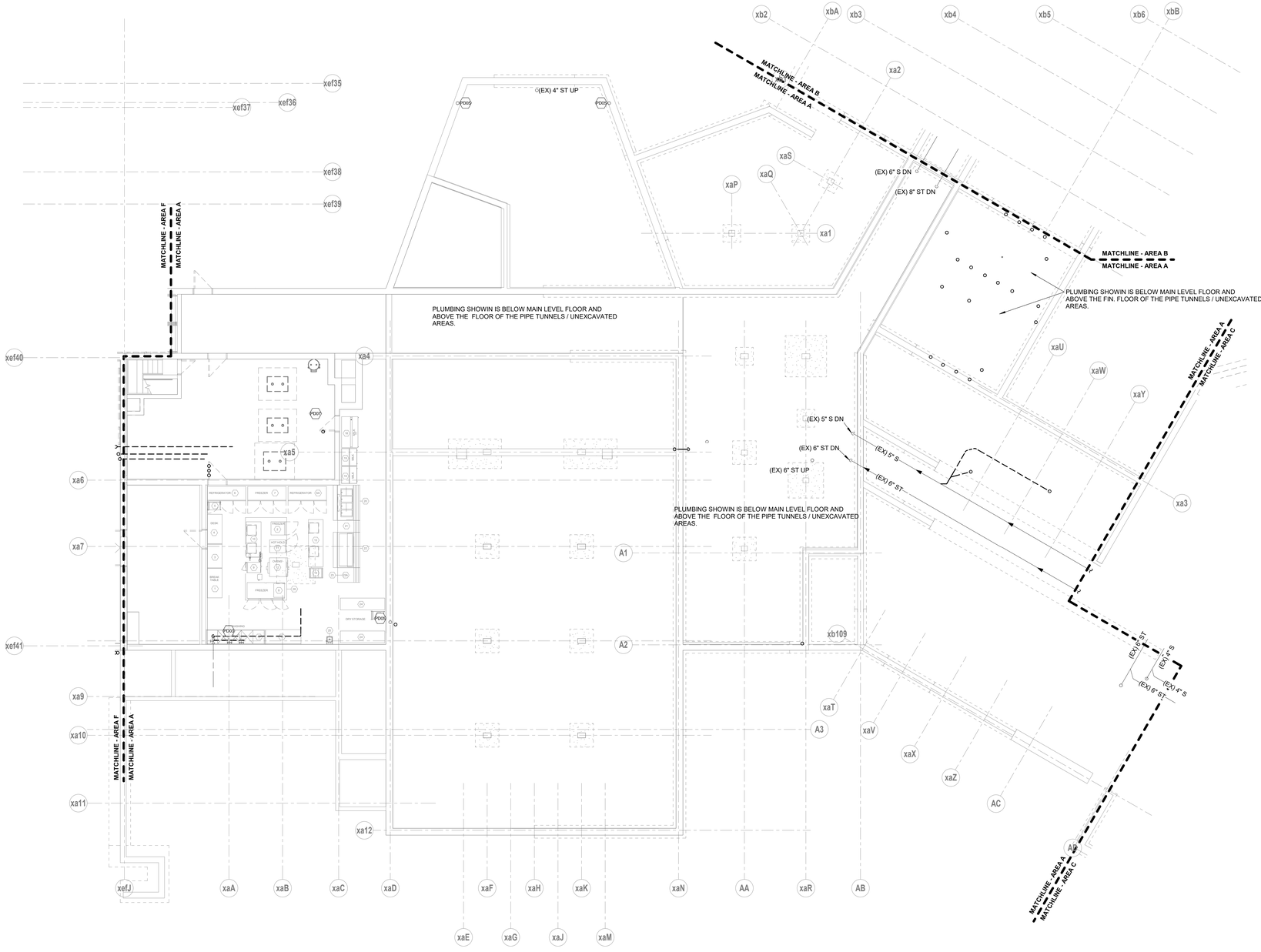
PD01 ALL EXISTING ABOVE FLOOR RAIN LEADERS SHALL BE DISCONNECTED AND REMOVED. WHERE EXISTING PIPING IS EMBEDDED IN MASONRY WALLS, PIPING SHALL BE CAPPED & ABANDONED IN PLACED.

PD03 EXISTING 4" DOMESTIC COLD WATER SERVICE ENTRANCE TO BE REUSED. ALL INTERIOR DOMESTIC WATER DISTRIBUTION PIPING SHALL BE DISCONNECTED AND REMOVED.

PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD05 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

PD07 ALL EXISTING PLUMBING EQUIPMENT, WATER HEATERS, PUMPS, EXT, PIPING SHALL BE DISCONNECTED AND REMOVED IN COMPLETE. PLUMBING CONTRACTOR TO FIELD VERIFY THE ENTIRE SYSTEMS PRIOR TO BEGINNING ANY DEMOLITION WORK.



1 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

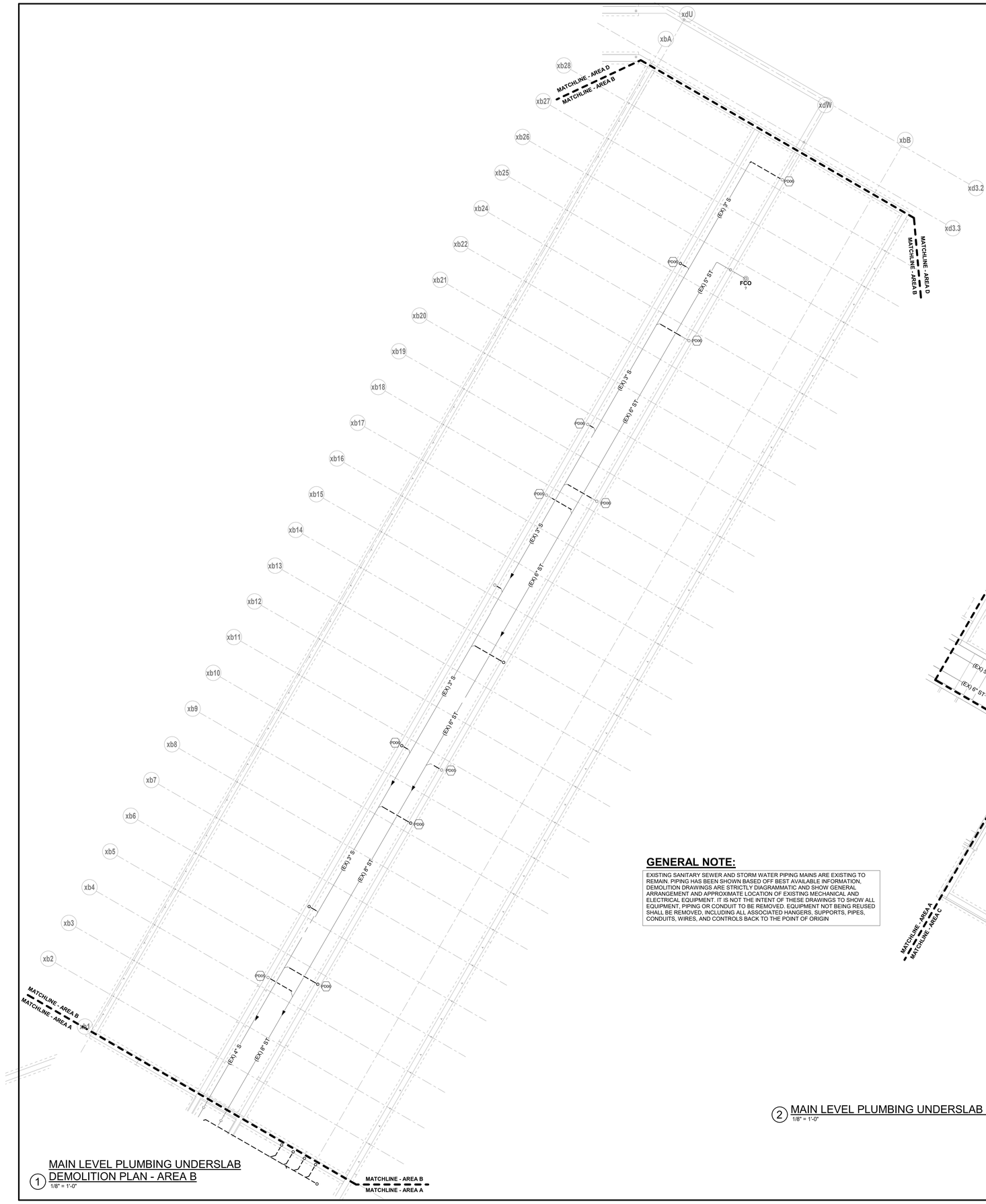
PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING UNDERSLAB DEMO PLAN - AREA A

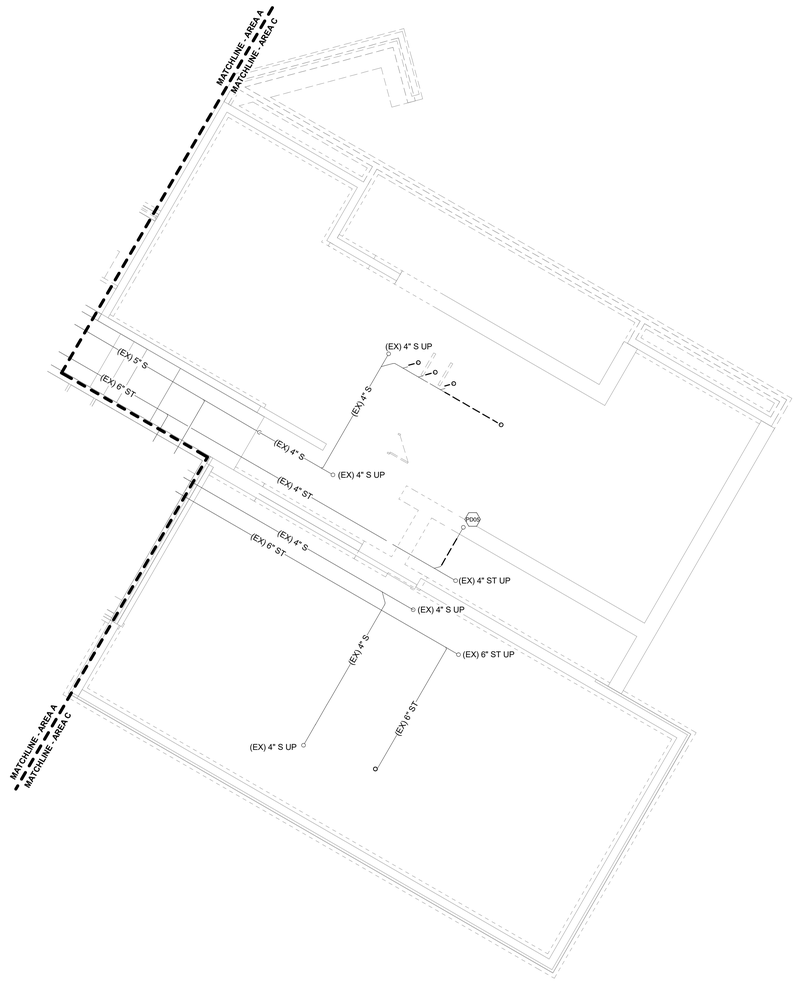
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1 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA B
1/8" = 1'-0"



2 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA C
1/8" = 1'-0"

GENERAL NOTE:

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PLUMBING DEMOLITION KEYNOTES

PD01 ALL EXISTING ABOVE FLOOR RAIN LEADERS SHALL BE DISCONNECTED AND REMOVED. WHERE EXISTING PIPING IS EMBEDDED IN MASONRY WALLS, PIPING SHALL BE CAPPED & ABANDONED IN PLACED.

PD02 ALL EXISTING DOMESTIC HOT AND COLD WATER TO BE DISCONNECTED & REMOVED.

PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD05 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

PD06 EXISTING SANITARY PIPING EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED & ABANDONED IN PLACED.

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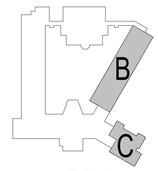
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

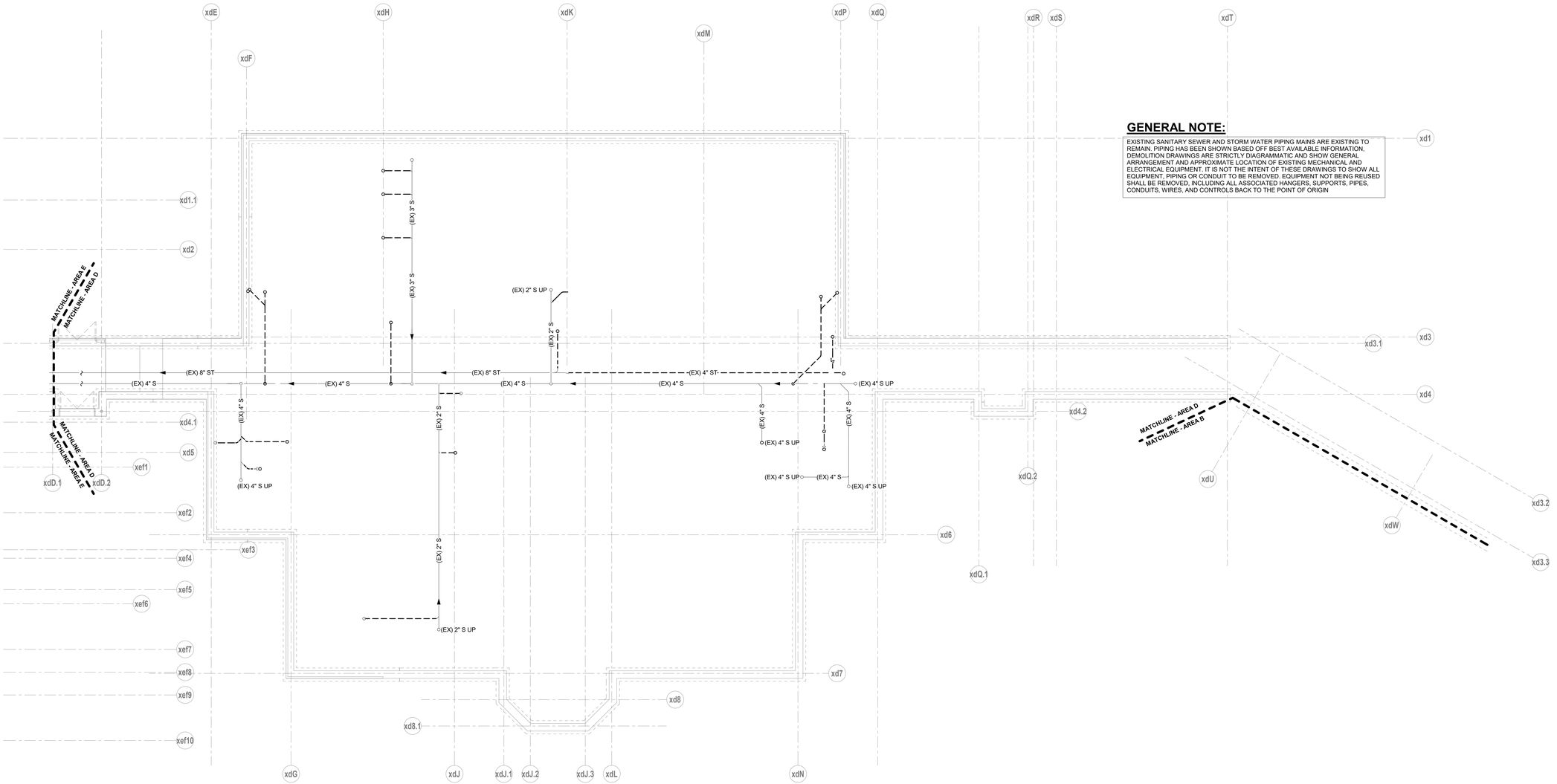
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MAIN LEVEL PLUMBING UNDERSLAB DEMO PLANS - AREAS B & C

DRAWING NO.:
PUD1.03

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1 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA D
1/8" = 1'-0"

GENERAL NOTE:

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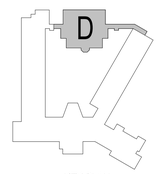
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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

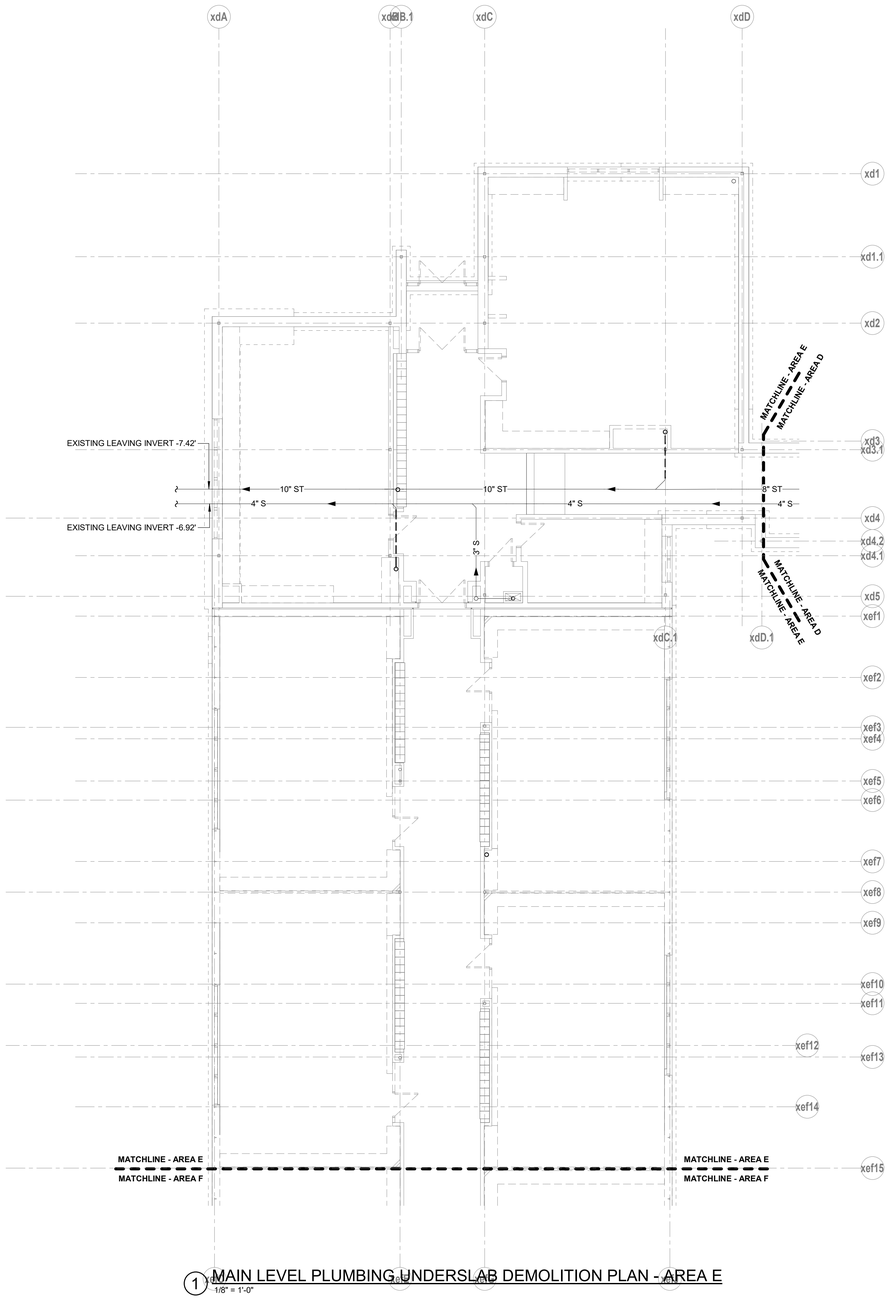
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MAIN LEVEL PLUMBING UNDERSLAB DEMO PLAN - AREA D

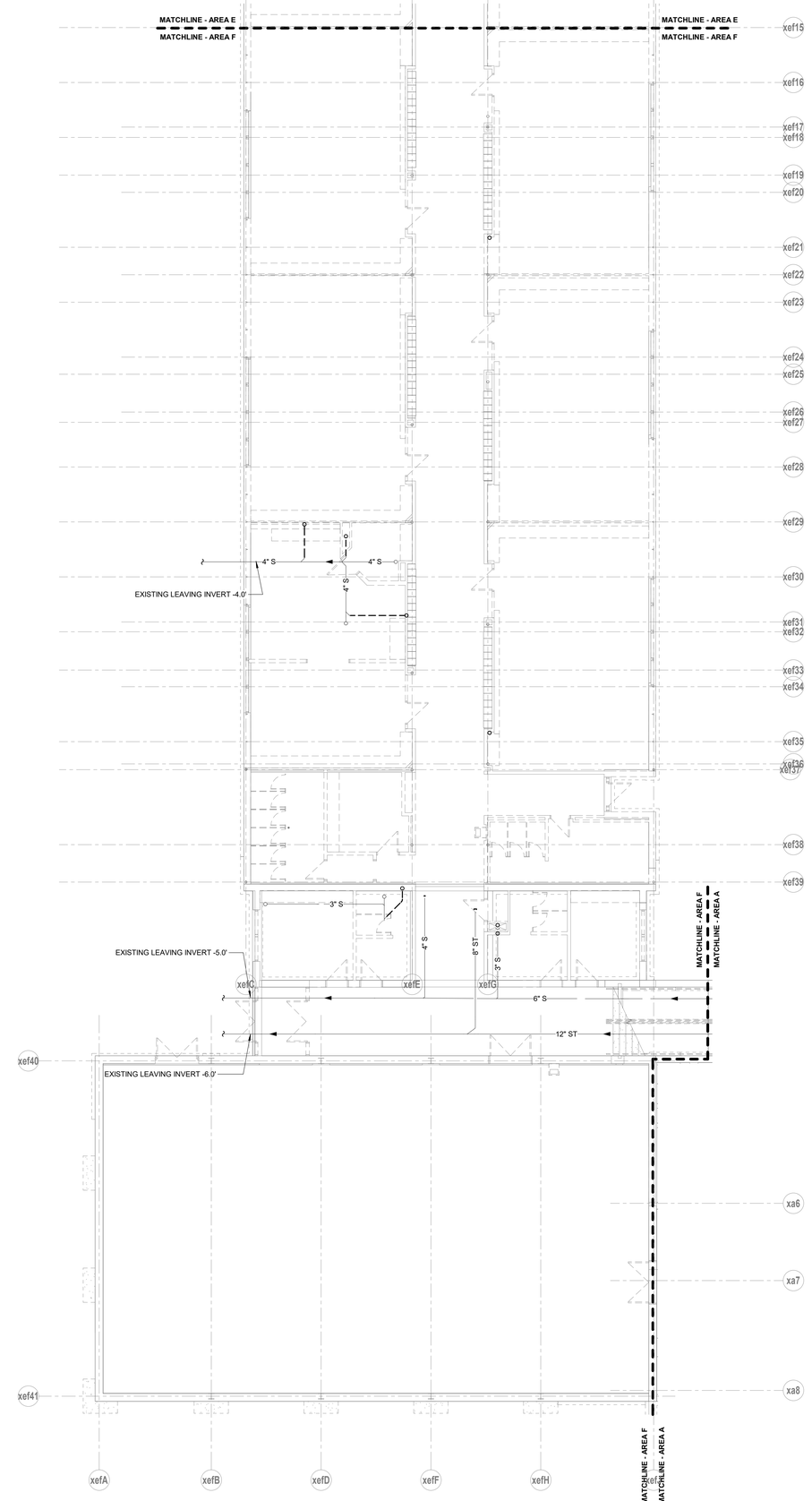
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1 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL PLUMBING UNDERSLAB DEMOLITION PLAN - AREA F
1/8" = 1'-0"

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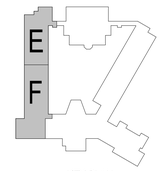
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MAIN LEVEL PLUMBING UNDERSLAB DEMO PLANS - AREA E & F

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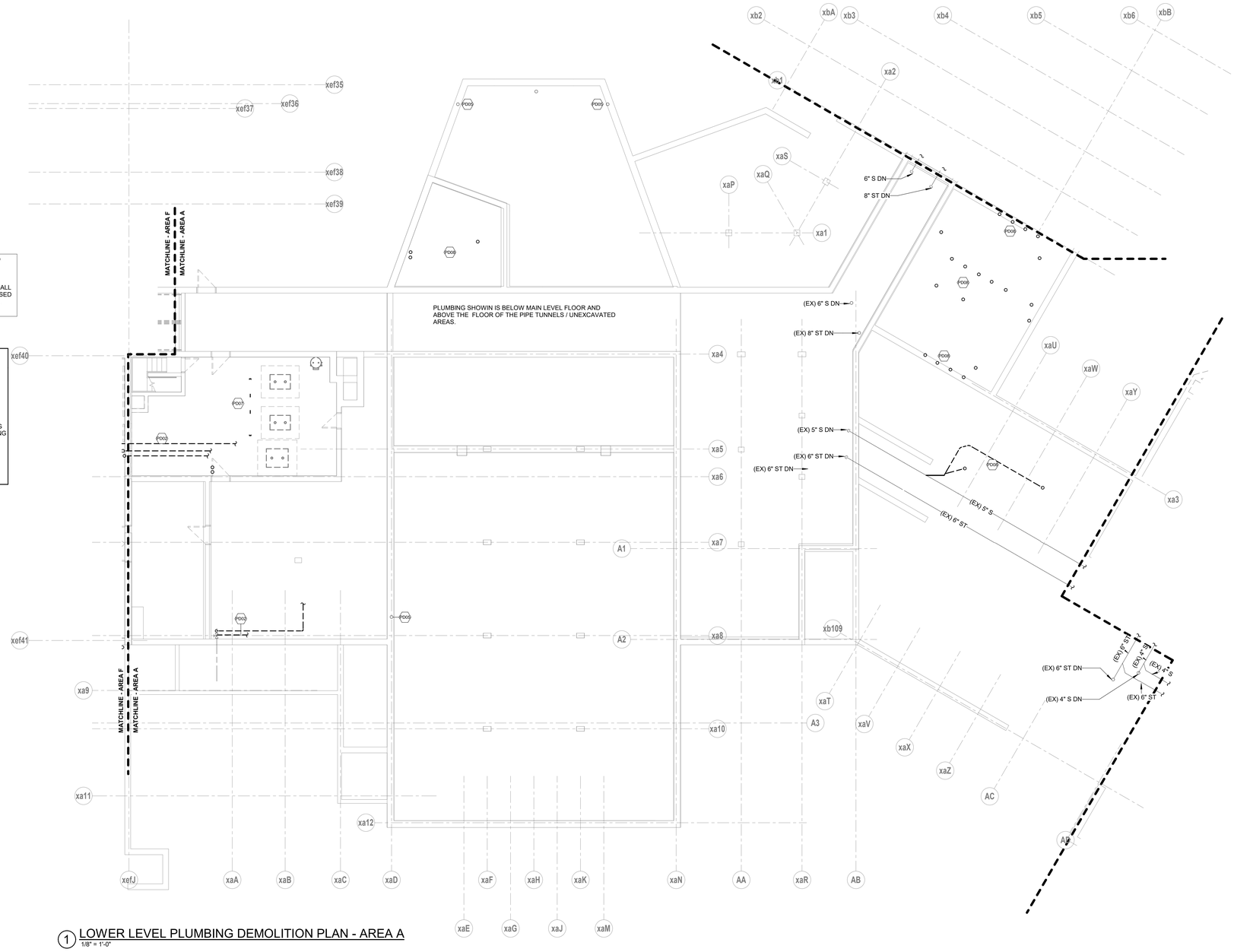
PLUMBING DEMOLITION KEYNOTES

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PD05 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

PD07 ALL EXISTING PLUMBING EQUIPMENT, WATER HEATERS, PUMPS, EXT, PIPING SHALL BE DISCONNECTED AND REMOVED IN COMPLETE. PLUMBING CONTRACTOR TO FIELD VERIFY THE ENTIRE SYSTEMS PRIOR TO BEGINNING ANY DEMOLITION WORK.

PD08 EXISTING SANITARY, WASTE & VENT BRANCH PIPING IN THIS AREA TO BE DISCONNECTED AND REMOVED. CONTRACTOR TO VERIFY EXACT LOCATIONS IN FIELD, PRIOR TO BEGINNING ANY DEMOLITION WORK.



1 LOWER LEVEL PLUMBING DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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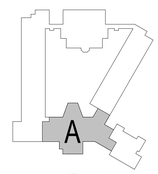
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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

LOWER LEVEL PLUMBING DEMO PLAN - AREA A

DRAWING NO.:
PD1.01

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PLUMBING DEMOLITION KEYNOTES

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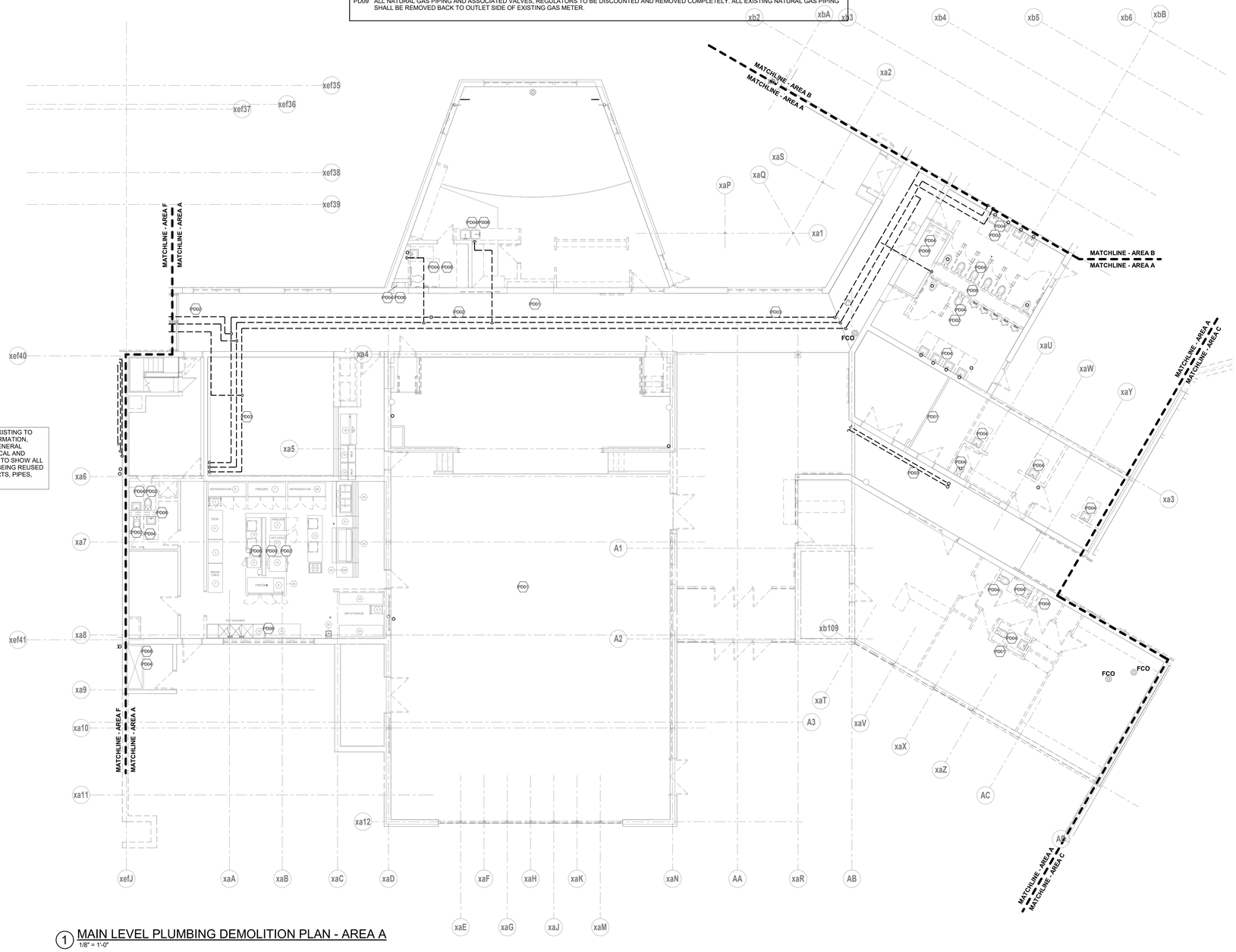
PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD08 EXISTING SANITARY, WASTE & VENT BRANCH PIPING IN THIS AREA TO BE DISCONNECTED AND REMOVED. CONTRACTOR TO VERIFY EXACT LOCATIONS IN FIELD, PRIOR TO BEGINNING ANY DEMOLITION WORK.

PD09 ALL NATURAL GAS PIPING AND ASSOCIATED VALVES, REGULATORS TO BE DISCOUNTED AND REMOVED COMPLETELY. ALL EXISTING NATURAL GAS PIPING SHALL BE REMOVED BACK TO OUTLET SIDE OF EXISTING GAS METER.

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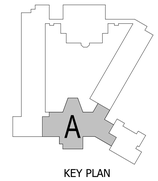
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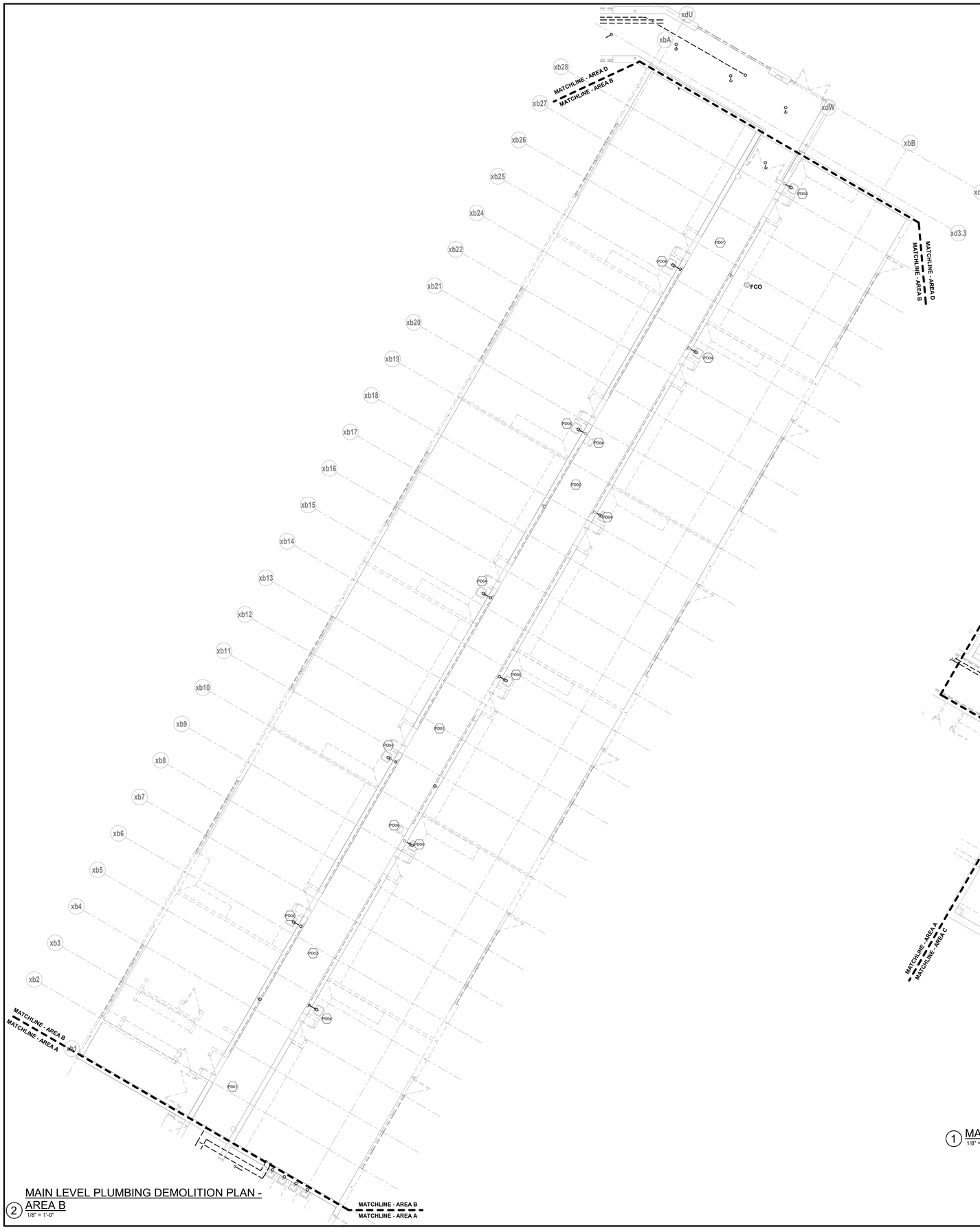
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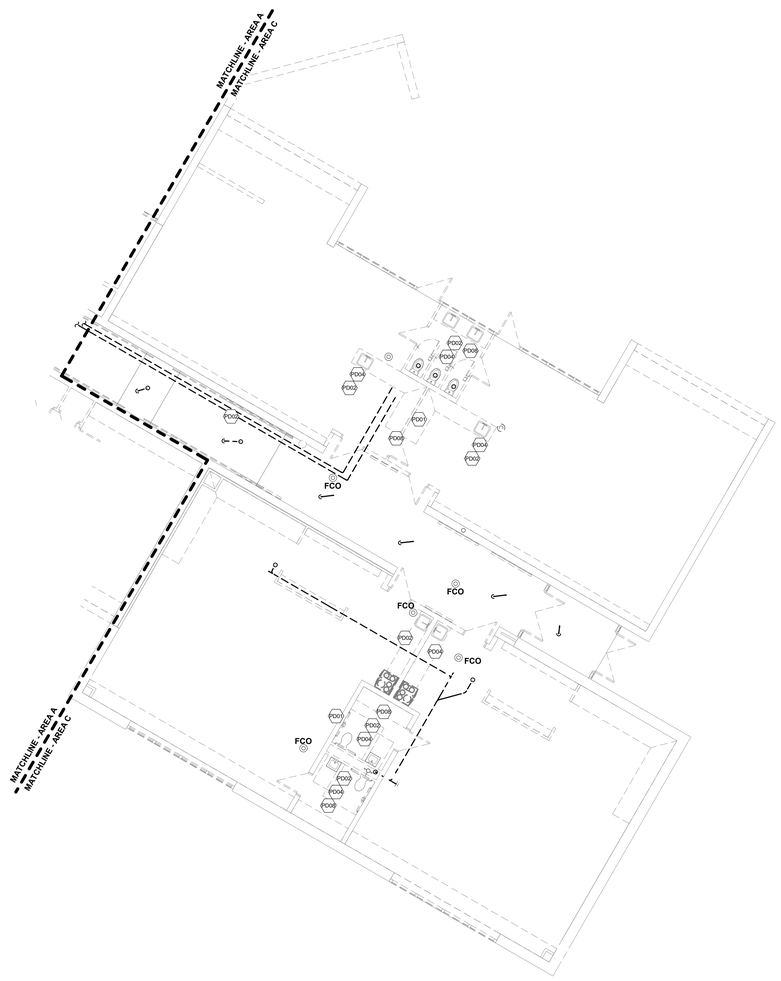
MAIN LEVEL PLUMBING DEMO PLAN - AREA A

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PD1.02

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2 MAIN LEVEL PLUMBING DEMOLITION PLAN - AREA B
1/8" = 1'-0"



1 MAIN LEVEL PLUMBING DEMOLITION PLAN - AREA C
1/8" = 1'-0"

PLUMBING DEMOLITION KEYNOTES

PD01 ALL EXISTING ABOVE FLOOR RAIN LEADERS SHALL BE DISCONNECTED AND REMOVED. WHERE EXISTING PIPING IS EMBEDDED IN MASONRY WALLS, PIPING SHALL BE CAPPED & ABANDONED IN PLACED.

PD02 ALL EXISTING DOMESTIC HOT AND COLD WATER TO BE DISCONNECTED & REMOVED.

PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD08 EXISTING SANITARY, WASTE & VENT BRANCH PIPING IN THIS AREA TO BE DISCONNECTED AND REMOVED. CONTRACTOR TO VERIFY EXACT LOCATIONS IN FIELD, PRIOR TO BEGINNING ANY DEMOLITION WORK.

GENERAL NOTE:

EXISTING SANITARY SEWER AND STORM WATER PIPING MAINS ARE EXISTING TO REMAIN. PIPING HAS BEEN SHOWN BASED OFF BEST AVAILABLE INFORMATION. DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN

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Additional offices located in Massachusetts and Rhode Island
Email: kba@kba-architects.com ▲ Web: www.kba-architects.com

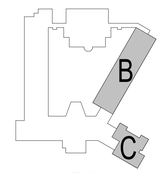
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING DEMO PLANS - AREAS B & C

DRAWING NO.:
PD1.03

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PLUMBING DEMOLITION KEYNOTES

PD01 ALL EXISTING ABOVE FLOOR RAIN LEADERS SHALL BE DISCONNECTED AND REMOVED. WHERE EXISTING PIPING IS EMBEDDED IN MASONRY WALLS, PIPING SHALL BE CAPPED & ABANDONED IN PLACED.

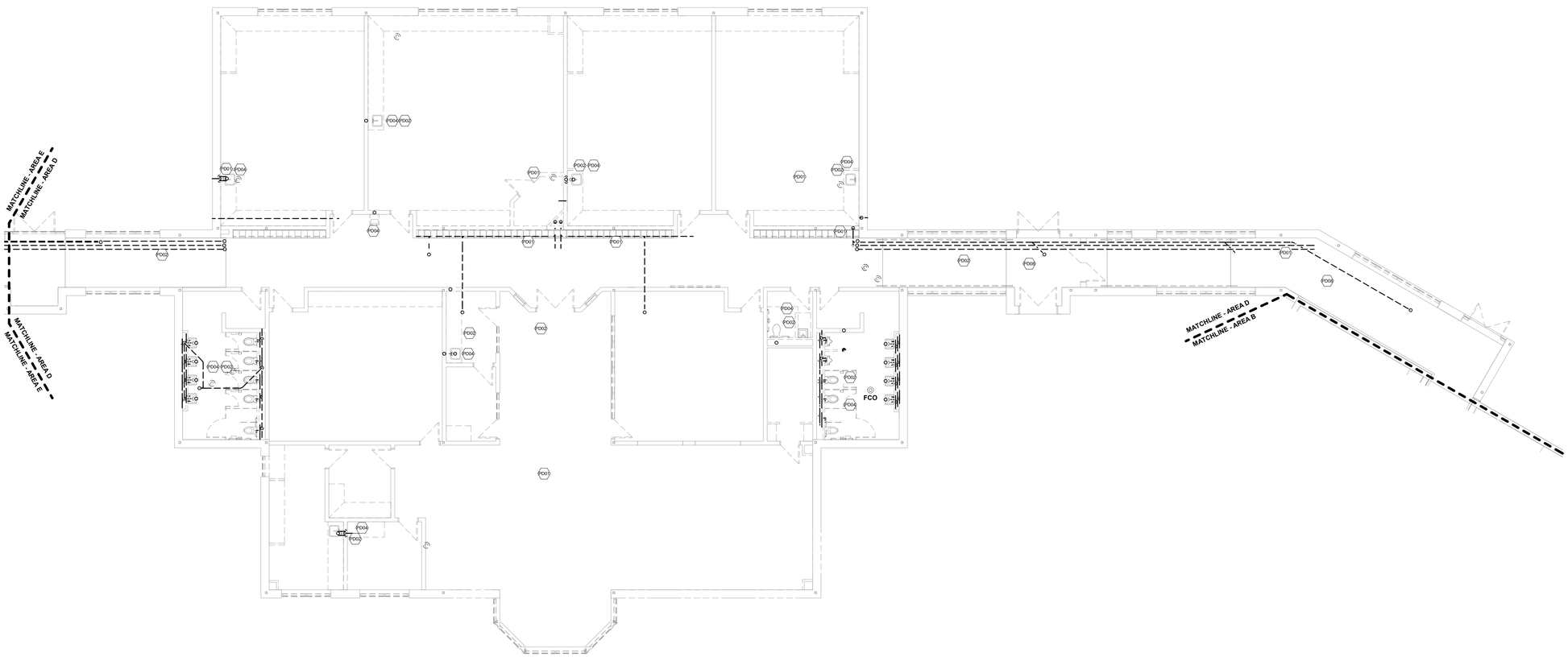
PD02 ALL EXISTING DOMESTIC HOT AND COLD WATER TO BE DISCONNECTED & REMOVED.

PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD08 EXISTING SANITARY, WASTE & VENT BRANCH PIPING IN THIS AREA TO BE DISCONNECTED AND REMOVED. CONTRACTOR TO VERIFY EXACT LOCATIONS IN FIELD, PRIOR TO BEGINNING ANY DEMOLITION WORK.

GENERAL NOTE:

EXISTING SANITARY SEWER AND STORM WATER PIPING MAINS ARE EXISTING TO REMAIN. PIPING HAS BEEN SHOWN BASED OFF BEST AVAILABLE INFORMATION, DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN



1 MAIN LEVEL PLUMBING DEMOLITION PLAN - AREA D
1/8" = 1'-0"

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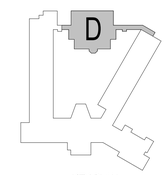
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

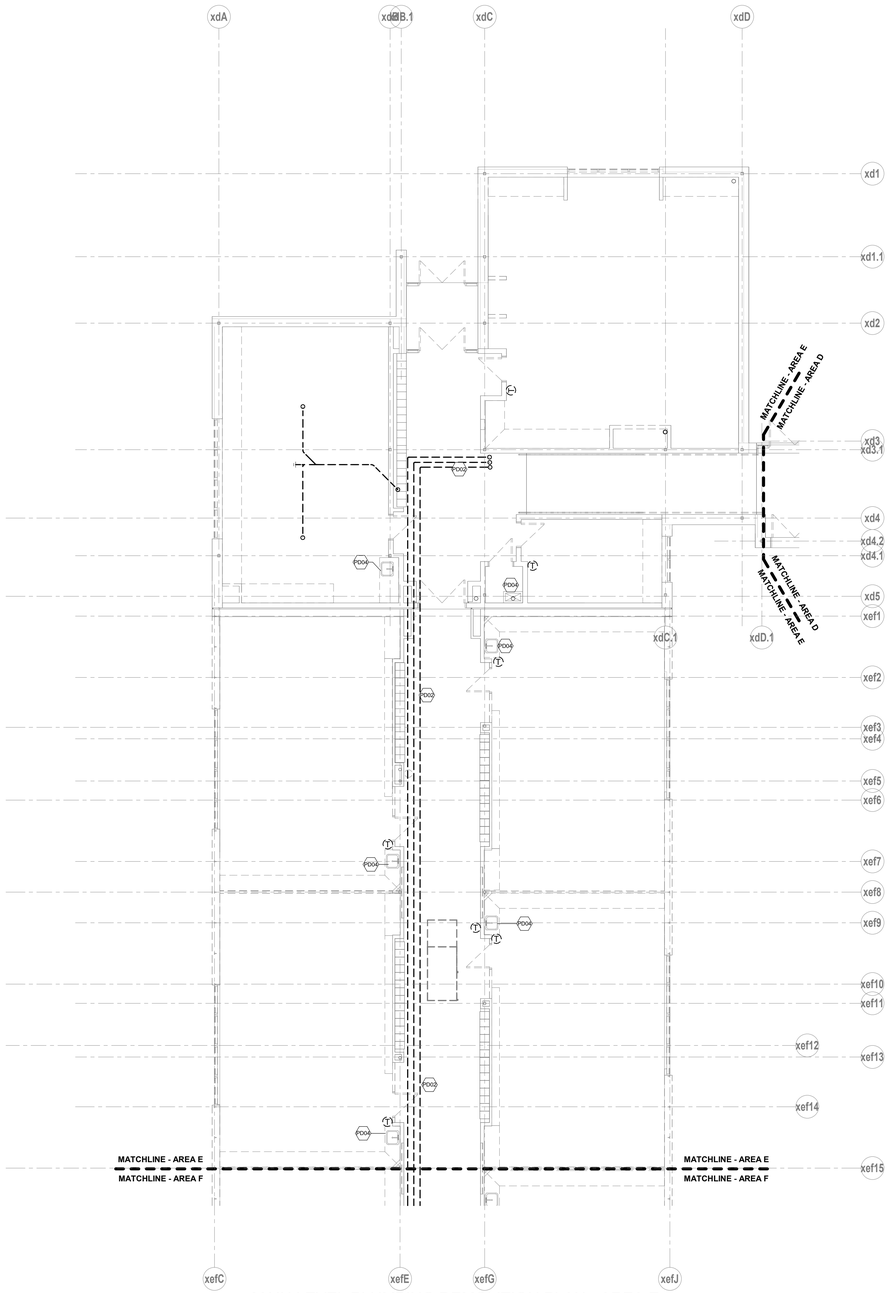
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING DEMO PLAN - AREA D

DRAWING NO.:
PD1.04

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1 MAIN LEVEL PLUMBING DEMOLITION PLAN - AREA E
1/8" = 1'-0"

PLUMBING DEMOLITION KEYNOTES

PD01 ALL EXISTING ABOVE FLOOR RAIN LEADERS SHALL BE DISCONNECTED AND REMOVED. WHERE EXISTING PIPING IS EMBEDDED IN MASONRY WALLS, PIPING SHALL BE CAPPED & ABANDONED IN PLACED.

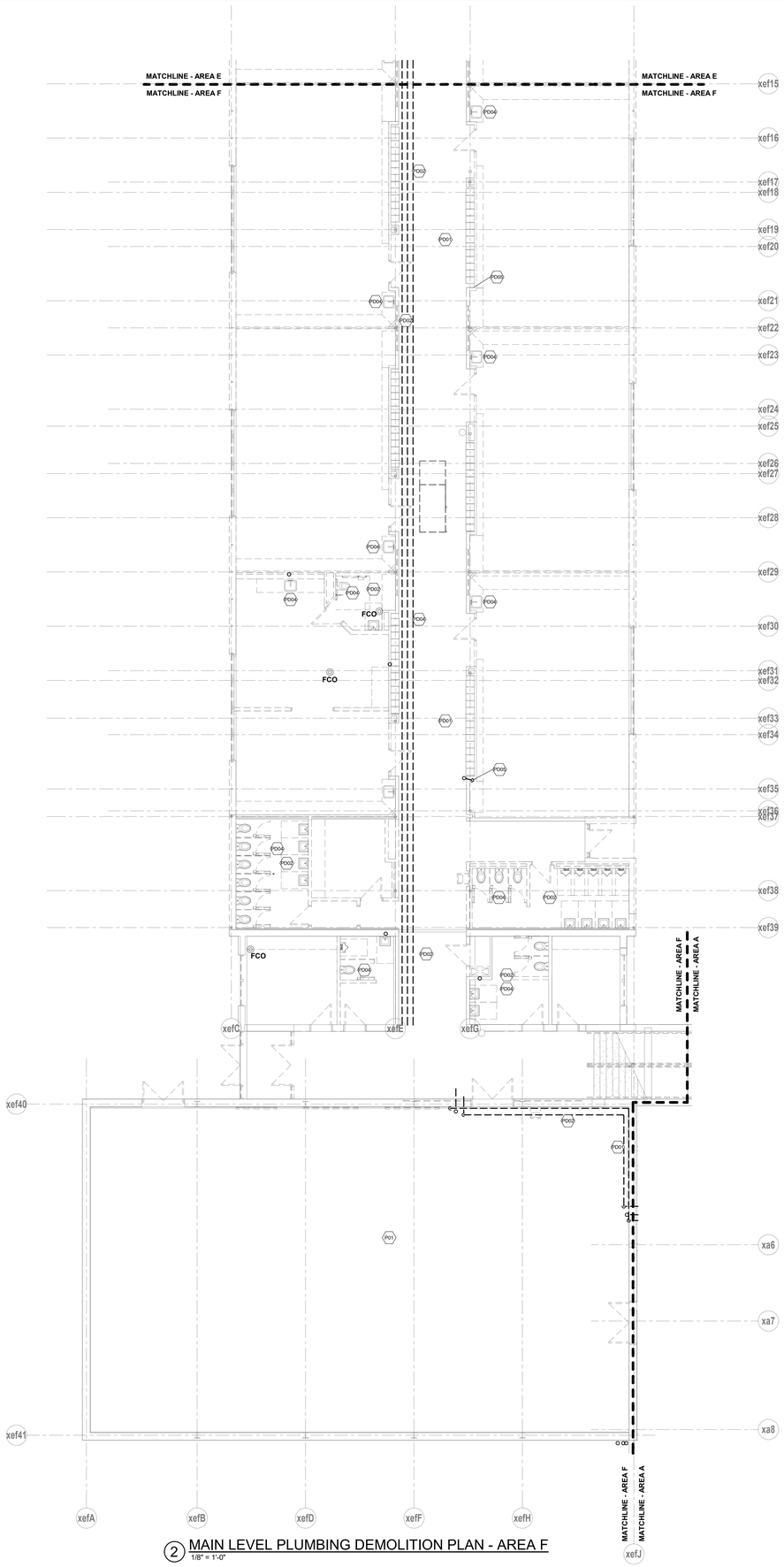
PD02 ALL EXISTING DOMESTIC HOT AND COLD WATER TO BE DISCONNECTED & REMOVED.

PD04 ALL EXISTING PLUMBING FIXTURES TO BE DISCONNECTED & REMOVED INCLUDING ALL DOMESTIC CONNECTIONS, VENTING AND SANITARY SEWER. ALL EXISTING FIXTURE SUPPORTS AND ACCESSORIES TO BE DISCONNECTED AND REMOVED.

PD05 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

GENERAL NOTE:

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2 MAIN LEVEL PLUMBING DEMOLITION PLAN - AREA F
1/8" = 1'-0"

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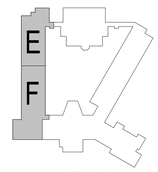
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING DEMO PLANS - AREAS E & F

DRAWING NO.:

PD1.05

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GENERAL DEMOLITION NOTE:

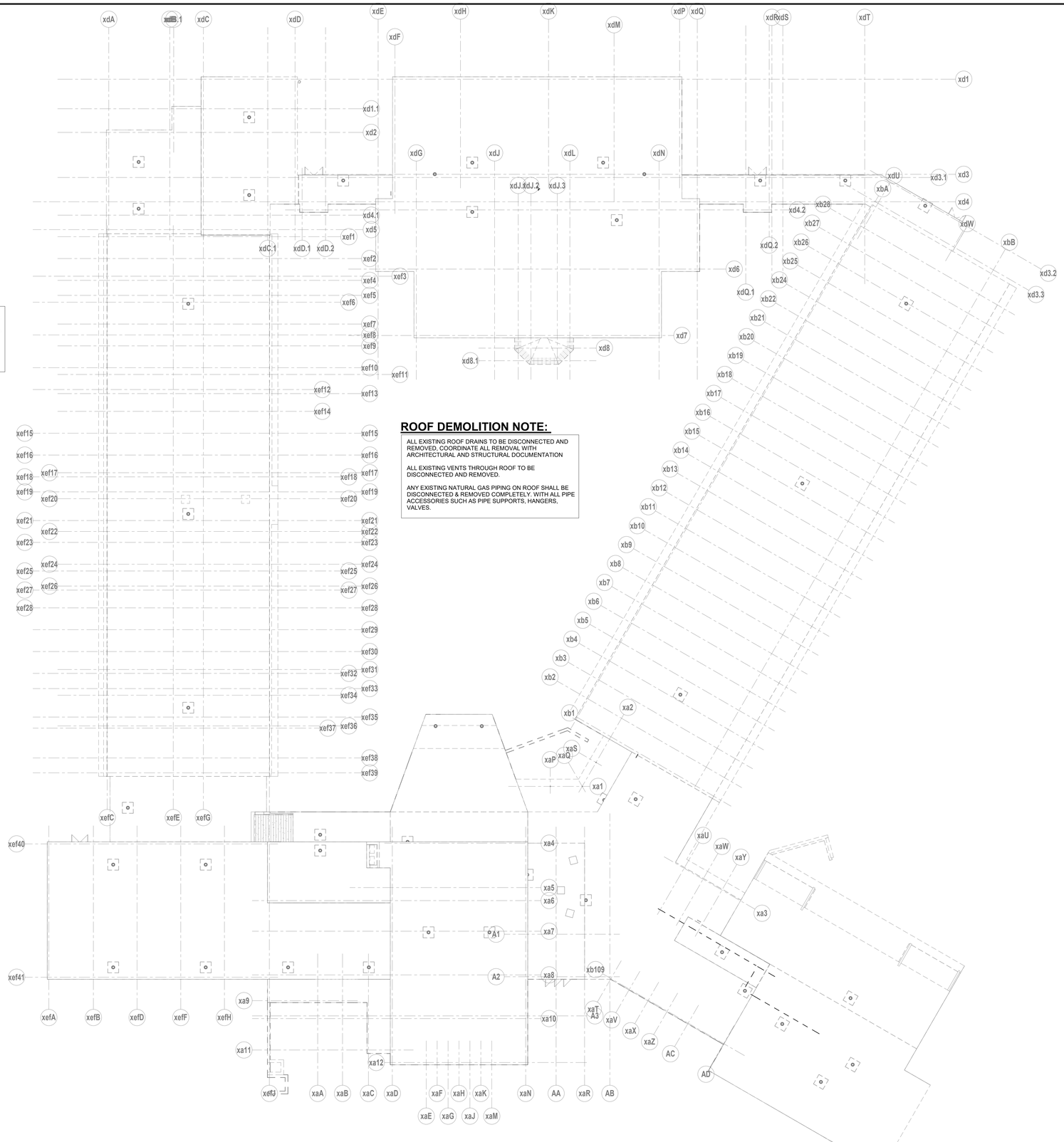
DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN. DEMOLITION CONTRACTOR TO VERIFY EXACT LOCATION OF ALL EXISTING ROOF DRAINS PRIOR TO BEGINNING ANY WORK.

ROOF DEMOLITION NOTE:

ALL EXISTING ROOF DRAINS TO BE DISCONNECTED AND REMOVED, COORDINATE ALL REMOVAL WITH ARCHITECTURAL AND STRUCTURAL DOCUMENTATION

ALL EXISTING VENTS THROUGH ROOF TO BE DISCONNECTED AND REMOVED.

ANY EXISTING NATURAL GAS PIPING ON ROOF SHALL BE DISCONNECTED & REMOVED COMPLETELY, WITH ALL PIPE ACCESSORIES SUCH AS PIPE SUPPORTS, HANGERS, VALVES.



1 ROOF PLUMBING DEMOLITION PLAN
1/16" = 1'-0"

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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

PLUMBING ROOF DEMO PLAN

DRAWING NO.:
PD1.07

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PLUMBING KEYNOTES

P10 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

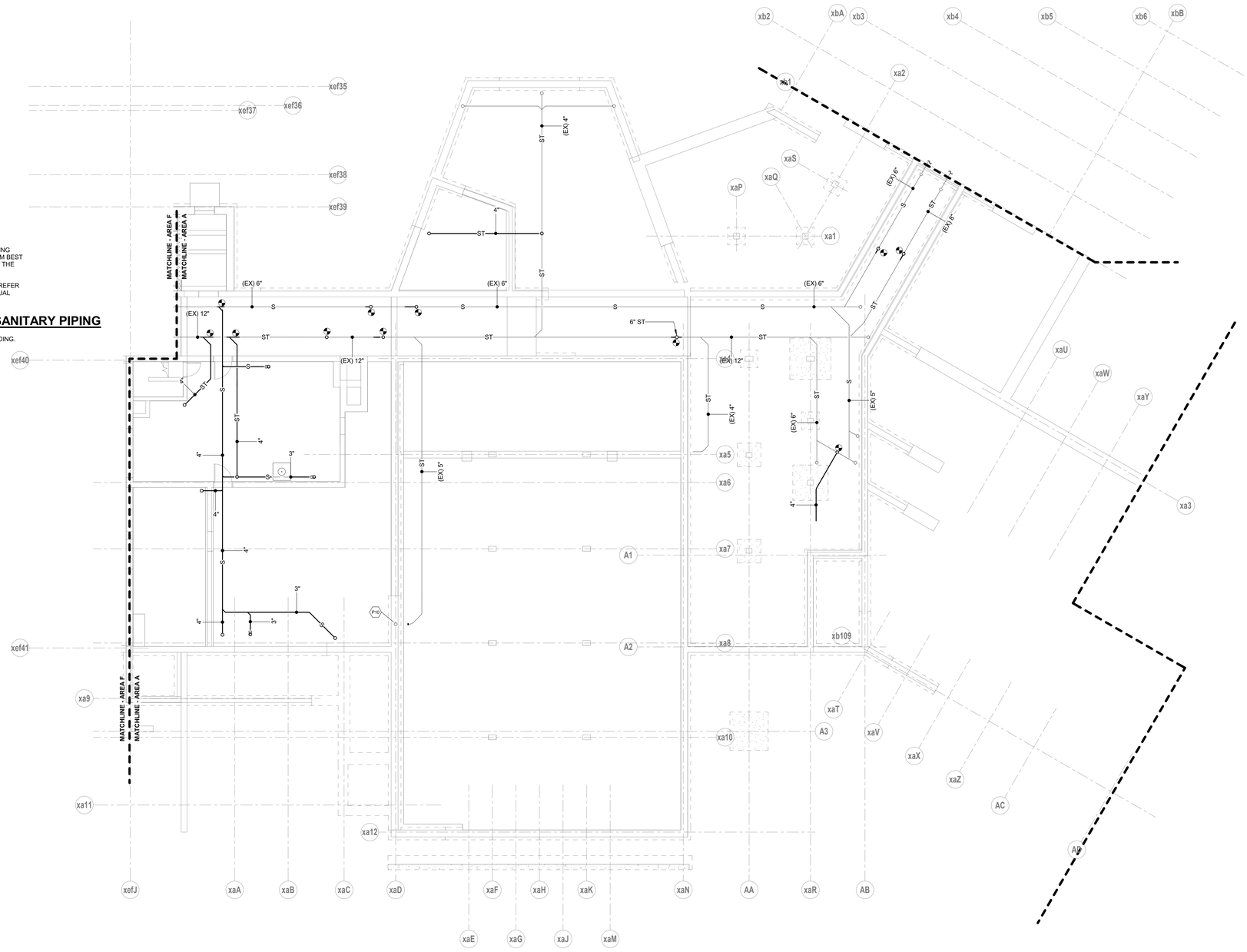
EXISTING CONDITIONS GENERAL NOTE:

ALL EXISTING SANITARY, WASTE, STORM PIPING MAINS ARE TO BE REUSED. EXISTING PIPING WILL BE SHOWN AT LIGHTER LINEWIEGHT. EXISTING CONDITIONS ARE FROM BEST AVAILABLE INFORMATION. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE PLUMBING CONTRACTOR BEFORE WORK SHALL BEGIN.

NEW SANITARY, WASTE, AND STORM PIPING SHOWN AT A THICKER LINEWEIGTH, REFER TO P0.01 PLUMBING ABBREVIATIONS, GENERAL NOTES AND SYMBOL LIST FOR VISUAL REFERENCE

GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

ALL EXISTING SANITARY MAINS SHALL BE JETTED CLEAN IN AREAS A & B OF BUILDING. PLUMBING CONTRACTOR VERIFY IN FIELD.



1 LOWER LEVEL PLUMBING UNDERSLAB PLAN - AREA A
1/8" = 1'-0"

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KEY PLAN

SCALE: 1/8" = 1'-0" (0" 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

LOWER LEVEL PLUMBING UNDERSLAB PLAN - AREA A

DRAWING NO.:

PU1.01

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EXISTING CONDITIONS GENERAL NOTE:

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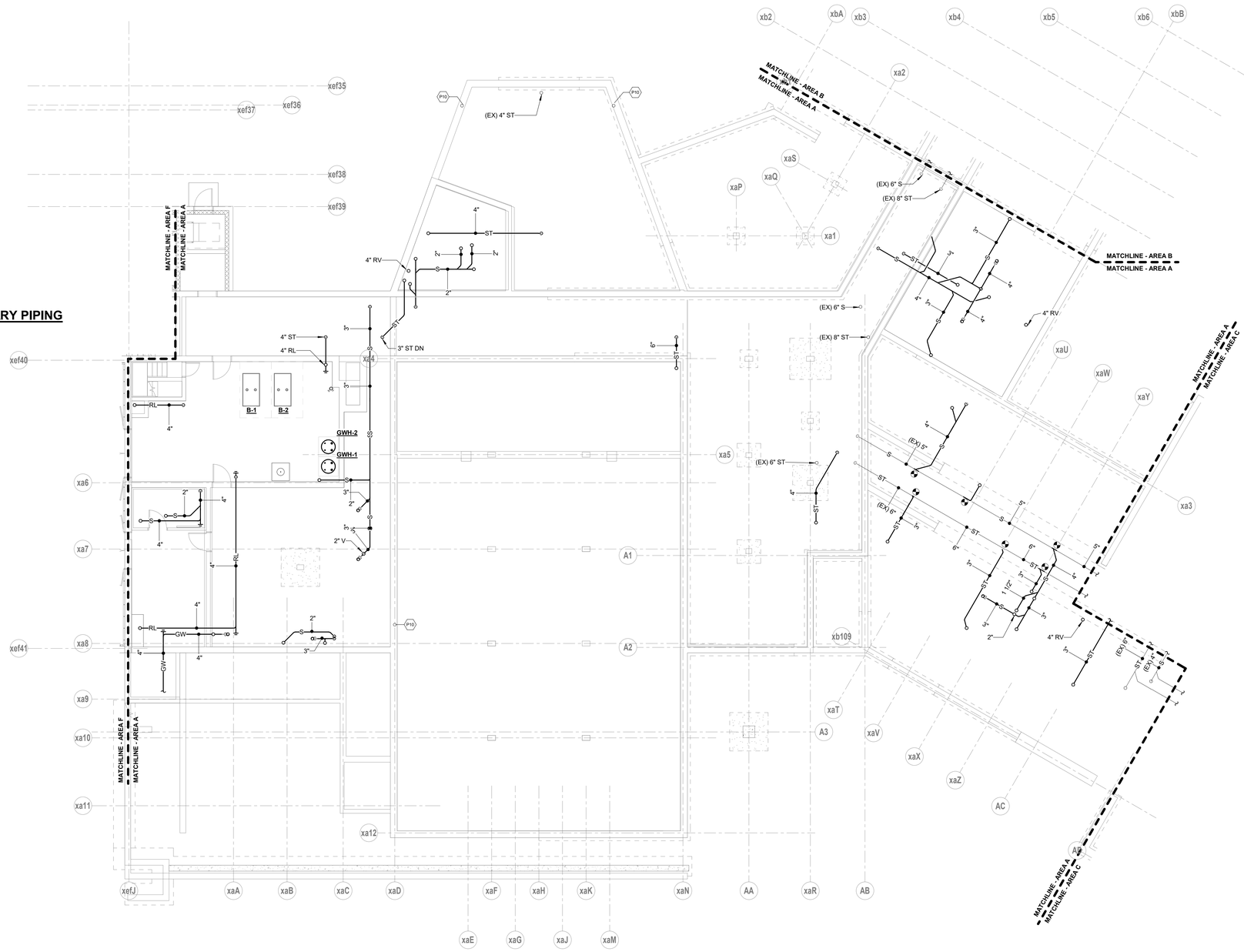
NEW SANITARY, WASTE, AND STORM PIPING SHOWN AT A THICKER LINEWEIGTH, REFER TO P0.01 PLUMBING ABBREVIATIONS, GENERAL NOTES AND SYMBOL LIST FOR VISUAL REFERENCE

GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

ALL EXISTING SANITARY MAINS SHALL BE JETTED CLEAN IN AREAS A & B OF BUILDING. PLUMBING CONTRACTOR VERIFY IN FIELD.

PLUMBING KEYNOTES

P10 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.



1 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

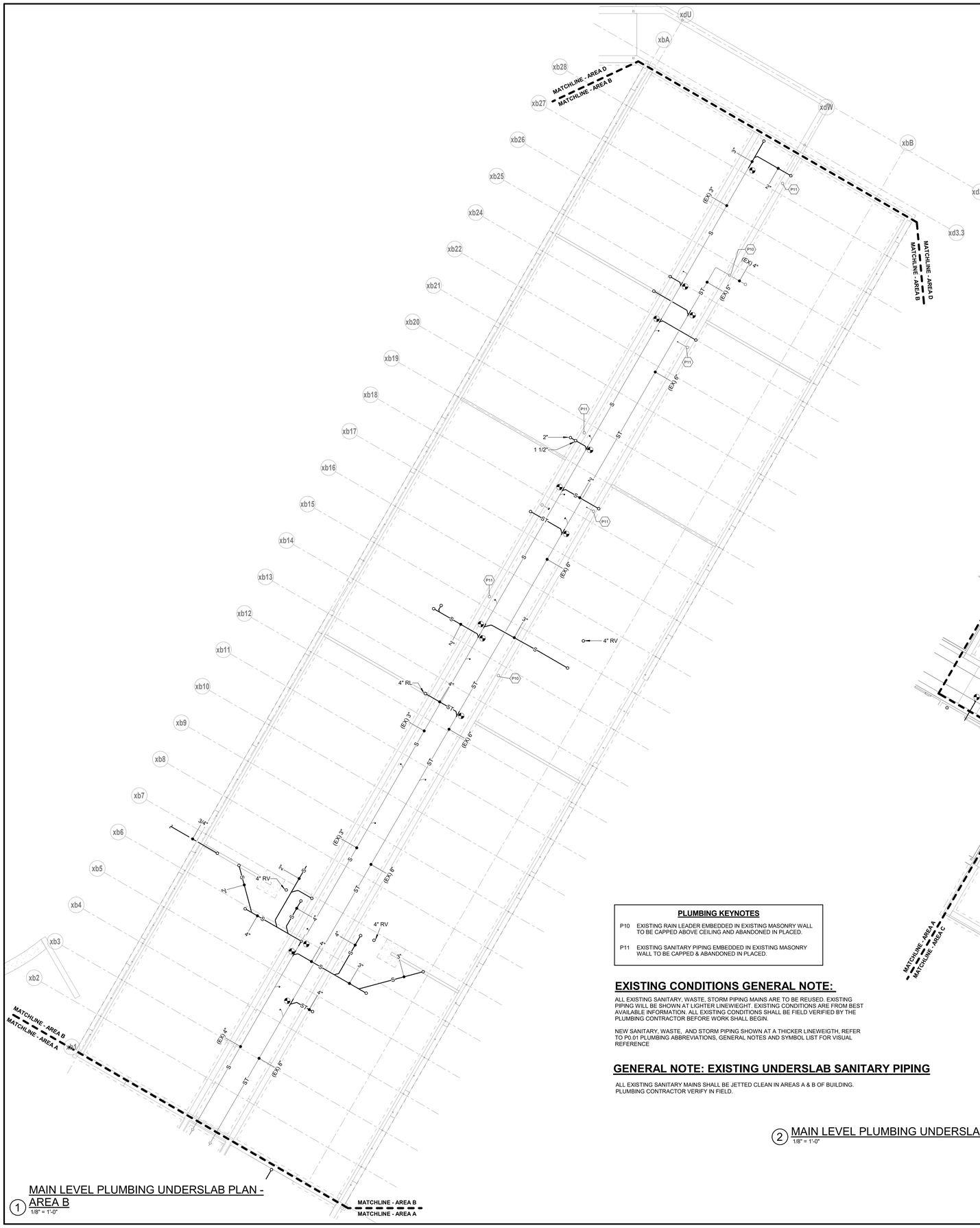
PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING BELOW FLOOR PLAN - AREA A

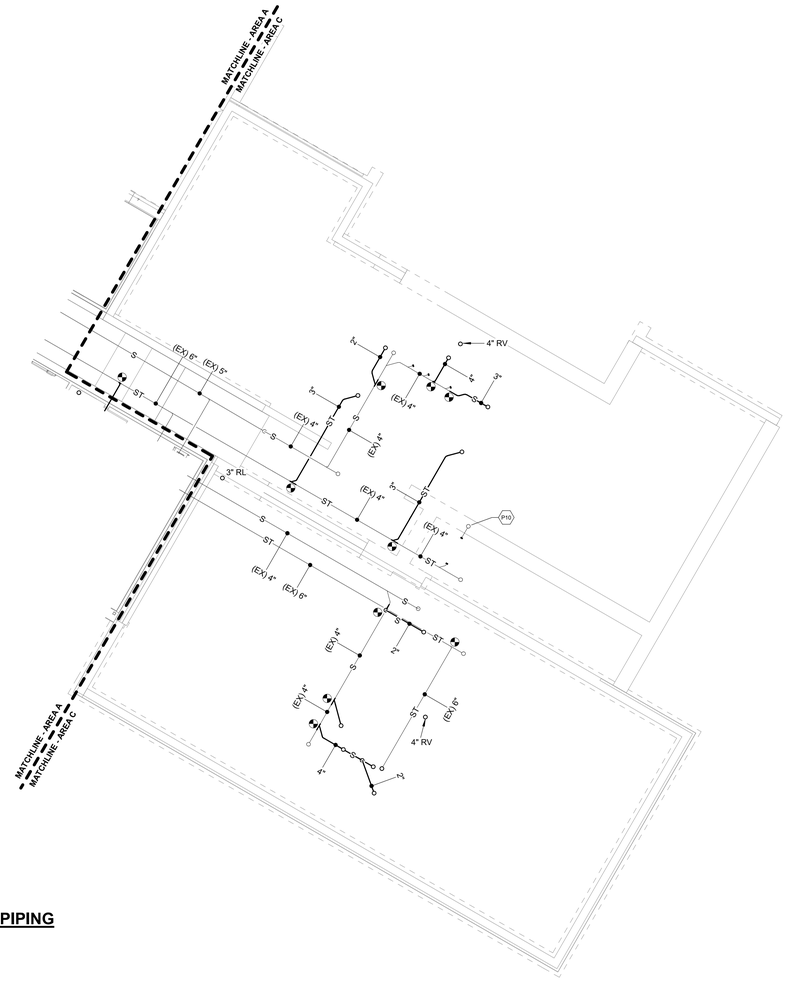
DRAWING NO.:

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1 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA B
1/8" = 1'-0"



2 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA C
1/8" = 1'-0"

PLUMBING KEYNOTES

P10 EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.

P11 EXISTING SANITARY PIPING EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED & ABANDONED IN PLACED.

EXISTING CONDITIONS GENERAL NOTE:

ALL EXISTING SANITARY, WASTE, STORM PIPING MAINS ARE TO BE REUSED. EXISTING PIPING WILL BE SHOWN AT LIGHTER LINEWIEGHT. EXISTING CONDITIONS ARE FROM BEST AVAILABLE INFORMATION. ALL EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE PLUMBING CONTRACTOR BEFORE WORK SHALL BEGIN.

NEW SANITARY, WASTE, AND STORM PIPING SHOWN AT A THICKER LINEWEIGTH, REFER TO P0.01 PLUMBING ABBREVIATIONS, GENERAL NOTES AND SYMBOL LIST FOR VISUAL REFERENCE

GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

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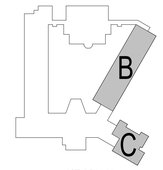
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

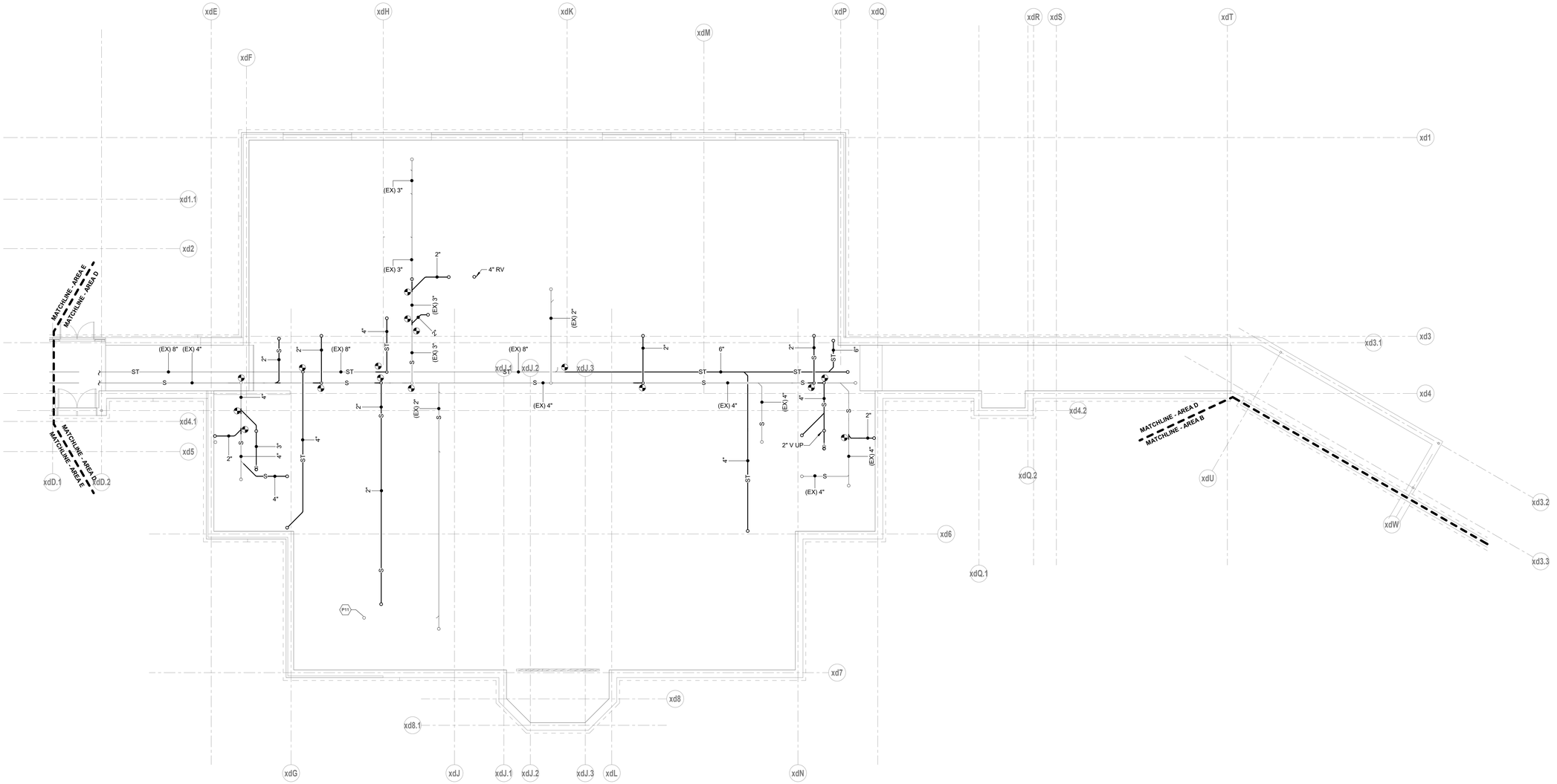
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MAIN LEVEL PLUMBING UNDERSLAB PLANS - AREAS B & C

DRAWING NO.:

PU1.03

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1 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA D
1/8" = 1'-0"

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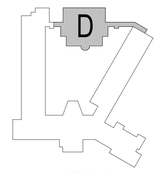
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

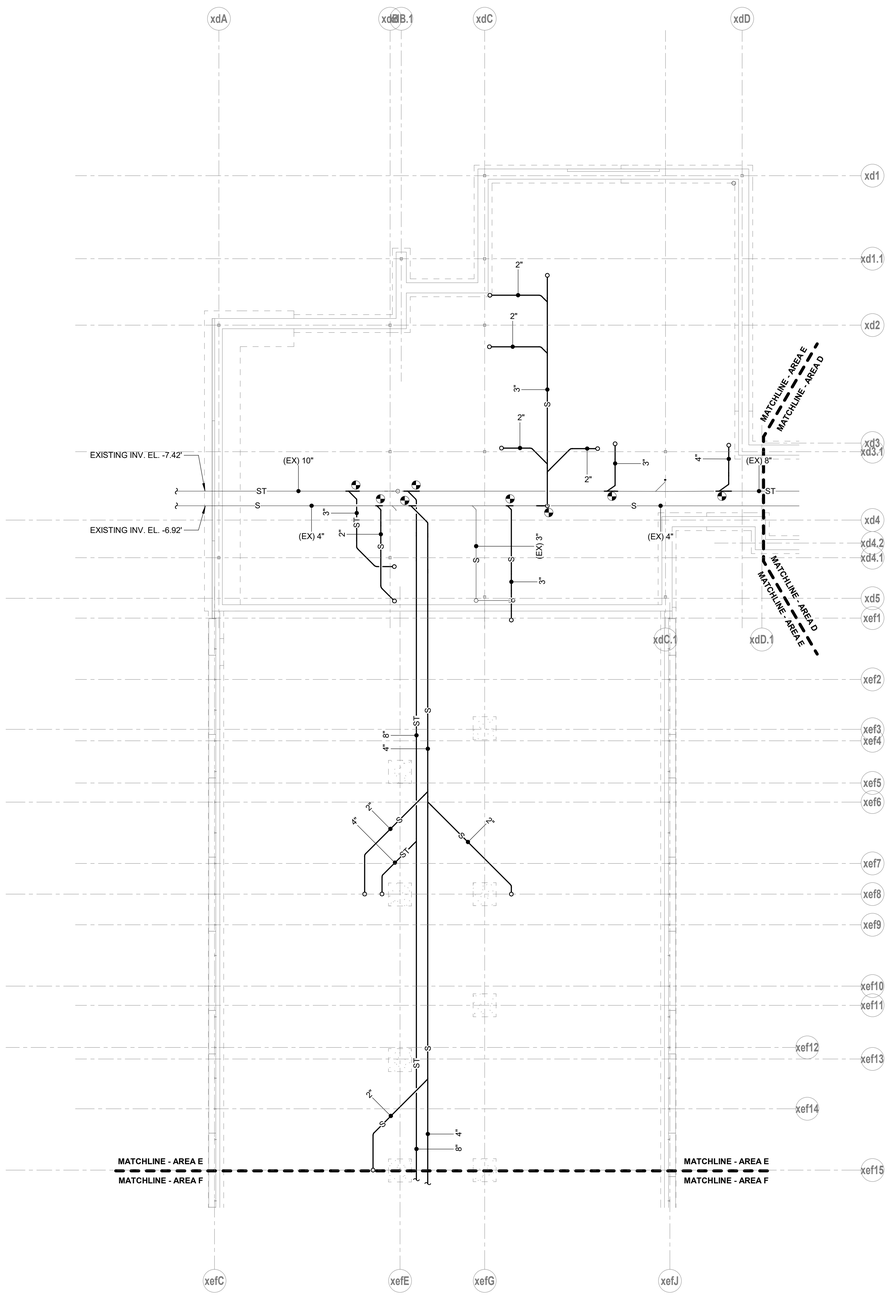
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA D

DRAWING NO.:
PU1.04

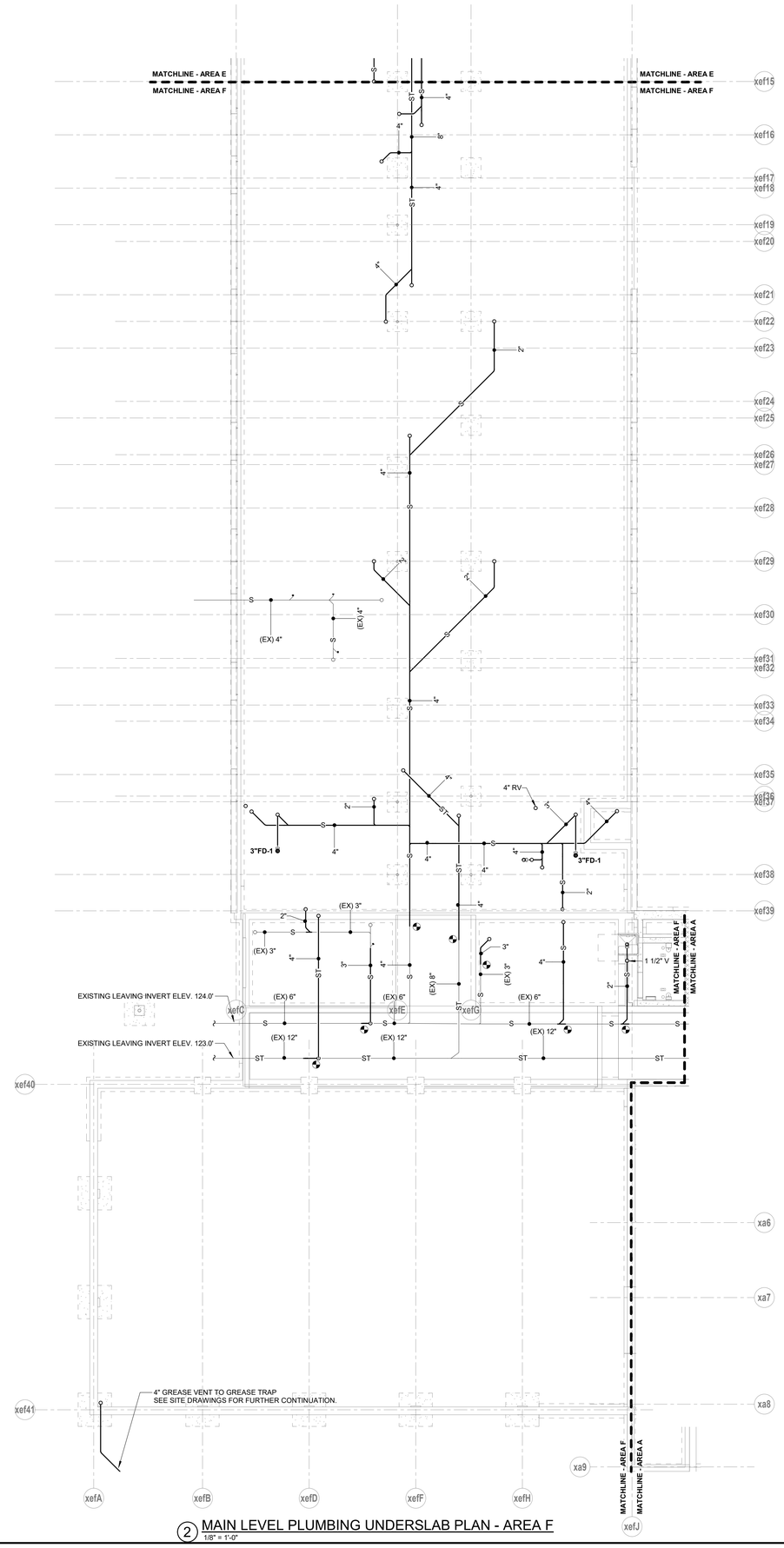
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1 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA E
1/8" = 1'-0"

GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

CONTRACTOR SHALL CUT THE FLOOR SLAB IN AREAS E & F TO EXPOSE EXISTING SANITARY PIPING.
CONTRACTOR SHALL SCOPE EXISTING SANITARY PIPING TO DETERMINE EXISTING PIPING CONDITION FOR POSSIBLE REUSE.



2 MAIN LEVEL PLUMBING UNDERSLAB PLAN - AREA F
1/8" = 1'-0"

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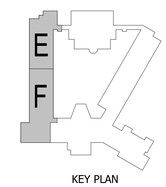
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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

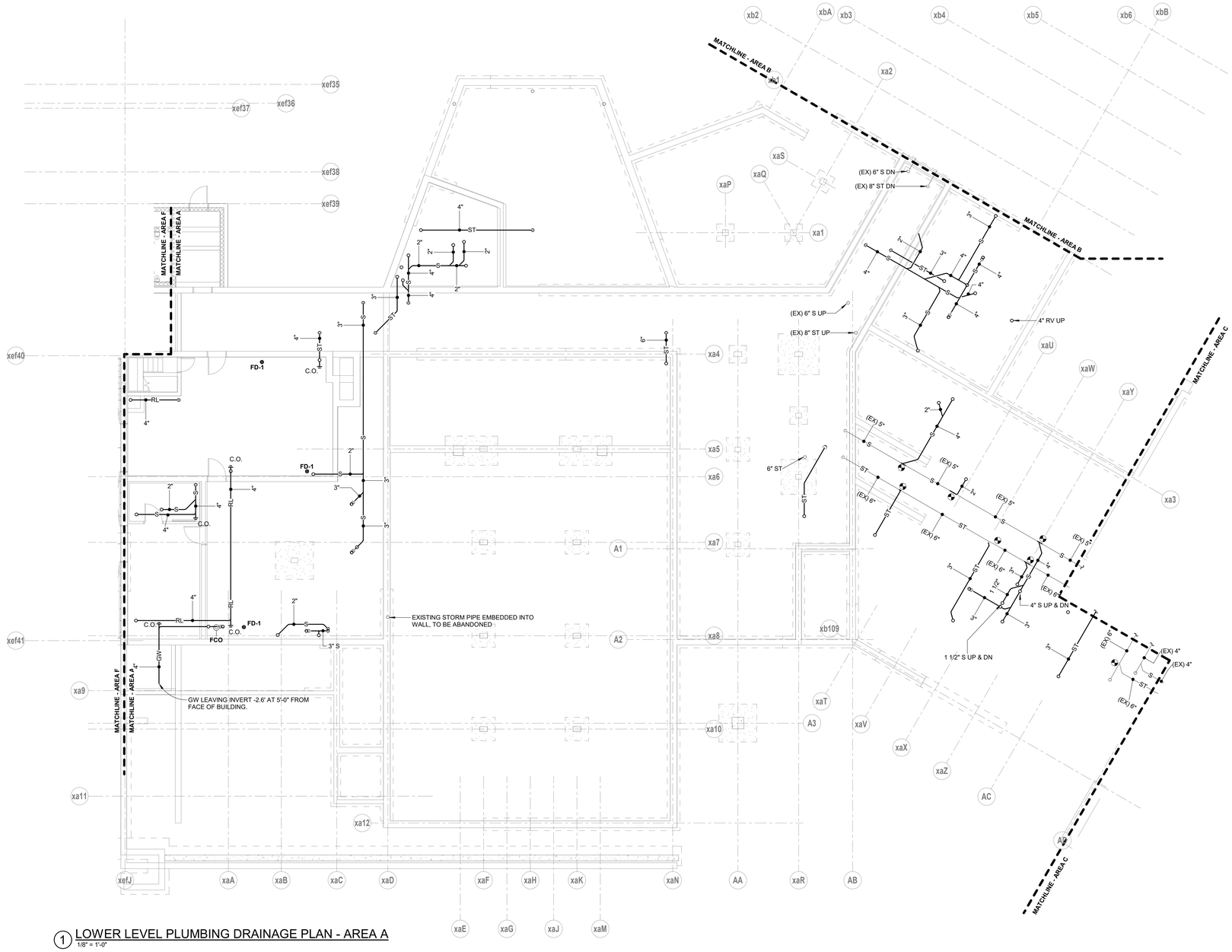
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING UNDERSLAB PLANS - AREAS E & F

DRAWING NO.:
PU1.05

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1 LOWER LEVEL PLUMBING DRAINAGE PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
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PROJECT NO.: 18-000 DRAWN BY: JB

LOWER LEVEL PLUMBING DRAINAGE PLAN - AREA A

DRAWING NO.:

P1.01

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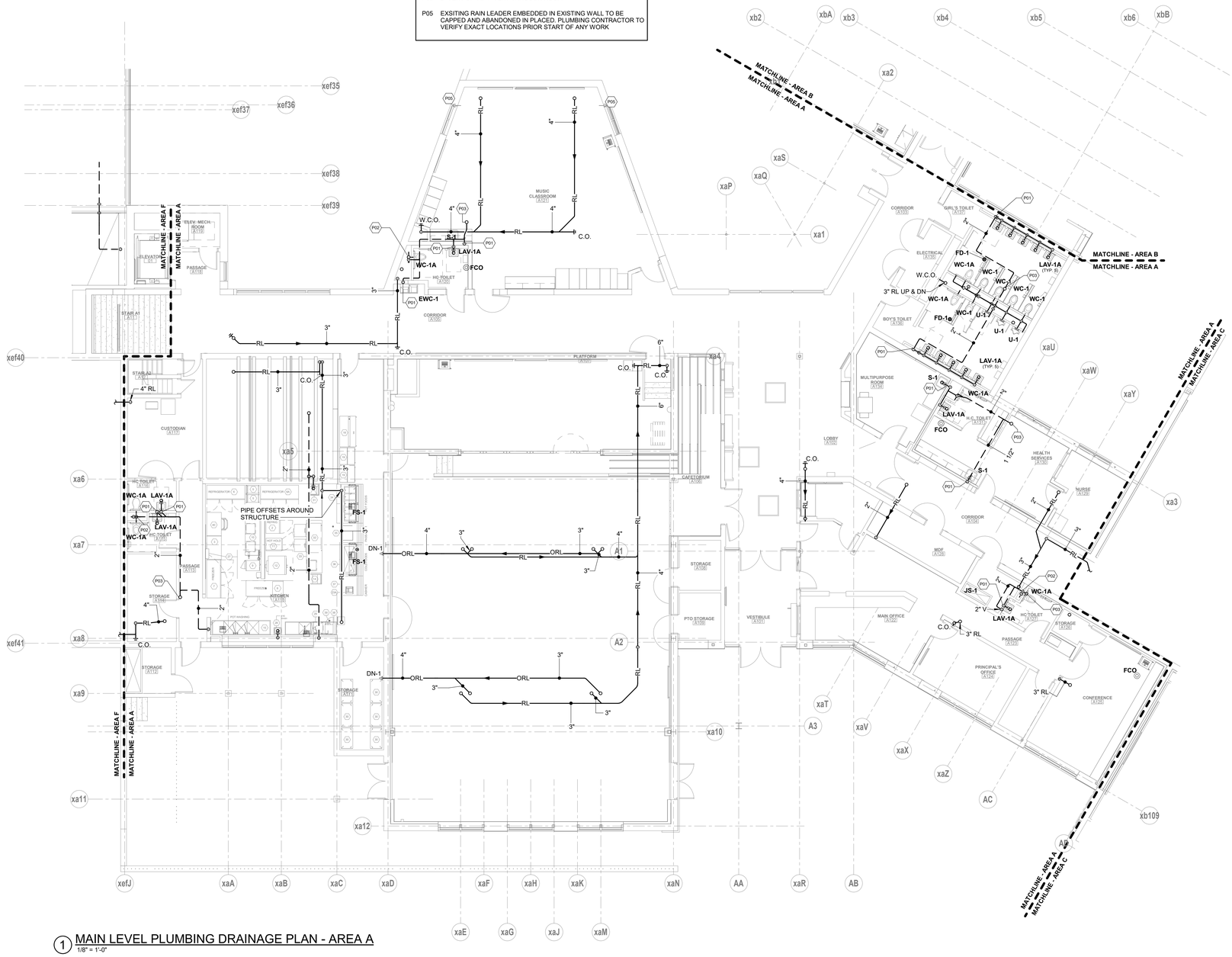
PLUMBING KEYNOTES

P01 1-1/2" WASTE DOWN, 1-1/2" VENT UP

P02 4" SANITARY DOWN BELOW FLOOR SLAB, 2" VENT UP IN WALL.

P03 2" VENT UP TO 4" VENT THROUGH ROOF.

P05 EXSITING RAIN LEADER EMBEDDED IN EXISTING WALL TO BE CAPPED AND ABANDONED IN PLACED. PLUMBING CONTRACTOR TO VERIFY EXACT LOCATIONS PRIOR START OF ANY WORK



1 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA A
1/8" = 1'-0"

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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA A

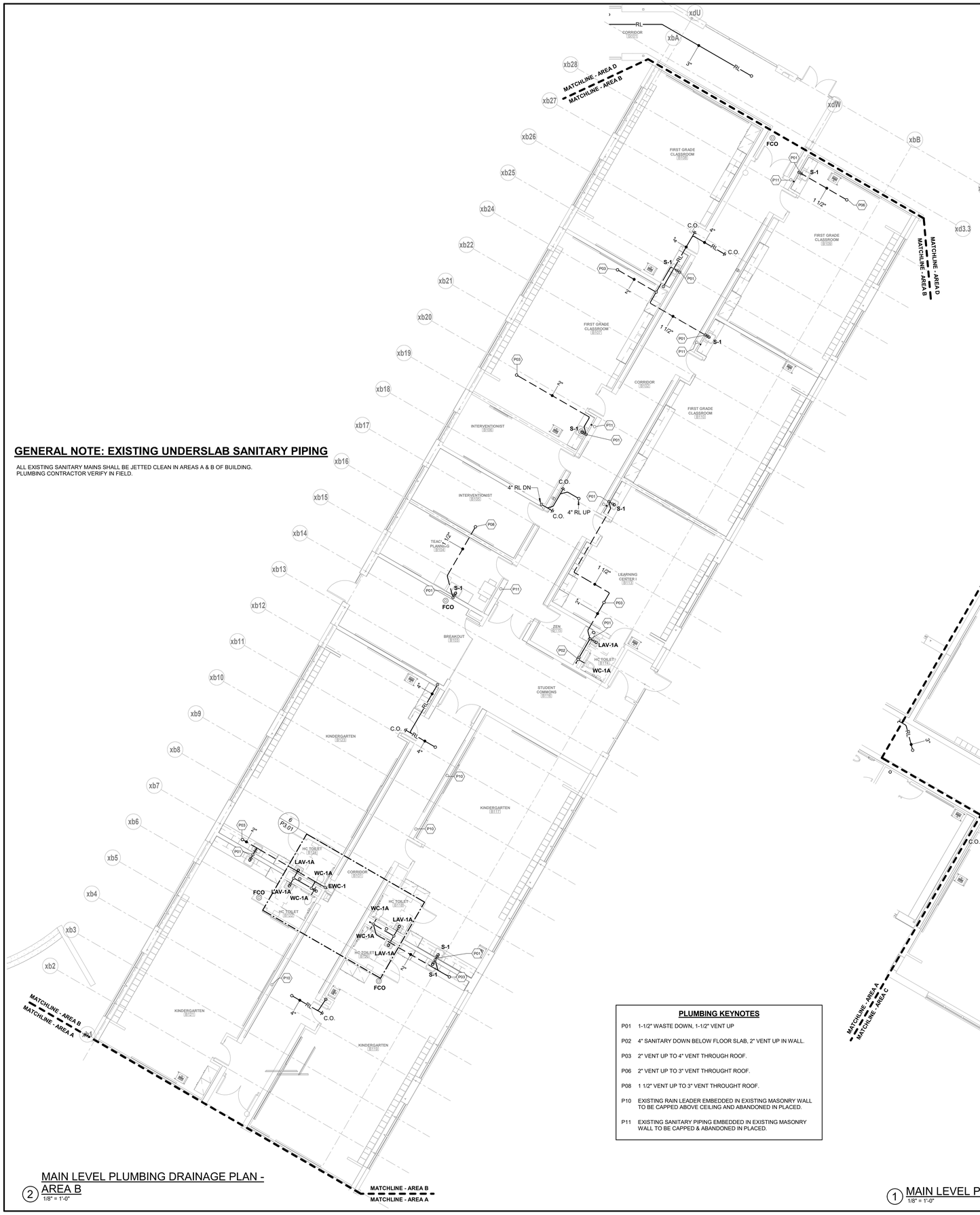
DRAWING NO.:

P1.02

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GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

ALL EXISTING SANITARY MAINS SHALL BE JETTED CLEAN IN AREAS A & B OF BUILDING.
PLUMBING CONTRACTOR VERIFY IN FIELD.



PLUMBING KEYNOTES

P01	1-1/2" WASTE DOWN, 1-1/2" VENT UP
P02	4" SANITARY DOWN BELOW FLOOR SLAB, 2" VENT UP IN WALL.
P03	2" VENT UP TO 4" VENT THROUGH ROOF.
P06	2" VENT UP TO 3" VENT THROUGHT ROOF.
P08	1 1/2" VENT UP TO 3" VENT THROUGHT ROOF.
P10	EXISTING RAIN LEADER EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED ABOVE CEILING AND ABANDONED IN PLACED.
P11	EXISTING SANITARY PIPING EMBEDDED IN EXISTING MASONRY WALL TO BE CAPPED & ABANDONED IN PLACED.

2 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA B
1/8" = 1'-0"

1 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA C
1/8" = 1'-0"

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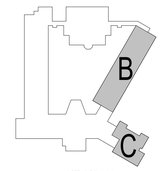
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KEY PLAN

SCALE: 1/8" = 1'-0" 0' 4' 8' 16' PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

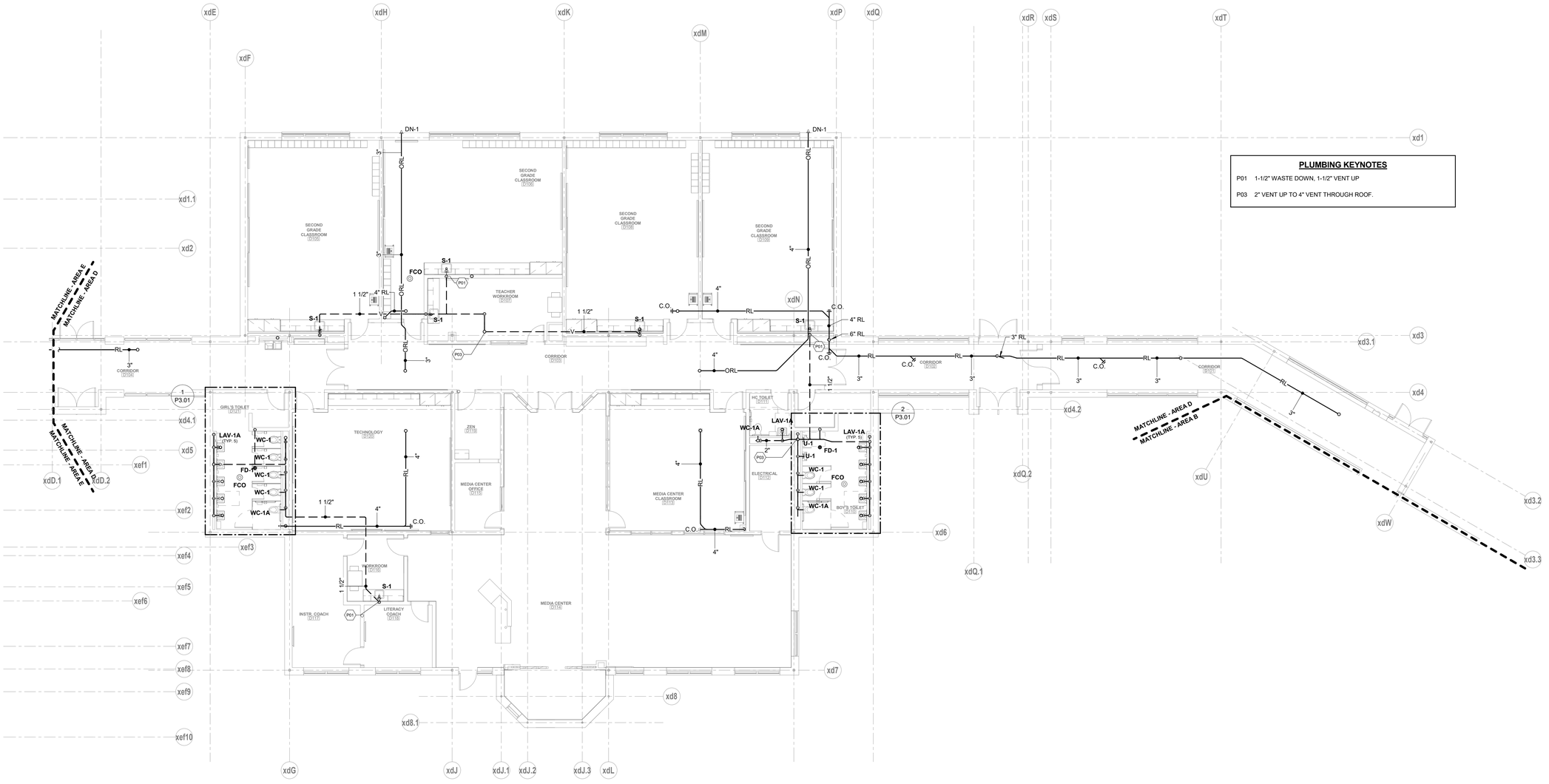
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MAIN LEVEL PLUMBING DRAINAGE PLANS - AREAS B & C

DRAWING NO.:

P1.03

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1 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA D
1/8" = 1'-0"

PLUMBING KEYNOTES

P01 1-1/2" WASTE DOWN, 1-1/2" VENT UP

P03 2" VENT UP TO 4" VENT THROUGH ROOF.

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SCALE: 1/8" = 1'-0"

PROJECT NO.: 18-000 DRAWN BY: JB

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

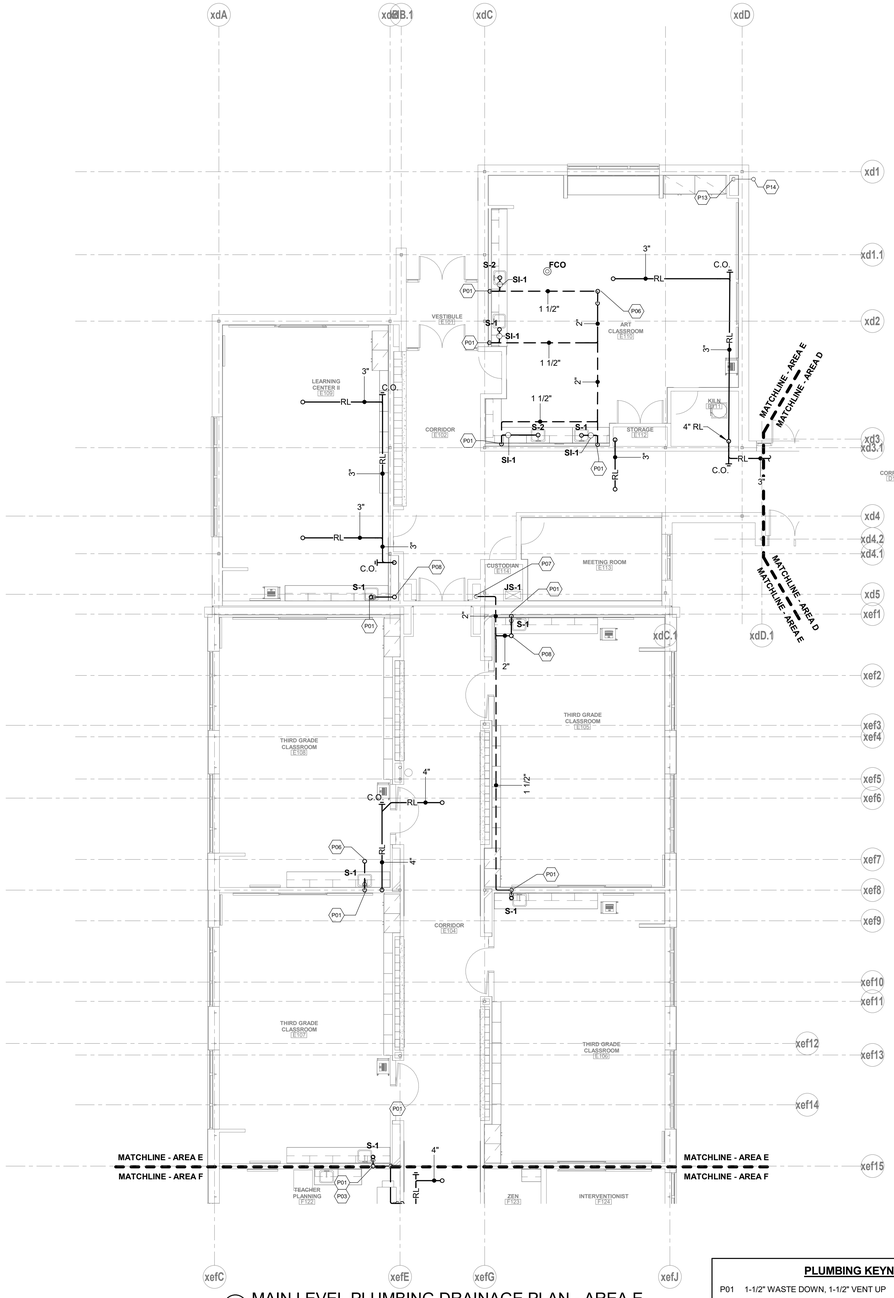
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MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA D

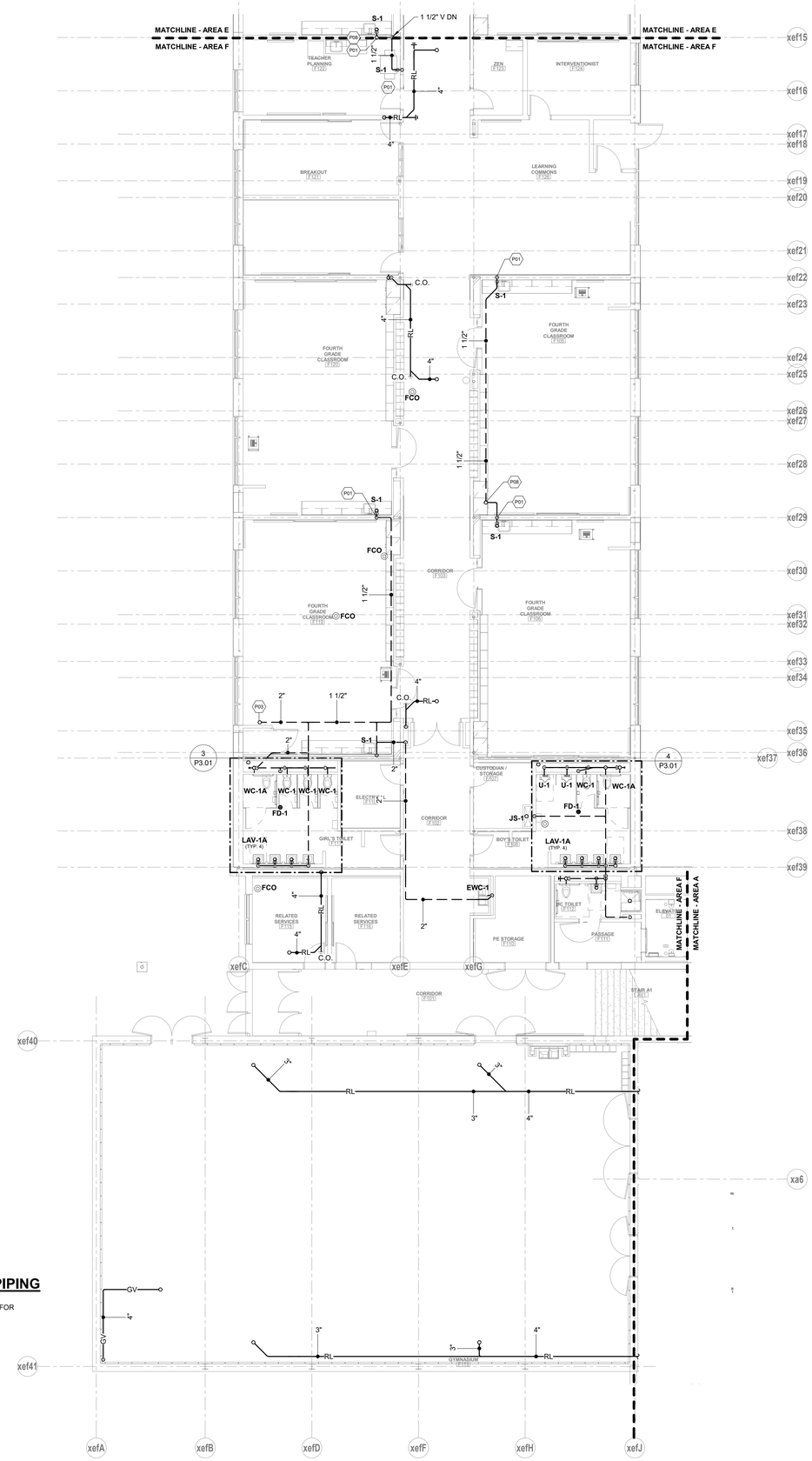
DRAWING NO.:

P1.04

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1 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL PLUMBING DRAINAGE PLAN - AREA F
1/8" = 1'-0"

PLUMBING KEYNOTES

P01	1-1/2" WASTE DOWN, 1-1/2" VENT UP
P03	2" VENT UP TO 4" VENT THROUGH ROOF.
P06	2" VENT UP TO 3" VENT THROUGHT ROOF.
P07	2" WASTE DOWN, 2" VENT UP
P08	1 1/2" VENT UP TO 3" VENT THROUGHT ROOF.
P13	EXISTING RADON MITIGATION VENT PIPING DOWN BELOW FLOOR SLAB.
P14	EXISTING RADON MITIGATION VENT PIPING UP ON FACE OF BUILDING.

GENERAL NOTE: EXISTING UNDERSLAB SANITARY PIPING

CONTRACTOR SHALL CUT THE FLOOR SLAB IN AREAS E & F TO EXPOSE EXISTING SANITARY PIPING. CONTRACTOR SHALL SCOPE EXISTING SANITARY PIPING TO DETERMINE EXISTING PIPING CONDITION FOR POSSIBLE REUSE.

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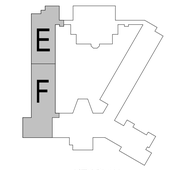
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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

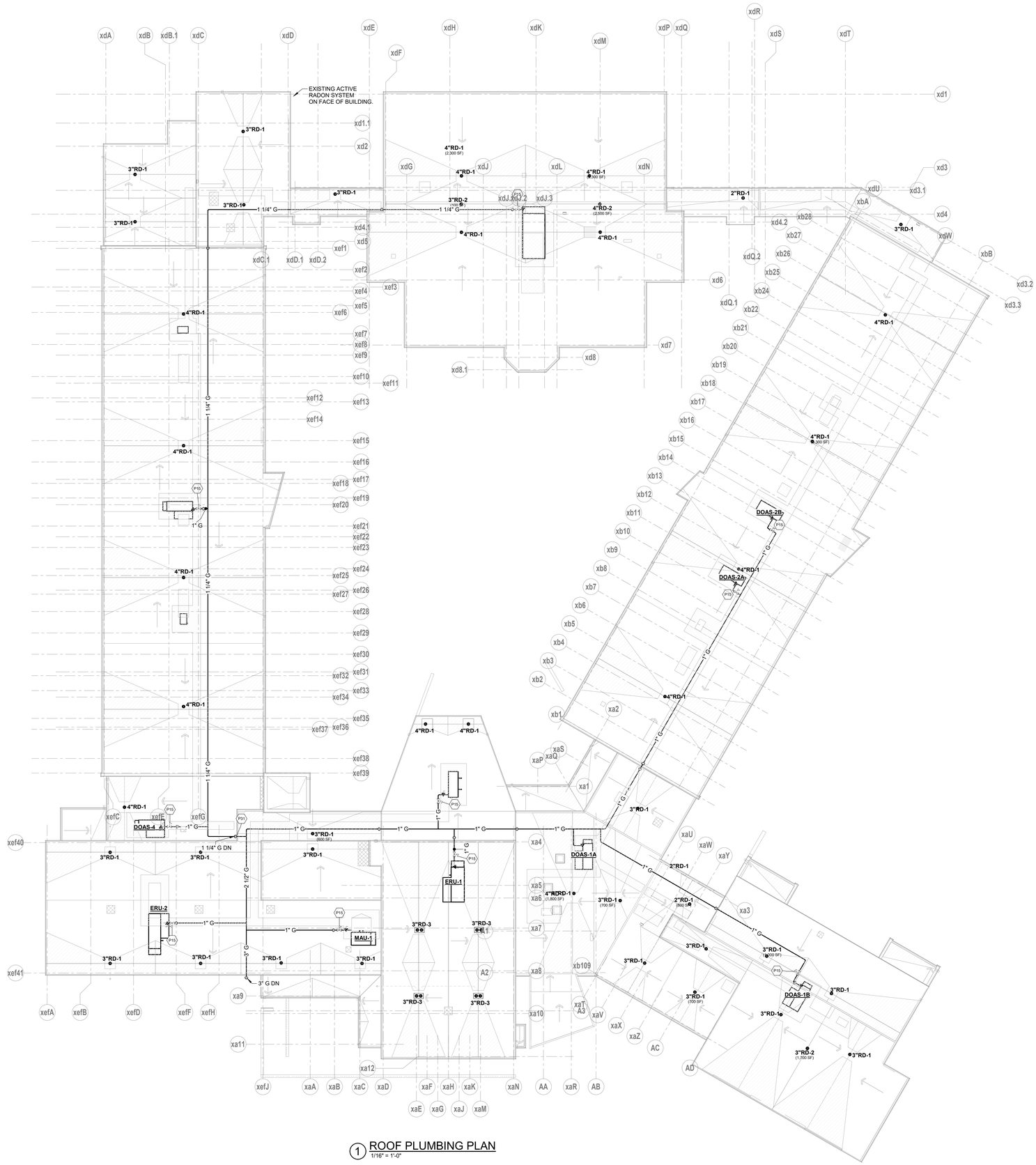
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MAIN LEVEL PLUMBING DRAINAGE PLANS - AREAS E & F

DRAWING NO.:
P1.05

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1 ROOF PLUMBING PLAN
1/16" = 1'-0"

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PROJECT TRUE

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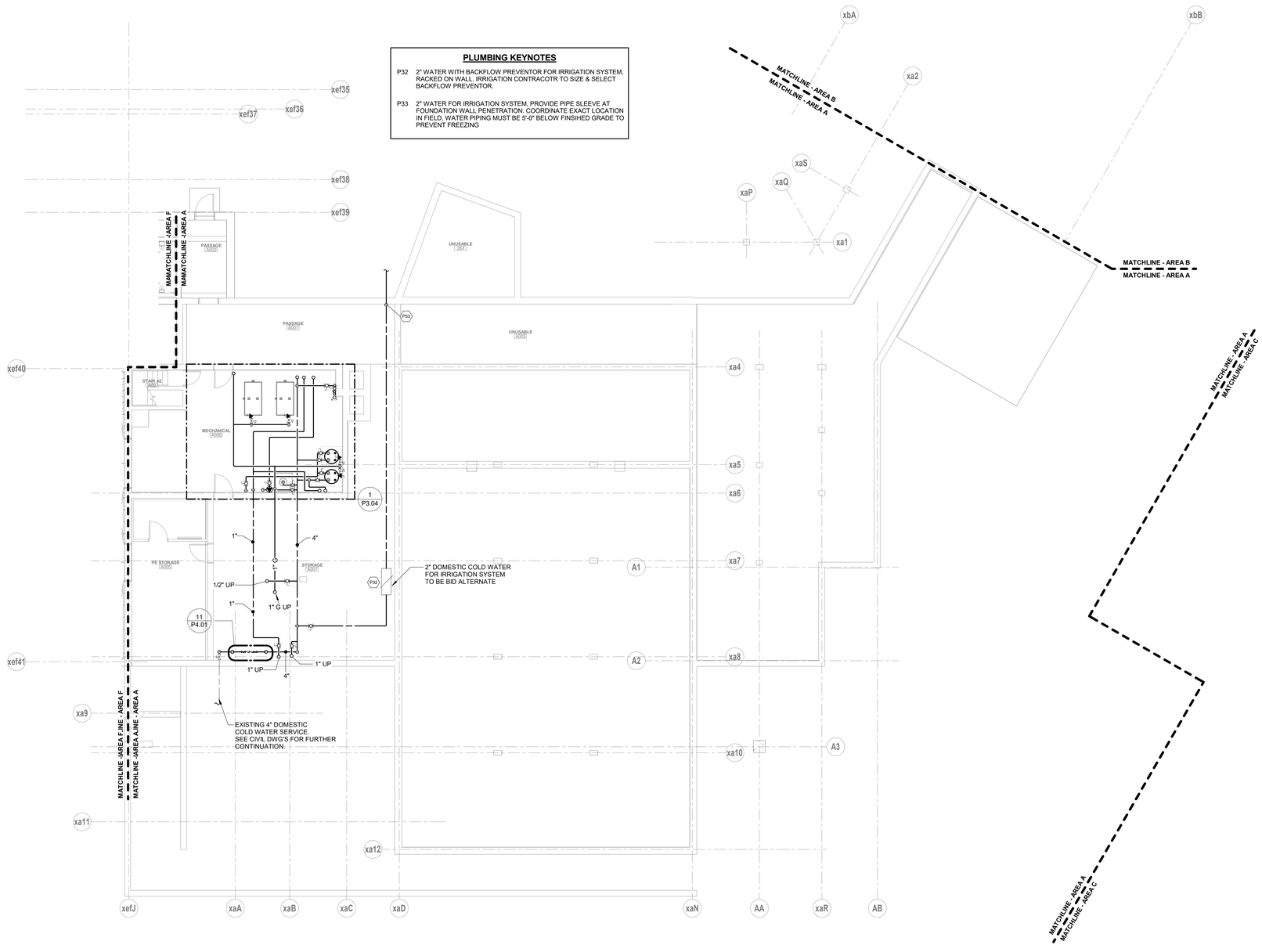
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PLUMBING ROOF PLAN

DRAWING NO.:
P1.07

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1 LOWER LEVEL PLUMBING SUPPLY PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

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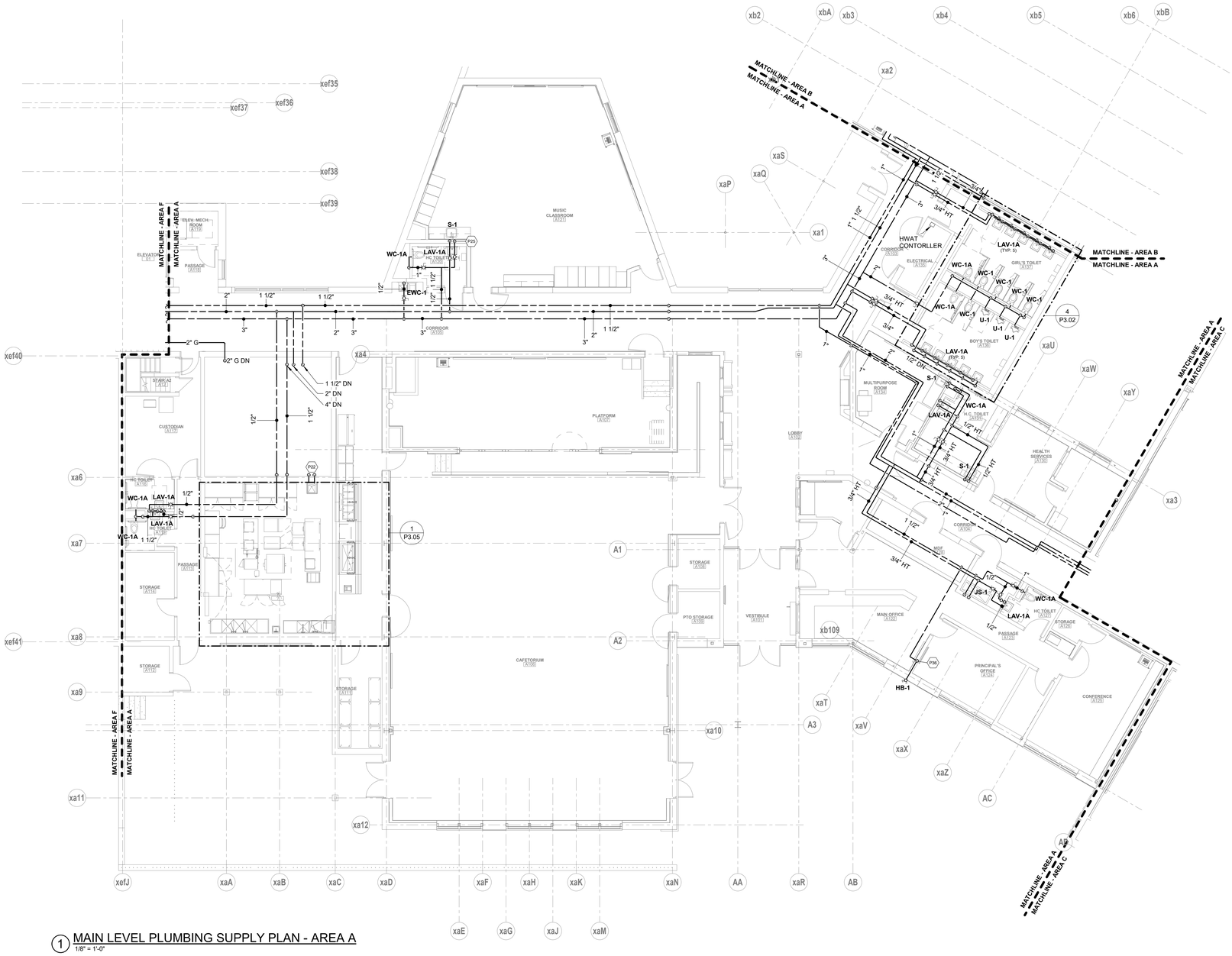
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LOWER LEVEL PLUMBING SUPPLY PLAN - AREA A

DRAWING NO.:
P2.01

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1 MAIN LEVEL PLUMBING SUPPLY PLAN - AREA A
1/8" = 1'-0"

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PROJECT TRUE

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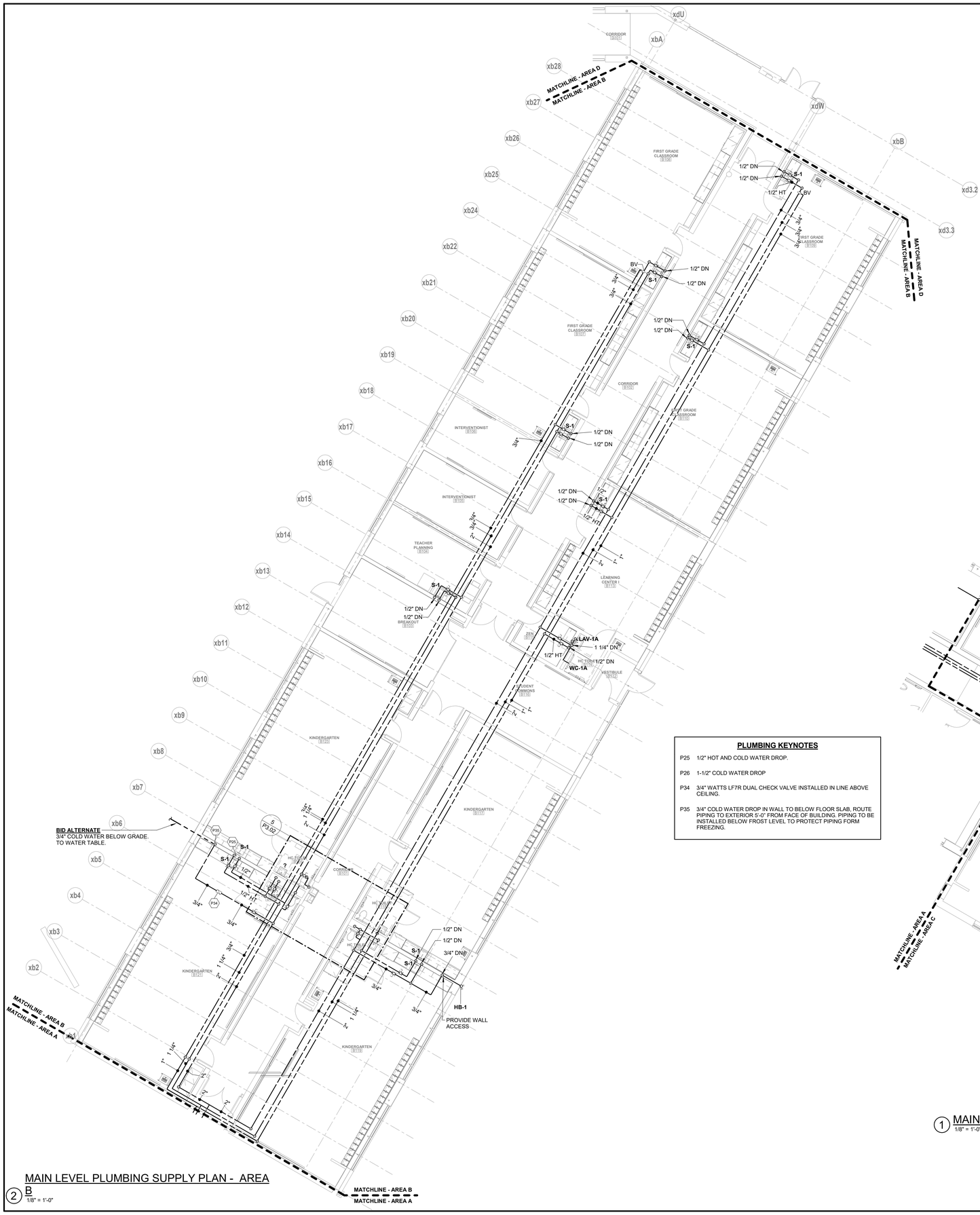
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MAIN LEVEL PLUMBING SUPPLY PLAN - AREA A

DRAWING NO.:
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MAIN LEVEL PLUMBING SUPPLY PLAN - AREA B

2 B

1/8" = 1'-0"

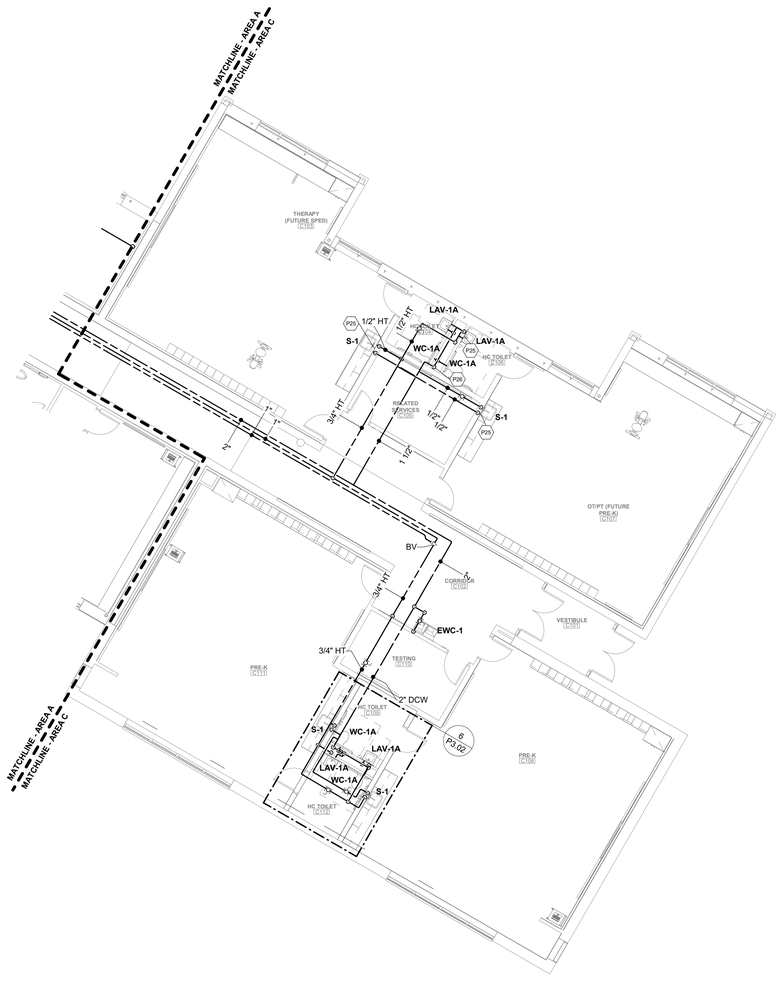
PLUMBING KEYNOTES

P25 1/2" HOT AND COLD WATER DROP.

P26 1-1/2" COLD WATER DROP

P34 3/4" WATTS LF7R DUAL CHECK VALVE INSTALLED IN LINE ABOVE CEILING.

P35 3/4" COLD WATER DROP IN WALL TO BELOW FLOOR SLAB, ROUTE PIPING TO EXTERIOR 5'-0" FROM FACE OF BUILDING. PIPING TO BE INSTALLED BELOW FROST LEVEL TO PROTECT PIPING FORM FREEZING.



1 MAIN LEVEL PLUMBING SUPPLY PLAN - AREA C

1/8" = 1'-0"

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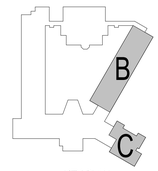
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KEY PLAN

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

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NEWINGTON, CT 06111

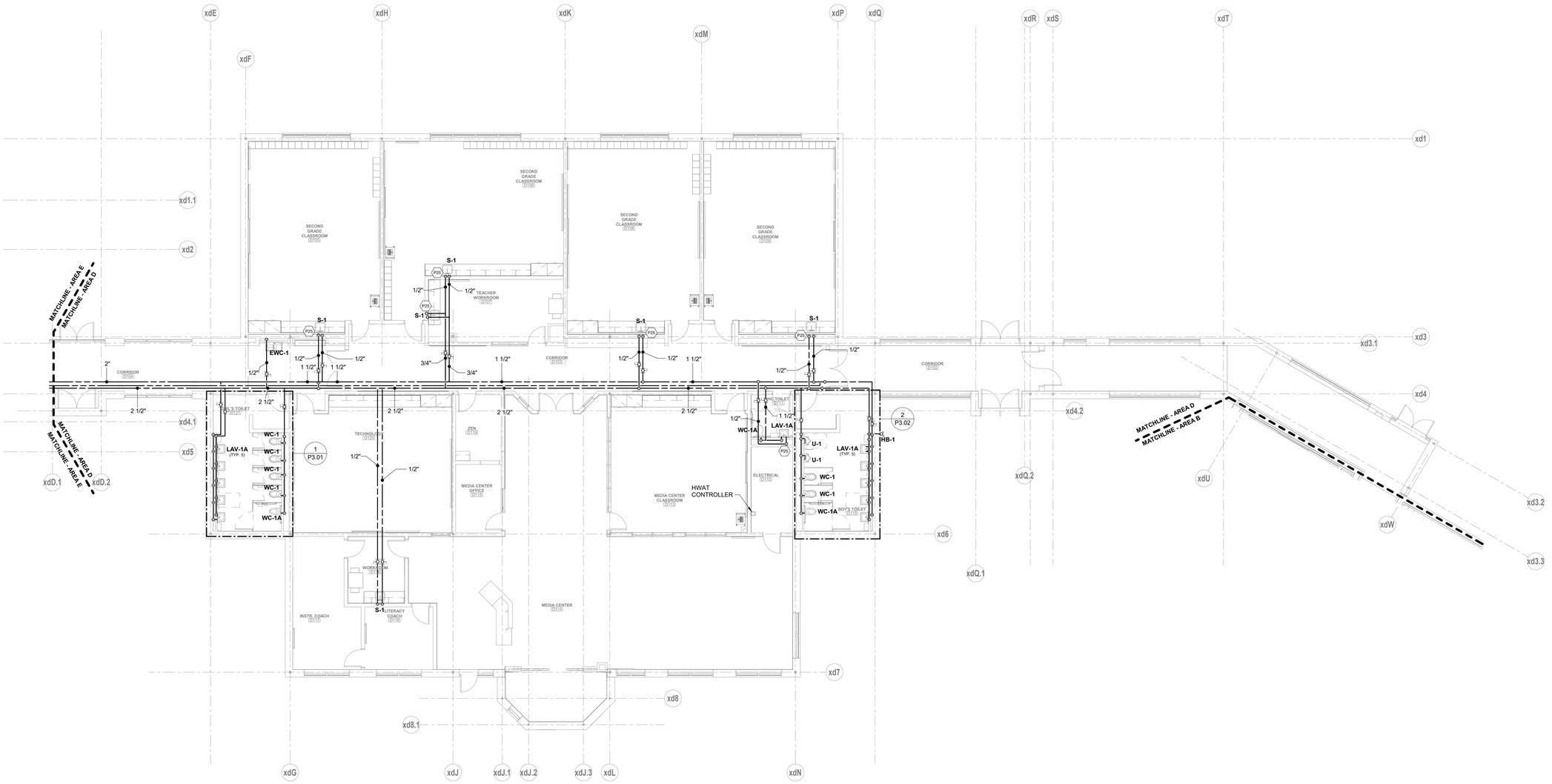
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MAIN LEVEL PLUMBING SUPPLY PLANS - AREAS B & C

DRAWING NO.:

P2.03

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1 MAIN LEVEL PLUMBING SUPPLY PLAN - AREA D
1/8" = 1'-0"

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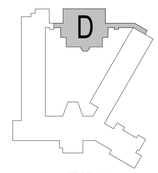
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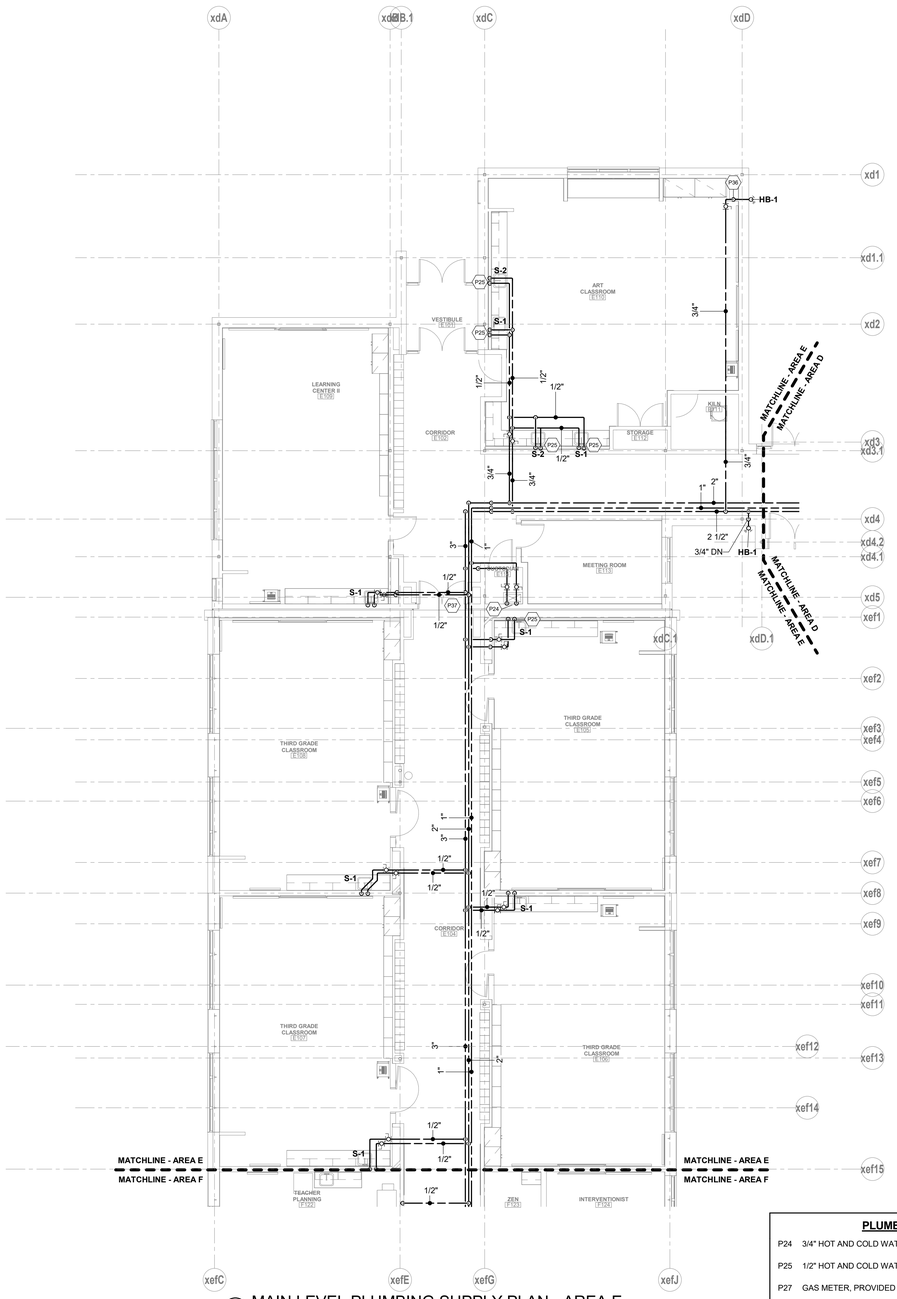
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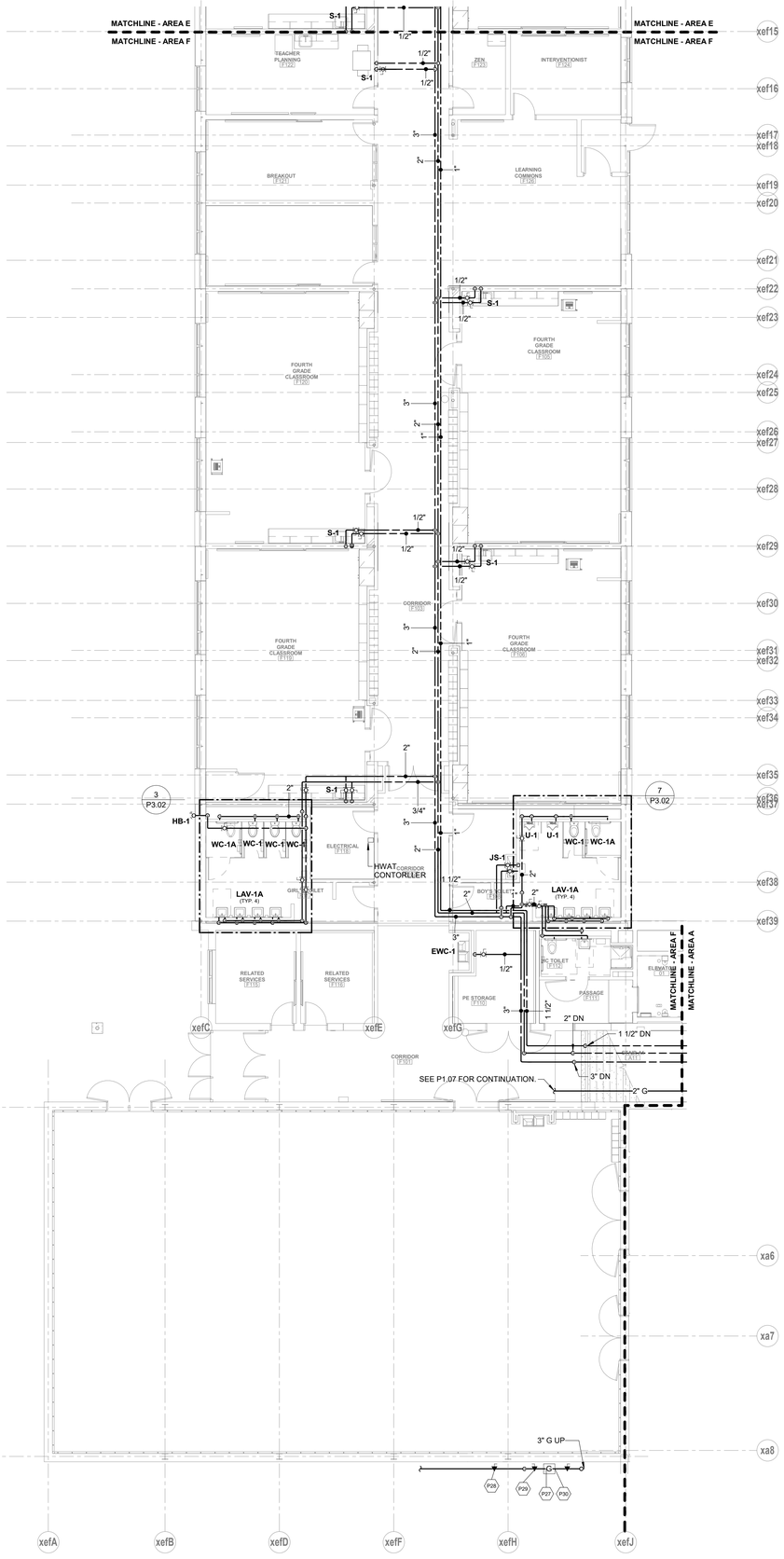
MAIN LEVEL PLUMBING SUPPLY PLAN - AREA D

DRAWING NO.:
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1 MAIN LEVEL PLUMBING SUPPLY PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL PLUMBING SUPPLY PLAN - AREA F
1/8" = 1'-0"

PLUMBING KEYNOTES

P24 3/4" HOT AND COLD WATER DROP,TO JS-1

P25 1/2" HOT AND COLD WATER DROP.

P27 GAS METER, PROVIDED BY LOCAL UTILITY.

P28 NATURAL GAS SERVICE BELOW GRADE. SEE SITE UTILITY DRAWINGS FOR FURTHER CONTINUATION.

P29 GAS SHUT-OFF VALVE, TO BE INSTALLED ON INLET & OUTLET SIDE OF GAS METER

P30 TOTAL CONNECTED NATURAL GAS LOAD OF 5,750.5 CFH AT THE OUTLET SIDE OF GAS METER. GAS PRESSURE TO BE SET AT 2PSIG ON THE OUTSIDE OF METER.

P36 3/4" COLD WATER DROP IN WALL , ROUTE TO EXTERIOR HOSE BIB

P37 PLUMBING CONTRACTOR TO PROVIDE FLEXIBLE BUILDING EXPANSION LOOPS AT BUILDING EXPANSION JOINTS. COORDINATE WITH ARCHITECTURAL & STRUCTURAL DRAWINGS.

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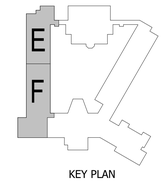
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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

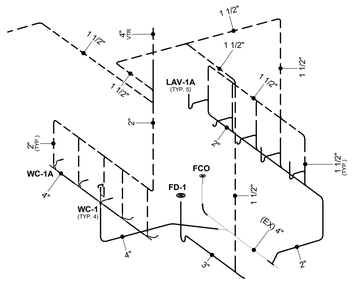
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

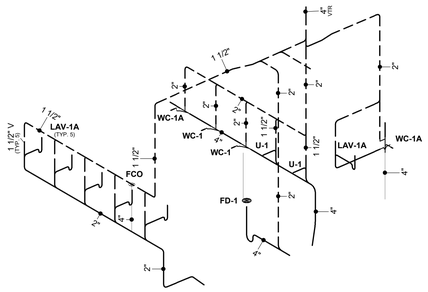
MAIN LEVEL PLUMBING SUPPLY PLANS - AREAS E & F

DRAWING NO.:
P2.05

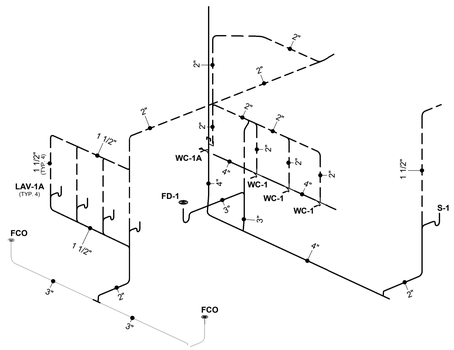
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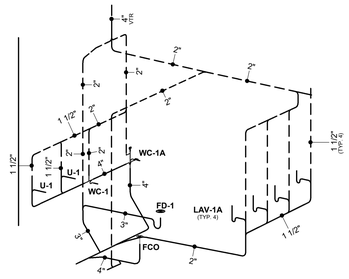
ISOMETRIC RISER - AREA D GIRLS TOILET D121 - DRAINAGE, WASTE & VENT



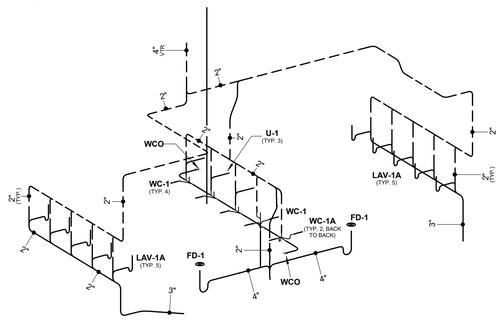
ISOMETRIC RISER AREA D BOYS TOILET D110 - DRAINAGE, WASTE & VENT



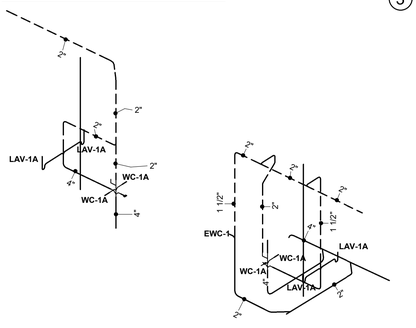
ISOMETRIC RISER AREA F GIRLS TOILET F117 - DRAINAGE, WASTE & VENT



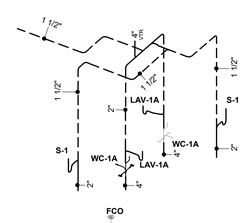
ISOMETRIC RISER - AREA F BOYS TOILET F108 - DRAINAGE, WASTE & VENT



ISOMETRIC RISER AREA A - BOYS TOILET A136 & GIRLS TOILET A137 - DRAINAGE, WASTE & VENT



ISOMETRIC RISER -AREA B - BOYS TOILET B124 & B118, GRILS TOILET B122 & 120 - DRAINAGE, WASTE & VENT



ISOMETRIC RISER AREA C - HC TOILET C109 & C112 - DRAINAGE, WASTE & VENT

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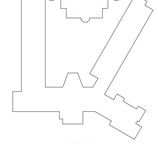
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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

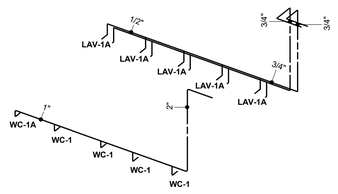
85 RESERVOIR ROAD
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DWV ISOMETRIC RISERS

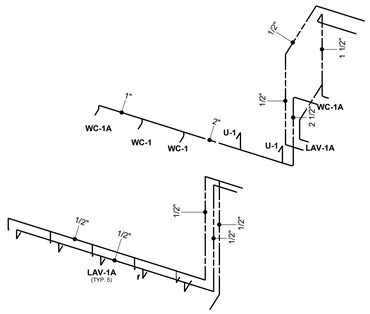
DRAWING NO.:
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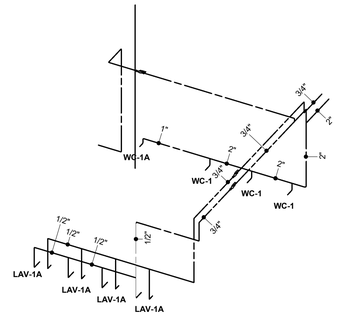
ISOMETRIC RISER - AREA D GIRLS TOILET D121 - DOMESTIC SUPPLY

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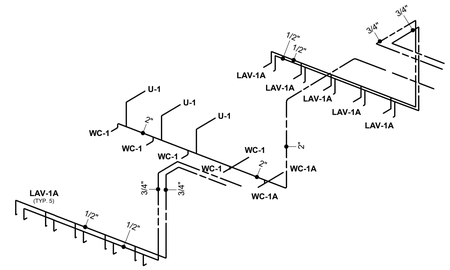
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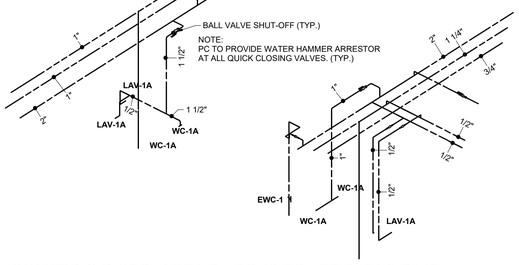
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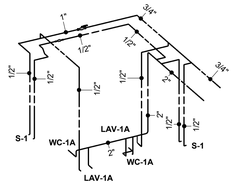
ISOMETRIC RISER AREA A - BOYS TOILET A136 & GIRLS TOILET A137 - DOMESTIC SUPPLY

4



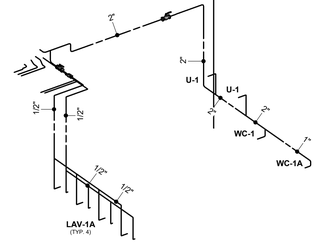
ISOMETRIC RISER -AREA B - BOYS TOILET B124 & B118, GRILS TOILET B122 & 120 - DOMESTIC SUPPLY

5



ISOMETRIC RISER AREA C - HC TOILET C109 & C112 - DOMESTIC SUPPLY

6



ISOMETRIC RISER - AREA F BOYS TOILET F108 - DOMESTIC SUPPLY

7

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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

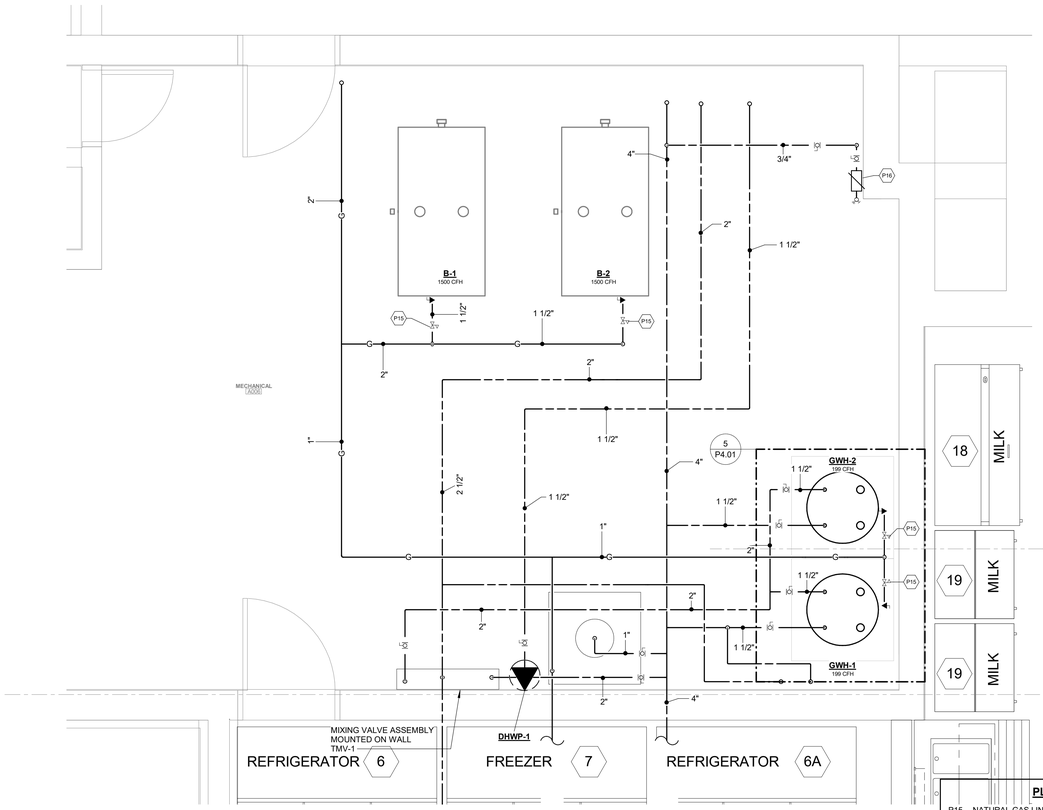
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DOMESTIC SUPPLY ISOMETRIC RISERS

DRAWING NO.:
P3.02

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1 LOWER LEVEL MECHANICAL ROOM PARTIAL PALN
1/2" = 1'-0"

PLUMBING KEYNOTES

P15 NATURAL GAS LINE PRESSURE REGULATOR TO BE SET AT 8" W.C. TYP. AT ALL GAS FIRED EQUIPMENT

P16 3/4" REDUCED PRESSURE BACKFLOW PREVENTER, WATTS 909-QT-S 3/4"

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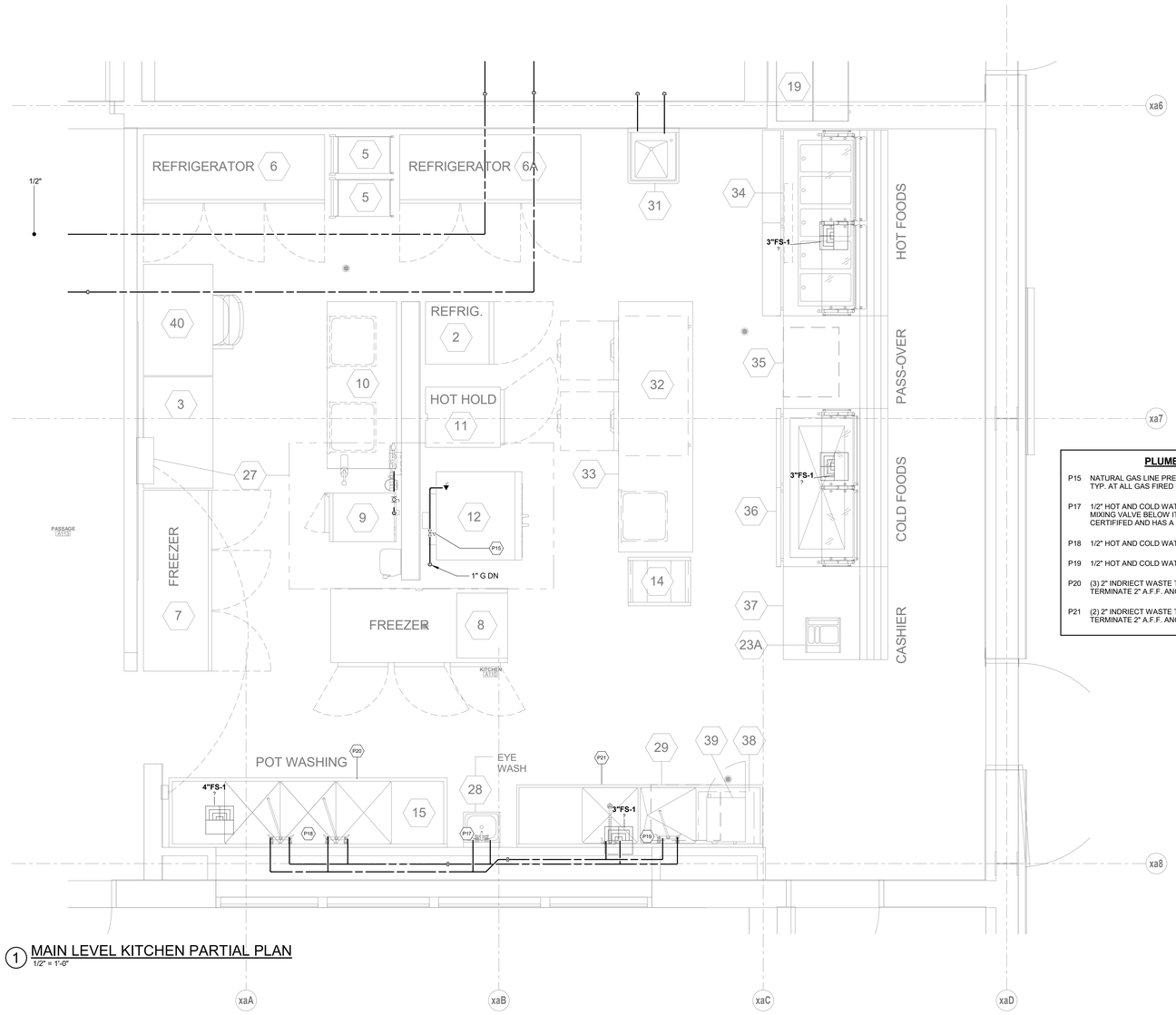
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PLUMBING PARTIAL PLANS

DRAWING NO.:
P3.04

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1 MAIN LEVEL KITCHEN PARTIAL PLAN
1/2" = 1'-0"

PLUMBING KEYNOTES

P15 NATURAL GAS LINE PRESSURE REGULATOR TO BE SET AT 8" W.C. TYP. AT ALL GAS FIRED EQUIPMENT

P17 1/2" HOT AND COLD WATER TO POIN TOF USE THERMOSTATIC MIXING VALVE BELOW ITEM # 28, VALVE SHALL BE ANSI Z358.1 CERTIFIFED AND HAS A 3 GPM FLOW RATE.

P18 1/2" HOT AND COLD WATER TO ITEM #15, TO EACH FACUET (2)

P19 1/2" HOT AND COLD WATER TO ITEM #29

P20 (3) 2" INDRIECT WASTE TO BE ROUTED FROM ITEM #15 TO 4" FS-1. TERMINATE 2" A.F.F. ANGLE CUT TO REDUCE SPLASHING.

P21 (2) 2" INDRIECT WASTE TO BE ROUTED FROM ITEM #29 TO 3" FS-1. TERMINATE 2" A.F.F. ANGLE CUT TO REDUCE SPLASHING.

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

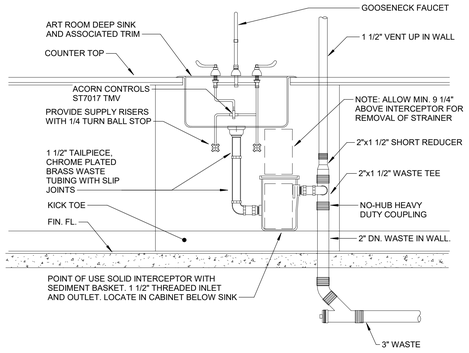
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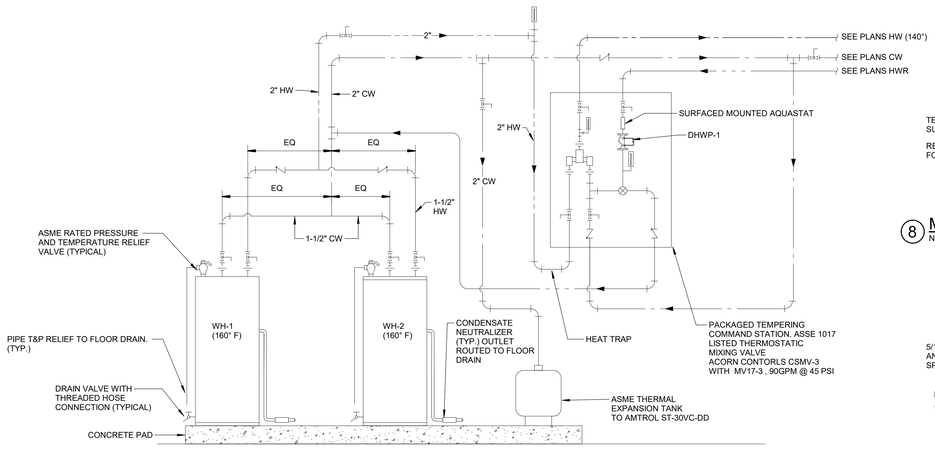
PLUMBING PARTIAL PLANS

DRAWING NO.:
P3.05

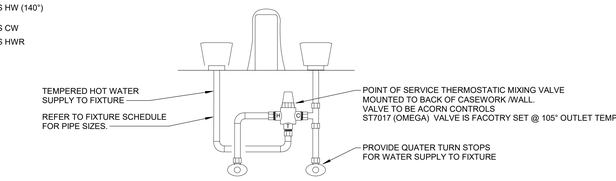
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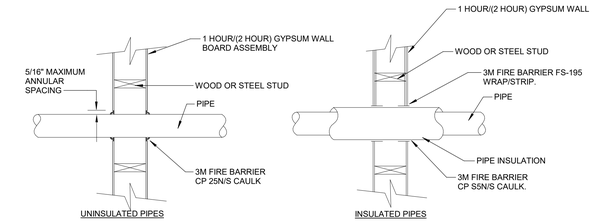
1 ARTROOM SINK WITH SOLID INTERCEPTER PIPING DETAIL
NTS



5 DOMESTIC HOT WATER SYSTEM SCHEMATIC
1/8" = 1'-0"

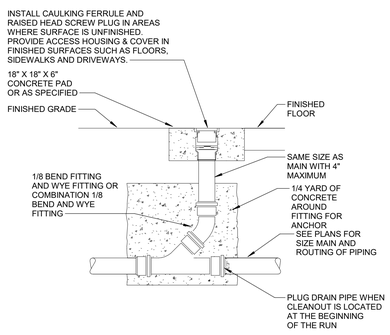


8 MIXING VALVE DETAIL
NTS

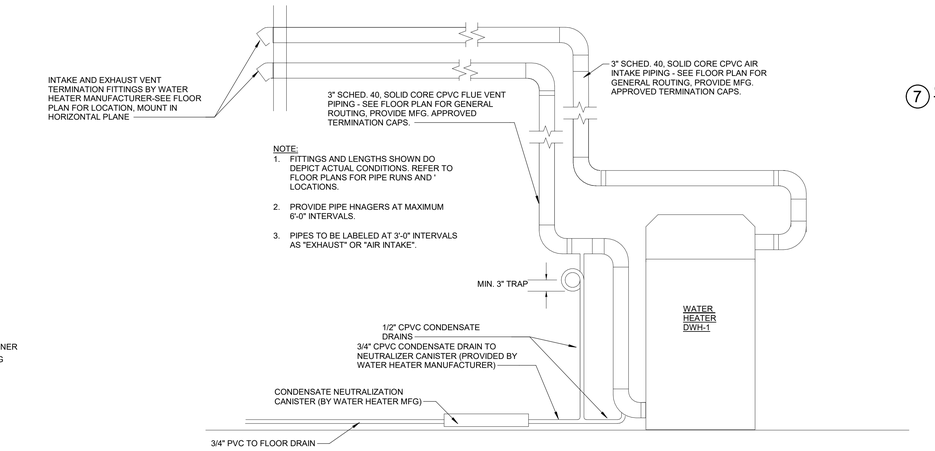


NOTES:
1. FIRE STOPPING TO CONFORM TO UL SYSTEM #147 ASSEMBLY
2. THE SPACE BETWEEN THE PENETRATING ITEM AND WALL BOARD MUST ACCOMMODATE AT LEAST ONE WRAP OF 3M BARRIER FS-195 WRAP/STRIP.
3. FILL ANNULAR SPACE WITH FS-195 WRAP/STRIP UNTIL THE SPACE IS LESS THAN 1/4".
4. THE WALL PENETRATION FIRESTOPS MUST BE INSTALLED ON BOTH SIDES OF THE WALL.

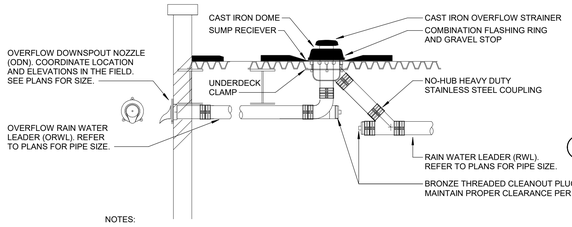
7 GYPSUM WALL PENETRATION FIRESTOP DETAIL
12" = 1'-0"



2 CLEANOUT
NTS

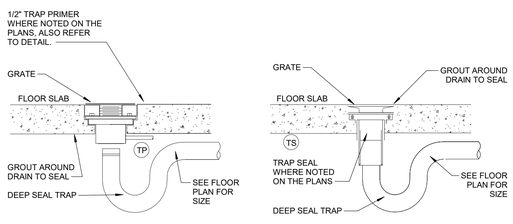


6 GAS WATER HEATER VENTING DETAIL - TYPICAL DWH-1 & DWH-2
NTS



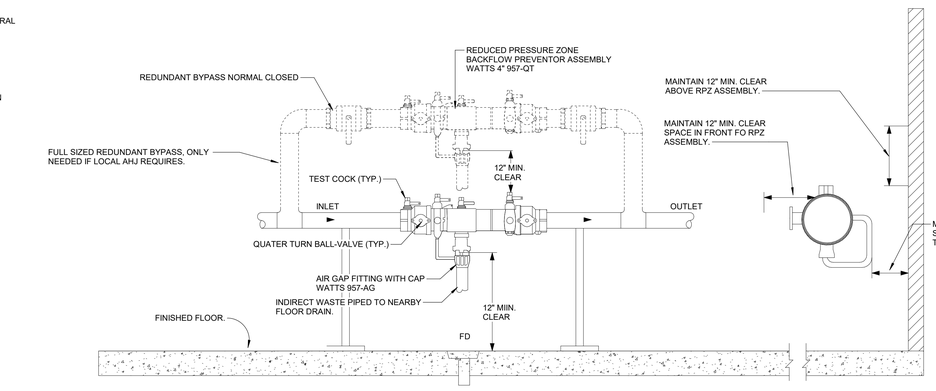
NOTES:
1. COMBINATION BI-FUNTIONAL ROOF DRAIN. REFER TO ROOF PLANS FOR ROOF DRAIN SIZE AND STRUCTURAL AND ARCHITECTURAL DOCUMENTS FOR ROOF DECK CONSTRUCTION AND ROOF BUILD-UP (INSULATION, FLASHING MEMBRANE VAPOR BARRIER, ETC.) PROVIDE EXTENSION RING AS REQUIRED FOR PROPER INSTALLATION.
2. INSULATE ROOF DRAIN SUMP BODY, RAIN WATER LEADER AND OVERFLOW RAIN WATER LEADER PER SPECIFICATION.
3. REFER TO MANUFACTURED OF THE ROOF DRAIN FOR RECOMMENDED ROOF DECK OPENINGS BASED ON THE SIZE OF THE DRAIN.

3 COMBINATION BI-FUNCTIONAL ROOF DRAIN DETAIL
NTS



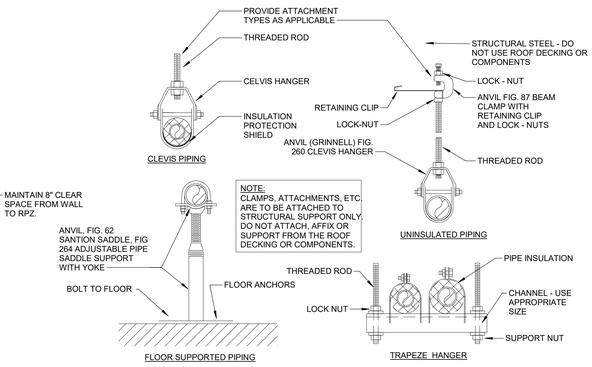
NOTE:
PROVIDE EXTENSION ADAPTER IF REQUIRED TO ACCOMMODATE FLOOR THICKNESS

4 FLOOR DRAIN DETAIL
NTS



NOTES
1. THE RPZ MOUNTHING HEIGHT AND CLEARANCES SHALL BE MAINTAINED PER THE LOCAL AHJ REQUIEMENTS. ALSO SEE MANUFACUTRES INSTALLATION INSTRUCTIONS FOR FURTHER INFORMATION.
2. THE ASSEMBLY SHALL BE ADEQUATELY SUPPORTED AND/OR RESTRAINED TO PREVENT LATERAL MOVEMENT. PIPE HANGERS, BRACES, SADDLES, SHOULD BE PALCED IN A MANNER THAT WILL NOT OBSTRUCT ACCESS TO THE TESTING PORTS OR VALVES.

11 BACKFLOW PREVENTER DETAIL
1" = 1'-0"



NOTES
3. SIZE HANGER RODS AND ANCHORS TO ADEQUATELY SUPPORT LOADS. REFER TO MANUFACTURERS RECOMMENDATIONS.
2. PROVIDE HANGERS SUITABLE FOR AWWA DUCTILE IRON PIPE FOR SANITARY AND STORM PIPING.
3. INSULATION SHIELDS TO BE GALVANIZED STEEL.

10 TYPICAL PIPE HANGER AND SUPPORT DETAIL
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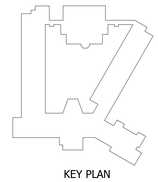
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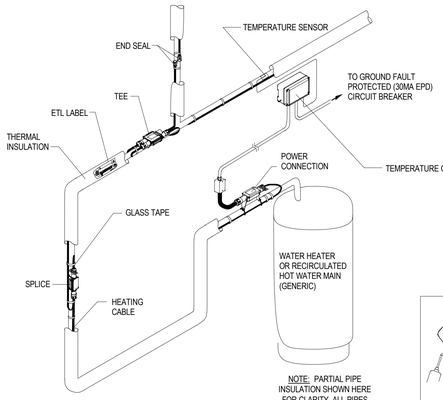
PROJECT NO.: 18-000 DRAWN BY: JB

PLUMBING DETAILS

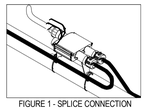
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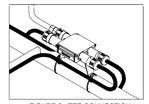
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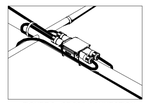
CIRCUIT #	TC LOCATION	OPERATING TEMPERATURE	CIRCUIT BREAKER (A)	MAX. CT LENGT	NOTES:
1	ELEC. A135	140°	30A	500	-
2	ELEC. F118	140°	30A	500	-
3	ELEC. D112	140°	30A	500	-

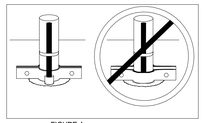


1 TEMPERATURE MAINTENANCE HEAT TRACE DETAILS
NOT TO SCALE


FIGURE 1 - SPLICE CONNECTION


FIGURE 2 - TEE CONNECTION


FIGURE 2 - CROSS CONNECTION


FIGURE 4
PROTECTING THE HEATING CABLE AT FLOOR PENETRATIONS

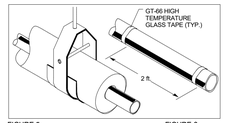


FIGURE 5
PIPE HANGER WITH HEATING CABLE INSULATION RUNS THROUGH HANGERS

FIGURE 6
ATTACHING HEATING CABLE

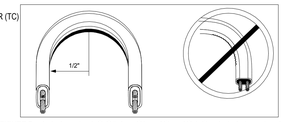
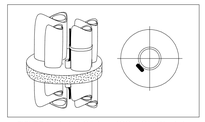
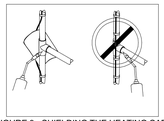


FIGURE 7 - BEND HEATING CABLE ON EDGE. DO NOT BEND IN FLAT PLANE


FIGURE 8 - BEND CABLE POSITION ON PIPE


FIGURE 9 - SHIELDING THE HEATING CABLE FROM FLAMES MAX. CONTINUOUS OPERATING TEMPERATURE 150°F (65°C)

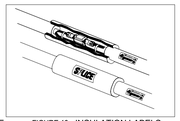
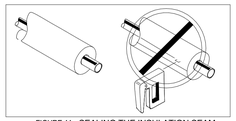
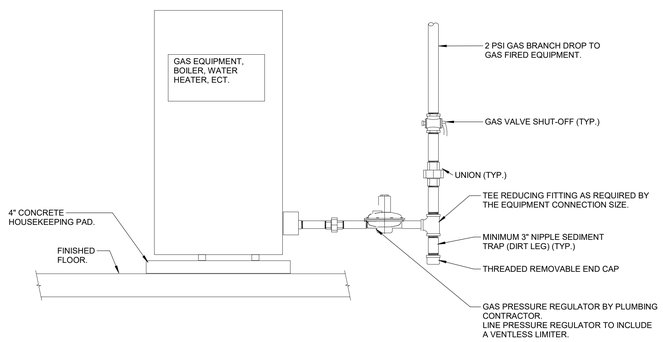


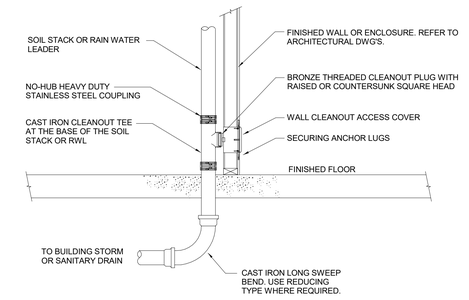
FIGURE 10 - INSULATION LABELS


FIGURE 11 - SEALING THE INSULATION SEAM
DO NOT USE STABLES

NOTES:
1. ALL NEW GAS PIPING SHALL BE PAINTED WITH PRIMER AND (2) COATS OF YELLOW RUST INHIBITIVE PAINT.
2. COORDINATE LOCATION OF GAS CONNECTION WITH EQUIPMENT LOCATION AND MECHANICAL CONTRACTOR
3. GAS PRESSURE REGULATORS TO BE AS MANUFACTURED BY MAXITROL, FISHER OR SENUS. CONTRACTOR TO SURVEY GAS UTILIZATION EQUIPMENT FOR SELECTION AND SIZING OF PROPER GAS REGULATORS.



2 EQUIPMENT GAS CONNECTION DETAIL
NOT TO SCALE



3 CLEANOUT DETAIL AT BASE OF STACK
1/8" = 1'-0"

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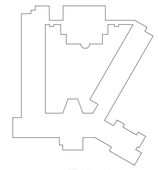
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION


KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

PLUMBING DETAILS

DRAWING NO.:
P4.02

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GAS-FIRED WATER HEATER SCHEDULE

ID	MANUFACTURER	MODEL	GAS BURNER		WATER SIDE				THERMAL EFFICIENCY	ELECTRICAL DATA			REMARKS
					STORAGE		PIPE DIAMETER						
			INPUT (BTU/H)	FUEL TYPE	RECOVERY @ 100°F (GPH)	VOL (gal)	INLET	OUTLET		FLA	VOLT	PH	
GWH-1	AO SMITH	BTH-199	199,000	NAT. GAS	235.0	100.0	1 1/2"	1 1/2"	98	5 A	120 V	1	PROVIDE CONDENSTATE NEUTRALIZATION KIT. VENTING SHOULD BE AL294C AND VENTED / INTAKE TO LOW PROFILE TERMINATION FITTING
GWH-2	AO SMITH	BTH-199	199,000	NAT. GAS	235.0	100.0	1 1/2"	1 1/2"	98	5 A	120 V	1	PROVIDE CONDENSTATE NEUTRALIZATION KIT. VENTING SHOULD BE AL294C AND VENTED / INTAKE TO LOW PROFILE TERMINATION FITTING

PLUMBING SPECIALTY FIXTURE SCHEDULE

TYPE	SPECIALTY ITEM	MANUFACTURER	MODEL	DESCRIPTION	REMARKS
ET-1	DOMESTIC WATER EXPANSION TANK	AMTROL	ST-30VC-DD	16.5 GALLON VERTICAL TANK, 15" DIAMETER, 25" TALL	
SI-1	SOLIDS INTERCEPTOR	JAY R. SMITH	871-T0150	SMALL CAPACITY ABS FLOOR MOUNTED SOLIDS INTERCEPTOR. WHITE ABS BODY. GASKET COVER WITH STAINLESS STEEL LATCH AND REMOVABLE SEDIMENT BUCKET WITH PERFORATED SCREEN	COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS / MILLWORK SPECIFICATIONS.

DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE

TAG	MANUFACTURER	MODEL NO.	PUMP		MOTOR			ELECTRICAL DATA		REMARKS
			FLOW (GPM)	HEAD (FT)	WATTS	RPM	ECM	VOLT	PH	
DHWP-1	TACO	0026e-SF2	6	18	120	0	YES	120 V	1	PUMP SHALL BE USED IN HIGH-EFFICIENCY ACTIVE ADAPT MODE.

PLUMBING FIXTURE SCHEDULE

GENERAL NOTES:

PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH SCREWDRIVER STOPS, WALL ESCUTCHEON, 17-GAUAGE SEMICAST "P" TRAPS WITH CLEANOUT PLUGS, PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNETION. REFER TO SPECIFICATIONS FOR EQUIVALENTS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING ELEVATION OF PLUMBING FIXTURES, CLEARANCE BELOW SINKS AND LAVATORIES AND OFFSET DRAIN LOCATIONS. OFFSET DRAINS SHALL BE OFFSET LEFT REAR OR OFFSET RIGHT REAR. COORDINATE MOUNTING HEIGHTS FOR CHILDREN AND ADULT FIXTURES WITH ARCHITECTURAL DRAWINGS.

TAG	TYPE	ADA	COLD	HOT	SAN	VENT	DESCRIPTION	REMARKS
EWC-1	ELECTRIC WATER COOLER	Yes	1/2"		2"	1 1/2"	HALSEY TAYLOR, MODEL HTHB-HAC8BLPV-WF, BI-LEVEL ADA COOLER, SURFACE MOUNTED, BOTTLE FILLING STAITON, ORDER WITH ITEM 98312C CANE APRON FOR HAC COOLERS.	
HB-1							AUTOMATIC DRAING, FREEZELESS WALL HYDRANT WITH HOSE CONNECTION BACKFLOW PROTECITON, HOSED IN TAMPER RESISTANT BRASS BOX, ONE PIECE BOX CONSTRUCTION, 3/8" SOLID BRASS OPERATING ROD, S.S. OPERATING STEM, INLET OPTION "C" ¾" COPPER WATER TUBE.	
JS-1	JANITOR SINK	No	3/4"	3/4"	3"	2"	FIAT PRODUCTS MOLDED STONE MOP SERVICE BASIN, MODEL # MSB 3624, OVERALL DIMENSIONS OF 36"X24"X10". ORDER WITH THE FOLLOWING OPTIONS. SERVICE FAUCET 830-AA, HOSE AND BRACKET 832-AA, MOP HANGER 889-CC, 3" QUICK DRAIN CONNECTOR QDC-3XH, STAINLESS STEEL BUMPERGUARD E-88-AA, STAINLESS STEEL WALL GUARD MSG3624	
LAV-1A	LAVATORY	Yes	1/2"	1/2"	1 1/2"	1 1/2"	WALL HUNG VITREOUS CHINA, DRILLED FOR CONCEALED ARM CARRIER, SINGLE HOLE, ACCESSIBLE, LAVATORY DIMENSIONS 20.75""X18.25". FAUCET TO BE ZURN HYDROPOWER SELF-SUSTAINING 10 PLUS YEARS BATTERY POWERED, SENSOR FAUCET, LINE PURGE MODE, METERING MODE, 30 SECOND TIME OUT, INFRARED CONVERGENCE TYPE PROXIMITY SENSOR, CHROME-PLATED CAST BRASS BODY, IN-LINE FILTER, 0.5GPM FLOW, ZURN MODEL Z6950-XL-S, ORDER WITH THE FOLLOWING SUFFIX OPTIONS: -B STANDARD BATTERY POWER ONLY, -SH SUPPLY HOSES FOR MIXING VALVE. INSTALL POINT OF SERVICE THERMOSTATIC MIXING VALVE BELOW LAVAOTRY, MIXING VALVE TO BE 1070 ASSE.	MOUNT TMV UNDER LAV AND PIPE TEPID WATER TO FAUCET
S-1	SINGLE BOWL SINK	Yes	1/2"	1/2"	1 1/2"	1 1/2"	DROP-IN 304 STAINLESS STEEL SINK WITH OVERALL DIMENSIONS OF 22"X19.5"X5.5", BOWL DIMENSIONS OF 18"X14"X5-3/8" DEEP, SINK MODEL # LRAD221955 CENTER REAR DRAIN LOCATION, FAUCET TO BE ELKAY MODEL LK5000, DECK MOUNTED, SINGLE HOLE, 1.5 GPM FLOW.	MOUNT TMV UNDER SINK AND PIPE COLD AND HOT WATER FROM TMV TO EACH FAUCE
S-2	SINGLE BOWL SINK	No	1/2"	1/2"	1 1/2"	1 1/2"	DROP-IN 304 STAINLESS STEEL SINK WITH OVERALL DIMENSIONS OF 22"X19.5"X7-5/8" DEEP. SINK SHALL HAVE BOWL DIMENSIONS OF 18"X14"X7.5" SINGLE HOLE PUNCHING, SINK MODEL # LR2219. FAUCET TO BE ELKAY MODEL # LK5000, DECKING MOUNTED FAUCET, PULL OUT SPRAY LEVEL HANDLE, 1.5GPM MAX FLOW RATE.	MOUNT TMV UNDER SINK AND PIPE COLD AND HOT WATER FROM TMV TO EACH FAUCE
SH-1	SHOWER	Yes	1/2"	1/2"	2"	1 1/2"	COMFORT DESIGNS MULTI-PIECE TRANSFER SHOWER, CENTER DRAIN, SOLD SURFACE FINISH, RETURN RECEIVER FLANGE, MODEL # SSS 3637BF 3PRRF, ANSI A117.1, SHOWER VALVE & TRIM TO SYMMONS "SAFETYMIX" HAND SHOWER SYSTEM 1-117-FS-1.5-72-B30-X-CHKS SYMMONS SAFETYMIX PRESSURE BALANCING MIXING VALVE WITH ADJUSTABLE STOP SCREW, LEVEL DIVERTER WITH VOLUME CONTROL FOR SHOWERHEAD, 30" ADJUSTING BAR FOR HAND SHOWER, 72" HOSE, POLISHED CHROME FINISH.	
U-1	URINAL	No	3/4"		2"	1 1/2"	"BARDON" HIHG EFFICIENCY URINAL, MODEL # K-4991-ET, WALL HUNG, VITEOUS CHINA, WASHOUT ACITON, 3/4" TOP SPUD, 14" EXTENDED RIM, FLUSHVALVE TO BE SLOAN VALVE CO. ROYAL MANUAL FLUSHOMETER MODEL# 186-0.125-DBP, 0.125GPF	PLUMBING CONTRACOTR TO PROVIDE IN WALL CARRIER BY JAY R. SMITH. PROVIDE WATER HAMMER ARRESTOR AT ALL CONNECTION POINTS.
WC-1	WATER CLOSET	No	1"		4"	2"	KOHLER "KINGSTON ULTRA" MODEL # K-84325, WALL HUNG, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, 11" WATER SURFACE AREA, 1-1/2" TOPSPUD, FLUSHVALVE TO BE SLOAN VLAVE CO. MODEL # ROYAL 111-1.28-SG, 1.28 GPF, POLISHED CHORME FINISH, MNAUL VLUSHOMETER, SANIGARD HANDLE, TOILET SEAT TO BE OPEN FRONT TYPE, LESS COVER, BY BEMIS	PLUMBING CONTRACOTR TO PROVIDE IN WALL CARRIER BY JAY R. SMITH. PROVIDE WATER HAMMER ARRESTOR AT ALL CONNECTION POINTS
WC-1A	WATER CLOSET	Yes	1"		4"	2"	KOHLER "KINGSTON ULTRA" MODEL # K-84325, WALL HUNG, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, 11" WATER SURFACE AREA, 1-1/2" TOPSPUD, FLUSHVALVE TO BE SLOAN VLAVE CO. MODEL # ROYAL 111-1.28-SG, 1.28 GPF, POLISHED CHORME FINISH, MNAUL VLUSHOMETER, SANIGARD HANDLE, TOILET SEAT TO BE OPEN FRONT TYPE, LESS COVER, BY BEMIS	PLUMBING CONTRACOTR TO PROVIDE IN WALL CARRIER BY JAY R. SMITH. PROVIDE WATER HAMMER ARRESTOR AT ALL CONNECTION POINTS

PLUMBING DRAINAGE SCHEDULE

TYPE	SPECIALTY ITEM	MANUFACTURER	MODEL	DESCRIPTION	REMARKS
DN-1	OVERFLOW DOWNSPOUT NOZZLE	FROET INDUSTRIES	#LPS	LOW PROFILE CHAMELEON DOWNSPOUT NOZZLE SERVING OVERFLOW STORM WATER SYSTEM. HINGED FLAPPER VALVE. ALUMINUM ALLOY CORRSSION RESISTANT. COLOR AS SELECTED BY ARCHITECT. DRAIN SIZE AS INDICATED ON FLOOR PLANS.	
FCO	FLOOR CLEANOUT	JAY R. SMITH	4032	CAST IRON CLEANOUT WITH ROUND ADJUSTABLE NICKEL-BRONZE SQUARE TOP WITH BRONZE PLUG AND VANDAL PROOF SCREWS	
FD-1	FLOOR DRAIN	JAY R. SMITH	2005Y	CAST IRON BODY WITH FLASHING COLLAR, 6" DIA ROUND NICKEL-BRONZE ADJUSTABLE STRAINER. VANDAL PROOF SCREWS. QUAD CLOSE TRAP SEAL.	
FS-1	FLOOR SINK	JAY R. SMITH	3004	10" DEEP, 14 GUAGE TYPE 304 STAINLESS STEEL RECEPTOR BODY, 12" SQUARE, 1/2GRATE, DOME BOTTOM STRAINER.	
RD-1	PRIMARY ROOF DRAIN	ZURN	Z100	PRIMARY ROOF DRAIN, POWDER COATED BODY, CAST IRON WITH ANCHOR FLANGE AND FULLY CAST SUMP WITH INCLUDES THE OUTLET, CAST IRON DOME STRAINER, MEMBRANE CLAMP RING,	
RD-2	OVERFLOW ROOF DRAIN	ZURN	Z100	15" [381MM] DIAMETER ROOF DRAIN. DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD AND LOW SILHOUETTE, OUTLET TO BE NO-HUB, ORDER WITH PREFIX ZC FOR CAST IRON DOME ORDER WITH THE FOLLOWING SUFFIXES, -W2 2" INTERNAL WATER DAM.	
RD-3	BI-FUNCTIONAL ROOF DRAIN	ZURN	Z163	ZURN Z163 15" DIAMETER COMBINATION PRIMARY ROOF DRAIN AND OVERFLOW DRAIN WITH LOW SILHOUETTE DOMES & DOUBLE TOP-SET DECK PLATE. DURA-COATED CAST IRON BODIES WITH COMBINATION MEMBRANE FLASHING CLAP / GRAVEL GUARDS, DOUBLE TOP-SET DECK PLATE, NO-HUB OUTLET, ORDER WITH CAST IRON DOME STRAINER.	
WCO	WALL CLEANOUT	ZURN	Z1441	DUCO CAST IRON CAULK FERRULE WITH CAST BRONZE TAPER. THREADED PLUG,CHROME PLATED FINISH COVER, COUNTERSUNK PLUG	

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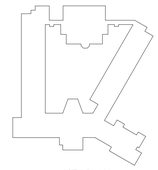
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REVISIONS

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KEY PLAN

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SCALE: 1/8" = 1'-0"
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: JB

PLUMBING SCHEDULES

DRAWING NO.:
P5.01

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ABBREVIATIONS

AC	AIR COMPRESSOR
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFR	ABOVE FINISHED ROOF
AHU	AIR HANDLING UNIT
AMB	AMBIENT
APROX	APPROXIMATE
AS	AIR SEPERATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
AVG	AVERAGE
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BFW	BOILER FEED WATER
BHP	BRAKE HORSEPOWER
BMS	BULIDING MANAGEMENT SYSTEM
BTUH	BRITISH THERMAL UNITS PER HOUR
CC	COOLING COIL
CD	CONDENSATE DRAIN
CDR	CONDENSER WATER RETURN
CDS	CONDENSER WATER SUPPLY
CFM	CUBIC FEET PER MINUTE
CFP	CHEMICAL FEED PUMPS
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLG	CEILING
CO	CLEANOUT
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
COND	CONDENSER
CONV	CONVECTOR
CP	CONDENSATE PUMP
CPU	CENTRAL PROCESSING UNIT
CT	COOLING TOWER
CU	CONDENSING UNIT
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CV	COEFFICIENT, VALVE FLOW
CV	CONSTANT VOLUME
D	DEPTH
DB	DRY BULB TEMPERATURE
dB	DECIBEL
DEG or °	DEGREE
DIA or Ø	DIAMETER
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EBB	ELECTRIC BASEBOARD RADIATION
EDR	EQUIVALENT DIRECT RADIATION
EF	EXHAUST FAN
EFF	EFFICIENCY
ELEC	ELECTRICAL
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EVAP	EVAPORATOR
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
F	FAHRENHEIT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FD	FLOOR DRAIN
FD/SB	FIRE DAMPER WITH INTEGRAL SECURITY BARS
FM	FLOW METER
FOB	FLAT ON BOTTOM
FOF	FUEL OIL FILL
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOT	FLAT ON TOP
FOV	FUEL OIL VENT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FSD	FIRE/SMOKE DAMPER
FT	FOOT OR FEET
G	GAS
GA	GAUGE
GAL	GALLONS
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HEIGHT
H/C	HEATING/COOLING
HC	HEATING COIL
HD	HEAD
HP	HORSEPOWER
HPC	HIGH PRESSURE CONDENSATE
HPG	HIGH PRESSURE GAS
HPS	HIGH PRESSURE STEAM
HR	HOUR(S)
HT	HEAT

ABBREVIATIONS

HTHW	HIGH TEMPERATURE HOT WATER
HTHWR	HIGH TEMPERATURE HOT WATER RETURN
HTHWS	HIGH TEMPERATURE HOT WATER SUPPLY
HTR	HEATER
HUM	HUMIDIFIER
HV	HEATING/VENTILATION UNIT
HW	HOT WATER
HWR	HOT WATER RETURN
HWRP	HOT WATER RETURN PUMP
HWRR	HOT WATER REVERSE RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
HZ	FREQUENCY (CYC, PER SEC.)
ID	INSIDE DIAMETER
IN	INCHES
IN WG	INCHES OF WATER, GAUGE (PRESS.)
IW	INDIRECT WASTE
KEF	KITCHEN EXHAUST FAN
KW	KILOWATT
L	LENGTH
LA	LABORATORY COMPRESSED AIR
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
LF	LINEAR FEET
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LV	LABORATORY VACUUM
LWT	LEAVING WATER TEMPERATURE
MA	MIXED AIR
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	BTU PER HOUR (THOUSAND)
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MH	METAL HALIDE
MIN	MINIMUM
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
N2	NITROGREN
N2O	NITROUS OXIDE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N.T.S.	NOT TO SCALE
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OA	OUTSIDE AIR
PCD	PUMPED CONDENSATE DRAIN (COOLING)
PD	PRESSURE DROP
PG	PROPYLENE GLYCOL
PH or Ø	PHASE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
RG	REFRIGERANT GAS
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RHG	REFRIGERANT HOT GAS
RL	REFRIGERANT LIQUID
RM	ROOM
RPD	REDUCED PRESSURE DEVICE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
S&R	SUPPLY AND RETURN
SA	SUPPLY AIR
SCP	STEAM CONDENSATE PUMP
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
T'STAT	THERMOSTAT
TD	TEMPERATURE DIFFERENCE
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
V	VOLTAGE
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VOL	VOLUME
W	WATT
W	WIDTH
WB	WET BULB TEMPERATURE
WP	WEATHERPROOF
WPD	WATER PRESSURE DROP
WWM	WELDED WIRE MESH

HVAC SYMBOLS

	RECTANGULAR, FLAT OVAL OR ROUND AIR DUCT
	AIR DUCT WITH ACOUSTICAL LINING
	SUPPLY AIR DUCT UP
	SUPPLY AIR DUCT DOWN
	RETURN AIR DUCT UP
	RETURN AIR DUCT DOWN
	EXHAUST AIR DUCT UP
	EXHAUST AIR DUCT DOWN
	TURNING VANES
AD / AD	ACCESS DOOR
	FLEXIBLE DUCT CONNECTION
	CEILING SUPPLY DIFFUSERS
	CEILING RETURN / EXHAUST GRILLE
	HARD DUCTED DIFFUSER OR GRILLE WITH FULL SIZE BOTTOM TAKE-OFF
	DIRECTION OF SUPPLY OR OUTDOOR AIRFLOW
	DIRECTION OF RETURN OR EXHAUST AIRFLOW
	DOOR UNDERCUT
BDD	BACK DRAFT DAMPER
VD	VOLUME DAMPER
FD	FIRE DAMPER
FD/SB	FIRE DAMPER WITH INTEGRAL SECURITY BARS
FS	FIRE/SMOKE DAMPER
SD	SMOKE DAMPER SYSTEM AND ASSOCIATED DEVICES PER SPECIFICATIONS AND MEP DETAILS
M	MOTORIZED DAMPER
H	HUMIDIFIER TUBE/PANEL
XXX	SUPPLY PIPING, REFER TO ABBREVIATION LIST FOR DESIGNATION (XXX)
XXX	RETURN PIPING, REFER TO ABBREVIATION LIST FOR DESIGNATION (XXX)
DS	DUCT SMOKE DETECTOR WITH REMOTE INDICATING LIGHT AND TEST SWITCH
SP	DUCT STATIC PRESSURE SENSOR
DP	DIFFERENTIAL PRESSURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
AFS	AIR FLOW STATION
SA	DUCT SOUND ATTENUATOR
T	ROOM THERMOSTAT
T	ROOM TEMPERATURE SENSOR
CO	CARBON MONOXIDE SENSOR
C	CARBON DIOXIDE SENSOR
H	HUMIDISTAT
	FINNED TUBE RADIATION
	WINDOW A/C
FM	FLOW METER
RC	VRF REMOTE CONTROL

FITTINGS AND VALVES

	BACKFLOW PREVENTOR
	STRAINER OR STRAINER WITH BLOW-DOWN VALVE HOSE END, CAP AND CHAIN
	PIPE ELBOW UP OR PIPE TEE UP
	PIPE ELBOW DOWN
	PIPE TEE DOWN
	TAKEOFF FROM BOTTOM OF MAIN PIPE
	TAKEOFF FROM TOP OF MAIN PIPE
	IN-LINE EXPANSION COMPENSATOR
	PIPE ANCHOR
	COMPANION FLANGE
	PIPE CAP OR CAPPED END OF PIPE
	UNION
	PIPE GUIDES
	PUMP
	DIRECTION OF FLUID FLOW
	VALVE ON RISER
	VALVE ON DROP
	AIR VENT
	FLOW SENSOR
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	BALL VALVE
	CALIBRATED BALANCING VALVE
	SHUT-OFF VALVE (SEE SPECIFICATIONS FOR APPLICATION TYPE)
	BUTTERFLY VALVE
	CHECK VALVE
	GLOBE VALVE
	GATE VALVE
	PRESSURE REDUCING VALVE
	TRIPLE DUTY VALVE
	OS&Y VALVE
	DRAIN VALVE WITH HOSE END, CAP & CHAIN OR WALL HYDRANT / HOSE BIBB
M	MOTORIZED BUTTERFLY VALVE
	PRESSURE RELIEF SAFETY VALVE
A	AQUASTAT
T	TEMPERATURE SENSOR WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
T	TEMPERATURE GAUGE WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
	THERMOMETER WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
P	PRESSURE GAUGE
P	PRESSURE SENSOR WITH SYPHON (STEAM)
FLEX	FLEXIBLE CONNECTOR
DUCT SIZING	
20x12	RECTANGULAR DUCT
20/12	FLAT OVAL DUCT
20"ø	ROUND DUCT

HVAC GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED HVAC SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TOP DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL PIPING AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ELECTRICAL ROOMS, DATA ROOMS, ELEVATOR MACHINE ROOM, STAIRWELL OR STAIRWELL WALLS THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. INSTALL SMOKE DETECTORS IN BOTH SUPPLY & RETURN AIR DUCTS FOR AIR HANDLING EQUIPMENT 2,000 CFM AND GREATER.
11. PROVIDE SMOKE DAMPERS IN BOTH SUPPLY & RETURN AIR DUCTS FOR AIR HANDLING EQUIPMENT 15,000 CFM AND GREATER.
12. PROVIDE SMOKE DAMPERS AND SMOKE DETECTORS AT DUCT PENETRATIONS OF SMOKE-BRRIERS, AND AT ELEVATOR SHAFT VENTS PER CODE REQUIREMENTS.
13. PROVIDE FIRE DAMPERS AT DUCT PENETRATIONS OF FIRE-RATED CONSTRUCTION, INCLUDING WALLS, SHAFTS AND FLOOR PENETRATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
14. PROVIDE AN AUTOMATIC TEMPERATURE CONTROL SYSTEM COMPLETE IN ALL REGARDS. ALL ZONES, VAV'S AND SYSTEM SHALL BE THERMOSTATICALLY CONTROLLED. REVIEW THE PLANS AND SPECIFICATIONS OF ALL MEP TRADES FOR A COMPLETE SCOPE OF THE WORK.
15. PIPING SHALL BE SUPPORTED FROM STRUCTURE ABOVE. TO MAXIMIZE HEAD ROOM, INSTALL PIPING TIGHT TO BOTTOM OF BEAMS WHEN RUNNING PERPENDICULAR TO BEAM; INSTALL PIPING TIGHT TO FLOOR SLAB WHEN RUNNING PARALLEL TO BEAM; PROVIDE ALL NECESSARY FITTINGS AND TRANSITIONS.
16. PROVIDE THROTTLING VALVES AND SHUT-OFF VALVES AS INDICATED IN SPECIFICATIONS IN ADDITION TO THOSE INDICATED ON THE DRAWINGS.
17. INSTALL ALL EQUIPMENT VALVES AS REQUIRED BY MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS AND AS DETAILED.
18. PROVIDE AIR VENTS AT ALL HIGH POINTS AND DRAINS AT ALL LOW POINTS.
19. PROVIDE PRESSURE RELIEF DOORS FOR AIR SYSTEMS, PER THE SPECIFICATIONS.
20. PROVIDE MOTORIZED DAMPERS AT ALL PERMANENT OPENINGS (EXHAUST, SUPPLY, RELIEF, O.A. INTAKES, MAKE-UP AIR, SMOKE VENTS, ETC.) EXCEPT DRYER, KITCHEN, AND FUME EXHAUST AND PROVIDE A MEANS TO CONTROL THE DAMPER OPERATION.
21. ALL SUPPLY RECTANGULAR 90° ELBOWS SHALL HAVE TURNING VANES.
22. PROVIDE DUCT TAKE-OFF TYPES AND VOLUME DAMPERS PER THE SPECIFICATIONS AND DUCT TAKE-OFF DETAILS ON DRAWINGS. TAKE-OFFS SHOWN ON FLOOR PLANS DO NOT REPRESENT THE SPECIFIC TYPE OF TAKE-OFF REQUIRED; CONSULT THE DETAILS AND SPECIFICATIONS.
23. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST, AND RETURN BRANCH DUCTS.
24. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT IN FIELD., INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
25. ALL EQUIPMENT LOCATED ON THE ROOF THAT REQUIRES SERVICING SHALL BE LOCATED A MINIMUM 10'-0" FROM EDGE OF THE ROOF.
26. ALL EXPOSED DUCTWORK SHALL BE FLAT, OVAL, OR ROUND. COORDINATE WITH ARCHITECT'S CEILING PLANS AND IDENTIFY ON DUCTWORK SHOP DRAWINGS.
27. ALL DUCTWORK AND PIPING CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
28. ALL THERMOSTATS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
29. ALL MOTORIZED DAMPERS SHALL BE WIRED BY ATC CONTRACTOR, COORDINATE VOLTAGE REQUIREMENTS WITH EQUIPMENT.
30. ALL TOILETS & BATHROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
31. ALL LOUVERS ARE SELECTED AND SCHEDULED BY ARCHITECT. LOUVER TAGS ARE SHOWN FOR COORDINATION ONLY.
32. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.
33. PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.

HVAC DEMOLITION GENERAL NOTES

1. BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS, CONNECTIONS AND DISRUPTIONS EFFECTING OTHER TRADES (MECHANICAL AND ELECTRICAL). INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
3. DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
4. REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
5. THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
6. THE LOCATION OF EXISTING HVAC SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PIPING, DUCTWORK, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
7. ALL EQUIPMENT, AND ASSOCIATED PIPING INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS, UP TO NEAREST EXISTING ACTIVE MAIN OR BRANCH LINE AND CAPPED AS CLOSE TO THE ACTIVE LINE AS POSSIBLE. NO EQUIPMENT, PIPING, OR CONDUIT SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
8. ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY PIPING OR CONDUIT WHICH MUST REMAIN ACTIVE, HE SHALL IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
9. ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
10. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
11. THE CONTRACTOR SHALL OBTAIN EXISTING MECHANICAL DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

SCALE: AS NOTED

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MECHANICAL GENERAL INFORMATION

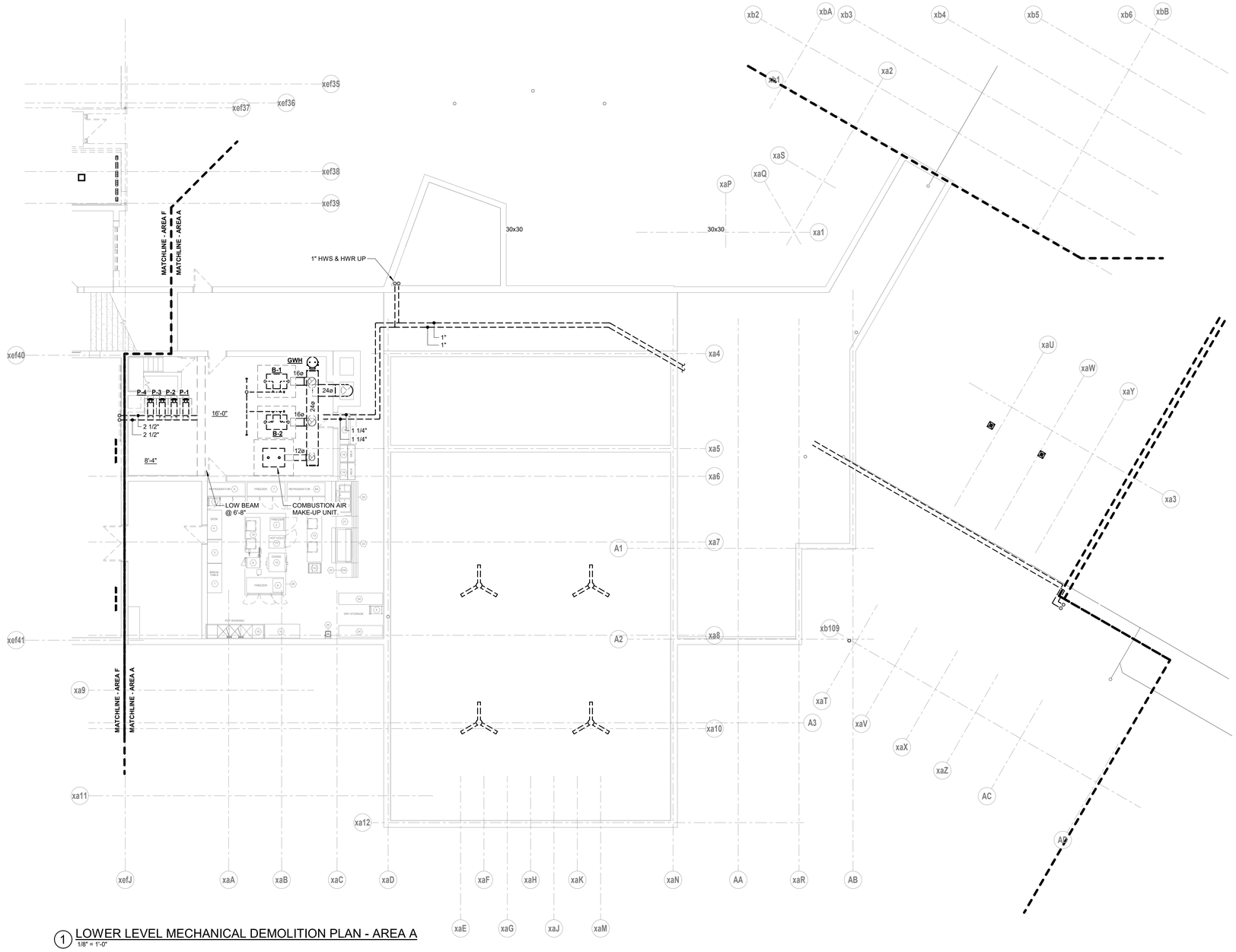
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DEMOLITION GENERAL NOTES

1. THIS PROJECT IS BEING RENOVATED AS NEW, ALL EXISTING MECHANICAL EQUIPMENT SHALL BE REMOVED.
2. CONTRACTOR SHALL REMOVE ALL BUT NOT LIMITED TO ROOFTOP AIR HANDLING UNITS, CONDENSING UNITS, WALL/WINDOW A/C UNITS, AIR TERMINAL UNITS, FANS, WIRING AND CONTROLS.
3. CONTRACTOR SHALL REMOVE ALL DUCTWORK, GRILLES, PIPING AND SUPPORTS.
4. EXISTING HVAC SYSTEMS SHOWN HERE ARE BASED ON DRAWINGS PROVIDED BY OWNER. CONTRACTOR SHALL VERIFY EXISTING HVAC LAYOUTS IN FIELD.
5. PATCH AND SEAL EXISTING WALL AND ROOF OPENINGS, MATERIAL AND COLOR TO MATCH EXISTING, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.



1 LOWER LEVEL MECHANICAL DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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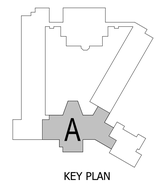
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KEY PLAN

SCALE: 1/8" = 1'-0" 0' 4' 8' 16' PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

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PROJECT NO.: 18-000 DRAWN BY: DS

LOWER LEVEL MECHANICAL DEMO PLAN - AREA A

DRAWING NO.:

MD1.01

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DEMOLITION GENERAL NOTES

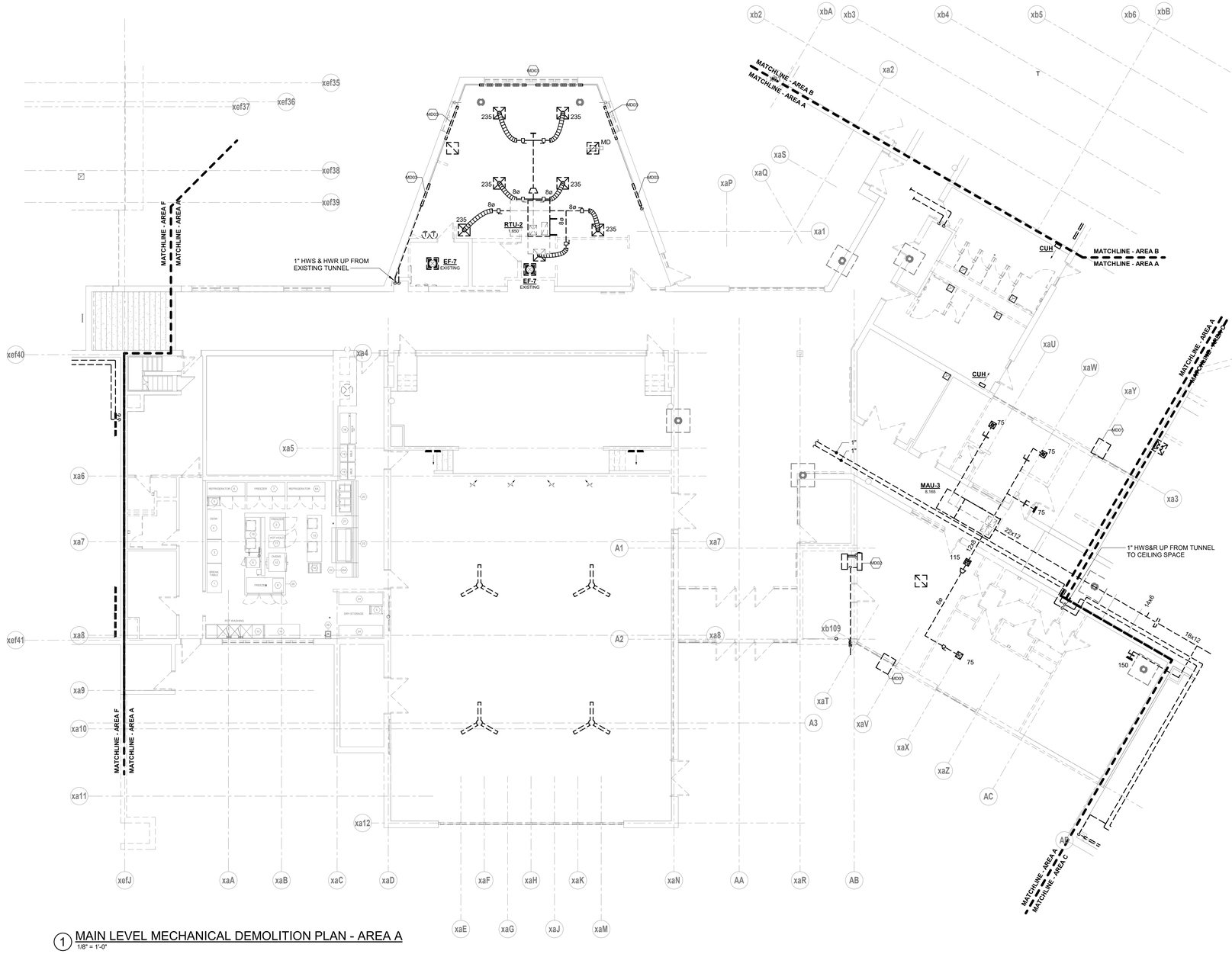
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5. PATCH AND SEAL EXISTING WALL AND ROOF OPENINGS, MATERIAL AND COLOR TO MATCH EXISTING, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

MECHANICAL DEMOLITION KEYNOTES

MD01 WINDOW A/C

MD02 SPLIT SYSTEM

MD03 HW BASEBOARD RADIATION



1 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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PROJECT TRUE

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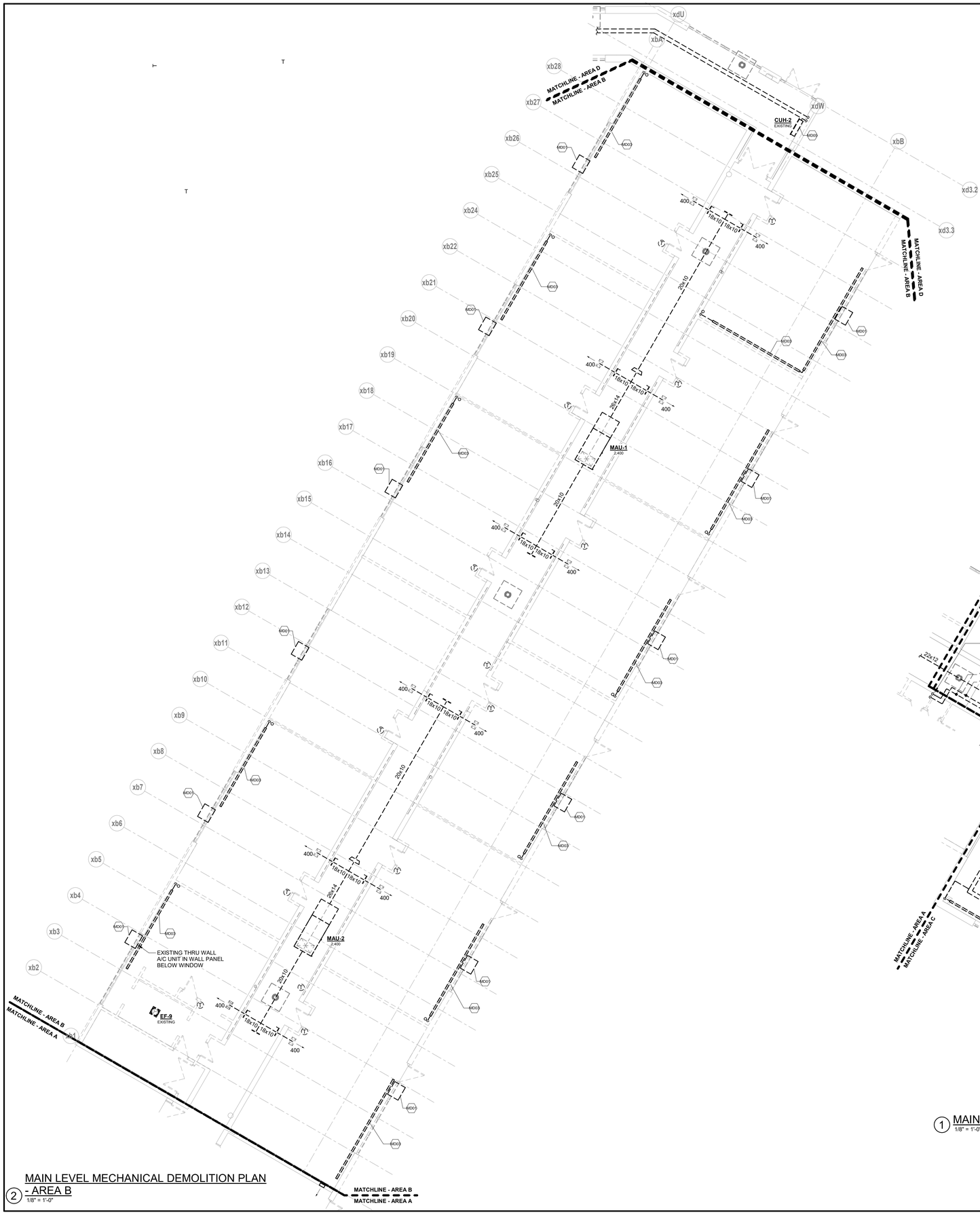
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MAIN LEVEL MECHANICAL DEMO PLAN - AREA A

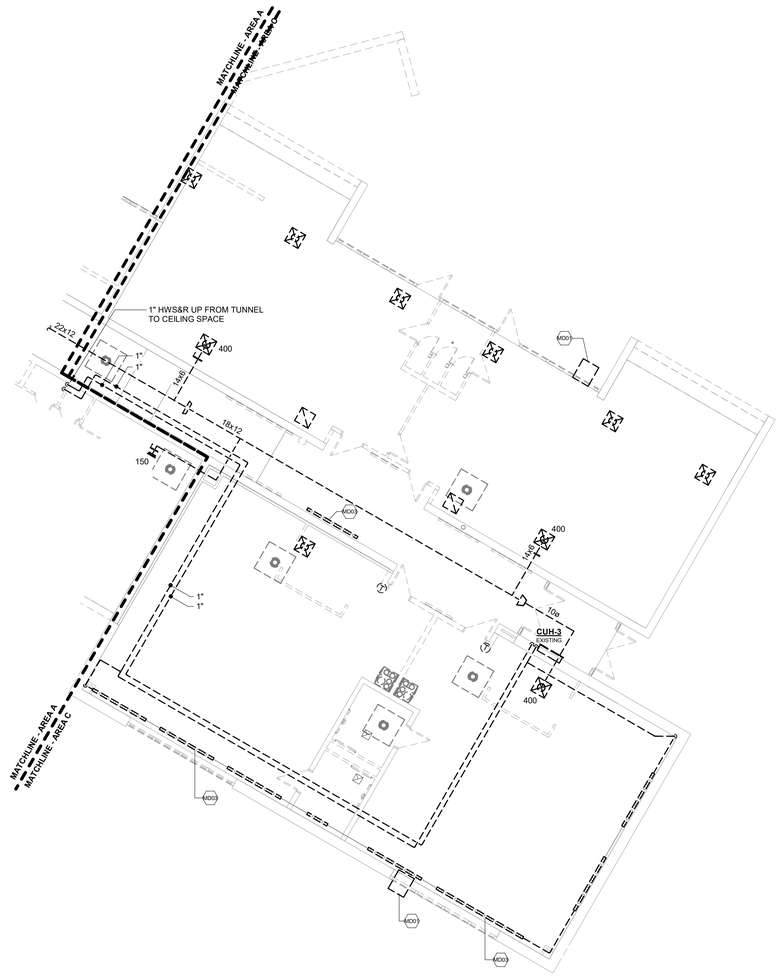
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2 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA B
1/8" = 1'-0"



1 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA C
1/8" = 1'-0"

DEMOLITION GENERAL NOTES

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2. CONTRACTOR SHALL REMOVE ALL BUT NOT LIMITED TO ROOFTOP AIR HANDLING UNITS, CONDENSING UNITS, WALL/WINDOW A/C UNITS, AIR TERMINAL UNITS, FANS, WIRING AND CONTROLS.
3. CONTRACTOR SHALL REMOVE ALL DUCTWORK, GRILLES, PIPING AND SUPPORTS.
4. EXISTING HVAC SYSTEMS SHOWN HERE ARE BASED ON DRAWINGS PROVIDED BY OWNER. CONTRACTOR SHALL VERIFY EXISTING HVAC LAYOUTS IN FIELD.
5. PATCH AND SEAL EXISTING WALL AND ROOF OPENINGS, MATERIAL AND COLOR TO MATCH EXISTING, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

MECHANICAL DEMOLITION KEYNOTES

MD01 WINDOW A/C

MD03 HW BASEBOARD RADIATION

MD05 CUH SURFACE WALL MOUNTED

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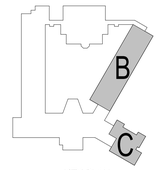
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

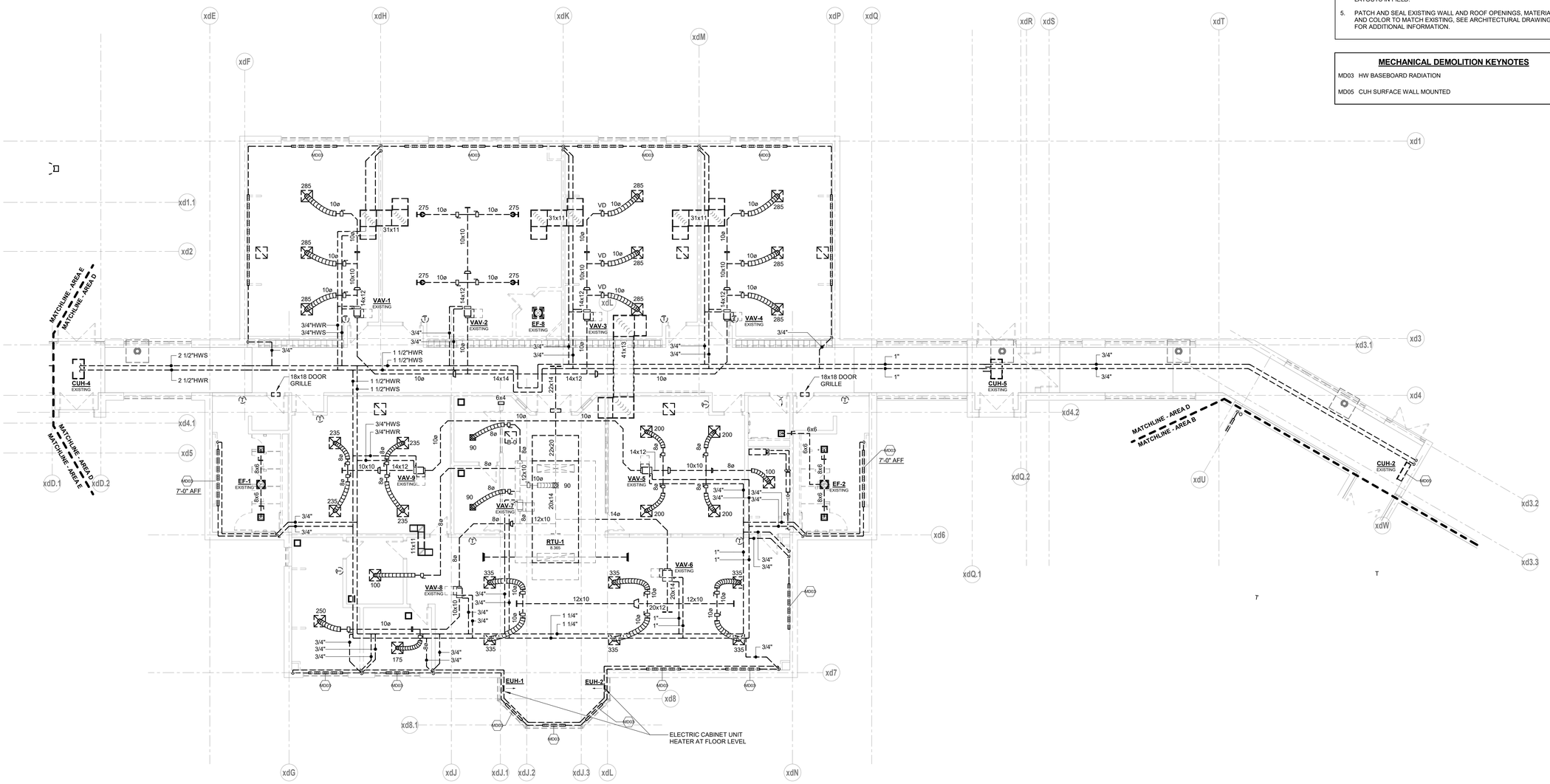
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MAIN LEVEL MECHANICAL DEMO PLANS - AREAS B & C

DRAWING NO.:

MD1.03

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1 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA D
1/8" = 1'-0"

DEMOLITION GENERAL NOTES

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2. CONTRACTOR SHALL REMOVE ALL BUT NOT LIMITED TO ROOFTOP AIR HANDLING UNITS, CONDENSING UNITS, WALL/WINDOW A/C UNITS, AIR TERMINAL UNITS, FANS, WIRING AND CONTROLS.
3. CONTRACTOR SHALL REMOVE ALL DUCTWORK, GRILLES, PIPING AND SUPPORTS.
4. EXISTING HVAC SYSTEMS SHOWN HERE ARE BASED ON DRAWINGS PROVIDED BY OWNER. CONTRACTOR SHALL VERIFY EXISTING HVAC LAYOUTS IN FIELD.
5. PATCH AND SEAL EXISTING WALL AND ROOF OPENINGS, MATERIAL AND COLOR TO MATCH EXISTING, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

MECHANICAL DEMOLITION KEYNOTES

MD03 HW BASEBOARD RADIATION

MD05 CUH SURFACE WALL MOUNTED

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85 RESERVOIR ROAD
NEWINGTON, CT 06111

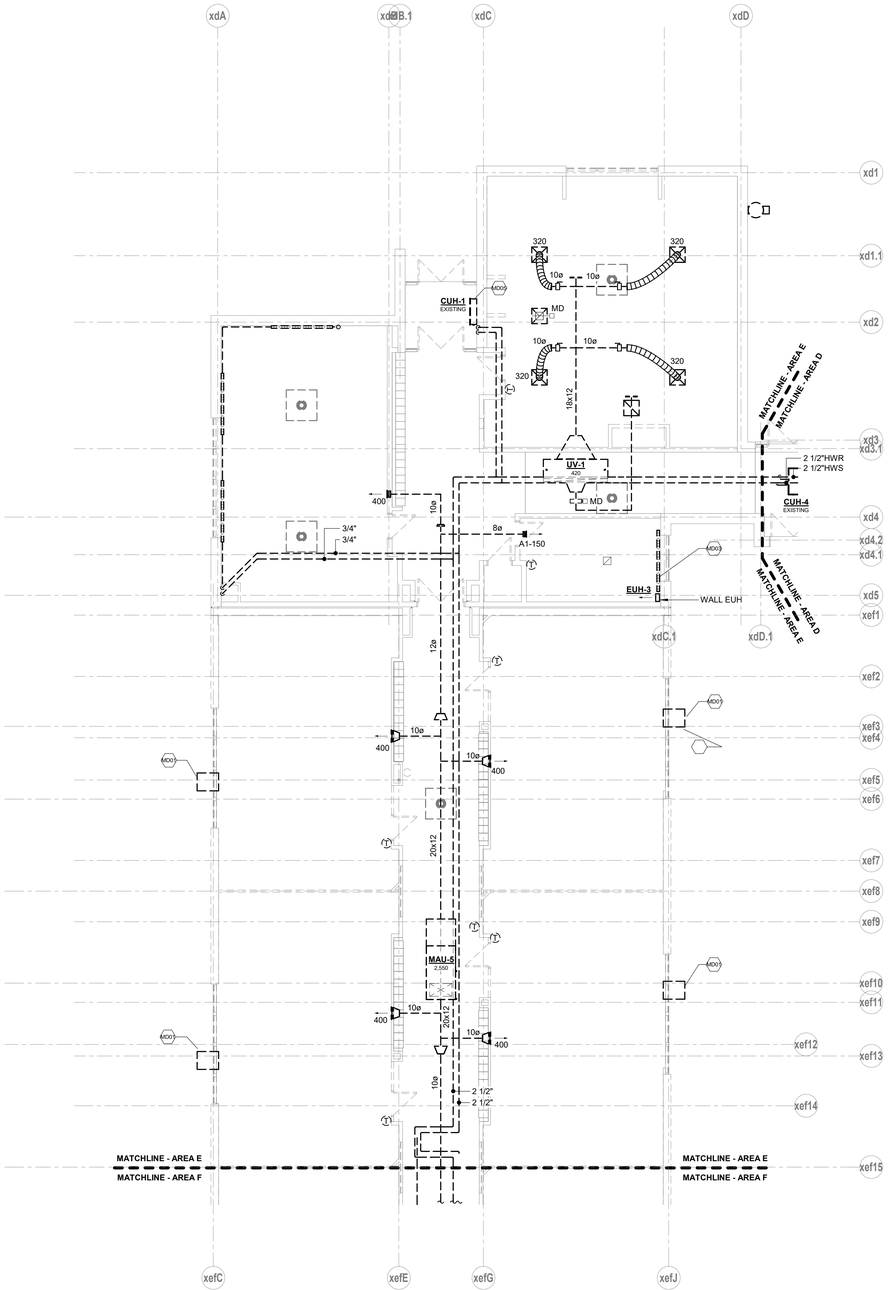
PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL DEMO PLAN - AREA D

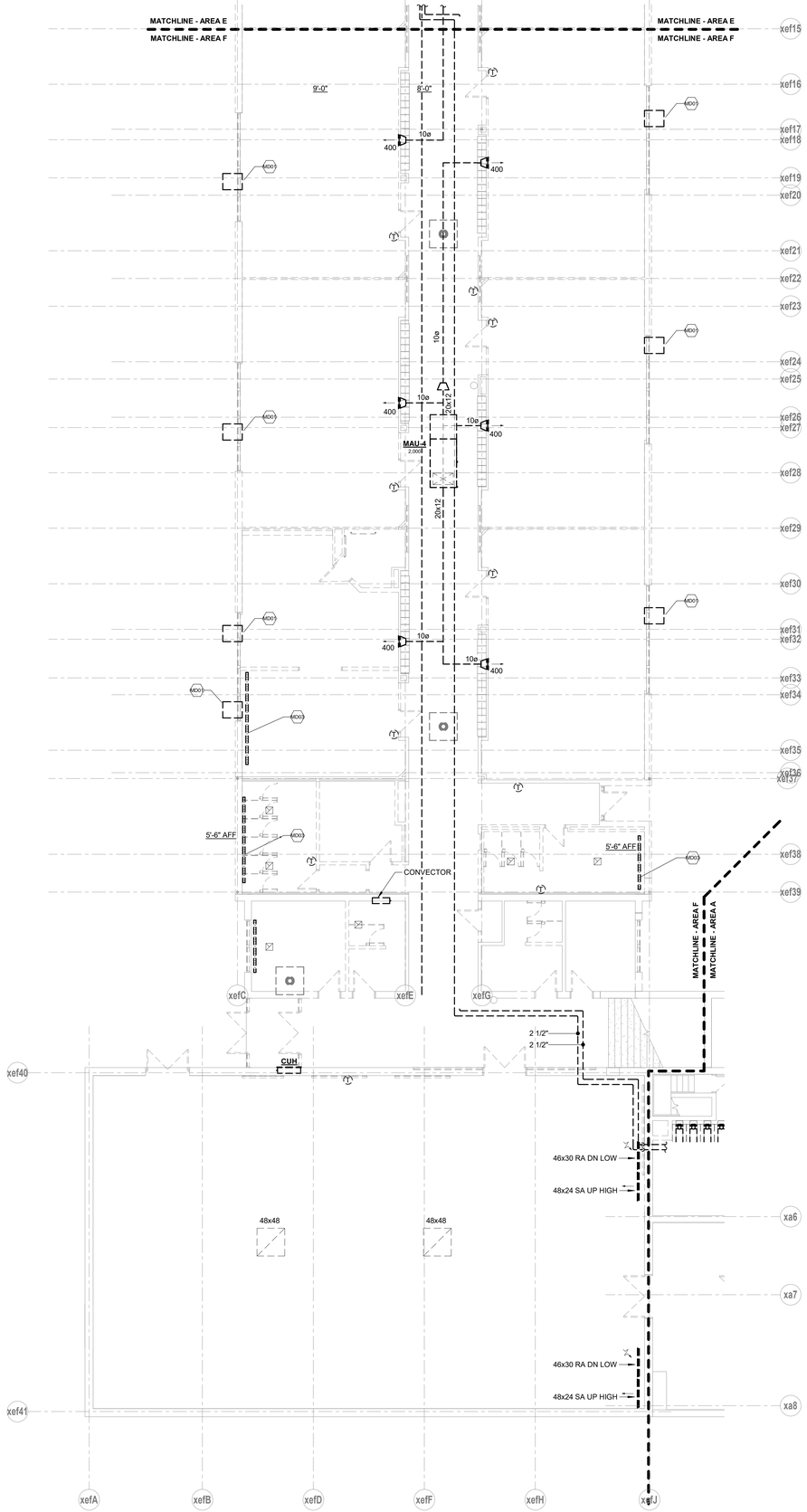
DRAWING NO.:

MD1.04

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1 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL MECHANICAL DEMOLITION PLAN - AREA F
1/8" = 1'-0"

DEMOLITION GENERAL NOTES

1. THIS PROJECT IS BEING RENOVATED AS NEW. ALL EXISTING MECHANICAL EQUIPMENT SHALL BE REMOVED.
2. CONTRACTOR SHALL REMOVE ALL BUT NOT LIMITED TO ROOFTOP AIR HANDLING UNITS, CONDENSING UNITS, WALL/WINDOW A/C UNITS, AIR TERMINAL UNITS, FANS, WIRING AND CONTROLS.
3. CONTRACTOR SHALL REMOVE ALL DUCTWORK, GRILLES, PIPING AND SUPPORTS.
4. EXISTING HVAC SYSTEMS SHOWN HERE ARE BASED ON DRAWINGS PROVIDED BY OWNER. CONTRACTOR SHALL VERIFY EXISTING HVAC LAYOUTS IN FIELD.
5. PATCH AND SEAL EXISTING WALL AND ROOF OPENINGS, MATERIAL AND COLOR TO MATCH EXISTING, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

MECHANICAL DEMOLITION KEYNOTES

MD01 WINDOW A/C

MD03 HW BASEBOARD RADIATION

MD05 CUH SURFACE WALL MOUNTED

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL DEMO PLANS - AREAS E & F

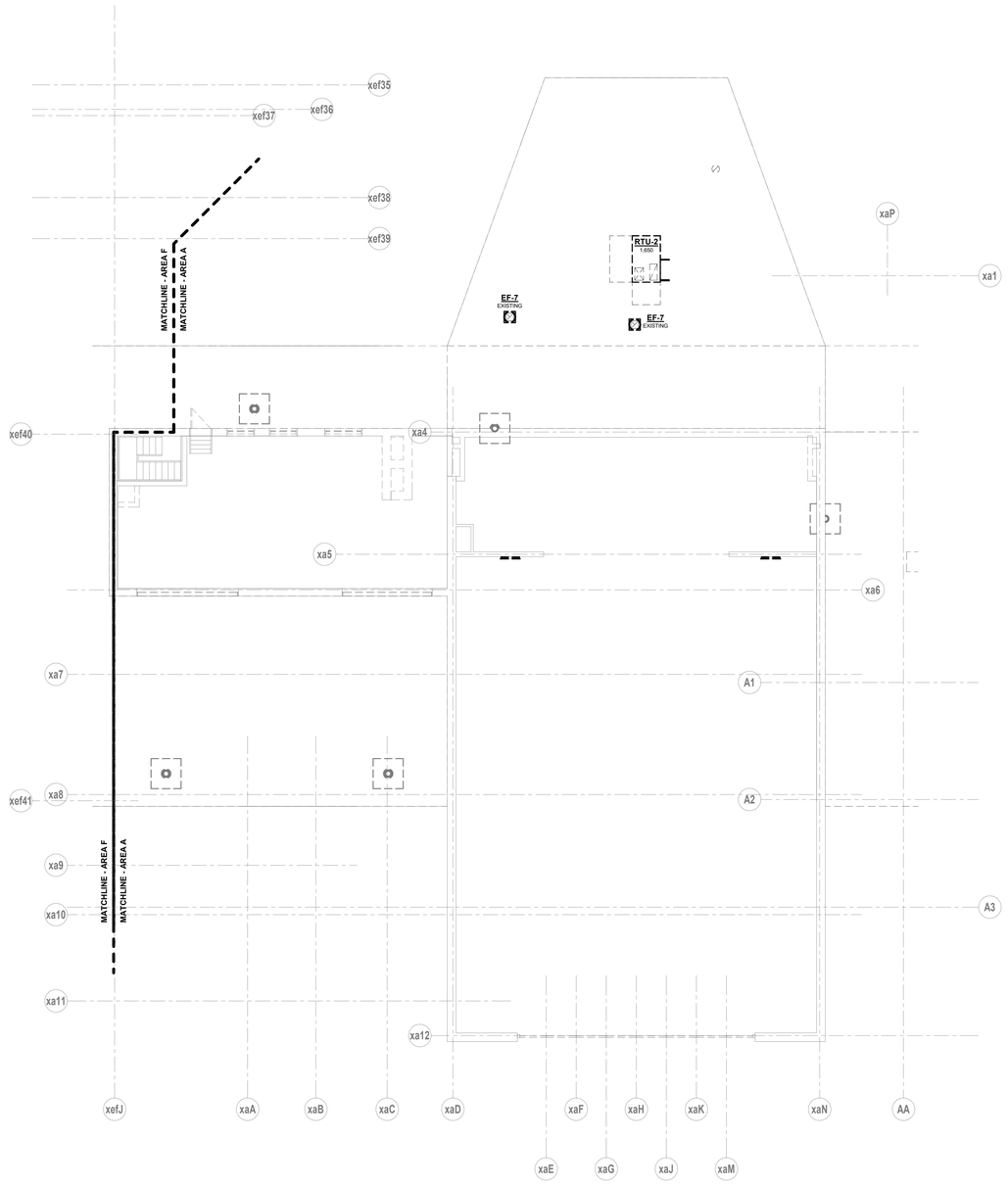
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1 UPPER LEVEL MECHANICAL DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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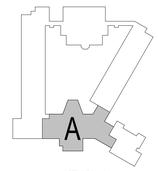
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

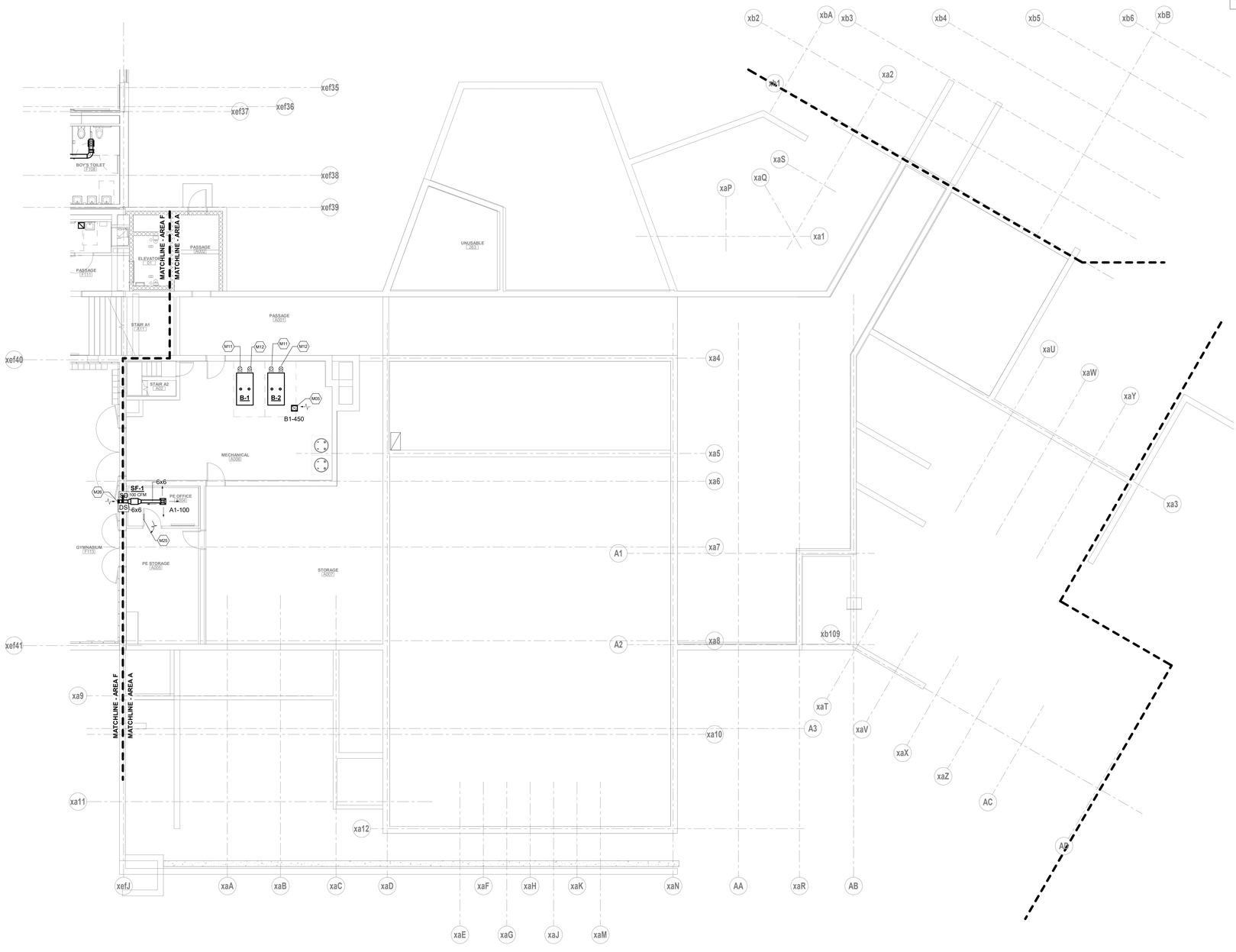
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UPPER LEVEL MECHANICAL DEMO PLAN - AREA A

DRAWING NO.:
MD1.06

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1 LOWER LEVEL MECHANICAL DUCT PLAN - AREA A
1/8" = 1'-0"

GENERAL NOTES:

1. ALL DUCTWORK CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
2. ALL VRF's AND RADIANT CEILING PANELS SHALL HAVE DEDICATED WALL MOUNTED TEMPERATURE SENSORS. WHENEVER VRF AND RADIANT CEILING PANEL ARE SERVING SAME SPACE, BOTH SHOULD BE CONNECTED TO ONE SENSOR.
3. ALL TEMPERATURE SENSORS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
4. REFER TO PIPING DRAWINGS FOR THERMOSTAT LOCATIONS.
5. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST AND RETURN BRANCH DUCTS.
6. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT, INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
7. ALL TOILETS, BATHROOMS AND STORAGE ROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
8. PROVIDE DUCT TRANSITIONS BETWEEN DUCTS AND ROOFTOP UNIT DUCT OPENINGS, WHENEVER THERE IS NOT ENOUGH SPACE BELOW THE UNIT, PROVIDE 24"-30" HIGH ROOF CURB AND TRANSITION WITH-IN THE CURB V.I.F.
9. COORDINATE ANY STEEL MODIFICATIONS WITH MECHANICAL AND STRUCTURAL ENGINEER.

ACOUSTICAL NOTES

1. PROVIDE MIN. 25'-0" OF 1" ACOUSTICAL DUCT LINER UPSTREAM AND DOWNSTREAM OF EACH AIR HANDLING UNIT A DEDICATED SILENCERS.
2. ALL INTERNAL LINERS SHALL BE NON-POROUS TYPE OR FILM LINED.
3. ALL SUPPLY, RETURN AND EXHAUST DIFFUSERS SHALL BE SELECTED AT 25 NC OR LOWER.
4. ALL VAV'S SHALL HAVE EITHER 3'-0" SOUND ATTENUATOR OR 10'-0" OF LINED DUCTWORK.
5. LOCATED ALL VOLUME DAMPERS 6'-0" TO 8'-0" FROM DIFFUSERS AND GRILLES. IF DUCT IS SHORTER THAN 6'-0", LOCATE IT AS FAR AWAY AS POSSIBLE.
6. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL INFORMATION.

MECHANICAL KEYNOTES

M05 12"x10" EA DUCT UP TO EF-2 (450) INSTALL IT 10'-0" AFF. VERIFY EXACT LOCATION IN FIELD.

M11 8" DIA. EXHAUST VENT UP THRU ROOF. TERMINATE MIN. 5'-0" A.F.R. INSTALL IT IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

M12 8" DIA. COMBUSTION AIR PIPE UP THRU ROOF. INSTALL IT IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

M25 PROVIDE DOOR WITH TRANSFER AIR GRILLE, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

M26 PROVIDE 10"x6" WALL GRILLE, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

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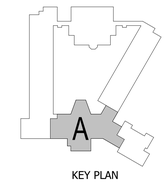
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

LOWER LEVEL MECHANICAL DUCT PLAN - AREA A

DRAWING NO.:
M1.01

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GENERAL NOTES:

1. ALL DUCTWORK CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
2. ALL VRF's AND RADIANT CEILING PANELS SHALL HAVE DEDICATED WALL MOUNTED TEMPERATURE SENSORS. WHENEVER VRF AND RADIANT CEILING PANEL ARE SERVING SAME SPACE, BOTH SHOULD BE CONNECTED TO ONE SENSOR.
3. ALL TEMPERATURE SENSORS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
4. REFER TO PIPING DRAWINGS FOR THERMOSTAT LOCATIONS.
5. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST AND RETURN BRANCH DUCTS.
6. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT, INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
7. ALL TOILETS, BATHROOMS AND STORAGE ROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
8. PROVIDE DUCT TRANSITIONS BETWEEN DUCTS AND ROOFTOP UNIT DUCT OPENINGS, WHENEVER THERE IS NOT ENOUGH SPACE BELOW THE UNIT, PROVIDE 24"-30" HIGH ROOF CURB AND TRANSITION WITH-IN THE CURB V.I.F.
9. COORDINATE ANY STEEL MODIFICATIONS WITH MECHANICAL AND STRUCTURAL ENGINEER.

ACOUSTICAL NOTES

1. PROVIDE MIN. 25'-0" OF 1" ACOUSTICAL DUCT LINER UPSTREAM AND DOWNSTREAM OF EACH AIR HANDLING UNIT A DEDICATED SILENCERS.
2. ALL INTERNAL LINERS SHALL BE NON-POROUS TYPE OR FILM LINED.
3. ALL SUPPLY, RETURN AND EXHAUST DIFFUSERS SHALL BE SELECTED AT 25 NC OR LOWER.
4. ALL VAV'S SHALL HAVE EITHER 3'-0" SOUND ATTENUATOR OR 10'-0" OF LINED DUCTWORK.
5. LOCATED ALL VOLUME DAMPERS 6'-0" TO 8'-0" FROM DIFFUSERS AND GRILLES. IF DUCT IS SHORTER THAN 6'-0", LOCATE IT AS FAR AWAY AS POSSIBLE.
6. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL INFORMATION.

MECHANICAL KEYNOTES

M02 24"x12"" EA DUCT UP TO KEF-1, PROVIDE DUCT TRANSITIONS AS NECESSARY (26600).

M03 24"x16" MA DUCT DOWN TO GREASE HOOD, PROVIDE DUCT TRANSITIONS AS NECESSARY (1400).

M04 24"x16" MA DUCT UP TO MAU-1, PROVIDE TRANSITIONS AS NECESSARY (2200).

M06 12"x10" EA DUCT UP & DN. (450)

M07 8"x8" EA DUCT UP TO EF-3. (200)

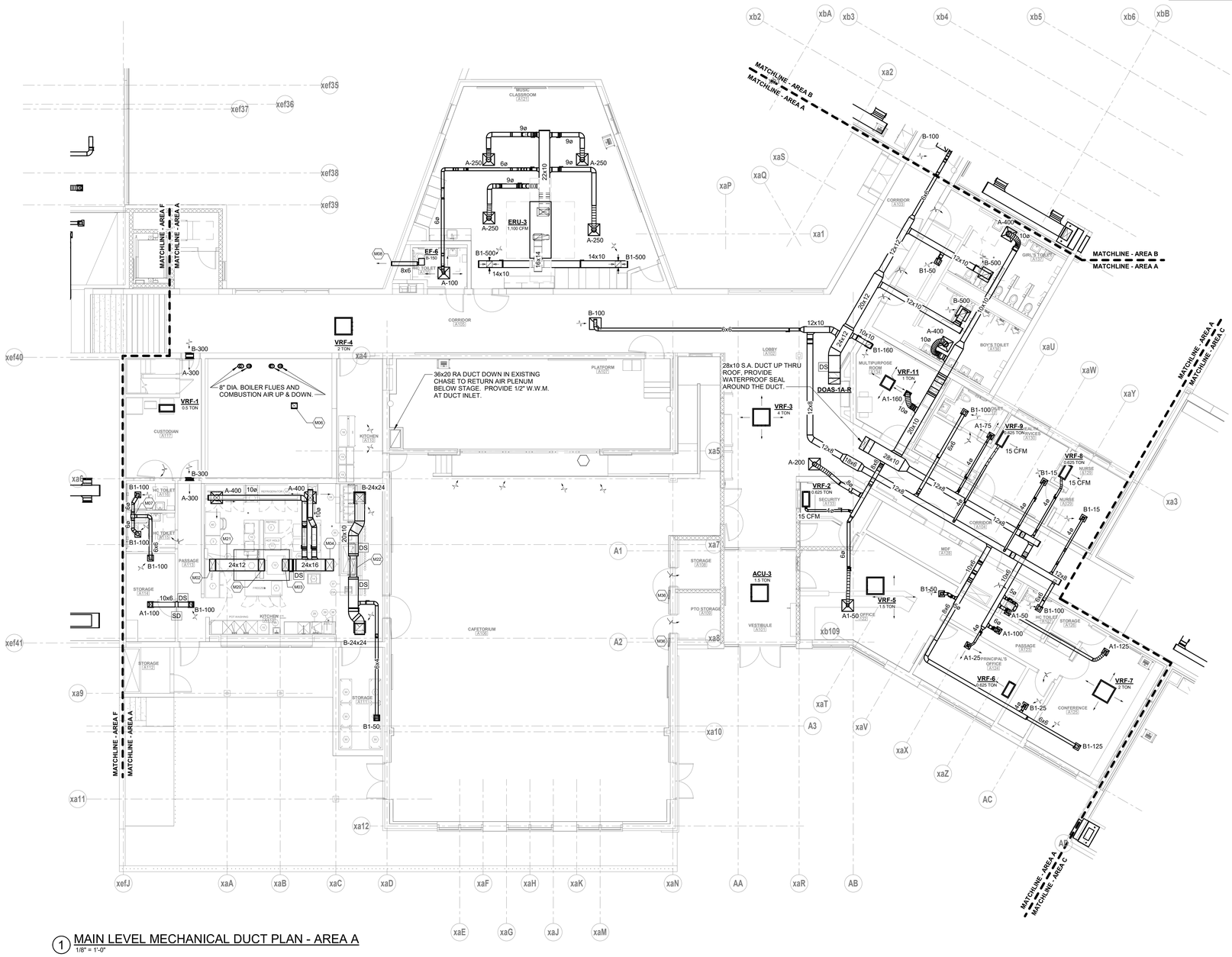
M08 FURNISH AND INSTALL BRICK VENT SIZED FOR 150 CFM, COORDINATE WITH ARCHITECT.

M20 SUPPLY AND EXHAUST DUCT DOWN TO GREASE EXHAUST HOOD, PROVIDE DUCT TRANSITIONS AS NECESSARY.

M21 STAINLESS STEEL GREASE EXHAUST DUCT, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

M22 44"x14" R.A. UP TO MAU-1, PROVIDE TRANSITIONS AS NECESSARY.

M36 PROVIDE DOOR WITH TWO TRANSFER AIR GRILLES, ONE DOWN LOW AND ONE UP HIGH, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.



1 MAIN LEVEL MECHANICAL DUCT PLAN - AREA A
1/8" = 1'-0"

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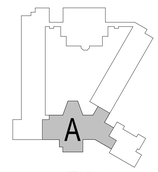
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

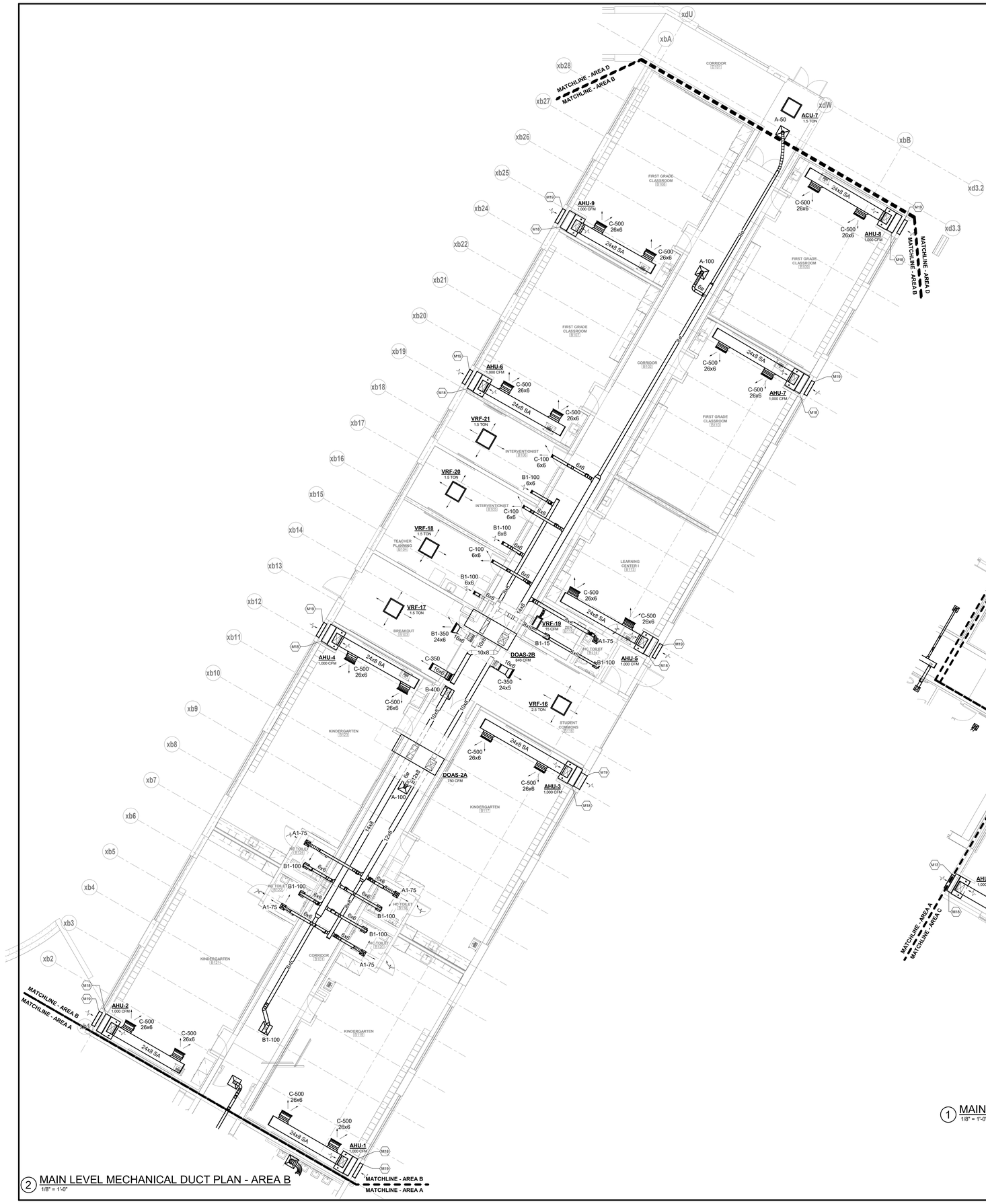
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MAIN LEVEL MECHANICAL DUCT PLAN - AREA A

DRAWING NO.:
M1.02

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2 MAIN LEVEL MECHANICAL DUCT PLAN - AREA B
1/8" = 1'-0"

1 MAIN LEVEL MECHANICAL DUCT PLAN - AREA C
1/8" = 1'-0"

GENERAL NOTES:

1. ALL DUCTWORK CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
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9. COORDINATE ANY STEEL MODIFICATIONS WITH MECHANICAL AND STRUCTURAL ENGINEER.

ACOUSTICAL NOTES

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6. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL INFORMATION.

MECHANICAL KEYNOTES

M13 FURNISH AND INSTALL 36"x36" LOUVER, REFER TO ARCHITECTURAL DRAWINGS FOR LOUVER MODEL AND EXACT LOCATION. LOUVER SHALL HAVE MINIMUM 50% FREE AREA.

M18 PROVIDE FACTORY FABRICATED 14" DEEP INSULATED PLENUM. CONTRCTOR MAY NEED TO MODIFY/EXTEND INTERNAL DEVIDER BETWEEN SUPPLY AND RELIEF TO MAINTAIN TIGHT SEAL BETWEEN THE TWO V.I.F.

M19 CONTRACTOR SHALL FIELD FABRICATE LOUVER WALL SLEEVES OR PURCHASE IT FROM MANUFACTURER IF AVAILABLE. THERE ARE TWO DIFFERENT WALL DEPTHS, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. LOUVERS ARE SELECTED AND SPECIFIED BY ARCHITECT.

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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
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PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL DUCT PLANS - AREAS B & C

DRAWING NO.:
M1.03

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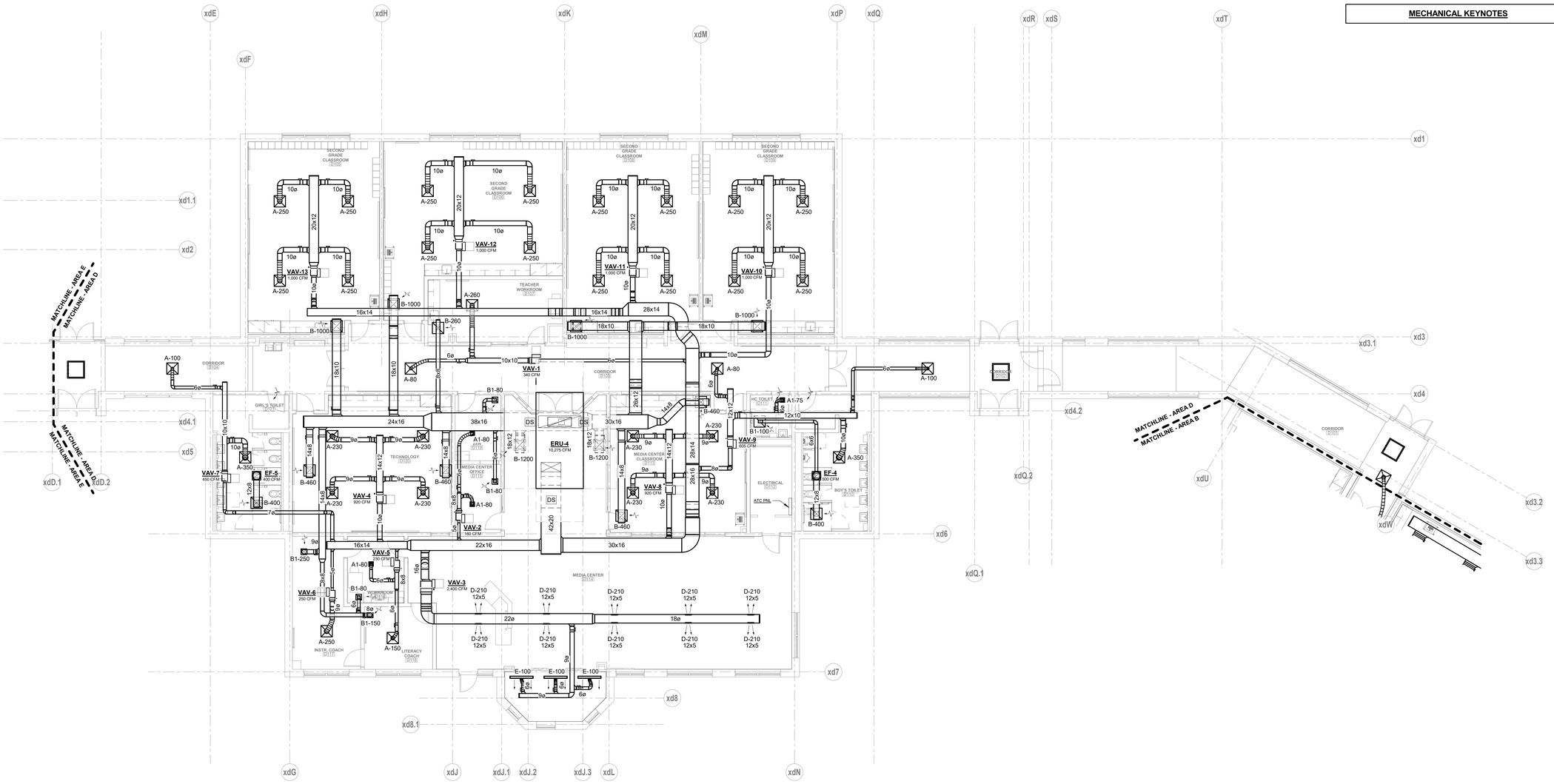
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ACOUSTICAL NOTES

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MECHANICAL KEYNOTES



1 MAIN LEVEL MECHANICAL DUCT PLAN - AREA D
1/8" = 1'-0"

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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

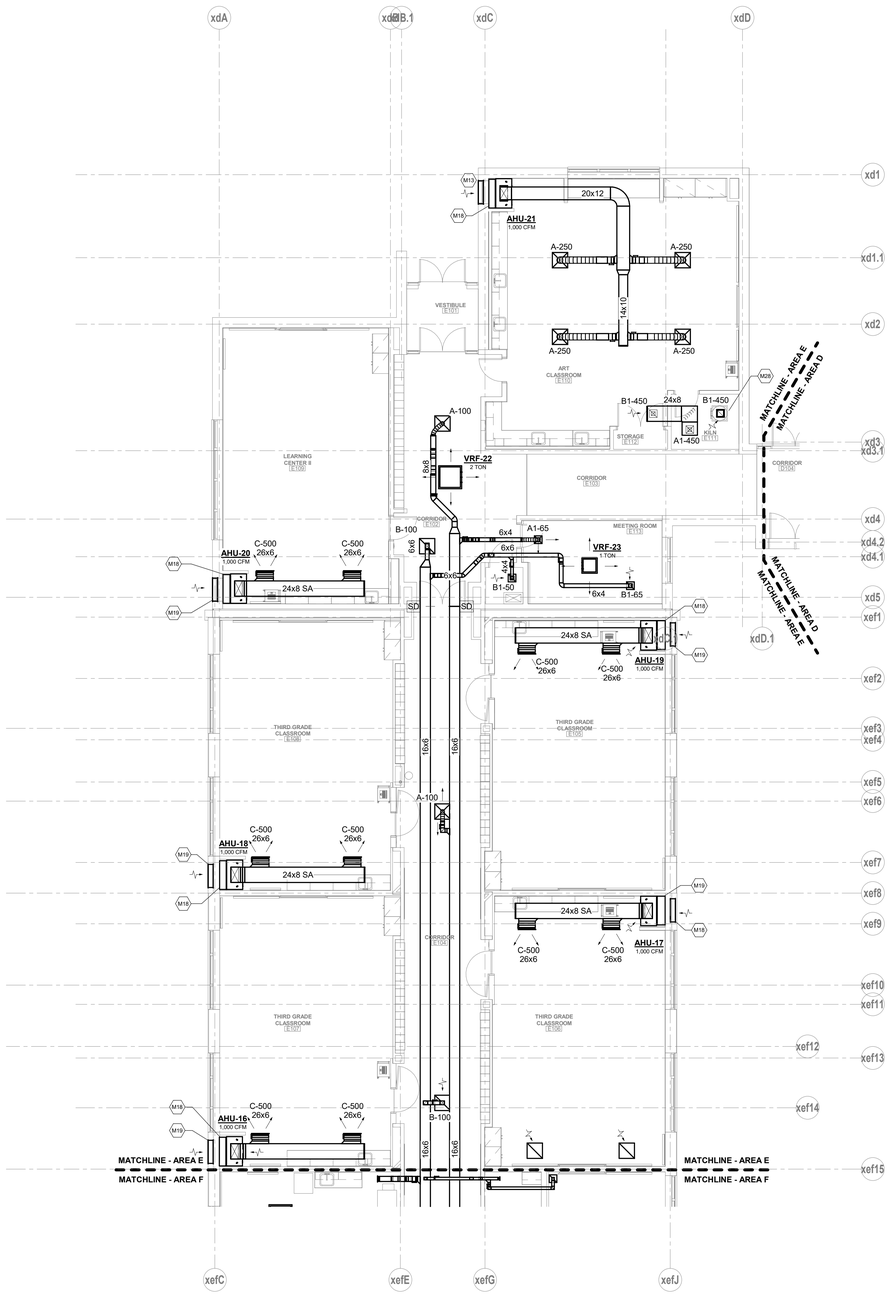
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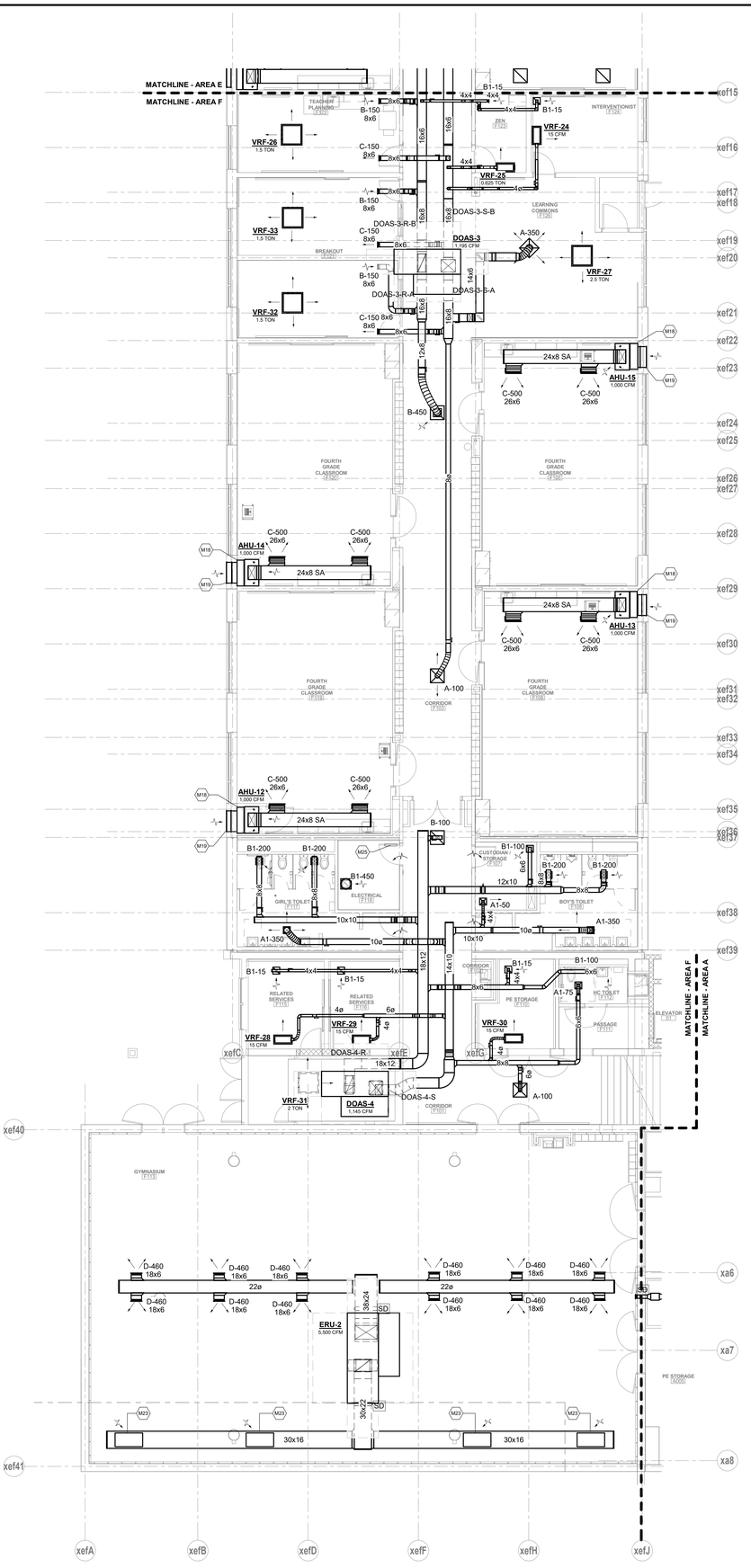
MAIN LEVEL MECHANICAL DUCT PLAN - AREA D

DRAWING NO.:
M1.04

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1 MAIN LEVEL MECHANICAL DUCT PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL MECHANICAL DUCT PLAN - AREA F
1/8" = 1'-0"

GENERAL NOTES:

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5. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST AND RETURN BRANCH DUCTS.
6. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT, INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
7. ALL TOILETS, BATHROOMS AND STORAGE ROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
8. PROVIDE DUCT TRANSITIONS BETWEEN DUCTS AND ROOFTOP UNIT DUCT OPENINGS, WHENEVER THERE IS NOT ENOUGH SPACE BELOW THE UNIT, PROVIDE 24"-30" HIGH ROOF CURB AND TRANSITION WITH-IN THE CURB V.I.F.
9. COORDINATE ANY STEEL MODIFICATIONS WITH MECHANICAL AND STRUCTURAL ENGINEER.

ACOUSTICAL NOTES

1. PROVIDE MIN. 25'-0" OF 1" ACOUSTICAL DUCT LINER UPSTREAM AND DOWNSTREAM OF EACH AIR HANDLING UNIT A DEDICATED SILENCERS.
2. ALL INTERNAL LINERS SHALL BE NON-POROUS TYPE OR FILM LINED.
3. ALL SUPPLY, RETURN AND EXHAUST DIFFUSERS SHALL BE SELECTED AT 25 NC OR LOWER.
4. ALL VAV'S SHALL HAVE EITHER 3'-0" SOUND ATTENUATOR OR 10'-0" OF LINED DUCTWORK.
5. LOCATED ALL VOLUME DAMPERS 6'-0" TO 8'-0" FROM DIFFUSERS AND GRILLES. IF DUCT IS SHORTER THAN 6'-0", LOCATE IT AS FAR AWAY AS POSSIBLE.
6. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL INFORMATION.

MECHANICAL KEYNOTES

M13 FURNISH AND INSTALL 36"x36" LOUVER, REFER TO ARCHITECTURAL DRAWINGS FOR LOUVER MODEL AND EXACT LOCATION. LOUVER SHALL HAVE MINIMUM 50% FREE AREA.

M18 PROVIDE FACTORY FABRICATED 14" DEEP INSULATED PLENUM. CONTRCTOR MAY NEED TO MODIFY/EXTEND INTERNAL DEVIDER BETWEEN SUPPLY AND RELIEF TO MAINTAIN TIGHT SEAL BETWEEN THE TWO V.I.F.

M19 CONTRACTOR SHALL FIELD FABRICATE LOUVER WALL SLEEVES OR PURCHASE IT FROM MANUFACTURER IF AVAILABLE. THERE ARE TWO DIFFERENT WALL DEPTHS, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. LOUVERS ARE SELECTED AND SPECIFIED BY ARCHITECT.

M23 PROVIDE 48"x24" DUCT OPENING ON TOP OF RETURN AIR DUCT WITH 1/2"W.W.M AT INLET.

M25 PROVIDE DOOR WITH TRANSFER AIR GRILLE, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

M28 10"x10" E.A. DUCT UP TO EF-1.

KAESTLE BOOS associates, inc

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JANUARY 14, 2022	PHASE 1 OF 3

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KEY PLAN

E
F

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL DUCT PLANS - AREAS E & F

DRAWING NO.:
M1.05

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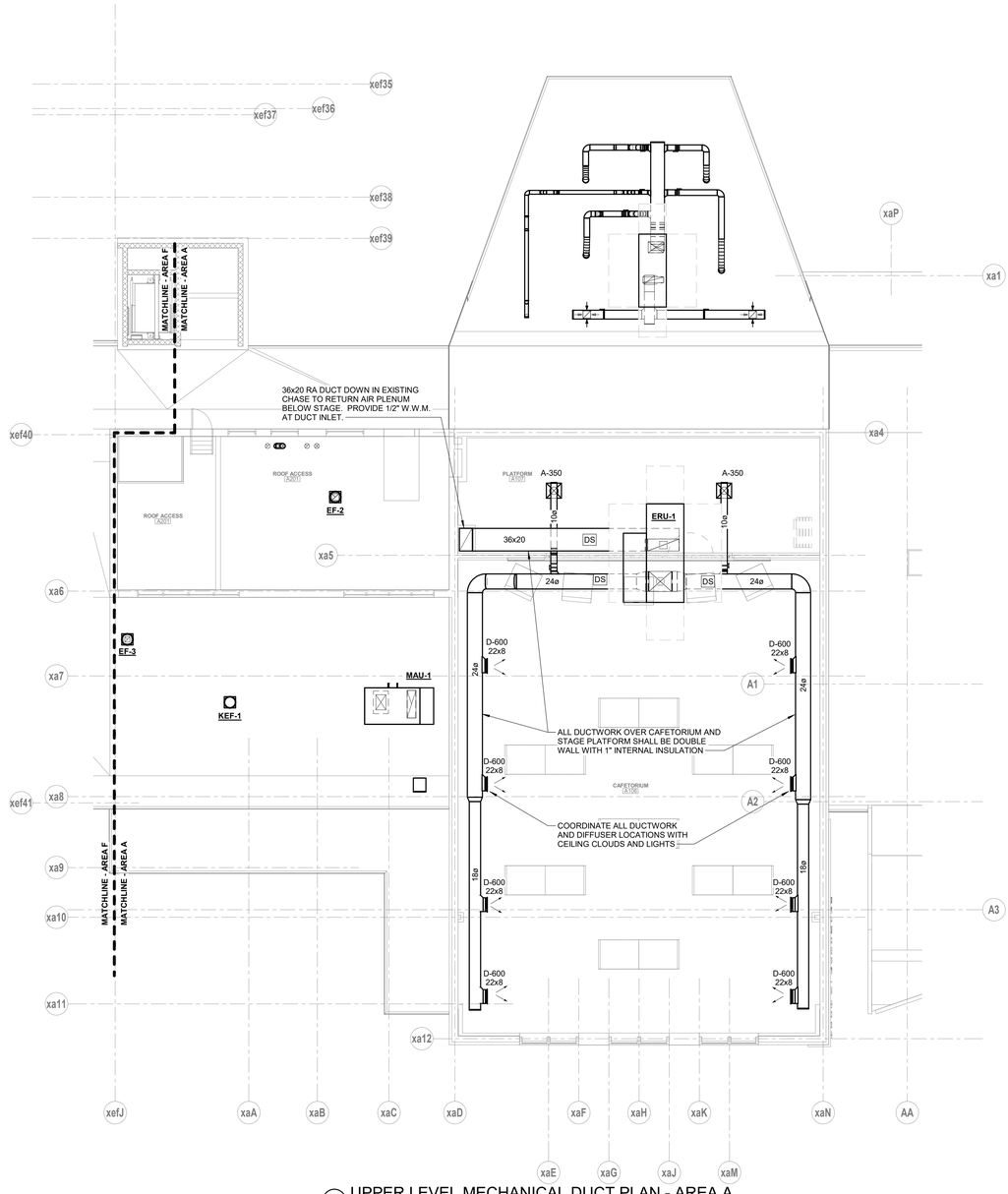
GENERAL NOTES:

1. ALL DUCTWORK CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
2. ALL VRF's AND RADIANT CEILING PANELS SHALL HAVE DEDICATED WALL MOUNTED TEMPERATURE SENSORS. WHENEVER VRF AND RADIANT CEILING PANEL ARE SERVING SAME SPACE, BOTH SHOULD BE CONNECTED TO ONE SENSOR.
3. ALL TEMPERATURE SENSORS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
4. REFER TO PIPING DRAWINGS FOR THERMOSTAT LOCATIONS.
5. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST AND RETURN BRANCH DUCTS.
6. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT, INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
7. ALL TOILETS, BATHROOMS AND STORAGE ROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
8. PROVIDE DUCT TRANSITIONS BETWEEN DUCTS AND ROOFTOP UNIT DUCT OPENINGS, WHENEVER THERE IS NOT ENOUGH SPACE BELOW THE UNIT, PROVIDE 24"-30" HIGH ROOF CURB AND TRANSITION WITH-IN THE CURB V.I.F.
9. COORDINATE ANY STEEL MODIFICATIONS WITH MECHANICAL AND STRUCTURAL ENGINEER.

ACOUSTICAL NOTES

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2. ALL INTERNAL LINERS SHALL BE NON-POROUS TYPE OR FILM LINED.
3. ALL SUPPLY, RETURN AND EXHAUST DIFFUSERS SHALL BE SELECTED AT 25 NC OR LOWER.
4. ALL VAV'S SHALL HAVE EITHER 3'-0" SOUND ATTENUATOR OR 10'-0" OF LINED DUCTWORK.
5. LOCATED ALL VOLUME DAMPERS 6'-0" TO 8'-0" FROM DIFFUSERS AND GRILLES. IF DUCT IS SHORTER THAN 6'-0", LOCATE IT AS FAR AWAY AS POSSIBLE.
6. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL INFORMATION.

MECHANICAL KEYNOTES



1 UPPER LEVEL MECHANICAL DUCT PLAN - AREA A
1/8" = 1'-0"

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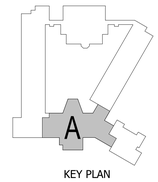
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

UPPER LEVEL MECHANICAL DUCT PLAN - AREA A

DRAWING NO.:
M1.06

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GENERAL NOTES

1. ALL ROOF MOUNTED EQUIPMENT THAT NEEDS SERVICING HAS TO BE LOCATED MINUMUM 10'-0" AWAY FROM EDGE OF THE ROOF.
2. ALL PLUMBING VENTS HAVE TO BE LOCATED MINUMUM 25'-0" AWAY FROM AHU OUTSIDE AIR INTAKE.

MECHANICAL KEYNOTES



1 MECHANICAL ROOF PLAN
1/16" = 1'-0"

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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MECHANICAL ROOF PLAN

DRAWING NO.:
M1.07

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GENERAL NOTES

1. ALL HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS NOTED OTHERWISE
2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES

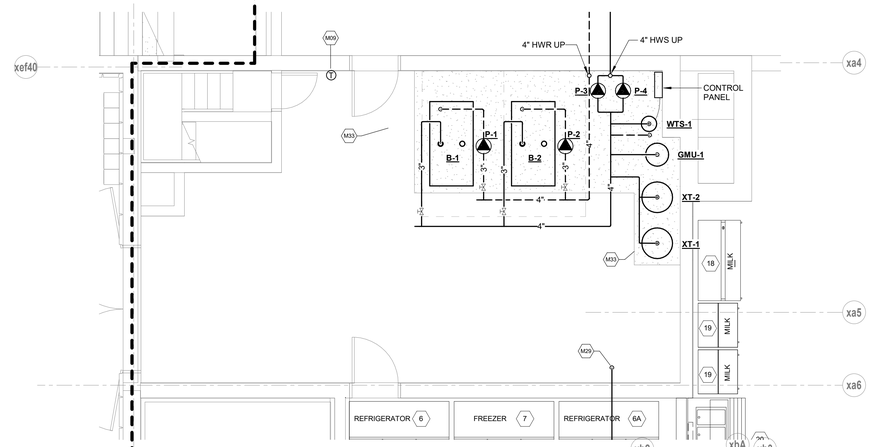
M09 REVERSE ACTING THERMOSTAT CONNECT TO EF-2.

M29 1 1/4" CONDENSATE PIPE DOWN TO FLOOR DRAIN.

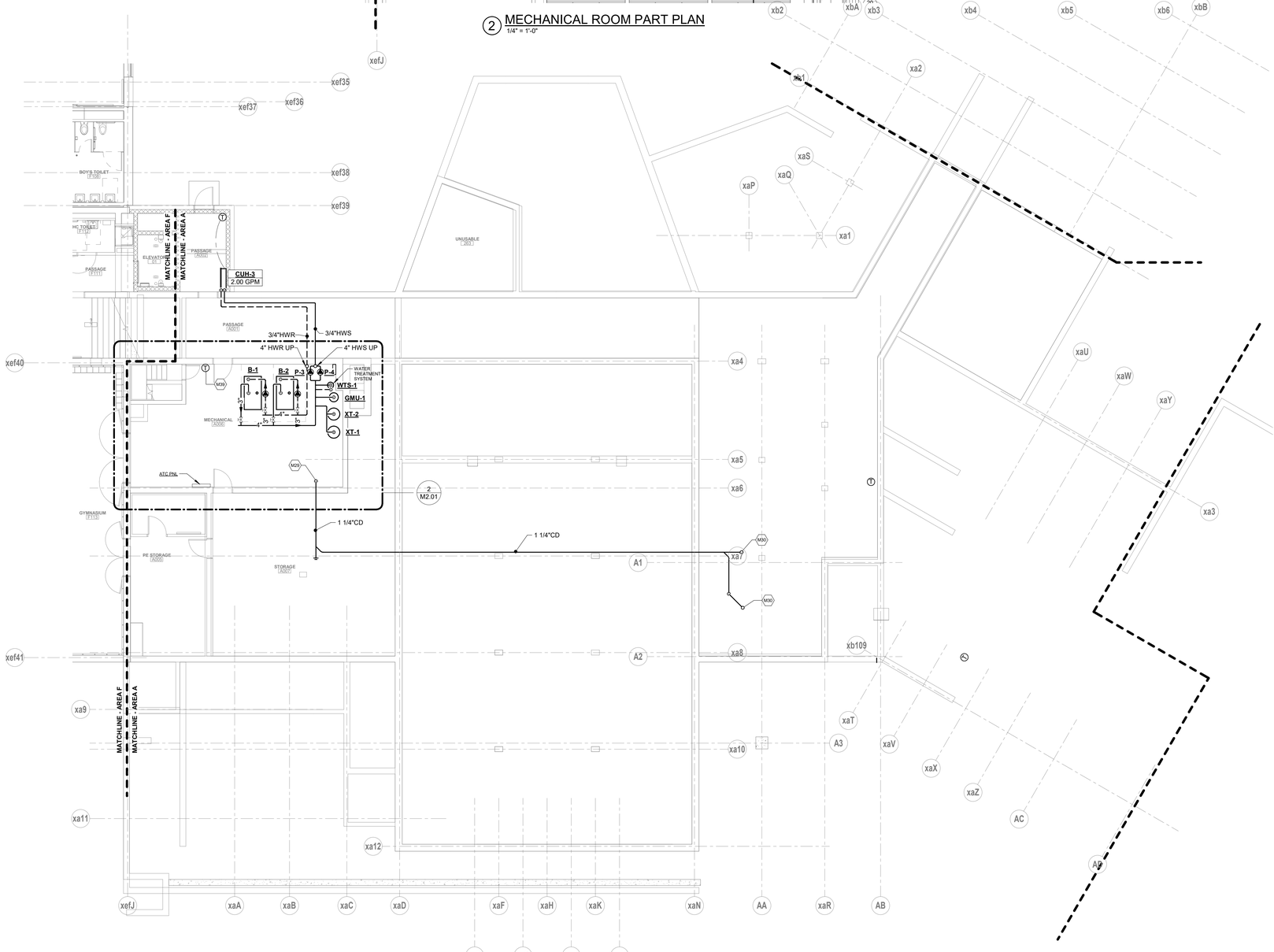
M30 1 1/4" CONDENSATE PIPE UP TO VRF UNITS.

M33 CONCRETE PAD

M39 REVERSE ACTING THERMOSTAT UP TO EF-2



2 MECHANICAL ROOM PART PLAN
1/4" = 1'-0"



1 LOWER LEVEL MECHANICAL PIPE PLAN - AREA A
1/8" = 1'-0"

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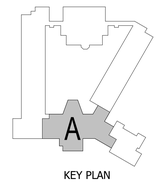
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KEY PLAN

SCALE: 1/8" = 1'-0" PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

LOWER LEVEL MECHANICAL PIPE PLAN - AREA A

DRAWING NO.:
M2.01

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GENERAL NOTES

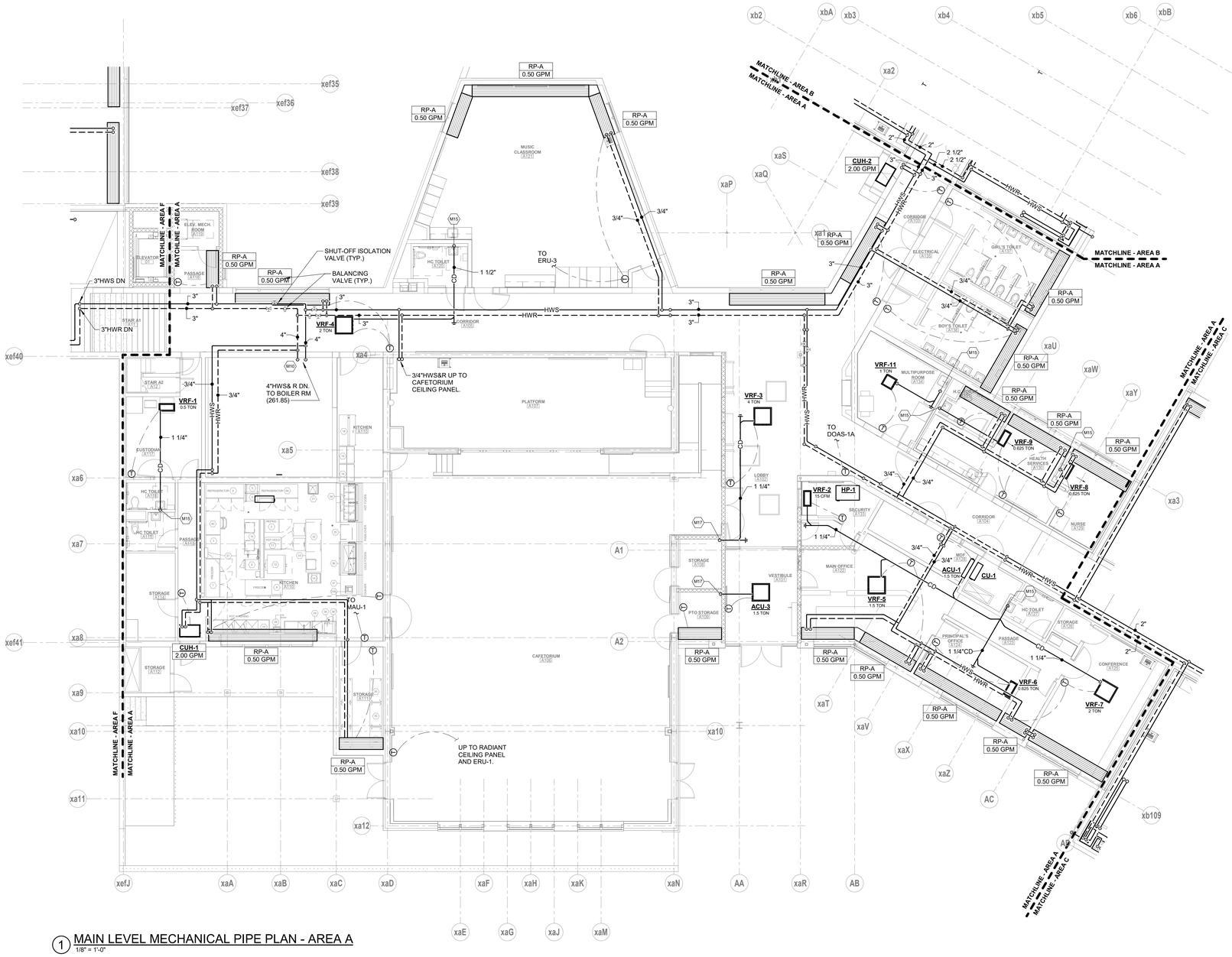
1. ALL HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS NOTED OTHERWISE.
2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES

M10 4" HWS&R DOWN TO BOILER ROOM.

M15 RUN 1 1/4" CONDENSATE PIPE IN A WALL AND CONNECT IT TO LAVATORY OR SINK TRAP. SEE VRF CONDENSATE PIPING DETAIL FOR ADDITIONAL INFORMATION.

M17 1 1/4" CONDENSATE PIPE DOWN TO CRAWL SPACE BELOW AND OVER TO FLOOR DRAIN



1 MAIN LEVEL MECHANICAL PIPE PLAN - AREA A
1/8" = 1'-0"

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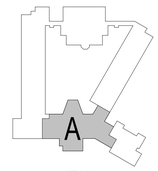
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL PIPE PLAN - AREA A

DRAWING NO.:
M2.02

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2 MAIN LEVEL MECHANICAL PIPE PLAN - AREA B
1/8" = 1'-0"

1 MAIN LEVEL MECHANICAL PIPE PLAN - AREA C
1/8" = 1'-0"

GENERAL NOTES

1. ALL HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS NOTED OTHERWISE.
2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES

M14 RUN 1 1/4" CONDENSATE PIPE IN A WALL TO OUTSIDE AND DOWN ONTO SPLASH BLOCK.

M15 RUN 1 1/4" CONDENSATE PIPE IN A WALL AND CONNECT IT TO LAVATORY OR SINK TRAP. SEE VRF CONDENSATE PIPING DETAIL FOR ADDITIONAL INFORMATION.

M31 RUN 3/4" HWS&R DOWN IN A WALL TO CABINET UNIT HEATER.

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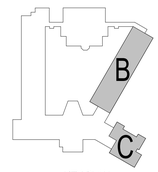
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL PIPE PLANS - AREAS B & C

DRAWING NO.:
M2.03

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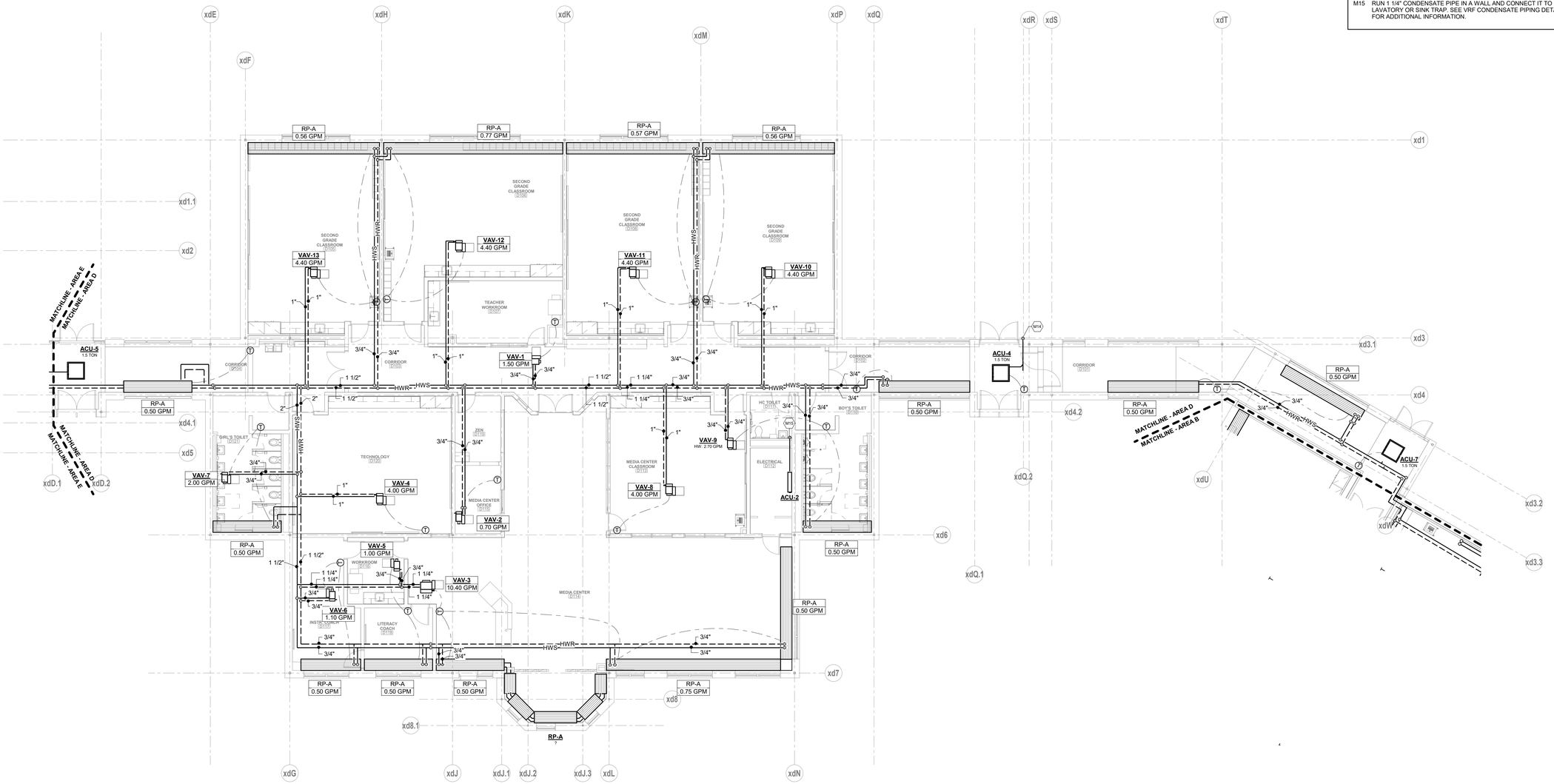
GENERAL NOTES

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2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES

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M15 RUN 1 1/4" CONDENSATE PIPE IN A WALL AND CONNECT IT TO LAVATORY OR SINK TRAP. SEE VRF CONDENSATE PIPING DETAIL FOR ADDITIONAL INFORMATION.



1 MAIN LEVEL MECHANICAL PIPE PLAN - AREA D
1/8" = 1'-0"

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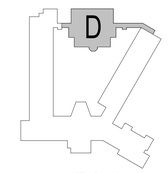
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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

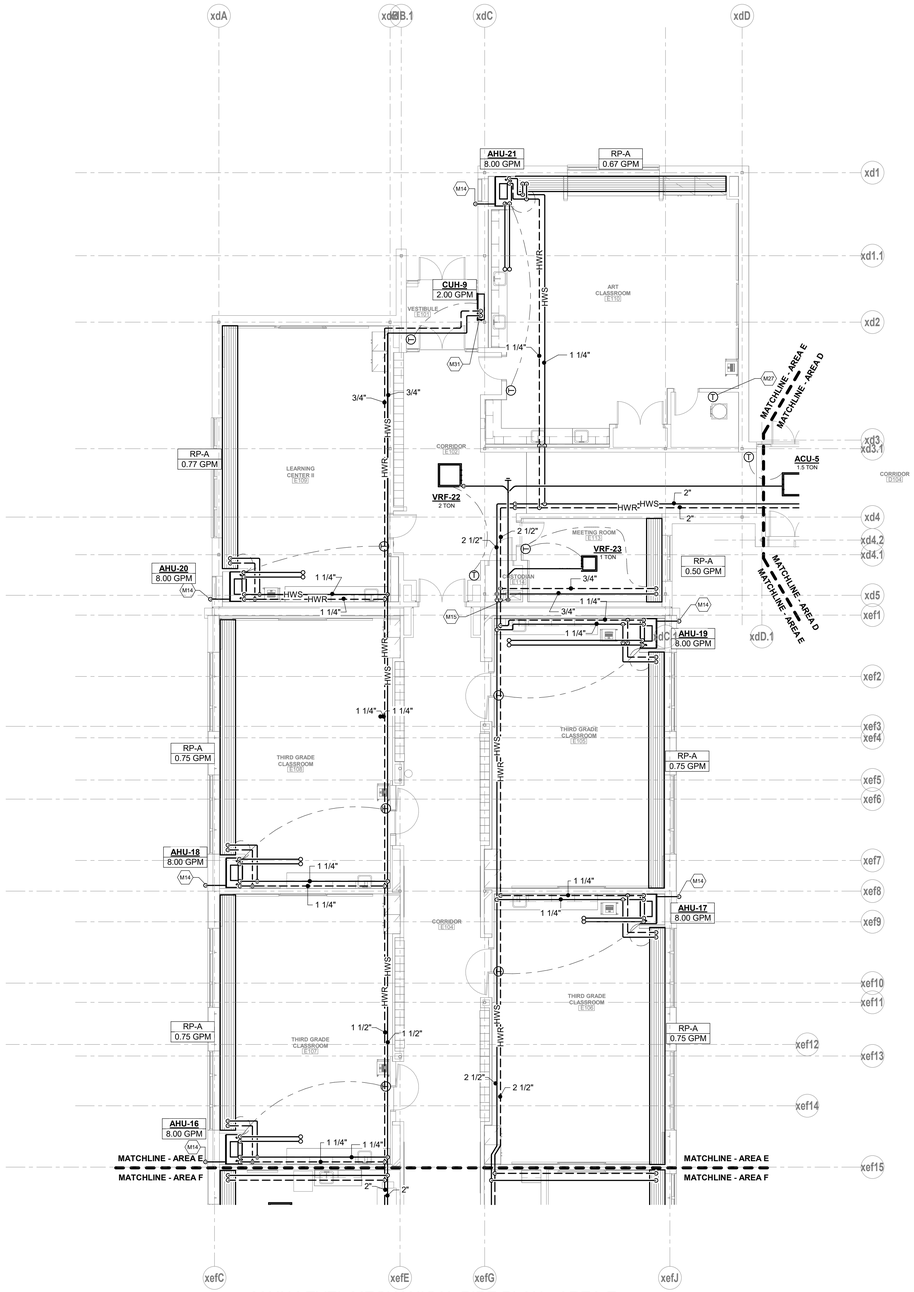
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

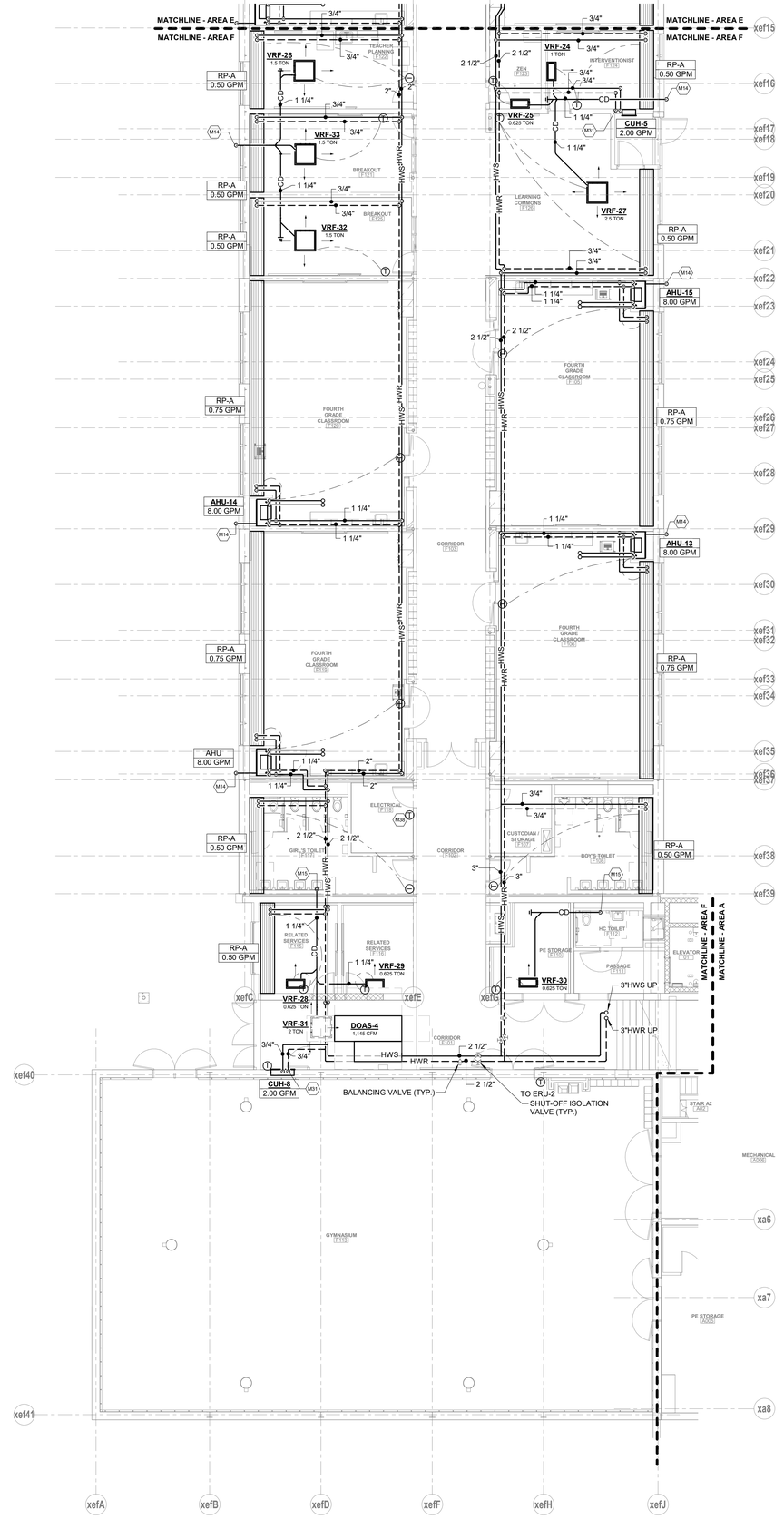
MAIN LEVEL MECHANICAL PIPE PLAN - AREA D

DRAWING NO.:
M2.04

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1 MAIN LEVEL MECHANICAL PIPE PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL MECHANICAL PIPE PLAN - AREA F
1/8" = 1'-0"

GENERAL NOTES

1. ALL HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS NOTED OTHERWISE.
2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES

M14 RUN 1 1/4" CONDENSATE PIPE IN A WALL TO OUTSIDE AND DOWN ONTO SPLASH BLOCK.

M15 RUN 1 1/4" CONDENSATE PIPE IN A WALL AND CONNECT IT TO LAVATORY OR SINK TRAP. SEE VRF CONDENSATE PIPING DETAIL FOR ADDITIONAL INFORMATION.

M27 REVERSE ACTING THERMOSTAT CONNECT TO EF-1.

M31 RUN 3/4" HWS&R DOWN IN A WALL TO CABINET UNIT HEATER.

M38 REVERSE ACTING THERMOSTAT UP TO EF-7

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KEY PLAN

SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MAIN LEVEL MECHANICAL PIPE PLANS - AREAS E & F

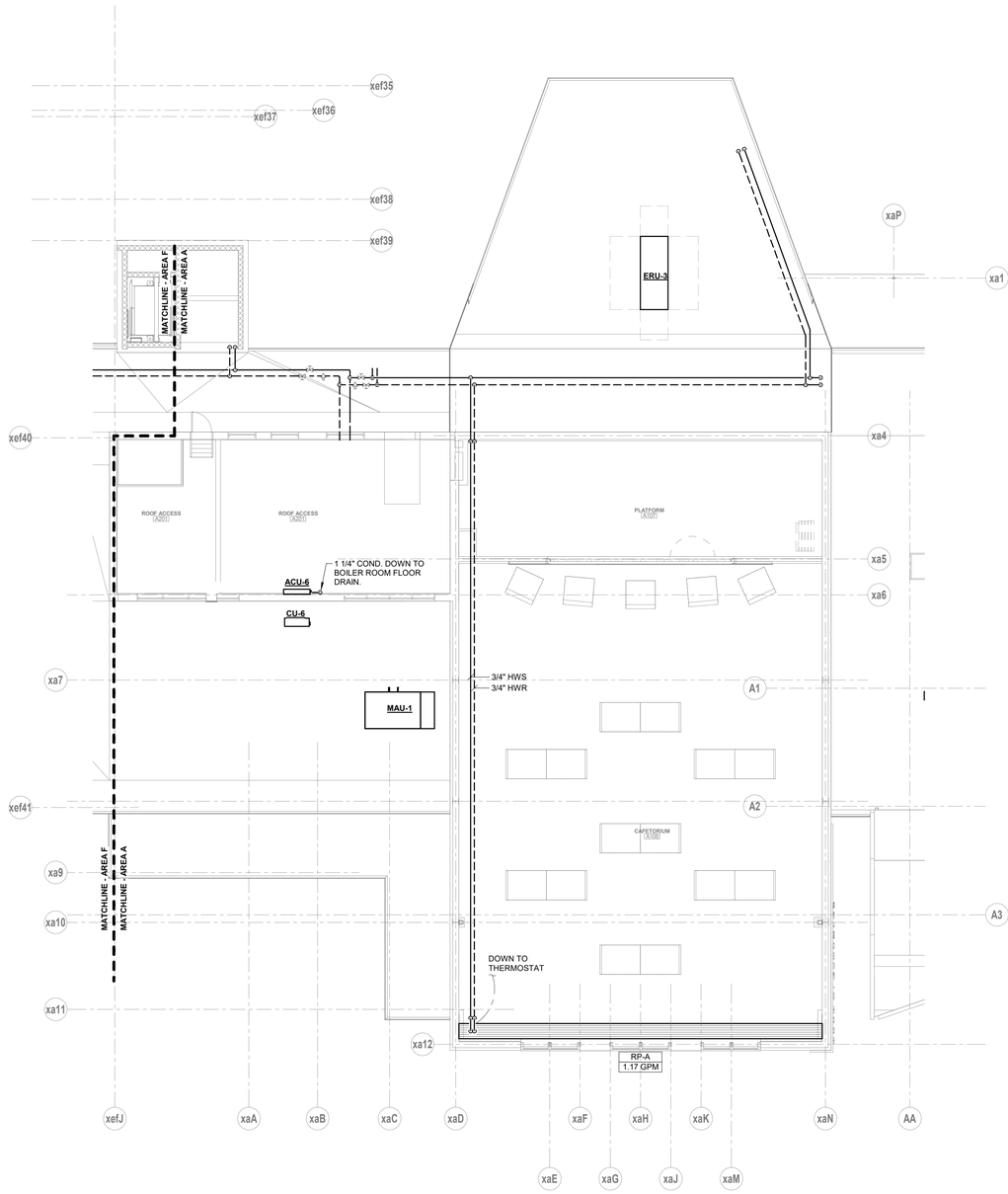
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M2.05

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GENERAL NOTES

1. ALL HOT WATER BRANCH PIPING SHALL BE 3/4" UNLESS NOTED OTHERWISE.
2. ALL CONDENSATE PIPING SHALL BE MINIMUM 1 1/4".

MECHANICAL KEYNOTES



1 UPPER LEVEL MECHANICAL PIPE PLAN - AREA A
1/8" = 1'-0"

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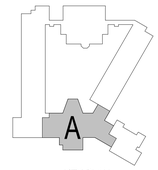
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KEY PLAN

SCALE: 1/8" = 1'-0" PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

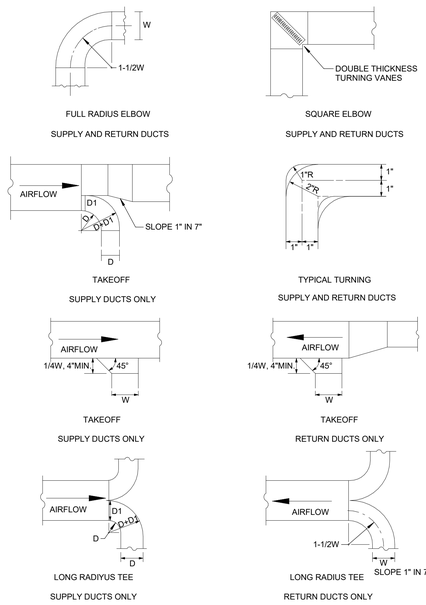
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UPPER LEVEL MECHANICAL PIPE PLAN - AREA A

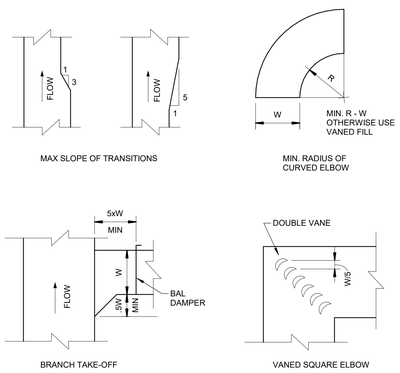
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M2.06

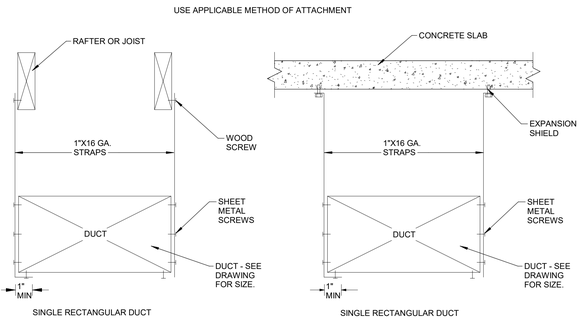
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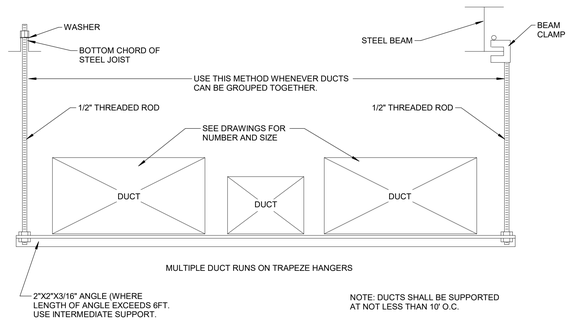


1 TYPICAL DUCT DETAILS
NOT TO SCALE

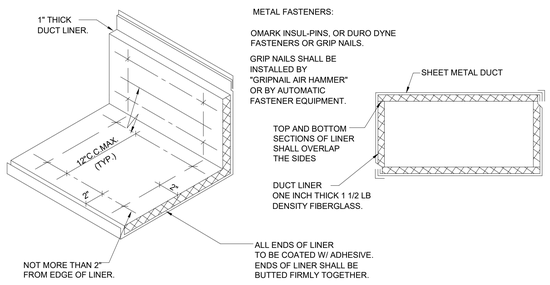


4 DUCT CONSTRUCTION DETAIL
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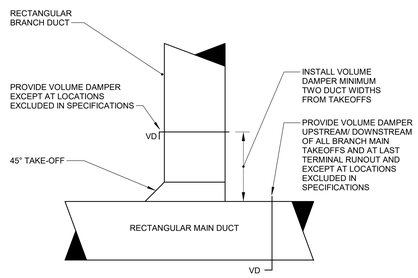




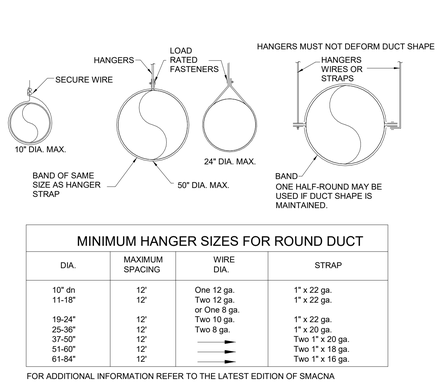
2 DUCT INSTALLATION DETAIL
NOT TO SCALE



3 DUCT LINER DETAIL
NOT TO SCALE



5 RECTANGULAR BRANCH TAKEOFF DETAIL
NOT TO SCALE

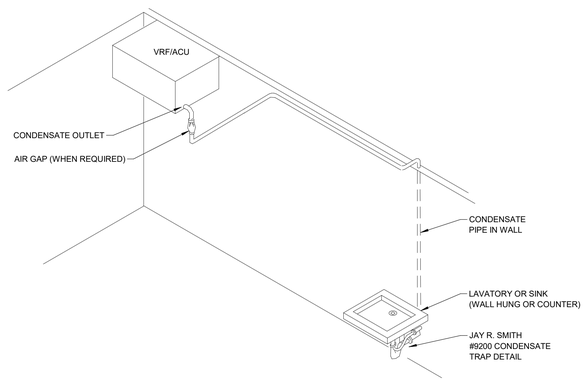


MINIMUM HANGER SIZES FOR ROUND DUCT

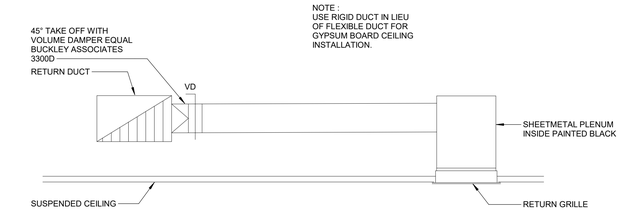
DIA.	MAXIMUM SPACING	WIRE DIA.	STRAP
10" dn	12'	One 12 ga.	1" x 22 ga.
11-18"	12'	Two 12 ga. or One 8 ga.	1" x 22 ga.
19-24"	12'	Two 10 ga.	1" x 22 ga.
25-36"	12'	Two 8 ga.	1" x 20 ga.
37-50"	12'	〃	Two 1" x 20 ga.
51-60"	12'	〃	Two 1" x 18 ga.
61-84"	12'	〃	Two 1" x 16 ga.

FOR ADDITIONAL INFORMATION REFER TO THE LATEST EDITION OF SMACNA

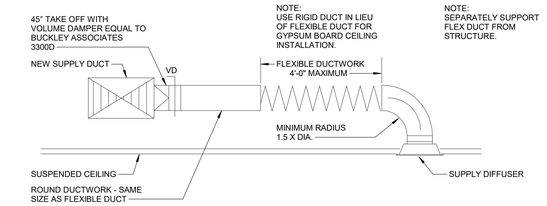
6 TYPICAL ROUND DUCT HANGER ATTACH. DET.
NOT TO SCALE



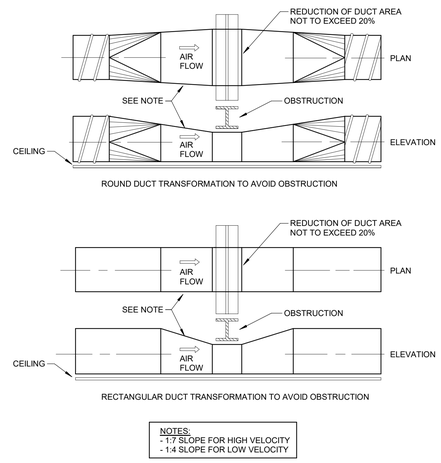
7 ACU CONDENSATE PIPING DETAIL
NOT TO SCALE



8 TYPICAL CEILING MOUNTED RETURN AIR GRILL DETAIL
NOT TO SCALE

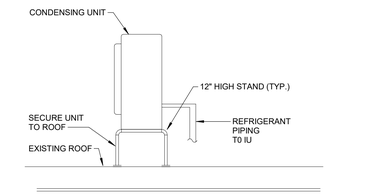


9 TYPICAL CEILING MOUNTED SUPPLY DIFFUSER DETAIL
NOT TO SCALE

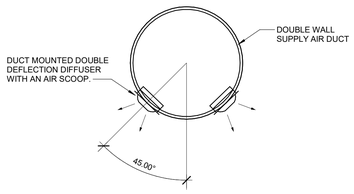


NOTES:
- 1:7 SLOPE FOR HIGH VELOCITY
- 1:4 SLOPE FOR LOW VELOCITY

10 DUCT OBSTRUCTION TRANSFORMATION DETAILS
NOT TO SCALE



11 STAND DETAIL FOR OUTDOOR UNIT ON ROOF
NOT TO SCALE



12 ROUND DUCT TYPE "D" DIFFUSER DETAIL
NTS

NOTES:

1. THIS DETAIL IS FOR GUIDANCE ONLY. IN ALL CASES, GAS VENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH AA CODES OF THE GAS VENT MANUFACTURER.
2. PROVIDE ALL REQUIRED BRACING AND SUPPORT AS REQUIRED BY THE GAS VENT MANUFACTURER.
3. THIS DETAIL APPLIES TO BOTH SLOPED AND FLAT ROOFS.

13 GAS VENT TERMINATION DETAIL
NOT TO SCALE

KAESTLE BOOS associates, inc

416 Slater Road, New Britain, CT 06053
Phone: 860-229-0361 ▲ Fax: 860-229-5303
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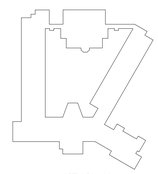
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ISSUE DATE

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JANUARY 14, 2022	PHASE 1 OF 3

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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

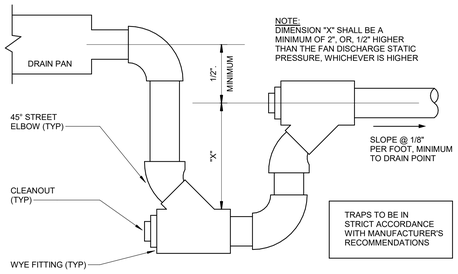
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

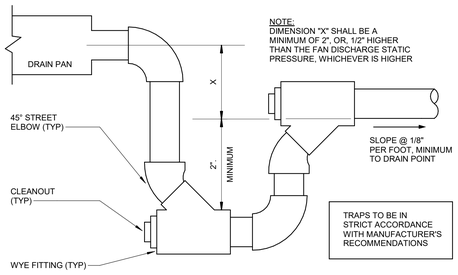
MECHANICAL DETAILS

DRAWING NO.:
M3.01

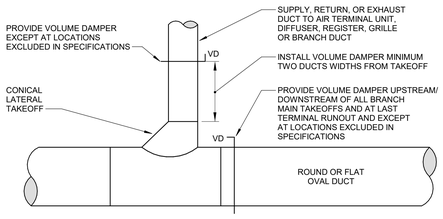
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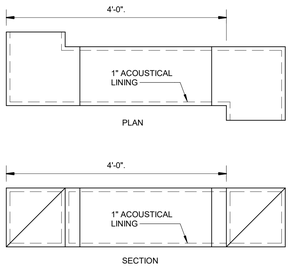
1 COOLING COIL CONDENSATE TRAP DETAIL FOR BLOW THRU COILS
NOT TO SCALE



2 COOLING COIL CONDENSATE TRAP DETAIL FOR DRAW-THRU COILS
NOT TO SCALE

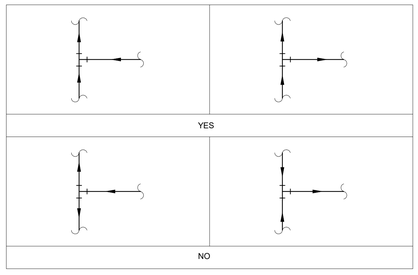


3 ROUND FLAT OVAL DUCT TAKEOFF DETAIL
NOT TO SCALE

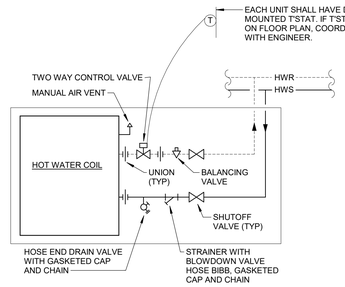


NOTE:
TRANSFER AIR DUCT OPENING SHALL BE EQUAL TO 1 SQ. FT. PER 500 CFM OF SYSTEM AIR. DUCT TO BE A MINIMUM OF 4'-0" LONG, WITH 1" OF ACOUSTICAL LINING. MINIMUM OPENING 1 SQ. FT.

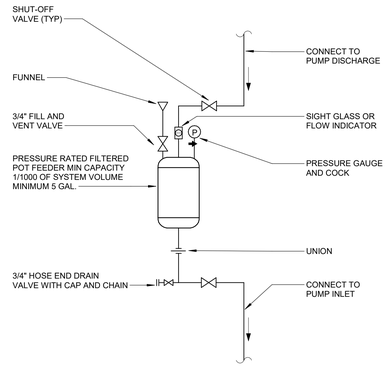
4 TRANSFER AIR DUCT
NOT TO SCALE



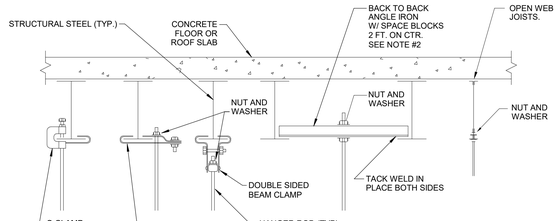
5 ALLOWABLE FLOW CONFIGURATIONS IN PIPING TEES - HVAC SYSTEMS
NOT TO SCALE



6 CABINET UNIT HEATER PIPING DETAIL
NTS

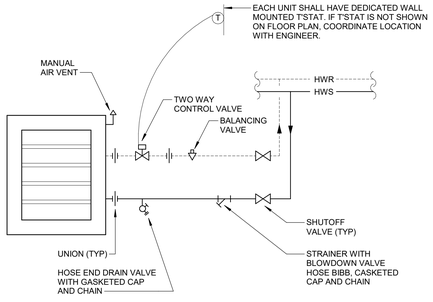


7 CHEMICAL POT FEEDER DETAIL
NOT TO SCALE

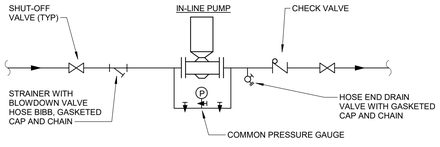


NOTES:
1. REFER TO PIPE HANGER DETAIL FOR HANGER ROD SIZE. FOR CEILING SUSPENDED EQUIPMENT PROVIDE MIN. 3/8" DIA. HANGER ROD (REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS).
2. FOR PIPES UNDER 2" USE A SINGLE 1-1/2"x1-1/2"x1/4" ANGLE IRON WITH C-CLAMP FOR PIPES 2-1/2" AND LARGER USE 3"x3"x1/4" ANGLE IRON BACK TO BACK AS SHOWN.
3. REFER TO "TYPICAL METHOD OF SECURING HANGER RODS TO CONCRETE DECK DETAIL" FOR ATTACHING HANGER RODS TO CONCRETE DECK.
4. REPAIR OF FIREPROOFING IN ORDER TO FACILITATE THE INSTALLATION OF HANGER RODS IN EXISTING CONSTRUCTION SHALL BE BY THE G.C.
5. USE OF C-CLAMPS AND SIDE BEAM CLAMPS IS LIMITED TO PIPING 2-1/2" AND UNDER.

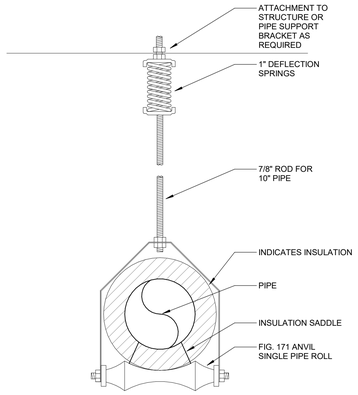
8 TYPICAL METHODS OF SECURING HANGER RODS
NOT TO SCALE



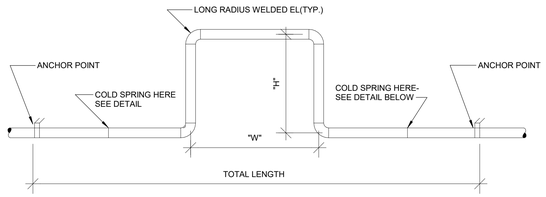
9 HOT WATER UNIT HEATER PIPING DETAIL
NOT TO SCALE

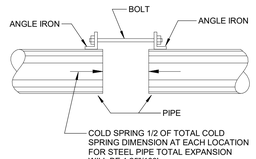


10 IN-LINE PUMP DETAIL
NOT TO SCALE



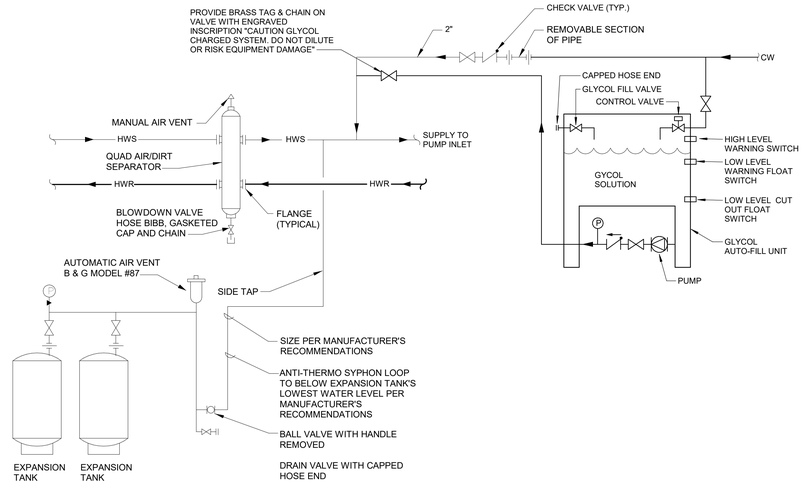
11 PIPE HANGER DETAIL - PIPES 6 INCHES AND ABOVE
NOT TO SCALE



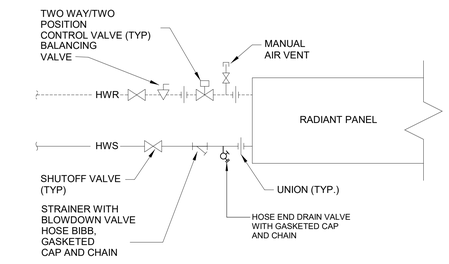


COLD SPRING NOTES:
1. TOTAL COLD SPRING DINENSION SHALL BE 1/2 OF TOTAL EXPANSION.
2. INSTALL ALL PIPE, LEAVING SPACE AT COLD SPRING LOCATION.
3. TACK ANGLES WITH HOLES TO EACH END OF PIPE PUT BOLT IN PLACE AND DRAW PIPE ENDS TOGETHER.
4. TACK WELD PIPE JOINT.
5. KNOCK OFF ANGLES AND COMPLETE WELD.

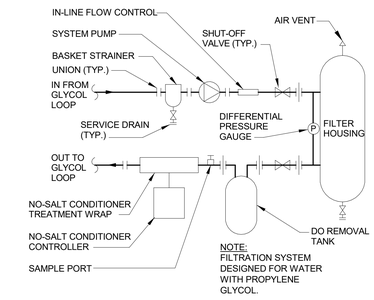
12 EXPANSION LOOP DETAIL
NOT TO SCALE



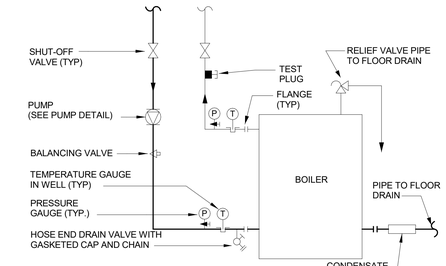
13 EXPANSION TANK WITH QUAD AIR & DIRT SEPARATOR DETAIL
NOT TO SCALE



14 RADIANT CEILING PANEL PIPING DETAIL
NOT TO SCALE



15 WATER TREATMENT SYSTEM DETAIL
NOT TO SCALE



16 TYPICAL BOILER PIPING DETAIL
NOT TO SCALE

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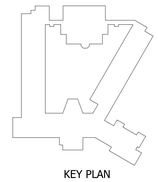
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

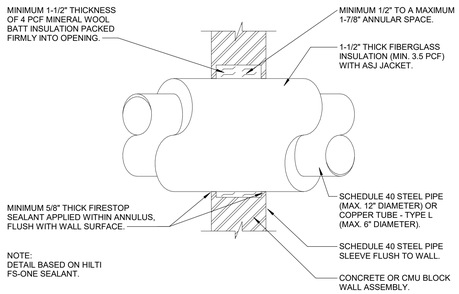
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

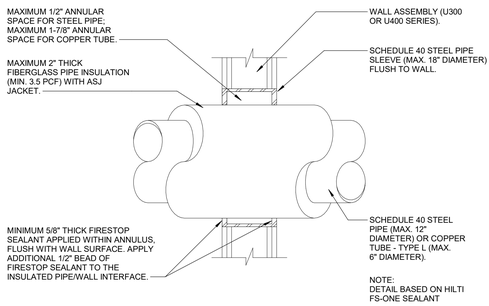
MECHANICAL DETAILS

DRAWING NO.:
M3.02

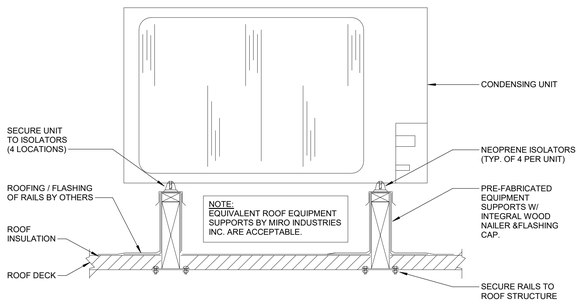
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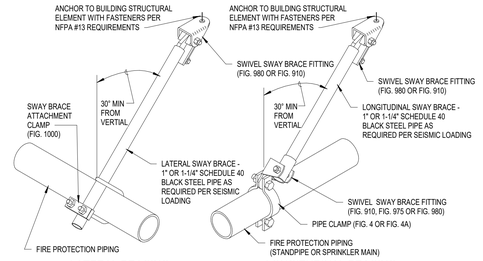
1 PIPE PENETRATION DETAIL - FIRE RATED CMU WALL
NOT TO SCALE

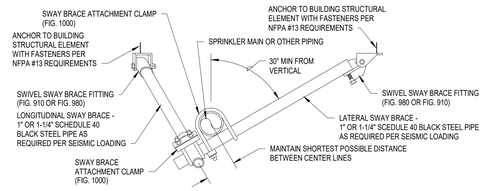


2 PIPE PENETRATION DETAIL - FIRE RATED FRAMED WALL
NOT TO SCALE



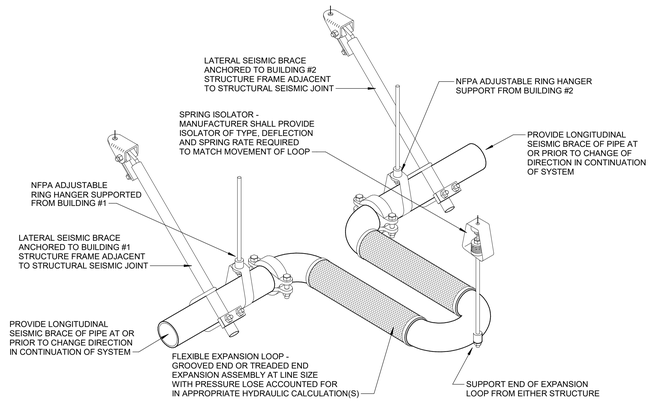
3 TYPICAL ROOF MOUNTED CONDENSING UNIT DETAIL
NOT TO SCALE





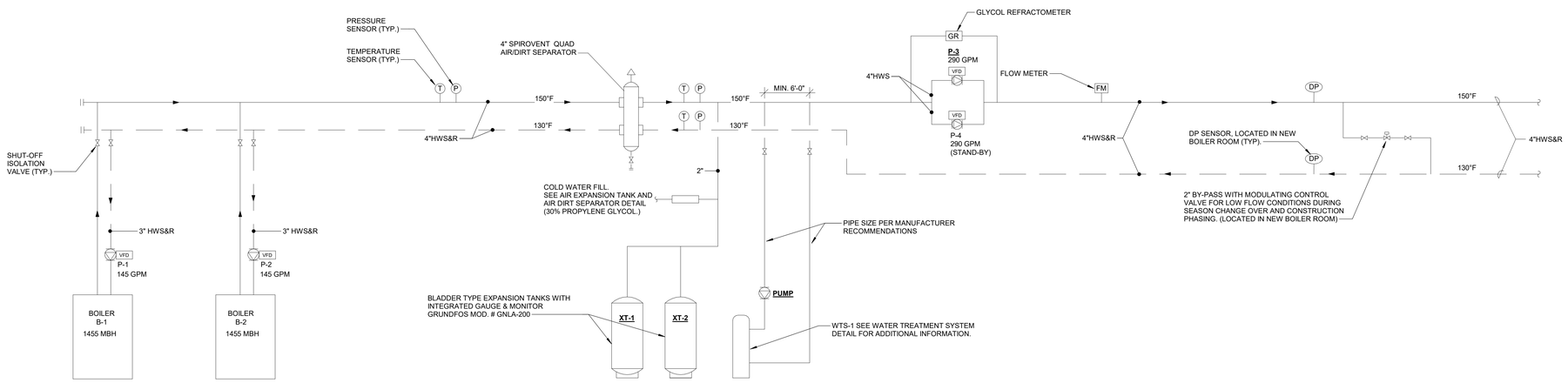
COMBINED LATERAL AND LONGITUDINAL BRACING

4 PIPING SEISMIC RESTRAINT DETAIL
NOT TO SCALE



NOTES:
1. SEE ARCHITECTURAL AND/OR STRUCTURAL DRAWING FOR LOCATION OF SEISMIC JOINTS.
2. IN LIEU OF MANUFACTURED ASSEMBLY PROVIDE FLEXIBLE GROOVED COUPLING ASSEMBLY OF NIPPLES AND ELBOWS REQUIRED TO ALLOW MOVEMENT IN SIX DIRECTIONS PER FIGURE IN NFPA #13 APPENDIX A.
3. BASED ON FIRELOOP BY THE METRAFLEX COMPANY, OR EQUAL PRODUCTS BY FLEX-HOSE INC. OR MASON-MERCER OR APPROVED EQUAL.

5 SEISMIC SEPARATION ASSEMBLY DETAIL
NOT TO SCALE



6 HOT WATER PIPING DIAGRAM - OPTION #1
NOT TO SCALE

KAESTLE BOOS associates, inc

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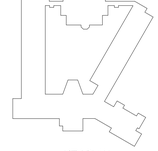
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85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MECHANICAL DETAILS

DRAWING NO.:
M3.03

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ROOFTOP UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	OUTSIDE AIRFLOW		FANS								GAS-FIRED HEAT EXCHANGER					SOUND POWER LEVEL (db) DISCHARGE/INLET/RADIATED								EFFICIENCY				ELECTRICAL DATA				REMARKS
						SUPPLY				SECONDARY				CAPACITY			PIPE PRESS.	AIRSIDE																
				MAX (CFM)	MIN (CFM)	FLOW (CFM)	ESP (in-wg)	HP (hp)	RPM	TYPE	FLOW (CFM)	ESP (in-wg)	HP (hp)	RPM	INPUT (BTUH)	OUTPUT (BTUH)	TURN DOWN RATIO	MIN (in-wg)	MAX (in-wg)	EAT(db) (°F)	LAT(db) (°F)	63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SEER	EER	IEER	COP	MCA	MOCP	VOLT	PH	
DOAS-1A	AAON	RN-008-3-0-EA09-32B -28" Curb	ROOF	1805	630	1805	1.50	3.0	1817	EXHAUST	1840	1.00	2.0	1744	90,000	72,900	10	5.50	18.00	0.0	0.0									0	0	0	0	26 A	35 A	480 V	3	
DOAS-1B	AAON	RQ-004-3-V-FA09-31B	ROOF	780	280	780	1.50	2.0	1780	EXHAUST	980	1.00	1.0	1753	60,000	48,600	10	5.00	18.00	0.0	0.0									0	0	0	0	17 A	20 A	480 V	3	
DOAS-2A	AAON	RQ-003-3-V-EA09-31B	ROOF	750	600	750	1.50	2.0	0	EXHAUST	1780	1.00	1.0		60,000	48,600	10	5.50	18.00	0.0	0.0									0	0	0	0	15 A	20 A	480 V	3	
DOAS-2B	AAON	RQ-004-3-V-EA09-31B	ROOF	840	600	840	1.50	2.0	0	EXHAUST	1780	1.00	1.0		60,000	48,600	10	5.50	18.00	0.0	0.0									0	0	0	0	17 A	20 A	480 V	3	
DOAS-3	AAON	RN-006-3-0-EA09-32B	ROOF	1195	350	1195	1.50	2.0	0	EXHAUST	995	1.00	1.0		90,000	72,900	10	5.50	18.00	0.0	0.0									0	0	0	0	17 A	25 A	480 V	3	
DOAS-4	AAON	RN-006-3-0-EA09-32B	ROOF	1145	400	1145	1.50	2.0	0	EXHAUST	1145	1.00	1.0		90,000	72,900	10	5.50	18.00	0.0	0.0									0	0	0	0	17 A	25 A	480 V	3	
ERU-1	AAON	RN-018-3-0-EA09-34B	ROOF	5500	3000	5500	1.50	7.5	0	EXHAUST	5500	1.00	5.0		270,000	218,700	10	5.50	18.00	0.0	0.0									0	0	0	0	51 A	60 A	480 V	3	
ERU-2	AAON	RN-016-3-0-EA09-34B	ROOF	5500	1800	5500	1.50	7.5	0	EXHAUST	5500	1.00	5.0		270,000	218,700	10	5.50	18.00	0.0	0.0									0	0	0	0	51 A	60 A	480 V	3	
ERU-3	AAON	RQ-003-3-V-EA09-31B	ROOF	1100	350	1100	1.50	1.0	0	EXHAUST	1000	1.00	1.0		60,000	48,600	10	5.50	18.00	0.0	0.0									0	0	0	0	15 A	20 A	480 V	3	
ERU-4	AAON	RN-040-3-0-EA09-3DB	ROOF	10275	2200	10275	1.50	15.0	0	EXHAUST	9060	1.00	7.5		810,000	648,000	10	5.50	18.00	0.0	0.0									0	0	0	0	112 A	125 A	480 V	3	
MAU-1	AAON	RN-015-3-0-EA0A-3GB	ROOF	2200	650	2200	1.00	2.0	0	NONE	0	0.00	0.0		292,500	234,000	10	5.50	18.00	0.0	0.0									0	0	0	0	35 A	45 A	480 V	3	

D/X COOLING COIL SCHEDULE

PRIMARY AIRSIDE ENERGY RECOVERY

TAG	COOLING COIL								HEATING				HOT GAS REHEAT		AIRFLOW		SUMMER DESIGN ENERGY RECOVERY										WINTER DESIGN ENERGY RECOVERY										REMARKS
	CAPACITY (MBH)		AIRSIDE														OUTSIDE AIR				EFF		EXHAUST AIR				OUTSIDE AIR				EFF		EXHAUST AIR				
	TOTAL	SENSIBLE	FLOW (CFM)	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	FV (FPM)	PD (in-wg)	ROWS	CAPACITY (MBH)	FLOW CFM)	EAT(db) (°F)	LAT(db) (°F)	CAPACITY (MBH)	LAT(db) (°F)	SUPPLY (CFM)	EXHAUST (CFM)	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	SENSIBLE	LATENT	TOTAL	CAPACITY (Btu/h)	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	LATENT	SENSIBLE	TOTAL	CAPACITY (Btu/h)	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	
DOAS-1A	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DOAS-1B	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DOAS-2A	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DOAS-2B	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DOAS-3	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DOAS-4	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ERU-1	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ERU-2	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ERU-3	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ERU-4	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MAU-1	0.0	0.0	0	0.0	0.0	0.0	0.0	0	0.00	0	0.0	0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: TRANE, ADDISON & GREENHECK
2. HEATING APACITIES BASED UPON DESIGN HEATING CFM AND MINIMUM OUTDOOR AIR CFM, 0 DEGREES F (WINTER), 70F/30% RH RA.
3. COOLING CAPACITIES BASED UPPON DESIGN CFM AND MINIMUM OUTDOOR AIR CFM, 91 DEGREES F DD/ 73 DEGREES F WB OA, 75F DB, 50% RH RA.
4. AHU SHALL BE PREWIRED FOR A SINGLE POINT CONNECTION.
5. ALTERNATE MANUFACTURER OF EQUAL PERFORMANCE AND CAPACITY MUST HAVE SIMILAR PHYSICAL DIMENSIONS, OTHERWISE BASE MANUFACTURER MUST BE SUPPLIED. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING DIMENSIONS IN FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STRUCTURAL AN MECHANICAL MODIFICATIONS AT NO COST TO OWNER.
6. PROVIDE MERV-14 FILTERS.
7. PROVIDE DUCT TRANSITION AT THE UNIT AS NECESSARY V.I.F.
8. PROVIDE OA INTAKE HOODS.
9. ROOF OPENING AROUND BOTH SUPPLY AND RETURN DUCTS BELOW EACH ROOFTOP UNIT SHALL BE COMPLETELY SEALED TO PREVENT ANY NOISE TRANSFER.
10. PROVIDE STAINLESS STEEL GAS CHAMBER.
11. PROVIDE RETURN AIR ISOLATION DAMPER.
12. PROVIDE (3) THREE AIR FLOW STATIONS FOR EACH RTU (S.A., E.A., AND O.A.)
13. PROVIDE RETURN AIR DUCT CO2 SENSOR
14. PROVIDE RETURN AIR DUCT HUMIDITY SENSOR
15. PROVIDE VFD'S ON BOTH SUPPLY & EXHAUST FANS.
16. PROVIDE 18" HIGH PREFABRICATED TAPERED ROOF CURBS FOR ALL UNITS EXCEPT FOR DOAS-1A WHICH WILL BE 28" HIGH WITH HORIZONTAL SUPPLY DUCT CONNECTION ON SHORT SIDE OF THE UNIT.
17. MAU-1 SHALL HAVE RETURN AIR BY-PASS DAMPER.
18. PROVIDE DISCONNECT SWITCH.

AIR HANDLING UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	OUTSIDE AIRFLOW		FANS						SOUND POWER LEVEL (db) DISCHARGE/INLET/RADIATED								ELECTRICAL DATA				REMARKS
						SUPPLY			SECONDARY															
				MAX (CFM)	MIN (CFM)	FLOW (CFM)	ESP (in-wg)	POWER (hp)	TYPE	FLOW (CFM)	POWER (hp)	63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	MCA	MOCP	VOLT	PH	
AHU-1	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-2	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-3	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-4	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-5	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-6	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-7	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-8	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-9	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-10	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-11	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-12	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-13	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-14	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-15	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-16	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-17	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-18	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-19	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-20	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF
AHU-21	CHANGEAIRE	SYSTEMAIR - C-CABINET	INDOOR	1000	350	1000	0.25	0.5	RELIEF	1000	0.3									8.6 A	15 A	208 V	1	UNIT SHALL HAVE HOT WATER COIL, ENERGY RECOVERY WHEEL, AND VRV COIL INTERCONNECTED WITH DAIKIN HEAT PUMP LOCATED ON THE ROOF

HEATING WATER COIL (30% PROPYLENE GLYCOL)

D/X COOLING

PRIMARY AIRSIDE ENERGY RECOVERY

TAG	HEATING WATER COIL (30% PROPYLENE GLYCOL)									D/X COOLING										PRIMARY AIRSIDE ENERGY RECOVERY																
		AIRSIDE					WATERSIDE				COOLING COIL							HEATING					AIRFLOW		SUMMER DESIGN ENERGY RECOVERY							WINTER DESIGN ENERGY RECOVERY						
											CAPACITY (MBH)		AIRSIDE											OUTSIDE AIR							OUTSIDE AIR					
TAG	CAPACITY (MBH)	FLOW (CFM)	EAT(db) (°F)	LAT(db) (°F)	PD (in-wg)	ROWS	FLOW (GPM)	EWT (°F)	LWT (°F)	PD (FT)	TOTAL	SENSIBLE	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	PD (in-wg)	ROWS	CAPACITY (MBH)	FLOW (CFM)	EAT(db) (°F)	LAT(db) (°F)	SUPPLY (CFM)	EXHAUST (CFM)	EAT(db) (°F)	EAT(wb) (°F)	LAT(db) (°F)	LAT(wb) (°F)	EFF TOTAL	CAPACITY (Btu/h)	EAT(db) (°F)	LAT(db) (°F)	EFF TOTAL	CAPACITY (Btu/h)	SERVES
AHU-1	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-2	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-3	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-4	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-5	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-6	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-7	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-8	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-9	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-10	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-11	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-12	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-13	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-14	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-15	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-16	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-17	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-18	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-19	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-20	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	
AHU-21	41.7	1000	66.6	104.6	0.00	2	8.00	150.0	136.0	0.75	37.5	26.3	76.3	64.0	52.1	51.0	0.67	3	41.0	1000	66.0	104.0	350	1,000	89	74.1	77.9	66.2	73.09	10,230	1	55.4	76.87	26,000	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: AIRDALE
2. PROVIDE O.A./E.A. REAR PLENUMS.
3. AHU SHALL BE PREWIRED FOR A SINGLE POINT CONNECTION.
4. P

CABINET UNIT HEATER SCHEDULE (30% PROPYLENE GLYCOL)

TAG	MANUFACTURER	MODEL	TYPE	FAN			HEATING COIL							ELECTRICAL DATA		REMARKS
					MOTOR			AIRSIDE			WATERSIDE					
				FLOW (CFM)	QTY	POWER (hp)	CAPACITY (BTUH)	EAT(db) (°F)	LAT(db) (°F)	FLOW (GPM)	EWT (°F)	LWT (°F)	PD (PSI)	VOLT	PH	
CUH-1	ZEHNDER RITTLING	RFRC-420-03	CEILING RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	PASSAGE A113
CUH-2	ZEHNDER RITTLING	RFRC-420-03	CEILING RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	CORRIDOR A103
CUH-3	ZEHNDER RITTLING	RF-220-03	FLOOR MOUNTED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	PASSAGE A002
CUH-4	ZEHNDER RITTLING	RRW-320-03	WALL SEMI-RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	VESTIBULE B112
CUH-5	ZEHNDER RITTLING	RRW-320-03	WALL SEMI-RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	VESTIBULE F125
CUH-7	ZEHNDER RITTLING	RRW-320-03	WALL SEMI-RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	VESTIBULE C101
CUH-8	ZEHNDER RITTLING	RRW-320-03	WALL SEMI-RECESSED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	VESTIBULE F
CUH-9	ZEHNDER RITTLING	RF-220-03	FLOOR MOUNTED	300	1	1/30	19500.0	70.0	130.0	2.00	150.0	130.0	2.70	120 V	1	VESTIBULE E101

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: STERLING A MESTEK CO., & VULCAN RADIATOR.
2. PROVIDE HIGH STATIC MOTOR.
3. MANUFACTURER TO PROVIDE FACTORY WIRED AND MOUNTED FUSED DISCONNECT.
4. PROVIDE SELF CONTAINED THERMOSTAT (UNLESS OTHERWISE SHOWN ON DRAWINGS).
5. PROVIDE 3-SPEED FAN.
6. PROVIDE 1" THROWAWAY FILTER.
7. CUH SIZE: 44-3/16"L X 24"W X 10"D.

VARIABLE AIR VOLUME TERMINAL UNIT SCHEDULE

TAG	MANUFACTURER / MODEL	Neck Size	PRIMARY AIRFLOW		HEATING COIL (30% PROPYLENE GLYCOL)							REMARKS
					AIRSIDE				WATERSIDE			
			MAX (CFM)	CAPACITY (Btu/h)	FLOW (CFM)	EAT(db) (°F)	LAT(db) (°F)	ROWS	FLOW (GPM)	EWT (°F)	LWT (°F)	PD (FT)	
VAV-1	Titus DESV (Heating Water)	6	340	14665.9	340	55.0	95.0	1	1.50	150.0	130.0	10.00	
VAV-2	Titus DESV (Heating Water)	5	160	6901.6	160	55.0	95.0	1	0.70	150.0	130.0	10.00	
VAV-3	Titus DESV (Heating Water)	16	2400	103523.8	2400	55.0	95.0	1	10.40	150.0	130.0	10.00	
VAV-4	Titus DESV (Heating Water)	10	920	39684.1	920	55.0	95.0	1	4.00	150.0	130.0	10.00	
VAV-5	Titus DESV (Heating Water)	5	230	9921.0	230	55.0	95.0	1	1.00	150.0	130.0	10.00	
VAV-6	Titus DESV (Heating Water)	5	250	10783.7	250	55.0	95.0	1	1.10	150.0	130.0	10.00	
VAV-7	Titus DESV (Heating Water)	7	450	19410.7	450	55.0	95.0	1	2.00	150.0	130.0	10.00	
VAV-8	Titus DESV (Heating Water)	10	920	39684.1	920	55.0	95.0	1	4.00	150.0	130.0	10.00	
VAV-9	Titus DESV (Heating Water)	8	605	26096.6	605	55.0	95.0	1	2.70	150.0	130.0	10.00	
VAV-10	Titus DESV (Heating Water)	10	1000	43134.9	1000	55.0	95.0	1	4.40	150.0	130.0	10.00	
VAV-11	Titus DESV (Heating Water)	10	1000	43134.9	1000	55.0	95.0	1	4.40	150.0	130.0	10.00	
VAV-12	Titus DESV (Heating Water)	10	1000	43134.9	1000	55.0	95.0	1	4.40	150.0	130.0	10.00	
VAV-13	Titus DESV (Heating Water)	10	1000	43134.9	1000	55.0	95.0	1	4.40	150.0	130.0	10.00	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: NAILOR, KRUEGER, PRICE, AND TITUS.
2. 0.5" MAXIMUM ALLOWABLE STATIC PRESSURE DROP FOR BOX AND REHEAT COIL.
3. HEATING COIL PERFORMANCE BASED ON NOMINAL CFM LISTED IN THE SCHEDULE @ 55 DEGREE F. ENTERING AIR TEMPERATURE, 150 DEGREE F. ENTERING WATER TEMPERATURE.
4. VAV BOXES SHOWN ON DRAWINGS WITHOUT THE PERFORMANCE DATA TAG SHALL USE THE FOLLOWING CRITERIA: COOLING MINIMUM AIRFLOW SHALL BE 15% OF MAX AIRFLOW. HEATING AIRFLOW SHALL BE 50% OF MAXIMUM AIRFLOW ON INTERIOR SPACES, 70% OF THE MAX AIRFLOW ON NORTHERN & EASTERN EXPOSURES, 60% OF MAX AIRFLOW ON SOUTHERN AND WESTERN EXPOSURES.
5. VAV'S SHALL BE FURNISHED WITH 24V TRANSFORMER, 120V POWER BY ELECTRICAL CONTRACTOR.
6. FIRST 10'-0" OF DUCT DOWNSTREAM OF EACH VAV SHALL BE ACOUSTICALLY LINED. (INTERNAL LINER SHALL BE NON-POROUS OR FILM LINED)
7. ALL VAV'S SHALL HAVE EITHER A 3-FOOT SOUND ATTENUATOR OR 10 FEET OF ACOUSTICALLY LINED DUCTWORK.

FAN SCHEDULE

TAG	MANUFACTURER	MODEL	SERVES	TYPE	FAN						SOUND PRESS LEVEL (dBA)	SONES	ELECTRICAL DATA		REMARKS
					FLOW (CFM)	ESP (in-wg)	RPM	DRIVE TYPE	MOTOR POWER				VOLT	PH	
									HP	WATTS	DRIVE TYPE				
EF-1	COOK	101C17DEC	KILN RM. EXH.	ROOF DOWNBLAST	450	0.50	0	DIRECT	1/4		ECM	55	7.6	120 V	1	
EF-2	COOK	101C17DEC	BOILER RM.	ROOF DOWNBLAST	450	0.75	0	DIRECT	1/4		ECM	59	9.4	120 V	1	
EF-3	COOK	100C17DEC	TLT A115&116	ROOF DOWNBLAST	300	0.75	1599	DIRECT	1/4		ECM	55	7.5	120 V	1	
EF-4	COOK	101C17DEC	TLT D110	ROOF DOWNBLAST	500	0.50	0	DIRECT	1/4		ECM	55	7.6	120 V	1	
EF-5	COOK	100C17DEC	TLT D121	ROOF DOWNBLAST	400	0.50	0	DIRECT	1/4		ECM	56	7.6	120 V	1	
EF-6	COOK	GC-186	TLT A120	IN-LINE	150	0.50	0	DIRECT		72.0	-	47	3.5	120 V	1	
EF-7	COOK	101C17DEC	ELECTRICAL RM. F116	ROOF DOWNBLAST	450	0.75	0	DIRECT	1/4		ECM	59	9.4	120 V	1	
KEF-1	COOK	225VX17D	GREASE HOOD	ROOF UP-BLAST	2660	2.00	1525	BELT	3		VFD	65	21.0	480 V	3	
SF-1	COOK	GN-166	PE OFFICE 004	IN-LINE	100	0.00	0	DIRECT		37.0		38	1.4	115 V	1	TWO SPEED MOTOR

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: GREENHECK & TWIN CITY FANS
2. ALL CONTROLS INCLUDING ALL END SWITCHES AND DAMPERS SHALL BE PURCHASED & INSTALLED BY CONTROLS CONTRACTOR. COORDINATE CONTROLS VOLTAGE.
3. PROVIDE HEAVY DUTY CAST IRON REGREASABLE BEARINGS.
4. PROVIDE STAINLESS STEEL QUICK RELEASE LATCHES.
5. PROVIDE ALUMINUM BIRD SCREEN.
6. PROVIDE ROOF CURB 18" ABOVE FINISHED ROOF.
7. PROVIDE MOTORIZED DAMPER.
8. PROVIDE VARI-GREEN - CONSTANT AIRFLOW.
9. PROVIDE WITH ECM MOTOR.
10. PROVIDE PRE-WIRED NEMA3 DISCONNECT
11. KEF-1 PROVIDE HINGED BASE KIT & GREASE TERMINATOR.

RADIANT HEATING PANEL SCHEDULE (30% PROPYLENE GLYCOL)

TAG	MANUFACTURER	MODEL	STYLE	WIDTH (IN.)	BTUH/LF	# OF TUBES	PIPE SIZE	EWT (°F)	LWT (°F)	REMARKS
RP-A	AIRTITE	AR-X	LINEAR	24"	243	4	3/4"	150	130	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: AIRTEX, RITTLING, & BARCOL AIR.
2. RADIANT PANELS SHALL BE INSTALLED & PIPED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS & RECOMMENDATIONS.
3. MINIMUM WATER FLOW SHALL BE NO LESS THAN 1 GPM.
4. MAXIMUM RADIANT PANEL LENGTH ON SINGLE PIPE CONNECTION SHALL BE 40 LINEAR FEET.
5. WHENEVER RADIANT PANEL IS LONGER THAN 40 LINEAR FEET IT SHALL HAVE MULTIPLE PIPE CONNECTIONS WITH BALANCING VALVE ON EACH RETURN LINE.
6. MULTIPLE 40 LINEAR FEET SECTIONS MAY BE SERVED BY A SINGLE MODULATING CONTROL VALVE AS LONG AS ALL OF THEM ARE SERVING THE SAME ZONE.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LENGTH OF EACH RADIANT HEATING PANEL.
8. FULL LENGTH OF RADIANT HEATING PANEL SHALL BE ACTIVE.
9. PROVIDE INSULATION ON TOP OF RADIANT PANELS THICKNESS AS RECOMMENDED BY MANUFACTURER.
10. RADIANT PANELS SHALL BE CUT-OUT AROUND ALL COLUMNS & WALL OFFSETS. PROVIDE EXTRA TRIM AS NECESSARY (SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
11. IN ROOMS WITHOUT CEILINGS. PROVIDE BULL NOSE ON ALL EXPOSED EDGES OF CEILING PANEL.

GRILLES, DIFFUSERS AND REGISTERS SCHEDULE

(BASED ON KRUEGER)

ACCEPTABLE MANUFACTURERS BY: PRICE & TITUS
SEE ARCHITECTURAL DRAWINGS FOR CEILING TYPES AND CONSTRUCTION. SIZE AND CFM INDICATED ON MECHANICAL DRAWINGS

A - MODEL 5SHRV DIRECTIONAL DIFFUSER, LOUVERED FACE, 4-WAY THROW (UNLESS SHOWN OTHERWISE), 24X24 MODULE SIZE, LAY-IN BORDER, ALUMINUM CONSTRUCTION. PROVIDE MODEL SR ADAPTER AND INDUCTION VANES.

A1 - MODEL 5SHRV DIRECTIONAL DIFFUSER, LOUVERED FACE, 4-WAY THROW (UNLESS SHOWN OTHERWISE), SURFACE MOUNT FRAME, ALUMINUM CONSTRUCTION, OPPOSED BLADE DAMPER, AND INDUCTION VANES.

B - MODEL S580 RETURN GRILLE, 45° FIXED LOUVERS, 3/4" BLADE SPACING, 24X24 MODULE SIZE, LAY-IN BORDER, ALUMINUM CONSTRUCTION.

B1 - MODEL S580 RETURN GRILLE, 45° FIXED LOUVERS, 3/4" BLADE SPACING PARALLEL TO LONG DIMENSION, SURFACE MOUNT BORDER, ALUMINUM CONSTRUCTION.

C - MODEL 5880 LOUVERED SUPPLY REGISTER, DOUBLE DEFLECTION CORE, 3/4" BLADE SPACING PARALLEL TO LONG DIMENSION, SURFACE MOUNT FRAME, ALUMINUM CONSTRUCTION, OPPOSED BLADE DAMPER.

D - MODEL 5DMGDR SPIRAL DUCT SUPPLY GRILLE, DOUBLE DEFLECTION CORE, EXTRUDED ALUMINUM CONSTRUCTION, CLEAR ANODIZED FINISH. PROVIDE OPTIONAL AIR EXTRACTOR/DAMPER.

E - PRICE MODEL SDS LINEAR SLOT DIFFUSER, (2) 1" SLOTS, SURFACE MOUNT FRAME, ALUMINUM CONSTRUCTION, WHITE FINISH, BLACK PATTERN CONTROLLERS. PROVIDE INSULATED PLENUM.

CEILING SUPPLY DIFFUSER TYPE A & A1		CEILING RETURN/EXHAUST DIFFUSER TYPE B & B1		FLEXIBLE DUCT SIZE (FOR SUPPLY DUCTS ONLY)	
CFM	NECK SIZE	CFM	NECK SIZE	CFM	NECK SIZE
0 - 100	6 X 6	0 - 100	6 X 6	0 - 70	5"Ø
101 - 225	9 X 9	101 - 150	8 X 8	71 - 100	6"Ø
226 - 400	12 X 12	151 - 250	10 X 10	101 - 150	8"Ø
401 - 625	15 X 15	251 - 350	12 X 12	151 - 225	9"Ø
626 - 900	18 X 18	351 - 500	14 X 14	226 - 275	10"Ø
901 - 1200	24 X 24	501 - 650	16 X 16	276 - 400	12"Ø
		651 - 800	18 X 18	401 - 500	14Ø
		801 - 1200	24 X 24	501 - 700	16"Ø
				701 - 900	18"Ø
				901 - 1100	20"Ø

NOTES:
1. COORDINATE COLOR SELECTION WITH ARCHITECT.
2. COORDINATE BORDER TYPE WITH ARCHITECT.
3. PROVIDE DUCT MOUNTED VOLUME DAMPER, LOCATE IT AS FAR AS POSSIBLE FROM DIFFUSER, GRILLE OR REGISTER.
4. ALL INTERNAL INSULATION SHALL BE NON-POROUS TYPE OR FILM LINED.
5. ALL DIFFUSERS, GRILLES & REGISTERS SHALL BE SELECTED AT 25NC OR LESS.

VRF FAN COIL UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	AIRFLOW	COIL CAPACITY		SOUND PRESS LEVEL			ELECTRICAL DATA					REMARKS
				SUPPLY (CFM)	COOLING (Btu/h)	HEATING (Btu/h)	LOW (dBA)	MID (dBA)	HIGH (dBA)	FLA	MCA	MOCP	VOLT	PH	
VRF-1	DAIKIN	FXEQ07PVJU	CEILING RECESSED	0	6000.0	0.0	0	0	0	0.3 A	0.4 A	0 A	208 V	1	
VRF-2	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-3	DAIKIN	FXFQ48TVJU	CEILING RECESSED	0	48000.0	54000.0	0	0	0	1.4 A	1.8 A	15 A	208 V	1	
VRF-4	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	
VRF-5	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-6	DAIKIN	FXEQ07PVJU	CEILING RECESSED	0	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-7	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	
VRF-8	DAIKIN	FXEQ07PVJU	CEILING RECESSED	0	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-9	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-11	DAIKIN	FXFQ12TVJU	CEILING RECESSED	0	12000.0	13500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-12	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	
VRF-13	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	
VRF-14	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-15	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-16	DAIKIN	FXFQ30TVJU	CEILING RECESSED	0	30000.0	34000.0	0	0	0	1 A	1.3 A	15 A	208 V	1	
VRF-17	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-18	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-19	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-20	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-21	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-22	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	
VRF-23	DAIKIN	FXFQ12TVJU	CEILING RECESSED	0	12000.0	13500.0	0	0	0	0.3 A	0.4 A	15 A	208 V	1	
VRF-24	DAIKIN	FXEQ12PVJU	CEILING RECESSED	15	12000.0	13500.0	0	0	0	0.3 A	0.4 A	15 A	208 V	1	
VRF-25	DAIKIN	FXEQ07PVJU	CEILING RECESSED	0	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-26	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-27	DAIKIN	FXFQ30TVJU	CEILING RECESSED	0	30000.0	34000.0	0	0	0	1 A	1.3 A	15 A	208 V	1	
VRF-28	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-29	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-30	DAIKIN	FXEQ07PVJU	CEILING RECESSED	15	7500.0	8500.0	0	0	0	0.2 A	0.3 A	15 A	208 V	1	
VRF-31	DAIKIN	FXFQ24TVJU	CEILING RECESSED	0	24000.0	27000.0	0	0	0	0.6 A	0.7 A	15 A	208 V	1	3-WAY BLOW CASSETTE, ONE SIDE SHALL BE BANKED OFF
VRF-32	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	
VRF-33	DAIKIN	FXFQ18TVJU	CEILING RECESSED	0	18000.0	20000.0	0	0	0	0.5 A	0.6 A	15 A	208 V	1	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: LG & MITSUBISHI.
2. PROVIDE WIRED DELUXE REMOTE CONTROLLER.
3. PROVIDE CONDENSATE PUMP.
4. PROVIDE UL LISTED DRAIN PAN CONDENSATE OVERFLOW SENSOR.
5. ALL UNITS SHALL BE INTEGRATED INTO BMS.
6. REFRIGERANT PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

VRF HEAT PUMP SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	SYSTEM INFORMATION						MODULE INFORMATION					REMARKS
				NOMINAL CAPACITY		EFFICIENCY									
				COOLING (Btu/h)	HEATING (Btu/h)	EER	IEER	SCHE	COP	FLA	MCA	MOCP	VOLT	PH	
HP-1	DAIKIN	REYQ120XAYDA	AIR COOLED	120,559	85,077	13.2	25.5	26	3.81			0 A			14 TON
HP-2	DAIKIN	REYQ144XAYDA	AIR COOLED	144,278	106,310	11.9	23.5	25.5	3.75			0 A			10 TON
HP-3	DAIKIN	REYQ192XAYDA	AIR COOLED	192,471	163,701	13	22.6	26.6	3.85			0 A			16 TON
HP-4	DAIKIN	REYQ240XAYDA	AIR COOLED	243,586	173,836	11.6	22.2	25.6	3.68			0 A			18 TON
HP-5	DAIKIN	REYQ288XAYDA	AIR COOLED	288,610	217,004	11	21	23.3	3.51			0 A			22 TON
HP-6	DAIKIN	REYQ240XAYDA	AIR COOLED	173,600	173,600	11.6	22.2	25.6	3.68			0 A			20 TON

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: LG & MITSUBISHI
2. INVERTER TYPE VARIABLE SPEED COMPRESSOR TECHNOLOGY.
3. PROVIDE CONDENSING UNIT ROOF SUPPORTS, EQUIVALENT TO MIRO INDUSTRIES.
4. ALL UNITS SHALL BE INTEGRATED INTO BMS.
5. PROVIDE WIND BUFFLE AND SNOW/HAIL GUARDS.
6. REFRIGERANT PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS.

SPLIT SYSTEM FAN COIL UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	AIRFLOW	COIL CAPACITY		SOUND PRESS LEVEL		ELECTRICAL DATA		REMARKS
				SUPPLY (CFM)	COOLING (Btu/h)	HEATING (Btu/h)	LOW (dBA)	HIGH (dBA)	VOLT	PH	
ACU-1	DAIKIN	FTX18AXVJU	WALL MOUNTED	716	18000.0	21600.0	33	49	208 V	1	
ACU-2	DAIKIN	FTX18AXVJU	WALL MOUNTED	716	18000.0	21600.0	33	49	208 V	1	
ACU-3	DAIKIN	FCQ18TAVJURZQ	CEILING MOUNTED	742	18000.0	21600.0	28	36	208 V	1	
ACU-4	DAIKIN	FCQ18TAVJURZQ	CEILING MOUNTED	742	18000.0	21600.0	28	36	208 V	1	
ACU-5	DAIKIN	FCQ18TAVJURZQ	CEILING MOUNTED	742	18000.0	21600.0	28	36	208 V	1	
ACU-6	DAIKIN	FTX18AXVJU	WALL MOUNTED	716	18000.0	21600.0	33	49	208 V	1	
ACU-7	DAIKIN	FCQ18TAVJURZQ	CEILING MOUNTED	742	18000.0	21600.0	28	36	208 V	1	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: LG & MITSUBISHI.
2. PROVIDE WIRED DELUXE REMOTE CONTROLLER.
3. PROVIDE CONDENSATE PUMP.
4. PROVIDE UL LISTED DRAIN PAN CONDENSATE OVERFLOW SENSOR.

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	COMPRESSOR		SUMMER AMBIENT DBT	SEER	EER	MCA	MOCP	VOLT	PH	REMARKS
			CAPACITY (TONS)	LOW AMBIENT KIT								
CU-1	DAIKIN	RX18AXVJU	1.5	Yes	95 °F	18.5	12.5	16.4 A	20 A	208 V	1	
CU-2	DAIKIN	RX18AXVJU	1.5	Yes	95 °F	18.5	12.5	16.4 A	20 A	208 V	1	
CU-3	DAIKIN	RZQ18TAVJUA	1.5	Yes	95 °F	18.6	13	16.5 A	20 A	208 V	1	HEATING OPERATION DOWN TO -4 DEG. F
CU-4	DAIKIN	RZQ18TAVJUA	1.5	Yes	95 °F	18.6	13	16.5 A	20 A	208 V	1	HEATING OPERATION DOWN TO -4 DEG. F
CU-5	DAIKIN	RZQ18TAVJUA	1.5	Yes	95 °F	18.6	13	16.5 A	20 A	208 V	1	HEATING OPERATION DOWN TO -4 DEG. F
CU-6	DAIKIN	RZQ18TAVJUA	1.5	Yes	95 °F	18.6	13	16.5 A	20 A	208 V	1	HEATING OPERATION DOWN TO -4 DEG. F
CU-7	DAIKIN	RZQ18TAVJUA	1.5	Yes	95 °F	18.6	13	16.5 A	20 A	208 V	1	HEATING OPERATION DOWN TO -4 DEG. F

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: LG & MITSUBISHI
2. VARIABLE COMPRESSOR SPEED INVERTER TECHNOLOGY.
3. PROVIDE ROOF CONDENSING UNIT SUPPORTS, EQUIVALENT TO MIRO INDUSTRIES.
4. PROVIDE WIND BUFFLE AND SNOW/HAIL GUARD..
5. PROVIDE LOW AMBIENT TEMPERATURE KIT.

GLYCOL MAKE-UP UNIT SCHEDULE

TAG	MFR	MODEL	TANK SIZE (GALLONS)	GPM	PRESSURE RANGE	PUMP HP	SERVES	VOLTS/ PHASE	REMARKS
GMU-1	BELL & GOSSETT	GMU-30	55	10	9-30PSI	1/2	HOT WATER SYSTEM	120/1	

GENERAL NOTES/ACCESSORIES:
1. ACCEPTABLE MANUFACTURERS BY: ARMSTRONG PUMPS INC., WESSELS CO., NEPTUNE
2. DIAPHRAGM TANK
3. LOW WATER CUT OFF
4. PRESSURE SWITCH/STARTER
5. Y-STRAINER
6. 3D VALVE
7. PRESSURE GAUGE -60PSI

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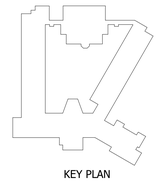
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: DS

MECHANICAL SCHEDULES

DRAWING NO.:
M4.02

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GAS-FIRED BOILER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	GAS-FIRED HEAT EXCHANGER											ELECTRICAL DATA			REMARKS
				GAS BURNER					WATERSIDE									
							FUEL											
								PRESSURE (in-wg)										
				INPUT (BTUH)	OUTPUT (BTUH)	STAGES	TYPE	MIN	MAX	FLOW (GPM)	EWT (°F)	LWT (°F)	PD (FT)	VOL (gal)	THERMAL EFF (%)	FLA	VOLT	PH	
B-1	THERMAL SOLUTIONS	AMP-1500	FLOOR MTD.	1,500,000	1,455,000	5	GAS	4.0	14.0	145.00	130.0	150.0	19.00	13.0	97	13.5 A	120 V	1	8"DIA FLUE & VENT
B-2	THERMAL SOLUTIONS	AMP-1500	FLOOR MTD.	1,500,000	1,455,000	5	GAS	4.0	14.0	145.00	130.0	150.0	19.00	13.0	97	13.5 A	120 V	1	8"DIA. FLUE & VENT

NOTES:
- ACCEPTABLE MANUFACTURERS BY: BRYAN & VIESSMAN MANUFACTURING CO., BOSCH THERMOTECHNOLOGY CORP., AND AERCO
- STAINLESS STEEL HEAT EXCHANGER.
- PROVIDE VARIABLE SPEED CIRCULATING ECM PUMPS.
- PROVIDE SLIDE OUT BURNER FOR EASY MAINTENANCE.
- PROVIDE CONDENSATE NEUTRALIZING KIT.
- PROVIDE INTERNAL MANUAL HIGH LIMIT AND AUTOMATIC LIMIT.
- HEADER SENSOR
- 7" COLOR CONCERT BOILER CONTROL
- INTERNAL LOW WATER CUT-OFF.
- VENTLESS SUPPLY GAS REGULATOR.
- VENT ADAPTER (POLYPROPYLENE)
- NOX EMMSSIONS LESS THAN 10 PPM.
- WATER FLOW SWITCH
- STAINLESS STEEL MESH PRE-MIX BURNER
- BLOCKED CONDENSATE SWITCH
- COMBUSTION AIR SWITCH
- PRESSURE RELIEF VALVE
- PRESSURE/TEMPERATURE GAUGE
- SUPPLY & RETRUN TEMPERATURE SENSORS
- FLUE GAS TEMPERATURE SENSOR
- MODULATING GAS VALVE
- DIRECT SPARK IGNITION AND UV SCANNER
- HIGH/LOW GAS PRESSURE SWITCHES, MANUAL RESET
- SEALED COMBUSTION AIR INTAKE
- BACnet CARD.
- ENTIRE FLUE VENT SHALL BE AL29-4C.
- COMBUSTION AIR INTAKE PIPE SHALL BE POLYPROPYLENE.
- 50 PSI RELIEF VALVE

PUMP SCHEDULE (30% PROPYLENE GLYCOL)

TAG	MANUFACTURER	MODEL	TYPE	PUMP			MOTOR		ELECTRICAL DATA		REMARKS
				FLOW (GPM) DESIGN	HEAD (FT)	DRIVE TYPE	POWER HP	RPM	VOLT	PH	
P-1	GRUNDFOS	MAGNA3 65-120 GF 115V	IN-LINE	145	15	VFD	1-1/2	3960	120 V	1	
P-2	GRUNDFOS	MAGNA3 65-120 GF 115V	IN-LINE	145	15	VFD	1-1/2	3960	120 V	1	
P-3	GRUNDFOS	CRE-DP 64-1-1	IN-LINE	290	65	VFD	10	3599	480 V	3	
P-4	GRUNDFOS	CRE-DP 64-1-1	IN-LINE	290	65	VFD	10	3599	480 V	3	

NOTES:
1. ACCEPTABLE MANUFACTURERS BY: B&G & GRUNDFOS.
2. PROVIDE INTEGRATED VFD & DP SENSOR.
3. PROVIDE MAXIMUM IMPELLER DIAMETER FOR NON-OVERLOADING PERFORMANCE FOR SPECIFIED HORSEPOWER. TRIM AND BALANCE IMPELLER AFTER SYSTEM HAS BEEN INSTALLED AND OPERATED.

DUCT SOUND ATTENUATOR SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	SYSTEM	AIRFLOW (CFM)	MAX PD (in-wg)	OVERALL SIZE (IN.)			INSERTION LOSS OCTAVE BAND FREQUENCIES (Hz)								SERVES
							L	W	H	63	125	250	500	1000	2000	4000	8000	
	VIBRO-ACOUSTICS		ELBOW	Return Air	0	0	0	10	18									
	VIBRO-ACOUSTICS		ELBOW	Supply Air	0	0	0	10	28									
DOAS-1A-R	VIBRO-ACOUSTICS		ELBOW	Return Air	0	0	36	12	24									
DOAS-1B-R	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	18	24									
DOAS-2A-R	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	36	12	12									
DOAS-2A-S	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	12	12									
DOAS-2B-R	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	36	10	33									
DOAS-2B-S	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	12	12									
DOAS-3-R-A	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	36	16	8									
DOAS-3-R-B	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	36	16	8									
DOAS-3-S-A	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	16	8									
DOAS-3-S-B	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	16	8									
DOAS-4-R	VIBRO-ACOUSTICS		ELBOW	Return Air	0	0	36	18	12									
DOAS-4-S	VIBRO-ACOUSTICS		ELBOW	Supply Air	0	0	36	12	18									
ERU-1-R	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	36	12	12									
ERU-1-S	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	36	12	12									
ERU-2-R	VIBRO-ACOUSTICS		ELBOW	Return Air	0	0	36	22	30									
ERU-2-S	VIBRO-ACOUSTICS		ELBOW	Supply Air	0	0	36	24	38									
ERU-3-R	VIBRO-ACOUSTICS		ELBOW	Return Air	0	0	36	14	16									
ERU-3-S	VIBRO-ACOUSTICS		ELBOW	Supply Air	0	0	36	10	22									
ERU-4-R	VIBRO-ACOUSTICS		RECTANGULAR	Return Air	0	0	48	12	12									
ERU-4-S	VIBRO-ACOUSTICS		RECTANGULAR	Supply Air	0	0	48	42	20									

NOTES:
1. RE - RECTANGULAR ELBOW TRE - RECTANGULAR TEE D - DISSIPATIVE
2. VELOCITY SHOWN IS + (FORWARD FLOW) OR - (REVERSE FLOW) AS DEFINED BY ASTM E477-13.
3. IDEAL PRESSURE DROP AS DETERMINED PER ASTM E477-13 IN A NVLAP-ACCREDITED ACOUSTICAL LABORATORY.
4. PRESSURE DROP PER ASTM E477-13 PLUS SYSTEM EFFECTS FOR NEARBY DUCT ELEMENTS.
5. MINIMUM DYNAMIC INSERTION LOSS DETERMINED PER ASTM E477-13 IN A NVLAP-ACCREDITED ACOUSTICAL LABORATORY.
6. NON-BASIS OF DESIGN SILENCER MANUFACTURER SHALL PROVIDE, FOR APPROVAL, PROFESSIONAL ENGINEER STAMPED ACOUSTICAL CALCULATIONS FOR ALL SYSTEMS WITH SILENCERS TO DEMONSTRATE THAT THE RESULTANT DUCT BORNE FAN SOUND LEVELS, INCLUDING AIRBORNE AND BREAKOUT NOISE, MEET THE REQUIRED CRITERIA.
7. NON-BASIS OF DESIGN SILENCER MANUFACTURER SHALL PROVIDE, FOR APPROVAL, PROFESSIONAL ENGINEER STAMPED PRESSURE DROP CALCULATIONS FOR ALL SYSTEMS WITH SILENCERS TO DEMONSTRATE THAT THE RESULTANT INSTALLED PRESSURE DROP WITH SYSTEM EFFECTS DOES NOT EXCEED SCHEDULED VALUES.
8. FOR NON-BASIS OF DESIGN PRODUCT SUPPLIED, CONTRACTOR IS FINANCIALLY RESPONSIBLE TO ENSURE NOISE CONTROL SOLUTION IS DELIVERED TO ACHIEVE SPECIFIED NC LEVEL IN SPACES.
9. REFER TO ACOUSTICAL CONSULTANT REPORT FOR ADDITIONAL REQUIREMENTS.

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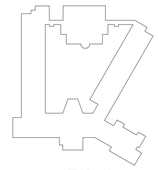
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MECHANICAL SCHEDULES

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ELECTRICAL GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED ELECTRICAL SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TO DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND CONDUITS. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND CONDUITS INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY CONDUITS, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL CONDUITS AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, BELOW PIPING OR THROUGH MECHANICAL ROOMS, THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF MECHANICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. ALL HOMERUNS SHALL BE 2#12, 1#12G., 3/4"C TO 20A-1P CIRCUIT BREAKER IN PANEL DESIGNATED UNLESS OTHERWISE NOTED.
11. ALL 120 VAC (277 VAC) CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE INCREASED TO 2#10, 1#10G, 3/4" CONDUIT UNLESS OTHERWISE NOTED.
12. ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRALS. USE OF COMMON NEUTRALS WILL NOT BE ALLOWED.
13. FIELD VERIFY WITH MANUFACTURER'S PROVIDED EXACT ELECTRICAL CHARACTERISTICS AND CONNECTION REQUIREMENTS OF ALL OPERATIONAL EQUIPMENT PRIOR TO MAKING ELECTRICAL POWER CONNECTION. FURNISH AND INSTALL SAFETY DISCONNECT AS REQUIRED BY NEC.
14. RECEPTACLES LOCATED WITHIN 6' OF A WATER SOURCE, OR OUTSIDE, AND WHERE REQUIRED BY CODE SHALL BE PROVIDED WITH GFCI PROTECTION, WHETHER INDICATED OR NOT.
15. EXTERIOR RECEPTACLES SHALL BE PROVIDED WITH "CAST ALUMINUM" LOCKABLE COVERS RATED "WEATHER-PROOF WHILE IN USE". LOCKS SHALL BE KEYED ALIKE.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED SLEEVES AND FIRE STOP FOR CONDUITS AND CABLES PENETRATING FIRE RATED WALLS AND FLOORS.
17. ELECTRICAL CONTRACTOR SHALL SEAL ALL CONDUITS PENETRATING EXTERIOR WALLS.
18. ALL WIRING SHALL BE IN CONDUIT, UNLESS OTHERWISE INDICATED. CONDUITS SHALL BE RUN CONCEALED IN NEW AND ABOVE CEILINGS.
19. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF EQUIPMENT WITH DIV. 21, 22 AND 23 PRIOR TO ROUGHING OR INSTALLING OUTLETS.
20. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER, ALL LOCATIONS OF EQUIPMENT BEING FURNISHED BY THE OWNER PRIOR TO ROUGHING OR INSTALLING OUTLETS.
21. REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND EXACT LOCATION OF DEVICES PRIOR TO ROUGHING OR INSTALLATION OF OUTLETS.
22. ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF DUCT SMOKE DETECTORS WITH DIV. 23. DUCT SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED BY DIV. 23.
23. ALL FIRE ALARM DEVICES LOCATED ON BUILDING EXTERIOR SHALL BE WEATHERPROOF RATED.
24. CONDUITS AND/OR WIRING SHALL NOT PENETRATE STAIR ENCLOSURES UNLESS SPECIFICALLY SERVING EQUIPMENT OR DEVICES LOCATED WITHIN STAIR ENCLOSURE.
25. WHERE INDICATED, PROVIDE FIXTURES WITH EMERGENCY BATTERY TO OPERATE LAMPS FOR 1 1/2 HOURS UPON LOSS OF NORMAL POWER. WIRE EMERGENCY BATTERY AND EXIT LIGHTS TO LINE SIDE OF AREA LIGHTING CIRCUIT.
26. DIRECTIONAL CHEVRONS SHALL CONFORM TO NFPA 5-10.4.1.2 AND SHALL BE IDENTIFIABLE AS A DIRECTIONAL INDICATOR AT A MINIMUM OF 40 FT. UNDER ALL SPACE CONDITIONS. PROVIDE DIRECTIONAL CHEVRONS AS INDICATED ON PLAN.
27. BRANCH CIRCUIT WIRING IS SHOWN ON THE FLOOR PLANS. NUMERALS ADJACENT TO THE HOMERUN SYMBOLS FOR LIGHTING, RECEPTACLES, MOTORS, APPLIANCES, ETC. INDICATE THE CIRCUIT NUMBER TO WHICH THE ITEMS ARE TO BE CONNECTED. PROVIDE BRANCH CIRCUIT WIRING FOR ALL ITEMS SHOWN IN ACCORDANCE WITH THESE GENERAL NOTES AND THE ELECTRICAL SPECIFICATIONS.
28. ALL 1 POLE, 15 AND 20 AMPERE BRANCH CIRCUITS SERVING RECEPTACLE OR LIGHTING SHALL BE 2 WIRE CIRCUITS PROVIDING AN INDIVIDUAL NEUTRAL CONDUCTOR FOR EACH UNGROUNDED (HOT) CIRCUIT CONDUCTOR. DO NOT SHARE NEUTRAL CONDUCTORS.
29. REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF CEILING MOUNTED DEVICES.
30. ALL EXPOSED CABLES OF ANY TYPE IN PLENUM CEILING SPACE SHALL BE PLENUM RATED.
31. CONTRACTOR SHALL PROVIDE ALL NECESSARY MISCELLANEOUS STEEL FOR THE SUPPORT OF ALL EQUIPMENT, PIPING, CONDUIT AND DUCTWORK. SUSPENDED FROM SLAB, STEEL, WALL OR TRUSSWORK.
32. ALL PENETRATIONS OF FLOORS AND WALLS (WHETHER OR NOT FIRE RESISTANCE RATED) SHALL BE PROVIDED WITH A THROUGH PENETRATION PROTECTION SYSTEM (FIRESTOPPING). EACH THROUGH - PENETRATION PROTECTION SYSTEM SHALL BE TESTED IN ACCORDANCE WITH ASTM E814 AND BE LISTED FOR THE TYPE OF FLOOR OR WALL ASSEMBLY PENETRATED AND THE TYPE OF PROTECTION SYSTEM.
33. IT IS NOT THE INTENTION TO SHOW EVERY FITTING, HANGER, WIRE OR DEVICE, ALL SUCH ITEMS SHALL BE FURNISHED AND INSTALLED AS NECESSARY FOR A COMPLETE SYSTEM.
34. SEE SPECIFICATION SECTION "ELECTRICAL IDENTIFICATION" FOR PROPERLY LABELING EQUIPMENT WIRING, BOXES, ETC.
35. CONTRACTOR SHALL DETERMINE THE QUANTITY OF CONDUCTORS REQUIRED FOR PROPER OPERATION OF ALL SWITCHING SCHEMES.
36. PROVIDE ALL BONDING AND GROUNDING REQUIRED BY THE NATIONAL ELECTRIC CODE, NFPA 70 AND AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
37. ALL REQUIRED BONDING CONDUCTORS SHALL BE MINIMUM #8 SOLID INSULATED COPPER, PROVIDE ALL NECESSARY FITTINGS, JUNCTION BOXES, END FITTINGS, ETC., FOR A COMPLETE, CONTINUOUS INSTALLATION.
38. ALL BONDING/GROUNDING CONNECTIONS SHALL BE MADE BY LISTED CLAMP OR CONNECTORS AS REQUIRED BY ARTICLE 250 OF NFPA 70, THE NATIONAL ELECTRIC CODE (CURRENT ADOPTED EDITION).
39. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.

SYSTEM INTENT NOTES

DEMOLITION:

1. UNLESS OTHERWISE NOTED, ELECTRICAL DEMOLITION SHALL BE A "FULL GUT" COMPREHENSIVE OF ALL EQUIPMENT, SYSTEMS, CONTROLS, FIXTURES, HARDWARE, WIRING AND RACEWAYS WITHIN THE PROJECT AREA, INCLUDING:
   a. ELECTRICAL
   b. TEL/DATA
   c. COMMUNICATIONS (INCLUDING PAGING, ALERTING SYSTEMS, WIRELESS SYSTEMS, ETC.)
   d. FIRE ALARM
   e. LIGHTING AND CONTROLS
   f. SECURITY (INCLUDING ALL SURVEILLANCE, ALARMS, ACCESS CONTROLS, ETC.)
   g. LIGHTNING PROTECTION
2. EXISTING WIRELESS ACCESS POINTS SHALL BE CAREFULLY DISCONNECTED, REMOVED, AND RETURNED TO OWNER.
3. REFER TO ADDITIONAL NOTES AND SPECIFICATIONS FOR ADDITIONAL DETAILS AND INFORMATION.

TELECOMMUNICATIONS AND CABLE TV SYSTEM NOTES:

1. THE SCOPE OF THIS PROJECT IS TO PROVIDE A "TURNKEY" TELECOMMUNICATIONS SYSTEM INCLUSIVE OF ALL INFRASTRUCTURE, WIRING, OUTLETS, PORTS, FACEPLATES, LABELING, TERMINATIONS, PATCH PANELS, TESTING, AND JUMPERS TO SUPPORT THE INSTALLATION OF TELECOMMUNICATIONS & DATA EQUIPMENT PROVIDED UNDER DIVISION 27 AND PROVIDED BY OWNER.
2. THIS SECTION SHALL BE INCLUSIVE OF TELEPHONE, CABLE TV, FIBER, HIGH SPEED INTERNET, AND DATA.
3. UNLESS OTHERWISE SPECIFIED, TELEPHONE, FIBER, HIGH SPEED INTERNET, AND DATA SYSTEMS SHALL BE COLLECTIVELY REFERRED TO AS "TEL/DATA".
4. UNLESS OTHERWISE SPECIFIED CABLE TV SHALL BE COLLECTIVELY REFERRED TO AS "CATV".
5. INFRASTRUCTURE SHALL INCLUDE PROVIDING ALL TECHNOLOGY STANDARDS REQUIREMENTS LISTED IN THE CONNECTICUT SCHOOL CONSTRUCTION STANDARDS AND GUIDELINES AS WELL AS THE FOLLOWING.
   A. PROVIDE NEW TELEPHONE, CATV, AND HIGH SPEED INTERNET SERVICE TO THE PROJECT LOCATION.
   B. ALL TEL/DATA AND CATV OUTLET LOCATIONS: 2-GANG BACKBOXES, 3.5" DEEP WITH SINGLE GANG MUD RING, CONDUIT TO ABOVE ACCESSIBLE CORRIDOR CEILING, AND TWO HOME RUN CABLES TO SERVING IT CLOSET. PROVIDE PORTS, FACEPLATES, TERMINATIONS, TESTING, AND LABELING AT OUTLET AND IT CLOSET PATCH PANEL.
   C. PATHWAYS (SLEEVES) THROUGH PARTITIONS AND FLOORS FOR TEL/DATA & CATV WIRING.
   D. PATHWAYS ACROSS INACCESSIBLE CEILINGS FOR TEL/DATA & CATV WIRING.
   E. POWER FOR ALL EQUIPMENT (INCLUDES RECEPTACLES AND HARD-WIRED CONNECTIONS AS REQUIRED).
   F. ALL EMPTY RACEWAYS SHALL BE LABELED AND HAVE PULL CORD INSTALLED.
   G. POWER FOR ALL EQUIPMENT.
   H. J-HOOK PATHWAYS THROUGH CORRIDORS TO IT CLOSETS.
   I. TWO 2-INCH CONDUIT SLEEVES BETWEEN CORRIDOR AND ALL SPACES REQUIRING DATA DEVICES.
   J. FOUR 4" CONDUIT SLEEVES BETWEEN CORRIDOR AND EACH IT CLOSET (MDF/IDF).
6. ALL WIRING, OUTLETS, TERMINATIONS, TESTING, AND MANUFACTURER'S CERTIFICATION
   A. UNLESS OTHERWISE NOTED, FOR ALL TEL/DATA OUTLETS PROVIDE FACEPLATE WITH TWO (2) DATA PORTS COMPLETELY WIRED TO TWO (2) DEDICATED HOMERUN CABLES TO TERMINATION IN PATCH PANEL WITHIN THE SERVING DATA CLOSET.
   B. FOR ALL WIRELESS ACCESS POINTS PROVIDE TWO PORT SURFACE MOUNT "BISCUIT CONNECTOR" BOX WITH TWO (2) DATA PORTS COMPLETELY WIRED TO TWO (2) DEDICATED HOMERUN CABLES TO TERMINATION IN PATCH PANEL WITHIN THE FLOOR SERVING DATA CLOSET. PROVIDE COMPLETE INSTALLATION OF ACCESS POINTS.
7. ALL DATA CABLES SHALL BE CAT-6 PLENUM RATED RISER CABLE.
8. ALL GENERAL NETWORK TEL/DATA CABLES SHALL BE BLUE.
9. ALL WIRING TERMINATIONS, PORTS, PATCH PANELS, FACEPLATES, AND OTHER ASSOCIATED EQUIPMENT AND DEVICES SHALL BE BASED ON THE SIEMON CATEGORY 6 Z-MAX FAMILY OF PRODUCTS.
10. INSTALLER SHALL BE SIEMON CERTIFIED AND SHALL PROVIDE ALL SYSTEM CERTIFICATION TESTING REQUIRED FOR MANUFACTURER'S 20 YEAR WARRANTY.
11. CONDUITS SHALL BE 1-1/4" UNLESS OTHERWISE SPECIFIED.
12. COORDINATE WITH OWNER'S PREFERRED TELEPHONE SYSTEM VENDOR AND PROVIDE DEDICATED COPPER TELEPHONE SERVICE LINES "POTS" FOR THE FOLLOWING SYSTEMS AND PROVIDE ALL RACEWAYS, BACKBOXES, CONDUCTORS, TERMINATIONS, AND FINAL TESTING AS REQUIRED FOR EACH SYSTEM:
    a. FIRE ALARM SYSTEM
    b. ELEVATOR CONTROLLER
    c. SECURITY SYSTEM
13. COORDINATE ALL WORK WITH EACH SERVICE PROVIDER AND OWNER'S TEL/DATA REPRESENTATIVE.
14. COORDINATE ALL SERVICE REQUIREMENTS WITH OWNER'S PREFERRED SERVICE PROVIDERS FOR TELEPHONE, HIGH-SPEED INTERNET, AND CATV. PROVIDE ALL ELEMENTS REQUIRED FOR PROPER OPERATION.
15. PROVIDE CONDUITS WITH PULL CORDS FROM EACH SERVICE PROVIDER SOURCE LOCATION TO EACH DEMARC LOCATION.
16. DEMARC FOR ALL TELE/DATA AND CATV SERVICES SHALL BE MAIN LEVEL MDF, UNLESS OTHERWISE DIRECTED BY OWNER'S TEL/DATA REPRESENTATIVE.
17. PROVIDE BACKBOARD FOR EACH SERVICE PROVIDER'S DEMARC EQUIPMENT IN THIS ROOM.
18. COORDINATE ALL DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS, FURNITURE SYSTEM VENDORS, AND THE WORK OF ALL OTHER TRADES.
19. AT EACH SERVICE PROVIDER DEMARC LOCATION, PROVIDE GROUND BAR BONDED TO BUILDING GROUNDING ELECTRODE SYSTEM AND DEDICATED 120V/20A RECEPTACLE ON BACKBOARD FOR SERVICE PROVIDER USE.
20. ALL DATA CLOSETS SHALL BE INTERCONNECTED VIA 6-STRAND ARMORED SINGLE-MODE FIBER WITH SC TERMINATIONS.
21. PROVIDE ALL RACKS, PATCH PANELS, SWITCHES, CABLE TRAYS, GROUNDING, AND ALL OTHER REQUIRED COMPONENTS AND ACCESSORIES.
22. ALL WIRELESS WIRELESS ACCESS POINTS SHALL BE OWNER FURNISHED, ELECTRICAL CONTRACTOR INSTALLED. PROVIDE UNIT PRICING TO FURNISH AND INSTALL ADDITIONAL WIRELESS ACCESS POINTS, WHERE REQUIRED.
23. PROVIDE WIRING FOR (2) 6000W UPS DEVICES IN EACH MDF/IDF.
24. COORDINATE ALL DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS, FURNITURE SYSTEM VENDORS, AND THE WORK OF ALL OTHER TRADES.
25. FAILURE TO COORDINATE WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY TO COMPLETE THE WORK FOR PROPER OPERATION.

GENERAL POWER & LIGHTING:

1. COORDINATE WITH MECHANICAL, PLUMBING AND FIRE PROTECTION PLANS AND PROVIDE POWER FOR ALL DEVICES AND EQUIPMENT INDICATED AND REQUIRED.
2. COORDINATE WITH KITCHEN CONSULTANT PLANS AND PROVIDE POWER, DATA, AND FIRE ALARM INTERFACE FOR ALL ASSOCIATED EQUIPMENT.
3. COORDINATE WITH SITE/CIVIL PLANS AND PROVIDE POWER FOR ALL INDICATED SITE LIGHTING AND EXTERIOR DEVICES.
4. COORDINATE WITH SECURITY CONSULTANT PLANS AND PROVIDE POWER AS REQUIRED FOR ALL DEVICES AND EQUIPMENT.
5. REFER TO ALL PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

SECURITY SYSTEM NOTES:

1. UNLESS OTHERWISE SPECIFIED, THE TERM "SECURITY" SHALL BE INCLUSIVE OF ACCESS CONTROL, VIDEO SURVEILLANCE, BURGLAR/INTRUDER ALARMS, PANIC SYSTEMS, AND ALL OTHER SECURITY RELATED SYSTEMS.
2. THE SCOPE OF THIS PROJECT IS TO PROVIDE BACKBOXES, RACEWAYS, AND SPECIFIED POWER TO SUPPORT THE INSTALLATION OF SECURITY WIRING, DEVICES, AND EQUIPMENT PROVIDED BY OTHERS. ADDITIONAL INFORMATION SHOWN FOR REFERENCE ONLY.
3. ALL SECURITY WORK SHALL BE COORDINATED WITH OWNER'S SECURITY REPRESENTATIVE AND SECURITY CONSULTANT PLANS AND SPECIFICATIONS PRIOR TO INSTALLATION.
4. FINAL LOCATION OF ALL SECURITY DEVICES SHALL BE COORDINATED WITH OWNER'S SECURITY REPRESENTATIVE, SECURITY CONSULTANT PLANS, AND ARCHITECT.
4. ALL EMPTY RACEWAYS SHALL BE LABELED AND HAVE PULL CORD INSTALLED.

FIRE ALARM REPLACEMENT NOTES:

1. THE SCOPE OF FIRE ALARM WORK INCLUDES REMOVAL OF THE ENTIRE EXISTING BUILDING FIRE ALARM SYSTEM (DEVICES, BOOSTERS, CONTROL CABINETS, WIRING, RACEWAYS, ETC.) AND REPLACEMENT WITH A NEW NFPA 72 COMPLIANT FIRE ALARM SYSTEM.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE INTERIM HEAT DETECTOR COVERAGE IN ALL AREAS UNDER CONSTRUCTION. THE HEAT DETECTORS SHALL BE LOCATED ON A DRAWING AND BE WIRED TO THE EXISTING FACP. THIS DRAWING SHALL BE SUBMITTED TO THE OWNER AND FIRE MARSHAL FOR APPROVAL. THE ELECTRICAL CONTRACTOR SHALL SUBMIT IN WRITING TO OWNER THAT THE INTERIM HEAT DETECTORS HAVE BEEN SYSTEM TESTED AND ARE CERTIFIED OPERATIONAL BY THE FIRE ALARM VENDOR. THE DETECTORS AND ASSOCIATED TEMPORARY USE EQUIPMENT SHALL BE REMOVED AND TURNED OVER TO THE OWNER WHEN THE NEW PERMANENT SYSTEM IS FULLY INSTALLED, COMMISSIONED, AND CERTIFIED OPERATIONAL BY THE FIRE ALARM VENDOR.
3. THE EXISTING SYSTEM SHALL REMAIN IN PLACE AND USED FOR THE REQUIRED TEMPORARY HEAT DETECTOR COVERAGE UNTIL THE NEW SYSTEM IS FULLY INSTALLED AND COMMISSIONED.
4. THE FIRE ALARM WORK SHALL PROCEED AS FOLLOWS:
   A. INSTALL TEMPORARY HEAT DETECTOR.
   B. CONNECT TEMPORARY HEAT DETECTORS TO EXISTING FACP.
   C. REMOVE ALL EXISTING NOTIFICATION AND INITIATION DEVICES, EXCEPT THOSE REQUIRED BY FIRE MARSHAL DURING CONSTRUCTION.
   D. INSTALL NEW FIRE ALARM CONTROL PANELS, TRANSPONDER PANELS, BATTERY CABINETS, BOOSTER CABINETS, AND POWER & COMMUNICATIONS WIRING.
   E. INSTALL NEW FIRE ALARM INITIATION AND NOTIFICATION DEVICES AS SHOWN ON PLANS.
   F. INSTALL ALL ADDITIONAL FIRE ALARM HEAD END EQUIPMENT (PANELS, BOOSTERS, BATTERIES, ETC.) AS REQUIRED FOR PROPER OPERATION & CODE COMPLIANCE.
   G. PROVIDE FINAL TESTING AND COMMISSIONING.
   H. REMOVE TEMPORARY HEAT DETECTORS, AND ALL ASSOCIATED EQUIPMENT, INCLUDING ALL WIRING AND RACEWAYS.
   I. REMOVE TEMPORARY/EXISTING FACP AT FINAL COMPLETION OF ALL PHASES OF WORK.
5. COORDINATE SEQUENCING OF ALL WORK WITH FIRE MARSHAL AND PHASING PLANS.
6. COORDINATE WITH ALL PROJECT DOCUMENTS FOR ADDITIONAL INFORMATION.
7. COORDINATE DEVICE LOCATIONS WITH THE ARCHITECTURAL PLANS AND THE WORK OF ALL OTHER TRADES.
8. COORDINATE INTERFACE REQUIREMENTS WITH DIVISION 8, DIVISION 14, DIVISION 21, DIVISION 23, DIVISION 27, AND DIVISION 28.
9. FAILURE TO COORDINATE INTERFACE REQUIREMENTS WILL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY TO COMPLETE THE WORK FOR PROPER OPERATION.

LIGHTNING PROTECTION SYSTEM:

1. PROVIDE A NEW UL MASTER LABEL CERTIFIED LIGHTNING PROTECTION SYSTEM FOR THE ENTIRE FACILITY.
2. SCOPE OF WORK SHALL BE INCLUSIVE OF PROVIDING ALL LABOR, MATERIALS, DESIGN, AND TESTING REQUIRED TO PROVIDE A MASTER LABEL CERTIFICATION. THIS INCLUDES ANY ADDITIONAL GROUNDING AND BONDING NOT OTHERWISE INCLUDED BY THE LIGHTNING PROTECTION INSTALLER OR INDICATED ON PLANS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

INTERCOM & PUBLIC ADDRESS SYSTEMS:

1. PROVIDE NEW INTERCOM AND PAGING SYSTEMS WITH SPEAKERS IN ALL CORRIDORS AND OCCUPIED SPACES, TWO WAY COMMUNICATION STATIONS IN EACH CLASSROOM, AND MASTER STATION WITH MICROPHONE AND HEAD END EQUIPMENT IN MAIN OFFICE. SYSTEM SHALL PROVIDE EXTERNAL INPUTS FOR BELL ALERTS, MUSIC PLAYERS, AND OTHER SIMILAR AUDIO INPUTS.

BELL SYSTEM:

1. PROVIDE NEW DIGITAL PROGRAMMABLE SYNCHRONIZED CENTRAL BELL SYSTEM. SYSTEM SHALL PROVIDE MULTIPLE DAILY PROGRAM SCHEDULES, INTERIM SCHEDULES, AND LOCAL IMMEDIATE CONTROL FOR SPECIAL ALERTS AS REQUIRED, AND MULTIPLE NOTIFICATION TONES. SYSTEM SHALL UTILIZE THE PUBLIC ADDRESS AND INTERCOM SPEAKERS FOR BROADCASTING BELL TONES.

CLOCK SYSTEM:

1. PROVIDE A NEW CENTRAL GPS SYNCHRONIZED 72 MHZ CLOCK SYSTEM (BASED ON PRIMEX ONEVUE SYNC) WITH CENTRAL ROOF MOUNTED ANTENNA, BROADCAST TRANSMITTER & HEAD END EQUIPMENT IN THE CENTRAL OFFICE, AND 120V CLOCKS INSTALLED IN ALL OCCUPIED SPACES. PROVIDE ALL WIRING, RACEWAYS, EQUIPMENT, AND FINAL CONNECTIONS.
2. CLOCKS SHALL BE TRADITIONAL ANALOG SERIES WITH 12.5" DIAMETER IN CLASSROOMS, OFFICES, AND SINGLE OCCUPANT SPACES: 16" IN CAFETERIA, GYMS, AUDITORIUM, AND OTHER LARGE OCCUPANT AREAS. PROVIDE WIRE GUARDS IN GYMS. PROVIDE DOUBLE FACE CLOCKS IN CORRIDORS.

ELECTRICAL DEMOLITION NOTES

1. BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS AND CONNECTIONS, MECHANICAL AND ELECTRICAL DISRUPTIONS EFFECTING OTHER TRADES. INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
3. DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
4. REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
5. THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
6. THE LOCATION OF EXISTING ELECTRICAL SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PANELS, CONDUITS, LIGHTING, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
7. ALL EQUIPMENT, AND ASSOCIATED WIRING, CONDUITS INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS. NO EQUIPMENT, WIRING OR CONDUITS SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
8. ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY WIRING OR CONDUIT WHICH MUST REMAIN ACTIVE, IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
9. ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
10. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
11. THE CONTRACTOR SHALL OBTAIN EXISTING ELECTRICAL DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.

LIGHTING FIXTURE NOTES

1. TYPE 'EM' EMERGENCY FIXTURES AND TYPE 'X' EXIT SIGNS SHALL BE WIRED TO LINE SIDE OF AREA LIGHTING CIRCUIT TO SENSE LOSS OF NORMAL POWER AND PROVIDE CONTINUOUS TRICKLE CHARGE, AND SHALL OPERATE AT A MINIMUM OF 1 1/2 HOURS UPON LOSS OF NORMAL POWER. SEE SCHEDULE.
2. DIRECTIONAL CHEVRONS SHALL CONFORM TO NFPA AND SHALL BE IDENTIFIABLE AS A DIRECTIONAL INDICATOR AT A MINIMUM OF 40 FT. UNDER ALL SPACE CONDITIONS. SEE DETAIL BELOW.



EXIT SIGN DIRECTIONAL INDICATOR

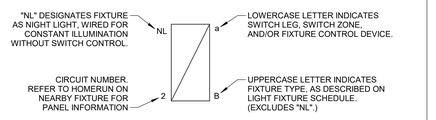
1. ALL FIXTURES TO BE LED WITH 0-10V DRIVERS STANDARD.
2. IN ALL LOCATIONS OTHER THAN THE GYM, LIGHT FIXTURES SHALL BE COLOR TEMPERATURE 4000°K.
   IN THE GYM, LIGHT FIXTURES SHALL BE COLOR TEMPERATURE 5000°K.
3. PROVIDE ERICO FASTENING PRODUCTS (CADDY) CAT. No. 515 OR 515A LIGHT FIXTURE SUPPORT CLIPS ON ALL RECESSED LIGHT FIXTURES. PROVIDE MINIMUM FOUR (4) PER FIXTURE.
4. IN ADDITION TO THE REQUIREMENTS OF THE IBC AND THE NEC, ALL RECESSED LIGHT FIXTURES SHALL BE PROVIDED WITH SUPPORT WIRES AT A MINIMUM OF FOUR (4) PER FIXTURE AND LOCATED NOT MORE THAN SIX (6") INCHES FROM EACH CORNER, EXTENDED AND ATTACHED TO THE BUILDING STRUCTURE. HANGER WIRES SHALL BE GALVANIZED CARBON

EQUIPMENT COORDINATION NOTES

1. REFER TO EQUIPMENT COORDINATION SCHEDULE FOR ALL EQUIPMENT WIRING INFORMATION.
2. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PROVIDE PROPOSED DISCONNECT SWITCH LOCATION FOR ENGINEER REVIEW PRIOR TO ROUGH-IN. IN ALL CASES, DISCONNECT SWITCH SHALL BE LOCATED WITHIN SIGHT OF EQUIPMENT SERVED.
3. DISCONNECT SWITCHES LOCATED OUTSIDE SHALL BE PROVIDED WITH NEMA 3R ENCLOSURE UNLESS OTHERWISE NOTED.

RTU-01 (PP1-1,3,7) — EQUIPMENT ID; PANEL & CIRCUIT

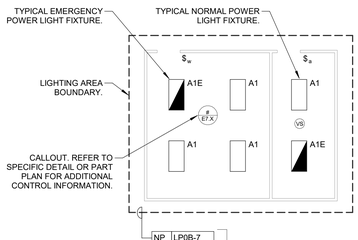
LIGHTING ANNOTATION SCHEME #1



NOTES:

1. UNSWITCHED LIGHTING BRANCH CIRCUIT WIRING SHOWN TO A SINGLE FIXTURE FOR EACH CIRCUIT. UNLESS OTHERWISE INDICATED OR REQUIRED FOR VOLTAGE DROP, PROVIDE (2) #12 AWG & (1) #12 AWG GND IN 3/4" CONDUIT FOR SWITCHED WIRING TO ALL COMMON CONTROL FIXTURES.
2. PROVIDE ALL LOW VOLTAGE CONTROL WIRING AS REQUIRED FOR PROPER OPERATION OF ALL FIXTURES FROM ASSOCIATED CONTROLS (INCLUDES DIMMERS, OCCUPANCY SENSORS, SCENE CONTROL SWITCHES, DAYLIGHT SENSORS, ETC.).
3. REFER TO LIGHTING CONTROL RELAY PANEL SCHEDULES, WHERE APPLICABLE, FOR ADDITIONAL CONTROL INFORMATION.
4. FIXTURES WITHOUT SWITCH LEG OR CONTROL DESIGNATION SHALL BE CONTROLLED BY THE CONTROL DEVICES WITHIN THE SAME ROOM OR AREA. (THIS INCLUDES ANY COMBINATION OF 3-WAY AND 4-WAY SWITCHES, SENSORS, SCENE CONTROLLERS, OR OTHER CONTROL DEVICES.)

LIGHTING ANNOTATION SCHEME #2



NP	LP0B-7
EM	EP1A-8
RC	LCP2D-3

CIRCUIT AND RELAY DESIGNATION. APPLIES TO ALL LIGHT FIXTURES WITHIN BOUNDARY AREA.

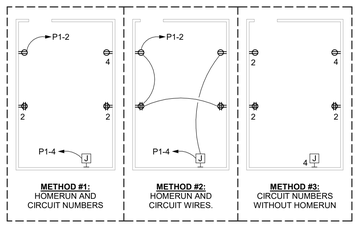
LEGEND

NP PP-7	"NP" INDICATES NORMAL POWER. "PP-7" IS A SAMPLE PANEL AND CIRCUIT NUMBER.
EM LP-2	"EM" INDICATES WIRED THROUGH EMERGENCY INVERTER. "LP-2" IS A SAMPLE PANEL AND CIRCUIT NUMBER.
RC LRP-3	"RC" INDICATES RELAY PANEL CONTROL. "LRP-3" IS A SAMPLE RELAY PANEL AND RELAY NUMBER.

NOTES:

1. DETAIL IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT ALL BOUNDARY AREAS WILL HAVE ALL THREE INDICATORS BLOCK.
2. REFER TO ALL OTHER LIGHTING ANNOTATION DETAIL SCHEMES FOR ADDITIONAL INFORMATION THAT MAY BE SHOWN.
3. REFER TO LIGHTING DETAILS FOR ADDITIONAL CONTROL REQUIREMENTS.
4. REFER TO SYMBOL LEGEND FOR ADDITIONAL INFORMATION.
5. CIRCUIT AND RELAY BLOCKS MAY ALSO BE USED WITH HOMERUN SYMBOL TO ILLUSTRATE RELAY CONTROL.
6. UNLESS OTHERWISE INDICATED, EMERGENCY FIXTURES WILL BE HALF-SHADED AND/OR HAVE "E" AT THE END OF THE TYPE DESGNATION (E.G.: F8E). CIRCUIT WIRING SHALL BE VIA EMERGENCY INVERTER.

CIRCUIT ANNOTATION METHODS



NOTES:

1. DETAIL IS FOR ILLUSTRATIVE PURPOSES ONLY. THE QUANTITY, TYPE, AND ARRANGEMENT OF DEVICES WILL VARY.
2. EACH ANNOTATION METHOD MAY BE USED THROUGHOUT THE PLANS AS DEEMED APPROPRIATE FOR CLARITY. COORDINATE WITH ENGINEER IF ADDITIONAL CLARIFICATION IS REQUIRED.
3. METHOD #3 WILL ONLY BE USED WHERE THERE IS ONLY ONE ELECTRIC PANEL, OR WHERE PANEL DESIGNATION IS OTHERWISE CLEARLY INDICATED.
4. REFER TO SYMBOL LEGEND FOR ADDITIONAL INFORMATION.

SINGLE PHASE WIRE SCHEDULE

MOCP (1-POLE OR 2-POLE)	CONDUCTORS (1 PH, 2W) WITH GROUND	CONDUIT SIZE	CONDUCTORS (1 PH, 3W) WITH GROUND	CONDUIT SIZE
15A	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"
20A	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"
25A	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"
30A	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"
35A	2#8 & 1#10G	3/4"	3#8 & 1#10G	3/4"
40A	2#8 & 1#10G	3/4"	3#8 & 1#10G	3/4"
45A	2#6 & 1#10G	1"	3#6 & 1#10G	1"
50A	2#6 & 1#10G	1"	3#6 & 1#10G	1"
60A	2#4 & 1#10G	1"	3#4 & 1#8G	1-1/4"
70A	2#4 & 1#8G	1"	3#4 & 1#8G	1-1/4"
80A	2#3 & 1#8G	1-1/4"	3#3 & 1#8G	1-1/2"
90A	2#2 & 1#8G	1-1/4"	3#2 & 1#8G	1-1/2"
100A	2#1 & 1#8G	1-1/2"	3#1 & 1#8G	2"

THREE PHASE WIRE SCHEDULE

MOCP (3 POLE)	CONDUCTORS (3 PH, 3W) WITH GROUND	CONDUIT SIZE	CONDUCTORS (3 PH, 4W) WITH GROUND	CONDUIT SIZE
15A	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"
20A	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"
25A	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"
30A	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"
35A	3#8 & 1#10G	3/4"	4#8 & 1#10G	3/4"
40A	3#8 & 1#10G	3/4"	4#8 & 1#10G	3/4"
45A	3#6 & 1#10G	1"	4#6 & 1#10G	1"
50A	3#6 & 1#10G	1"	4#6 & 1#10G	1"
60A	3#4 & 1#10G	1-1/4"	4#4 & 1#10G	1-1/4"
70A	3#4 & 1#8G	1-1/4"	4#4 & 1#8G	1-1/4"
80A	3#3 & 1#8G	1-1/4"	4#3 & 1#8	1-1/4"
90A	3#2 & 1#8G	1-1/4"	4#2 & 1#8G	1-1/2"
100A	3#1 & 1#8G	1-1/2"	4#1 & 1#8G	2"
110A	3#1 & 1#6G	1-1/2"	4#1 & 1#6G	2"
125A	3#1/0 & 1#6G	1-1/2"	4#1/0 & 1#6G	2"
150A	3#1/0 & 1#6G	2"	4#1/0 & 1#6G	2"
175A	3#2/0 & 1#6G	2"	4#2/0 & 1#6G	2"
200A	3#3/0 & 1#6G	2"	4#3/0 & 1#6G	2-1/2"
225A	3#4/0 & 1#4G	2-1/2"	4#4/0 & 1#4G	2-1/2"
250A	3#250KCMIL & 1#4G	2-1/2"	4#250KCMIL & 1#4G	3"
300A	3#350KCMIL & 1#4G	3"	4#350KCMIL & 1#4G	3"
350A	3#500KCMIL & 1#3G	3"	4#500KCMIL & 1#3G	4"
400A	3#500KCMIL & 1#3G	3-1/2"	4#500KCMIL & 1#3G	4"
450A	(2)3#4/0 & 1#2G	(2) 3"	(2)4#4/0 & 1#2G	(2) 3"
500A	(2)3#250KCMIL & 1#2G	(2) 3"	(2)4#250KCMIL & 1#2G	(2) 3"
600A	(2)3#350KCMIL & 1#1G	(2) 3"	(2)4#350KCMIL & 1#1G	(2) 3"
700A	(2)3#500KCMIL & 1#1/0G	(2) 3-1/2"	(2)4#500KCMIL & 1#1/0G	(2) 4"
800A	(2)3#500KCMIL & 1#1/0G	(2) 3-1/2"	(2)4#500KCMIL & 1#1/0G	(2) 4"
900A	(3)3#350KCMIL & 1#2/0G	(3) 3"	(3)4#350KCMIL & 1#2/0G	(3) 3"
1000A	(3)3#500KCMIL & 1#2/0G	(3) 3-1/2"	(3)4#500KCMIL & 1#2/0G	(3) 3-1/2"
1200A	(4)3#350KCMIL & 1#3/0G	(4) 4"	(4)4#350KCMIL & 1#3/0G	(4) 4"
1600A	(4)3#600KCMIL & 1#4/0G	(4) 4"	(4)4#600KCMIL & 1#4/0G	(4) 4"
2000A	(6)3#400KCMIL & 1#250KCMIL G	(6) 3"	(6)4#400KCMIL & 1#250KCMIL G	(6) 3"
2500A	(8)3#400KCMIL & 1#250KCMIL G	(8) 3"	(8)4#400KCMIL & 1#250KCMIL G	(8) 3"

NOTES:

1. CONDUCTOR SIZES BASED UPON 75°C INSULATION.
2. UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CIRCUIT WHERE INDICATED.
3. MINIMUM SIZE CONDUIT IS 3/4" UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.
4. PROVIDE A 3-PHASE 4-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.
5. PROVIDE A 1-PHASE 3-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.
6. MINIMUM SIZE CONDUIT UNDERGROUND IS 4 INCH EXCEPT FOR SITE BRANCH CIRCUITS SUCH AS LIGHTING AND MISCELLANEOUS POWER AND SYSTEMS WHICH SHALL BE A MINIMUM OF 1 INCH.
7. PROVIDE TYPE OF RACEWAY OR CABLE AS INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.
8. CONDUIT AND WIRE SIZES SHOWN IN SCHEDULE ABOVE ARE BASED ON MAXIMUM CIRCUIT LENGTH OF 100'.
9. CONDUIT AND WIRE SIZES FOR CIRCUITS OVER 100' SHALL BE CALCULATED TO ACCOUNT FOR VOLTAGE DROP.

ELECTRICAL SYMBOL LIST

NOTE: ALL MOUNTING HEIGHTS GIVEN ARE TO CENTERLINE OF DEVICE UNLESS NOTED OTHERWISE.

SYMBOL	DESCRIPTION
⊙ ▪	PENDANT MOUNTED LIGHT FIXTURE
▪ ▪	PENDANT MOUNTED LIGHT FIXTURE
▭	CEILING MOUNTED LIGHT FIXTURE
○	WALL MOUNTED LIGHT FIXTURE
○	SURFACE MOUNTED LIGHT FIXTURE
⊘	RECESSED DOWN LIGHT FIXTURE
▱	RECESSED 2'X4' LIGHT FIXTURE
▱	RECESSED 2'X2' LIGHT FIXTURE
▭	WALL MOUNTED FIXTURE
———	LINEAR FIXTURE
	SINGLE FACE EXIT SIGN WITH BATTERY AND DIRECTIONAL ARROWS UNIVERSAL MOUNT
	DOUBLE FACE EXIT SIGN WITH BATTERY AND DIRECTIONAL ARROWS UNIVERSAL MOUNT
	EMERGENCY BATTERY UNIT WITH TWO DIRECTIONAL HEADS
	EMERGENCY REMOTE, WEATHERPROOF, WITH DOUBLE DIRECTIONAL HEADS
$	SINGLE POLE TOGGLE SWITCH
$3	THREE WAY TOGGLE SWITCH
$4	FOUR WAY TOGGLE SWITCH
$K	SINGLE POLE KEYED TOGGLE SWITCH
$3K	THREE WAY KEYED TOGGLE SWITCH MOUNT
$4K	FOUR WAY KEYED TOGGLE SWITCH MOUNT
$T	THERMAL OVERLOAD SWITCH - MOUNT AT FRACTIONAL HP MOTORS
$D	DIMMER SWITCH
$PS	PROJECTION SCREEN SWITCH
$OC	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH
B	DOORBELL BUZZER/CHIME - MOUNT 7'-0" A.F.F.
PC	PHOTOCELL
E/G	EMERGENCY ELECTRIC/GAS SHUTOFF PUSHBUTTON OPERATOR
	GROUNDED DUPLEX RECEPTACLE
A	GROUNDED DUPLEX RECEPTACLE - MOUNT ABOVE COUNTER OR BACKSPLASH 42" A.F.F.
C	GROUNDED DUPLEX RECEPTACLE - MOUNT AT CEILING
GFI	GROUNDED DUPLEX GFI RECEPTACLE
WP	GROUNDED DUPLEX GFI RECEPTACLE "WEATHERPROOF WHILE IN-USE" COVER
S	GROUNDED DUPLEX RECEPTACLE - STUB UP TO 24" A.F.F. ON 1" (MIN) RGS CONDUIT
PM	VERTICAL PLUGMOLD WITH OUTLETS AT 12" O.C. - 5' LONG
MW	GROUNDED GFI DUPLEX RECEPTACLE DEDICATED FOR MICROWAVE OVEN - VERIFY EXACT MOUNTING LOCATION
	GROUNDED DOUBLE DUPLEX RECEPTACLE
	GROUNDED 240V RECEPTACLE
USB	GROUNDED GFI DUPLEX RECEPTACLE WITH INTEGRAL USB CHARGING PORT
	GROUNDED SIMPLEX RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE - MATCH NEMA CONFIGURATION OF EQUIPMENT SERVED
	FLOOR MOUNTED DEVICES AS LISTED ABOVE
	RECESSED MOUNTED PANELBOARD
	SURFACE MOUNTED PANELBOARD
PP	COMBINATION POWER/TEL/DATA POLE
	TELEPHONE/DATA OUTLETS
WAP	WIRELESS ACCESS POINT (WAP - WIRELESS ACCESS POINT) INCLUDE CAT 6 CABLE
DMX	DMX DIMMING OUTLET. INCLUDE ALL CABLING
MIC	MICROPHONE OUTLET. INCLUDE ALL CABLING
TS	TEACHER STATION DATA/COMMUNICATION OUTLET. INCLUDE ALL CABLING.
W	WALL PHONE OUTLET. INCLUDE ALL CABLING.
F	MANUAL FIRE ALARM PULL STATION - MOUNT AT 48" A.F.F.
H	HEAT DETECTOR
H 200°	HEAT DETECTOR 200°
S	AREA SMOKE DETECTOR
SD	DUCT SMOKE DETECTOR
SCO	AREA COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR
SE	ELEVATOR RETURN SMOKE DETECTOR
CO	FIRE ALARM CARBON MONOXIDE DETECTOR
RTS	FIRE ALARM REMOTE TEST SWITCH
M	MAGNETIC DOOR HOLDER
	FIRE ALARM VISUAL ONLY INDICATING UNIT - MOUNT AT 6'-6" A.F.F.
	FIRE ALARM SPEAKER/VISUAL INDICATING UNIT - MOUNT AT 6'-6" A.F.F.
R	LIGHTING CONTROL RELAY
AOM	FIRE ALARM ADDRESSABLE OUTPUT MODULE
AIM	FIRE ALARM ADDRESSABLE INPUT MODULE
SVC	SPEAKER VOLUME CONTROL
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL
HGMP	HAZARDOUS GAS MONITOR PANEL FURNISHED BY DIV. 25, WIRED BY DIV. 26
	EMERGENCY "CALL-FOR-AID" BUZZER/LIGHT - MOUNT AT 7'-6" A.F.F.
SA	EMERGENCY "CALL-FOR-AID" SWITCH - MOUNT 48" A.F.F. WITH PULL CORD TO 6" A.F.F.

SYMBOL	DESCRIPTION
M/S	EMERGENCY SWITCH - MOUNT AT 48" A.F.F. - M=MASTER - S=SLAVE
J J	JUNCTION BOX
J TC J TC	ABOVE CEILING JUNCTION BOX WITH 120V POWER FOR TEMPERATURE CONTROLS.
J FA J FA	ABOVE CEILING JUNCTION BOX W/ 120V POWER FOR MAGNETIC DOOR HOLDERS & FIRE ALARM DEVICES.
	JUNCTION BOX FOR CATV OUTLET WITH 1 1/4" CONDUIT TO CEILING
	MOTOR
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC MOTOR STARTER
	COMBINATION DISCONNECT SWITCH/MAGNETIC MOTOR STARTER
	BRANCH CIRCUIT WIRING
	BRANCH CIRCUIT FEEDER
	ELECTRICAL GROUND
	FLEXIBLE EQUIPMENT CONNECTION
	FIXED/HARD - WIRED EQUIPMENT CONNECTION
TC	TIMECLOCK
C	CONTACTOR
	SECURITY SYSTEM CAMERA
DL	SECURITY SYSTEM DOOR LOCK
	SECURITY SYSTEM MOTION SENSOR
CR	SECURITY SYSTEM CARD READER
DC	SECURITY SYSTEM DOOR CONTACT
KP	SECURITY SYSTEM KEY PAD
FS	FLOW SWITCH
TS	TAMPER SWITCH
PS	PRESSURE SWITCH
S	WALL MOUNTED SPEAKER
S	CEILING MOUNTED SPEAKER
IC	INTERCOM STATION
	COMBINATION SPEAKER/CLOCK
	CLOCK
FB	FLUSH FLOOR BOX WITH DOUBLE DUPLEX RECEPTACLE, TEL/DATA OUTLET, COMPLETE WITH COVERS, TRIMS, AND ACCESSORIES APPROPRIATE FOR EACH LOCATION. (LEGRAND-WIREMOLD COMPONENTS)
$OS $VS	WALL MOUNTED DUAL TECHNOLOGY PRESENCE SENSOR SWITCH. "OS" INDICATES 100% AUTO ON OCCUPANCY MODE, "VS" INDICATES MANUAL ON VACANCY MODE. (CRESTRON: GLA-DT-WLS-1)
$DS	WALL MOUNTED DUAL TECHNOLOGY VACANCY SENSOR SWITCH WITH DIMMING. PROGRAM FOR MANUAL ON MODE. (CRESTRON: GLA-DT-WLS-DIM)
$DS	WALL MOUNTED DUAL TECHNOLOGY VACANCY SENSOR SWITCH WITH DIMMING. PROGRAM FOR MANUAL ON MODE. (CRESTRON: GLA-DT-WLS-DIM)
$Z	WIRELESS WALL SWITCH WITH ON/OFF/DIMMING. PROVIDE WITH BLACK OUT LABEL FOR INSTALLATIONS ON GLASS (CRESTRON: ZUMMESH-KP10A-BATT-ENGRAVED)
$Z2	WIRELESS 6-BUTTON 2-SCENE WALL SWITCH WITH ON/OFF/DIMMING & SENSOR DISABLE. PROVIDE WITH BLACK OUT LABEL FOR INSTALLATIONS ON GLASS (CRESTRON: ZUMMESH-KP10C-BATT-ENGRAVED)
$Z6	WIRELESS 6-BUTTON 3-SCENE WALL SWITCH WITH ON/OFF/DIMMING. PROVIDE WITH BLACK OUT LABEL FOR INSTALLATIONS ON GLASS (CRESTRON: ZUMMESH-KP10C-BATT-ENGRAVED)
VS	CEILING MOUNTED DUAL TECHNOLOGY VACANCY SENSOR: (CRESTRON GLA-DT-QUATTRO-COM1-24) PROVIDE WITH POWER PACKS (NOT SHOWN ON PLANS) FOR OPERATION WITH ZUM CONTROL SYSTEM.
OS	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR: (CRESTRON GLA-DT-QUATTRO-COM1-24) PROVIDE WITH POWER PACKS (NOT SHOWN ON PLANS) FOR OPERATION WITH ZUM CONTROL SYSTEM.
OSC	CEILING MOUNTED HALLWAY VACANCY SENSOR: (CRESTRON GLA-US-HALLWAY-COM1-24) PROVIDE WITH POWER PACKS (NOT SHOWN ON PLANS) FOR OPERATION WITH ZUM CONTROL SYSTEM.
VSH	CEILING MOUNTED VACANCY SENSOR WITH HIGH-BAY LENS: (DOUGLAS: WOR_DD2) PROVIDE WITH POWER PACKS (NOT SHOWN ON PLANS) FOR OPERATION WITH ZUM WIRELESS DEVICES.
VSX	CEILING MOUNTED VACANCY SENSOR WITH EXTENDED LENS: (DOUGLAS: WORXDD2) PROVIDE WITH POWER PACKS (NOT SHOWN ON PLANS) FOR OPERATION WITH ZUM WIRELESS DEVICES.
Z	LIGHTING CONTROL SYSTEM PROCESSOR PANEL (CRESTRON ZUM: ZUML-HUB4-CN-PAK)
ZG	LIGHTING CONTROL SYSTEM GATEWAY DEVICE (CRESTRON ZUM: ZUMNET GATEWAY)
ZD	LIGHTING CONTROL SYSTEM DISTRIBUTION PANEL (CRESTRON ZUM: CLP-HUB-SW-POE-10)
TN	JUNCTION BOX FOR NORMAL POWER CIRCUIT CONNECTION TO TURF LIGHTING SYSTEM
TE	JUNCTION BOX FOR EMERGENCY POWER CIRCUIT CONNECTION TO TURF LIGHTING SYSTEM
U4	EXTERIOR POWER PEDESTAL WITH ONE DUPLEX RECEPTACLE AND ON 4-PORT USB OUTLET. DESIGN BASED ON LANDSCAPE FORMS MODEL: BM-PP-1G1U. FINISH BY ARCHITECT. COORDINATE MOUNTING LOCATION WITH ARCHITECT.
SP	JUNCTION BOX WITH DISCONNECT SWITCH FOR POWER TO SECURITY SYSTEM DEVICE.
HT	JUNCTION BOX WITH DISCONNECT SWITCH FOR POWER TO HEAT TRACE CONTROLLER.

ELECTRICAL LEGEND NOTES:
1. ALL SYMBOLS MAY NOT BE USED.

ABBREVIATIONS

A	AMPERE	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	MAU	MAKE-UP AIR UNIT
AFG	ABOVE FINISHED GRADE	MFG	MANUFACTURER
AFI	ARC FAULT CIRCUIT INTERRUPTER	NL	NIGHT LIGHT
AHU	AIR HANDLING UNIT	NLE	NEW LOCATION OF EXISTING
C	CONDUIT	OHD	OVERHEAD DOOR ELECTRIC OPERATOR
CB	CIRCUIT BREAKER	P	POLE
CKT	CIRCUIT	PE	PRIMARY ELECTRIC SERVICE
CUH	CABINET UNIT HEATER	PH or Ø	PHASE
DAC	DOOR ACCESS CONTROLLER	PNL	PANEL
EBB	ELECTRIC BASEBOARD	PVC	POLYVINYL CHLORIDE CONDUIT
EBU	EMERGENCY BATTERY UNIT	RAP	REMOTE ANNUNCIATOR PANEL
EF	EXHAUST FAN	RGS	RIGID GALVANIZED STEEL CONDUIT
EM	EMERGENCY POWERED	RLE	RELOCATE EXISTING
EMT	ELECTRICAL METALLIC TUBING	RTU	ROOFTOP UNIT
ETR	EXISTING TO REMAIN	SE	SECONDARY ELECTRIC SERVICE
EWC	ELECTRIC WATER COOLER	T	TELEPHONE SERVICE
EWH	ELECTRIC WATER HEATER	TV	TELEVISION
FA	FIRE ALARM	TX	TRANSFORMER
FACP	FIRE ALARM CONTROL PANEL	UNO	UNLESS NOTED OTHERWISE
FMC	FLEXIBLE METALLIC TUBING	W	WIRE
GFI	GROUND FAULT INTERRUPTER	WAP	WIRELESS ACCESS POINT
IG	ISOLATED GROUND	WP	WEATHER PROOF
JB	JUNCTION BOX		
KVA	KILOVOLT-AMP		

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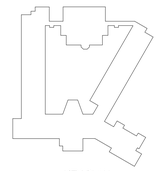
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REVISIONS

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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL GENERAL INFORMATION

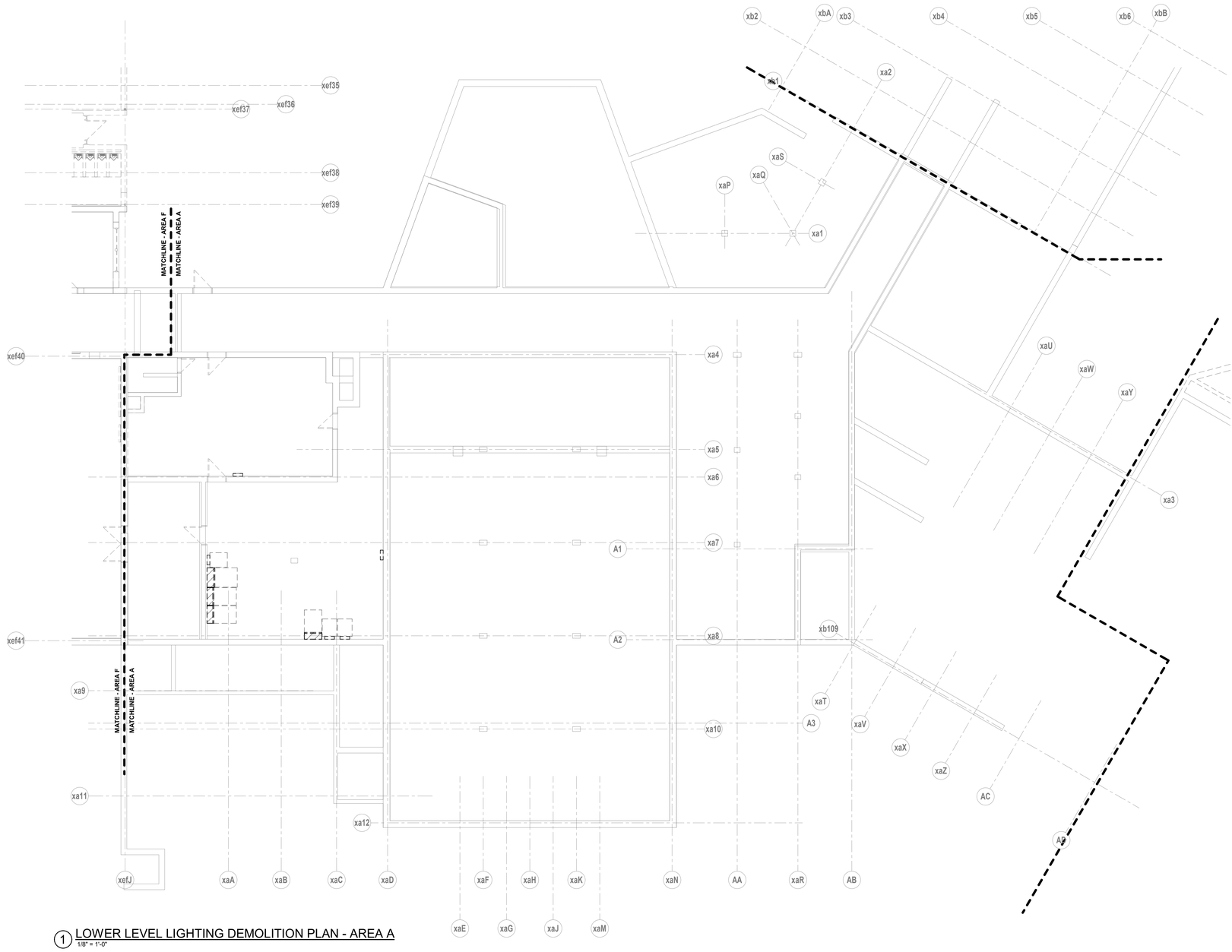
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LIGHTING DEMOLITION GENERAL NOTES

1. UNLESS OTHERWISE NOTED, PROVIDE DEMOLITION OF ALL INTERIOR AND EXTERIOR LIGHTING FIXTURES, DEVICES, AND CONTROLS LOCATED ON THE INTERIOR AND EXTERIOR OF THE BUILDING, INCLUDING ALL EXTERIOR BUILDING MOUNTED LIGHT FIXTURES AND EXTERIOR POLE MOUNTED AND BOLLARD LIGHT FIXTURES.
2. PRIOR TO START OF DEMOLITION, COORDINATE WITH OWNER FOR IDENTIFICATION OF ANY ITEMS OR FIXTURES THAT ARE TO BE REMOVED WITH CARE AND RETURNED TO OWNER FOR REUSE.
3. DEMOLITION SCOPE SHALL BE INCLUSIVE OF ALL ELEMENTS, INCLUDING ANY ITEMS NOT SHOWN.
4. DEMOLITION SHALL INCLUDE REMOVAL OF ALL ASSOCIATED DEVICES, RACEWAYS, BOXES, CONDUCTORS, AND MISCELLANEOUS HARDWARE BACK TO SOURCE.
5. COORDINATE WITH PHASING PLANS TO ENSURE DEMOLITION IS LIMITED TO AREAS UNDER CONSTRUCTION, AND AREAS THAT REMAIN OCCUPIED WILL CONTINUE TO BE SERVED BY ALL REQUIRED LIGHTING AND CONTROLS, INCLUDING EMERGENCY AND EXIT LIGHTS. RELOCATE FIXTURES AND CONTROLS AS REQUIRED TO ACCOMMODATE PHASING. RELOCATION SHALL INCLUDE ALL NECESSARY WIRING, RACEWAYS, AND CONTROLS REQUIRED FOR PROPER OPERATION, INCLUDING INTERFACING WITH OTHER SYSTEMS. COORDINATE NEW LOCATIONS OF RELOCATED AND TEMPORARY DEVICES WITH ARCHITECT.



1 LOWER LEVEL LIGHTING DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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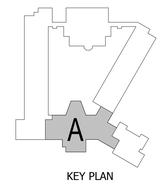
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LOWER LEVEL LIGHTING DEMO PLAN - AREA A

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1 MAIN LEVEL LIGHTING DEMOLITION PLAN - AREA A
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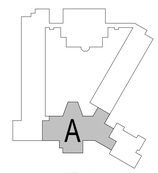
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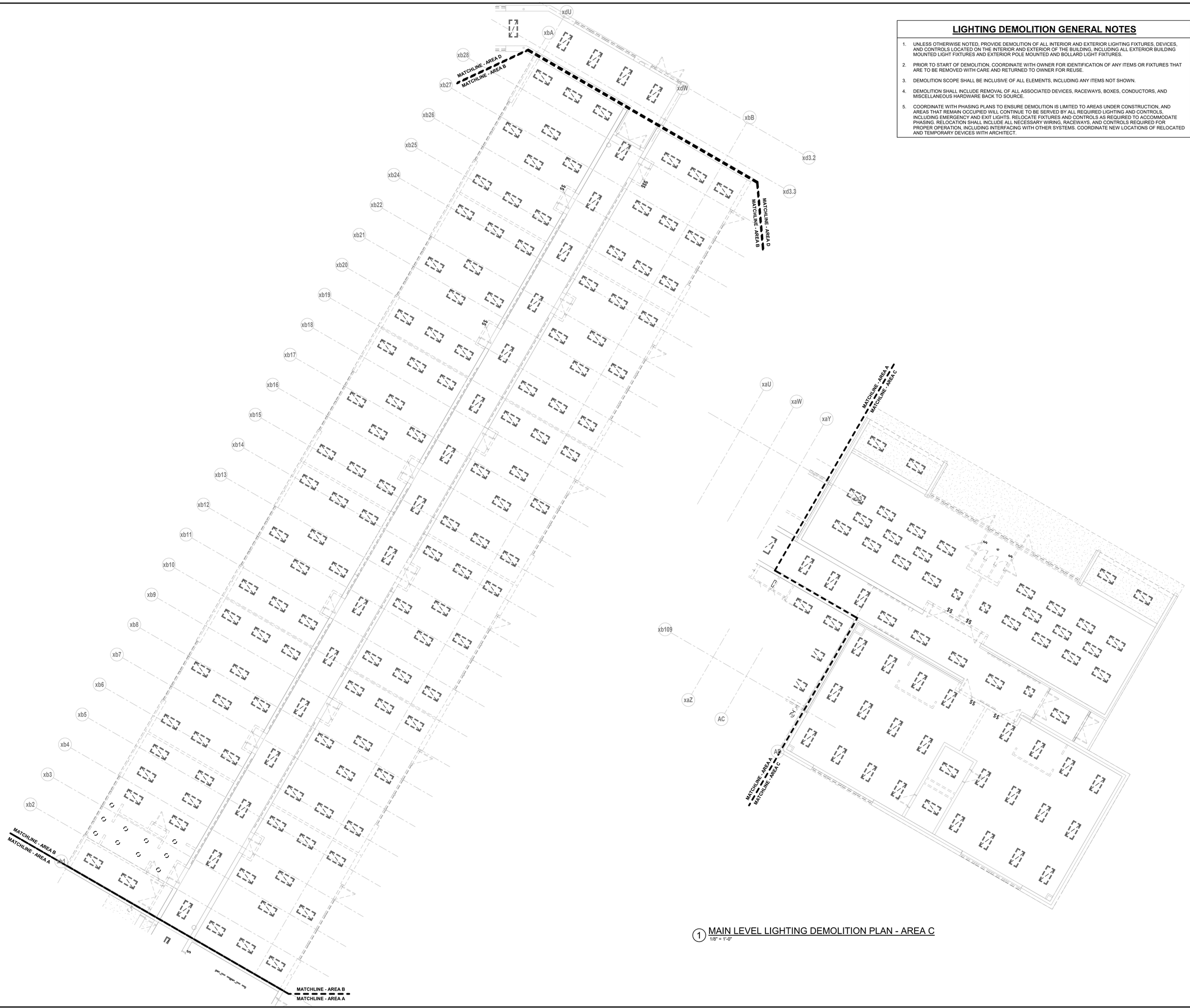
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MAIN LEVEL LIGHTING DEMO PLAN - AREA A

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1 MAIN LEVEL LIGHTING DEMOLITION PLAN - AREA C
1/8" = 1'-0"

LIGHTING DEMOLITION GENERAL NOTES

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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

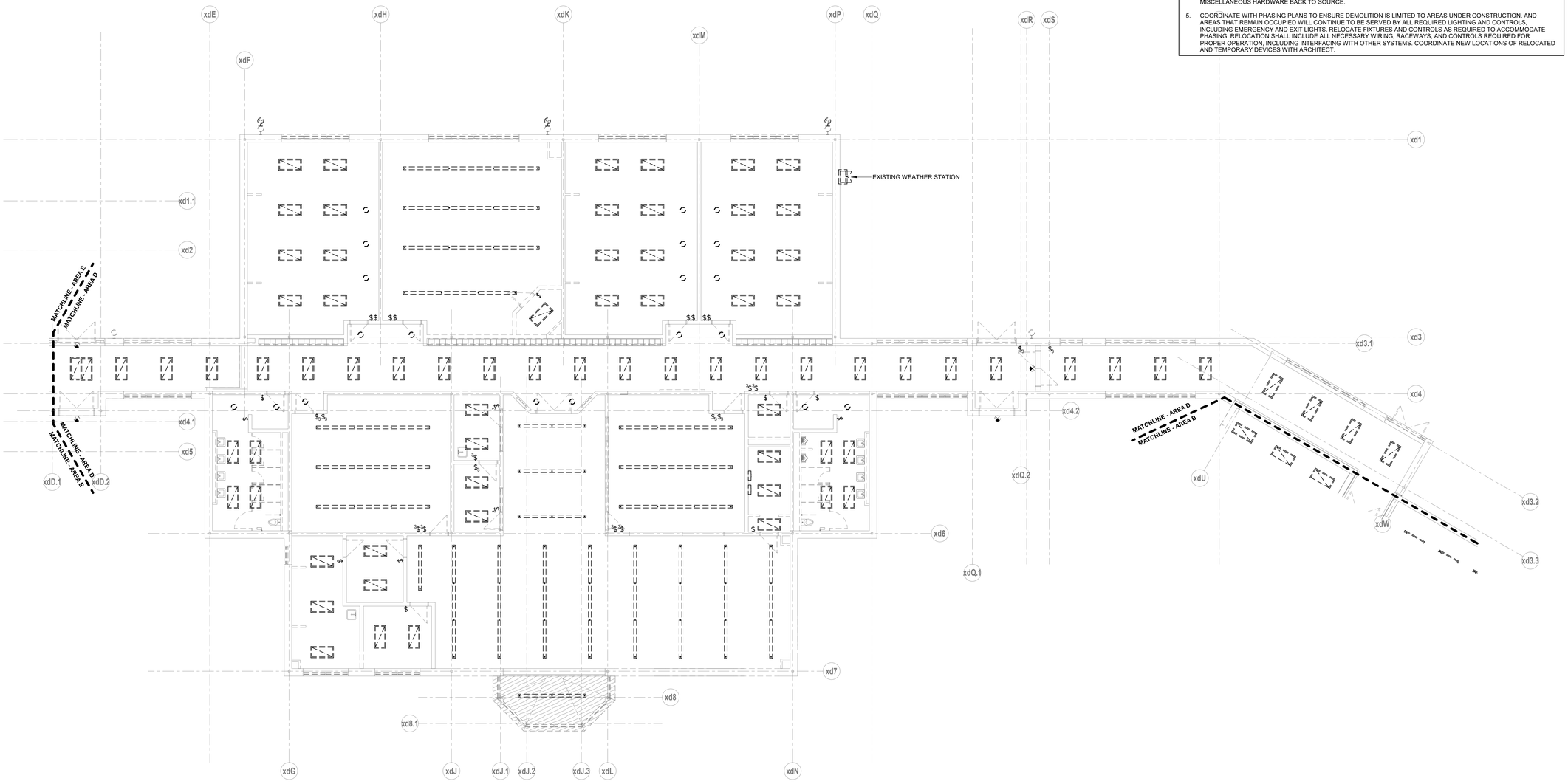
MAIN LEVEL LIGHTING DEMO PLANS - AREAS B & C

DRAWING NO.:
ED1.03

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LIGHTING DEMOLITION GENERAL NOTES

1. UNLESS OTHERWISE NOTED, PROVIDE DEMOLITION OF ALL INTERIOR AND EXTERIOR LIGHTING FIXTURES, DEVICES, AND CONTROLS LOCATED ON THE INTERIOR AND EXTERIOR OF THE BUILDING, INCLUDING ALL EXTERIOR BUILDING MOUNTED LIGHT FIXTURES AND EXTERIOR POLE MOUNTED AND BOLLARD LIGHT FIXTURES.
2. PRIOR TO START OF DEMOLITION, COORDINATE WITH OWNER FOR IDENTIFICATION OF ANY ITEMS OR FIXTURES THAT ARE TO BE REMOVED WITH CARE AND RETURNED TO OWNER FOR REUSE.
3. DEMOLITION SCOPE SHALL BE INCLUSIVE OF ALL ELEMENTS, INCLUDING ANY ITEMS NOT SHOWN.
4. DEMOLITION SHALL INCLUDE REMOVAL OF ALL ASSOCIATED DEVICES, RACEWAYS, BOXES, CONDUCTORS, AND MISCELLANEOUS HARDWARE BACK TO SOURCE.
5. COORDINATE WITH PHASING PLANS TO ENSURE DEMOLITION IS LIMITED TO AREAS UNDER CONSTRUCTION, AND AREAS THAT REMAIN OCCUPIED WILL CONTINUE TO BE SERVED BY ALL REQUIRED LIGHTING AND CONTROLS, INCLUDING EMERGENCY AND EXIT LIGHTS. RELOCATE FIXTURES AND CONTROLS AS REQUIRED TO ACCOMMODATE PHASING. RELOCATION SHALL INCLUDE ALL NECESSARY WIRING, RACEWAYS, AND CONTROLS REQUIRED FOR PROPER OPERATION, INCLUDING INTERFACING WITH OTHER SYSTEMS. COORDINATE NEW LOCATIONS OF RELOCATED AND TEMPORARY DEVICES WITH ARCHITECT.



1 MAIN LEVEL LIGHTING DEMOLITION PLAN - AREA D
1/8" = 1'-0"

KAESTLE BOOS associates, inc

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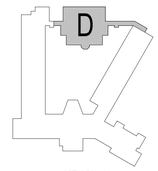
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

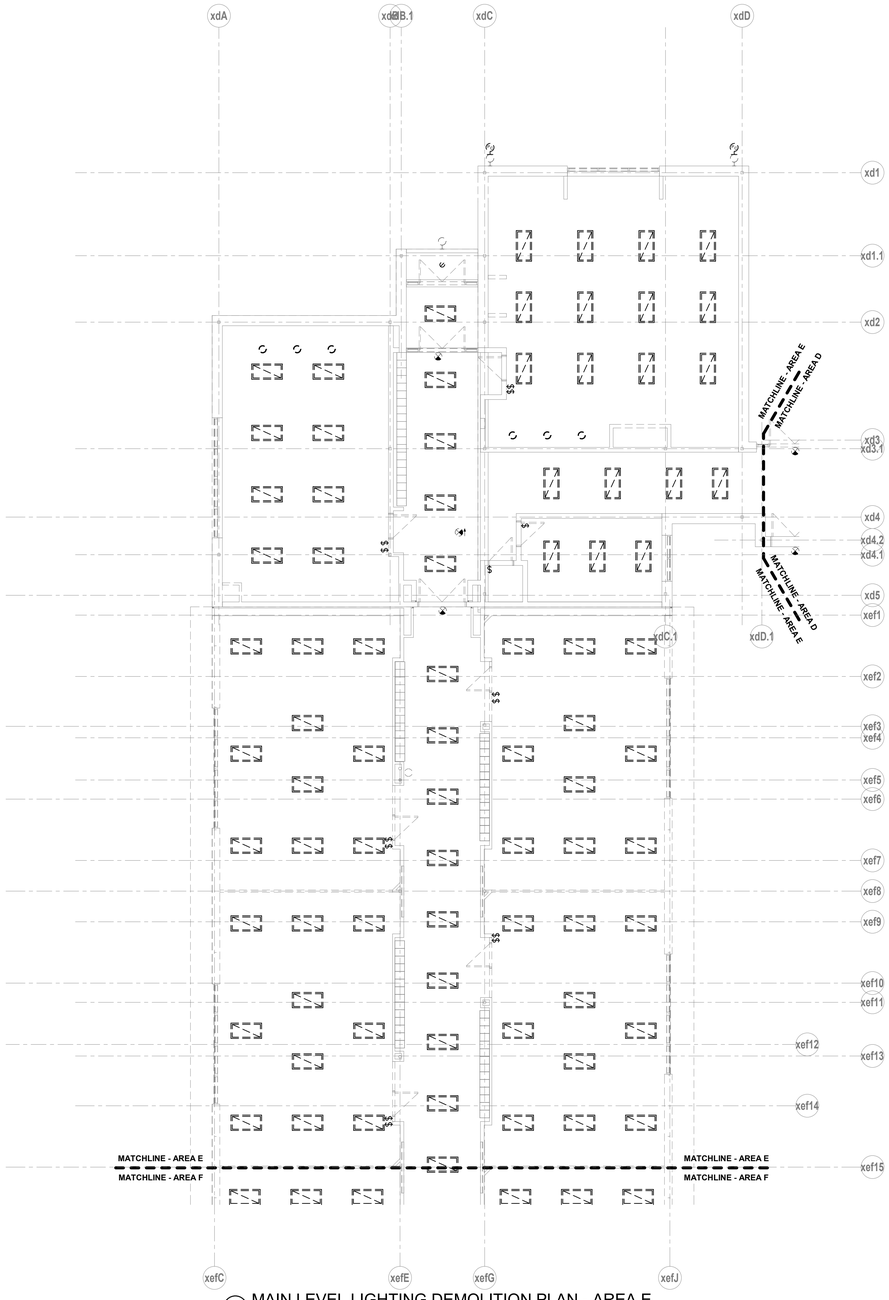
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

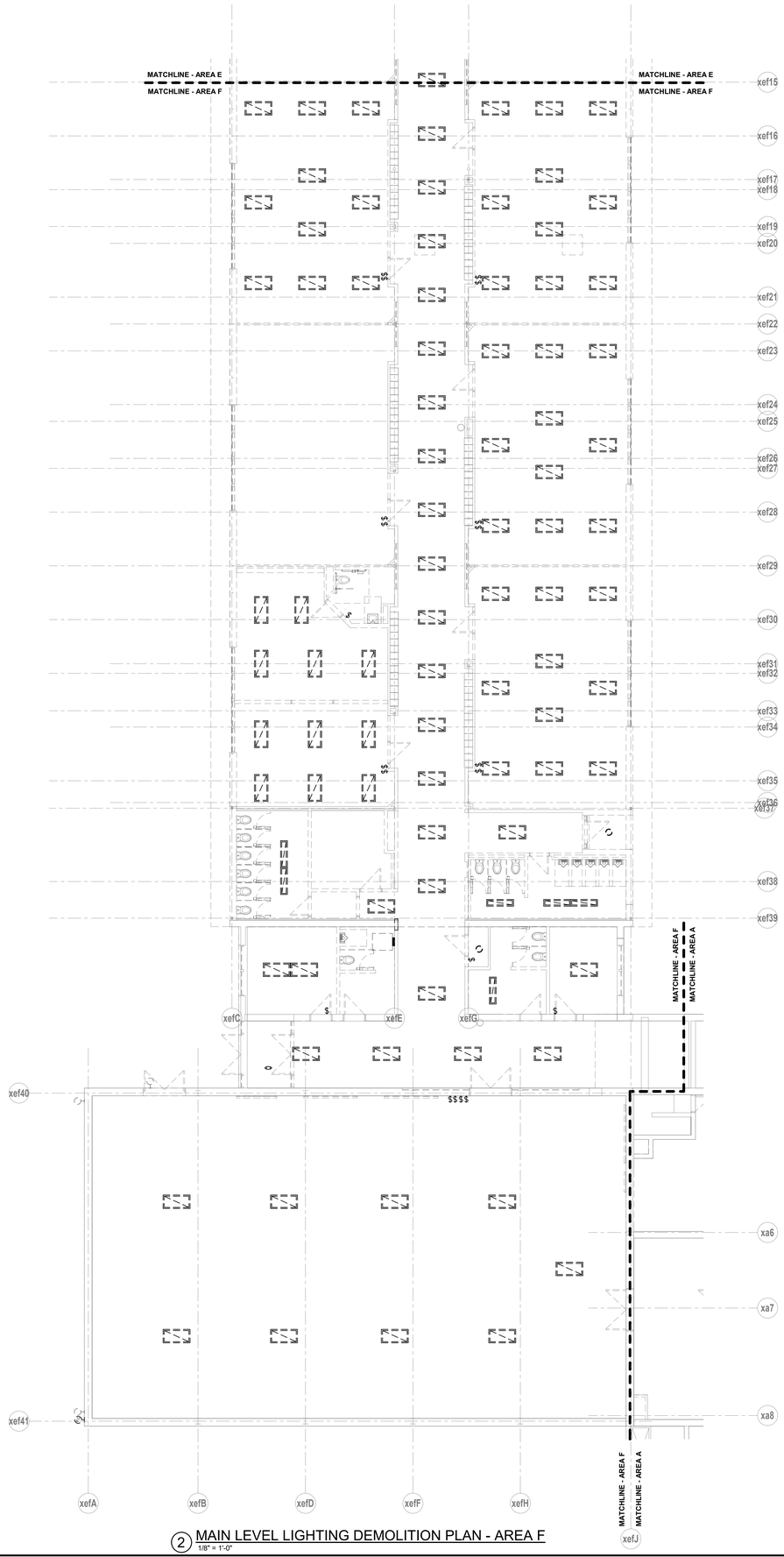
MAIN LEVEL LIGHTING DEMO PLAN - AREA D

DRAWING NO.:
ED1.04

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1 MAIN LEVEL LIGHTING DEMOLITION PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL LIGHTING DEMOLITION PLAN - AREA F
1/8" = 1'-0"

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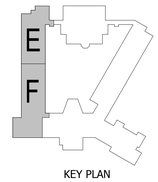
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KEY PLAN

SCALE: 1/8" = 1'-0" 0' 4' 8' 16' PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL LIGHTING DEMO PLANS - AREAS E & F

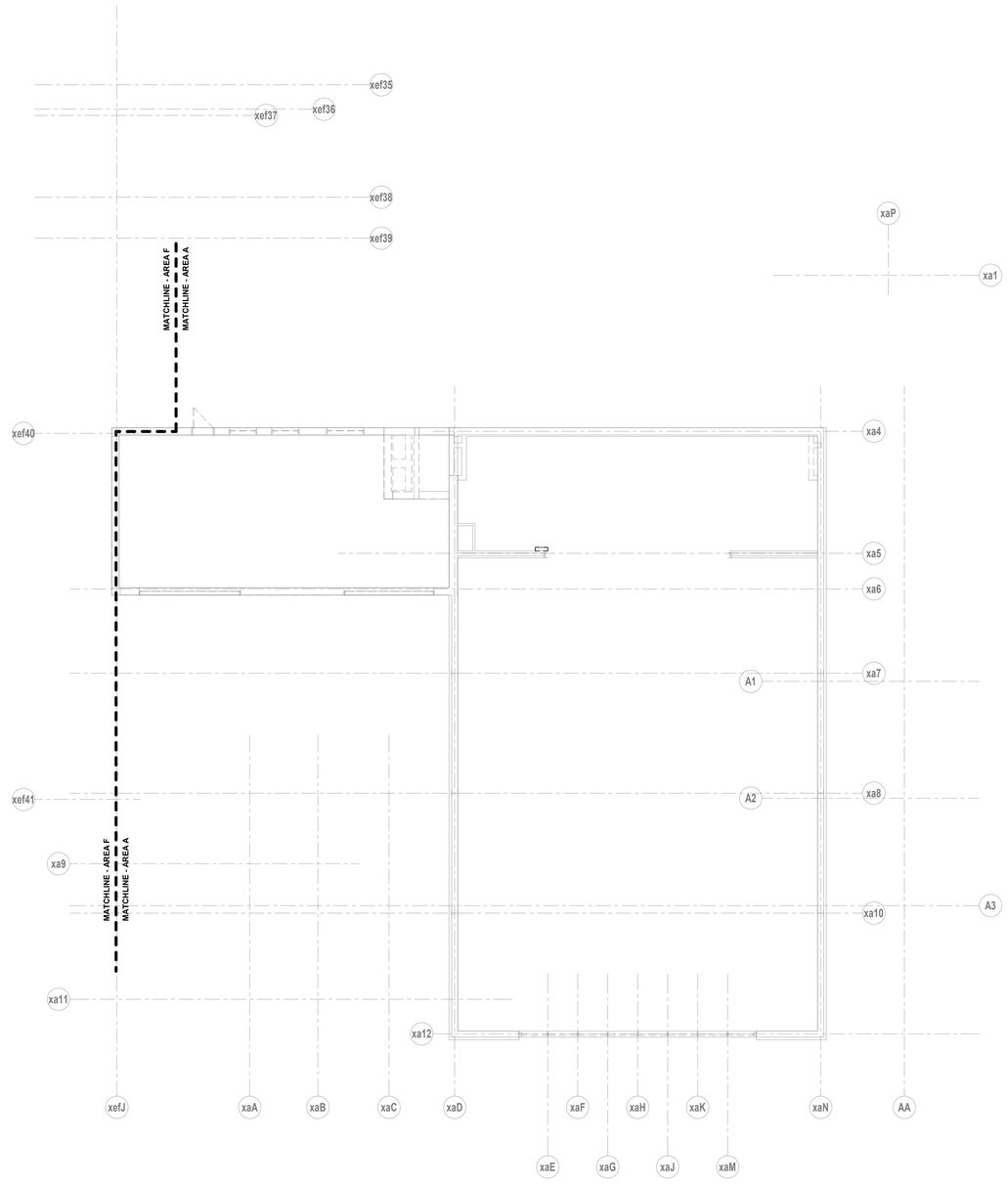
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1 UPPER LEVEL LIGHTING DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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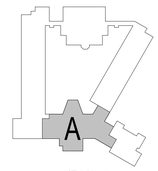
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JANUARY 14, 2022	PHASE 1 OF 3

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

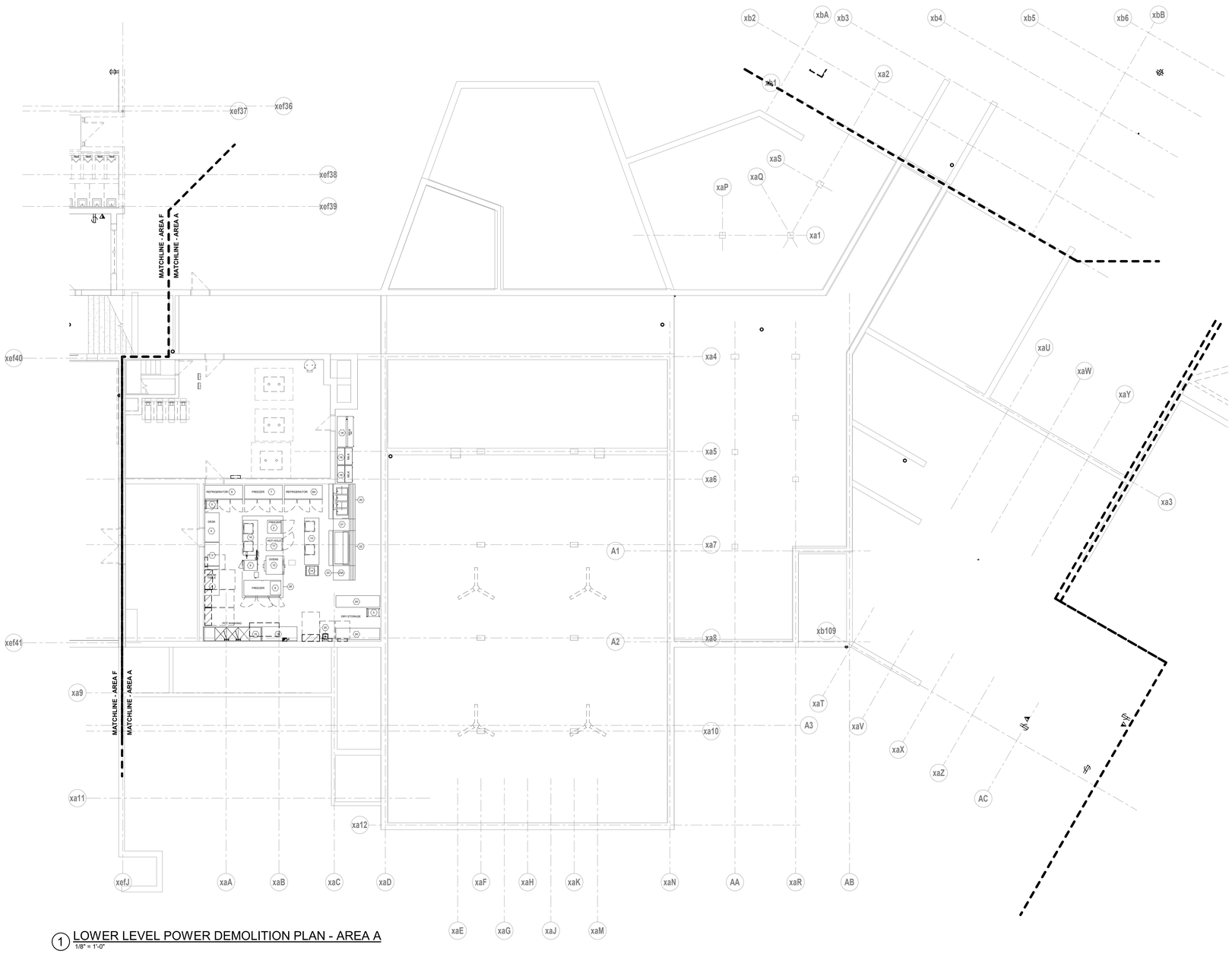
UPPER LEVEL LIGHTING DEMO PLAN - AREA A

DRAWING NO.:
ED1.06

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POWER DEMOLITION GENERAL NOTES

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1 LOWER LEVEL POWER DEMOLITION PLAN - AREA A
1/8" = 1'-0"

KAESTLE BOOS associates, inc

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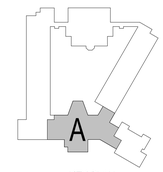
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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

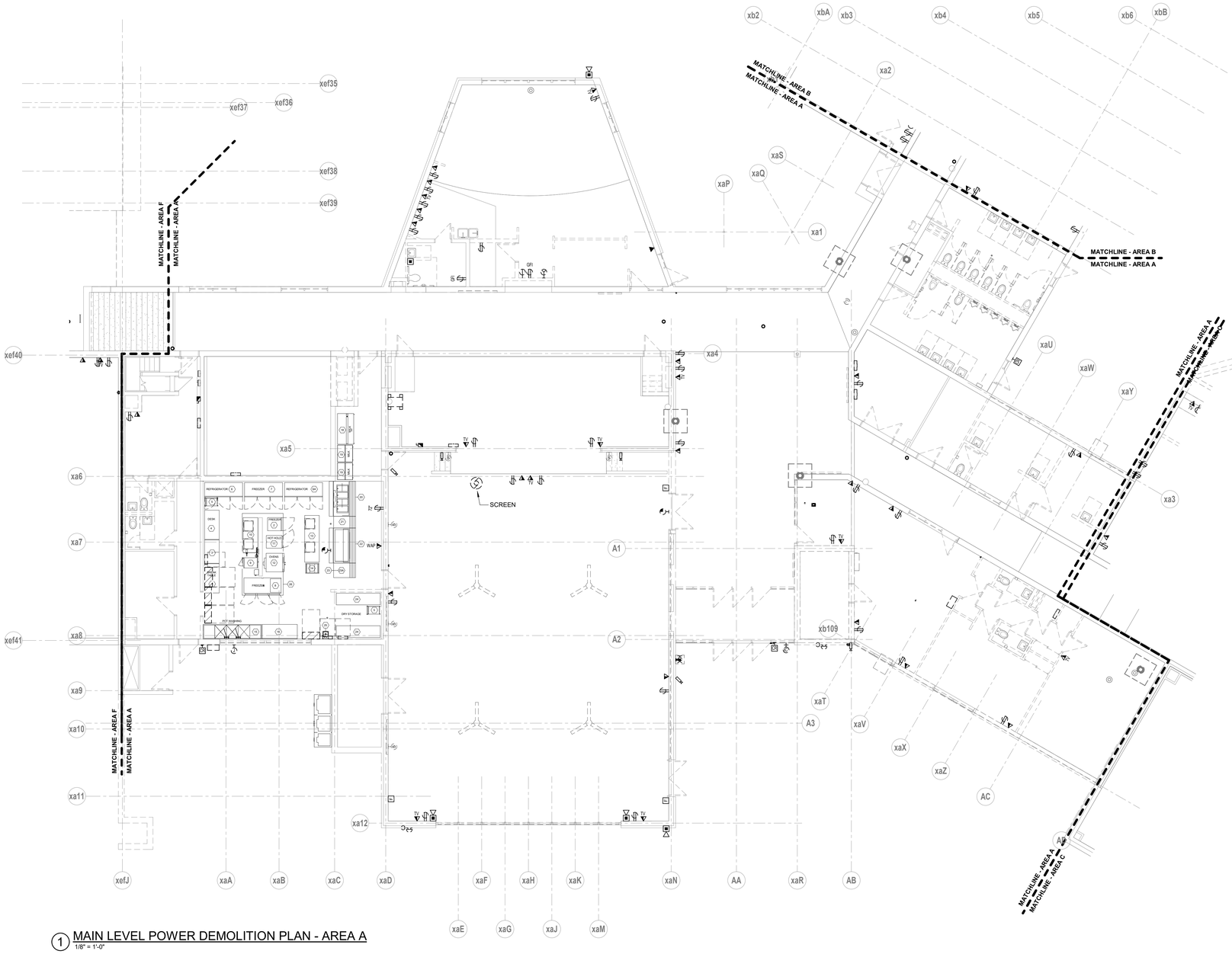
LOWER LEVEL POWER DEMO PLAN - AREA A

DRAWING NO.:
ED2.01

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POWER DEMOLITION GENERAL NOTES

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1 MAIN LEVEL POWER DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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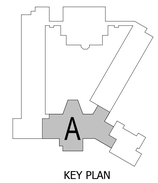
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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16') PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

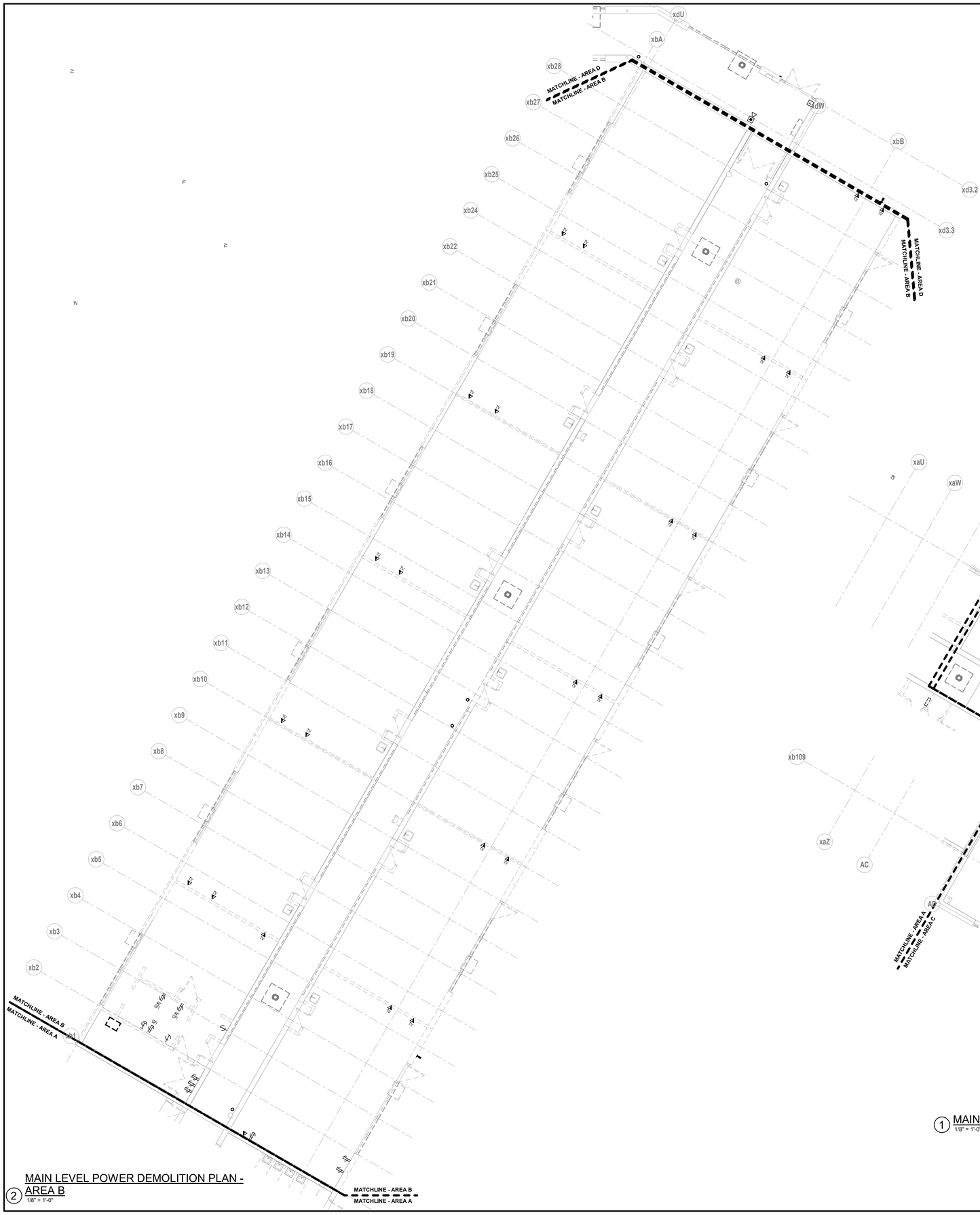
MAIN LEVEL POWER DEMO PLAN - AREA A

DRAWING NO.:
ED2.02

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POWER DEMOLITION GENERAL NOTES

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1 MAIN LEVEL POWER DEMOLITION PLAN - AREA C
1/8" = 1'-0"

2 MAIN LEVEL POWER DEMOLITION PLAN - AREA B
1/8" = 1'-0"

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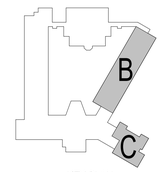
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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

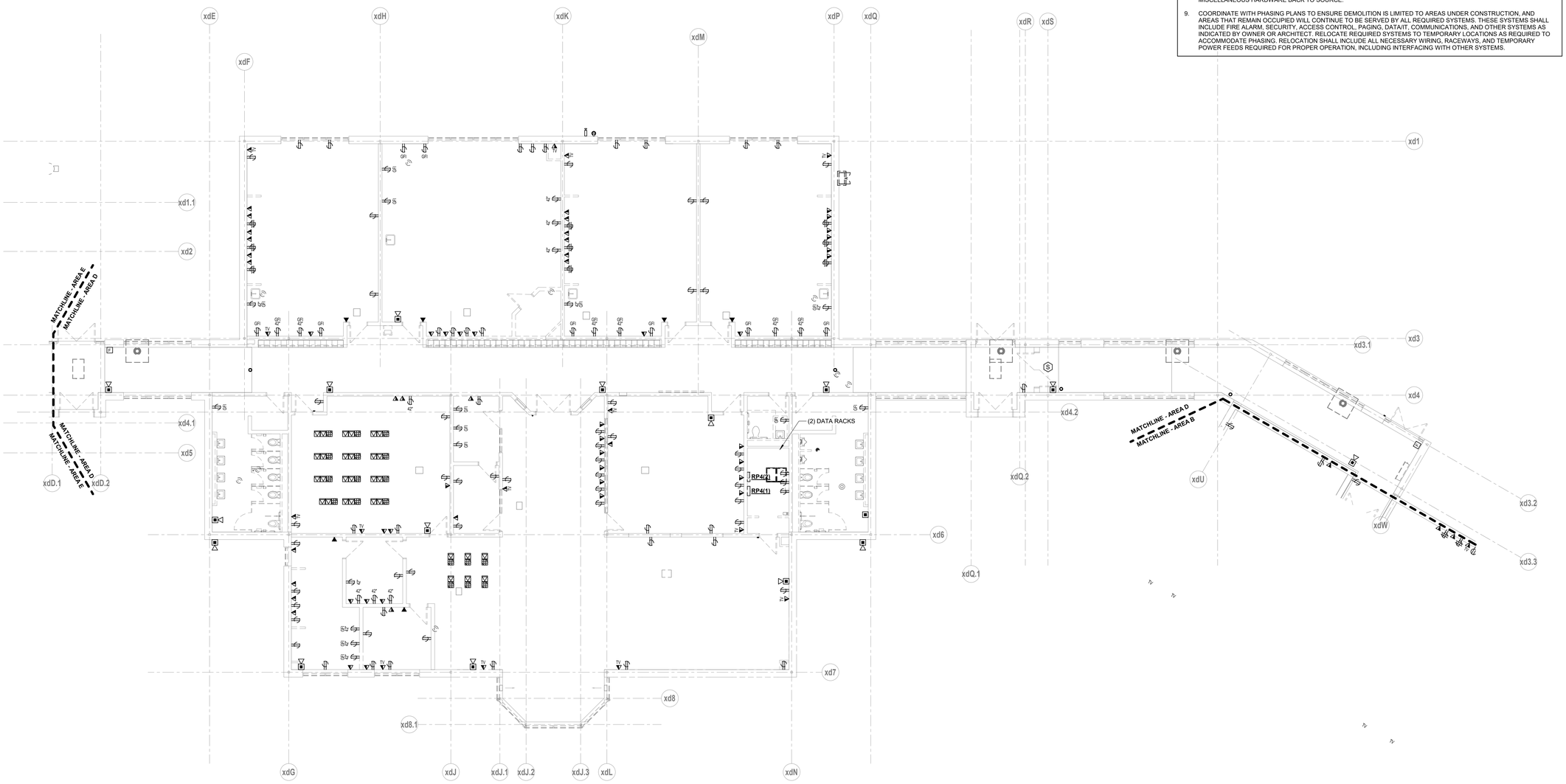
MAIN LEVEL POWER DEMO PLANS - AREAS B & C

DRAWING NO.:
ED2.03

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POWER DEMOLITION GENERAL NOTES

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4. PRIOR TO START OF DEMOLITION, COORDINATE WITH OWNER FOR IDENTIFICATION OF ANY ITEMS THAT ARE TO BE REMOVED WITH CARE AND RETURNED TO OWNER FOR REUSE.
5. ELECTRICAL DEMOLITION SCOPE SHALL BE INCLUSIVE OF ANY ITEMS NOT SHOWN.
6. COORDINATE WITH MECHANICAL AND PLUMBING PLANS AND REMOVE ALL POWER FEEDS, DISCONNECTS, CONTROLS, AND ASSOCIATED ELECTRICAL ELEMENTS FOR ALL MECHANICAL AND PLUMBING DEVICES BEING REMOVED.
7. EXCEPT WHERE OTHERWISE INDICATED, ALL ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE REMOVED.
8. DEMOLITION SHALL INCLUDE REMOVAL OF ALL ASSOCIATED DEVICES, RACEWAYS, BOXES, CONDUCTORS, AND MISCELLANEOUS HARDWARE BACK TO SOURCE.
9. COORDINATE WITH PHASING PLANS TO ENSURE DEMOLITION IS LIMITED TO AREAS UNDER CONSTRUCTION, AND AREAS THAT REMAIN OCCUPIED WILL CONTINUE TO BE SERVED BY ALL REQUIRED SYSTEMS. THESE SYSTEMS SHALL INCLUDE FIRE ALARM, SECURITY, ACCESS CONTROL, PAGING, DATA/IT, COMMUNICATIONS, AND OTHER SYSTEMS AS INDICATED BY OWNER OR ARCHITECT. RELOCATE REQUIRED SYSTEMS TO TEMPORARY LOCATIONS AS REQUIRED TO ACCOMMODATE PHASING. RELOCATION SHALL INCLUDE ALL NECESSARY WIRING, RACEWAYS, AND TEMPORARY POWER FEEDS REQUIRED FOR PROPER OPERATION, INCLUDING INTERFACING WITH OTHER SYSTEMS.



1 MAIN LEVEL POWER DEMOLITION PLAN - AREA D
1/8" = 1'-0"

KAESTLE BOOS associates, inc

416 Slater Road, New Britain, CT 06053
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Additional offices located in Massachusetts and Rhode Island
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750 OLD MAIN STREET
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ROCKY HILL, CT 06067
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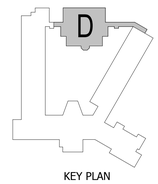
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN



SCALE: 1/8" = 1'-0" (0" 4" 8" 16") PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

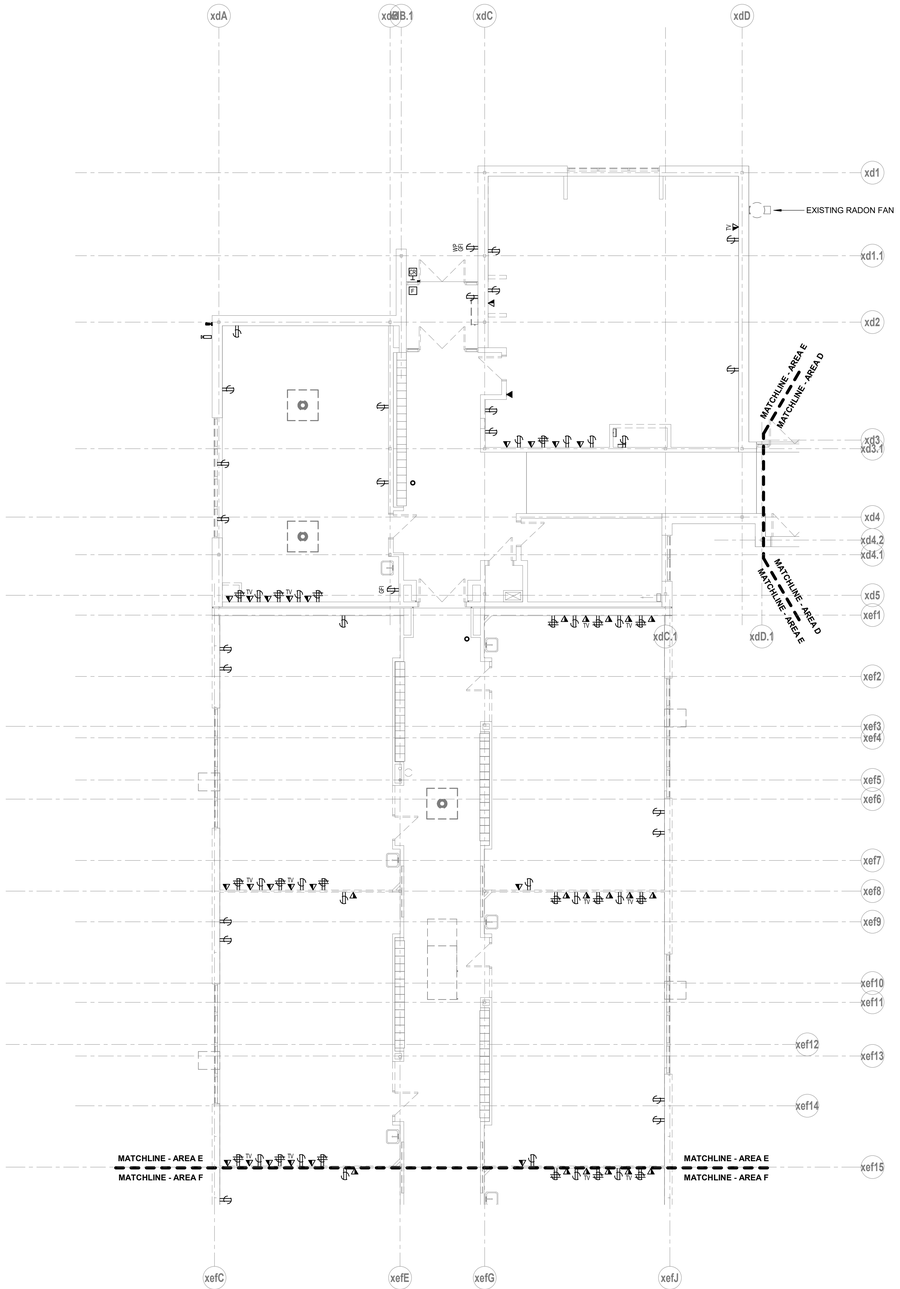
PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL POWER DEMO PLAN - AREA D

DRAWING NO.:

ED2.04

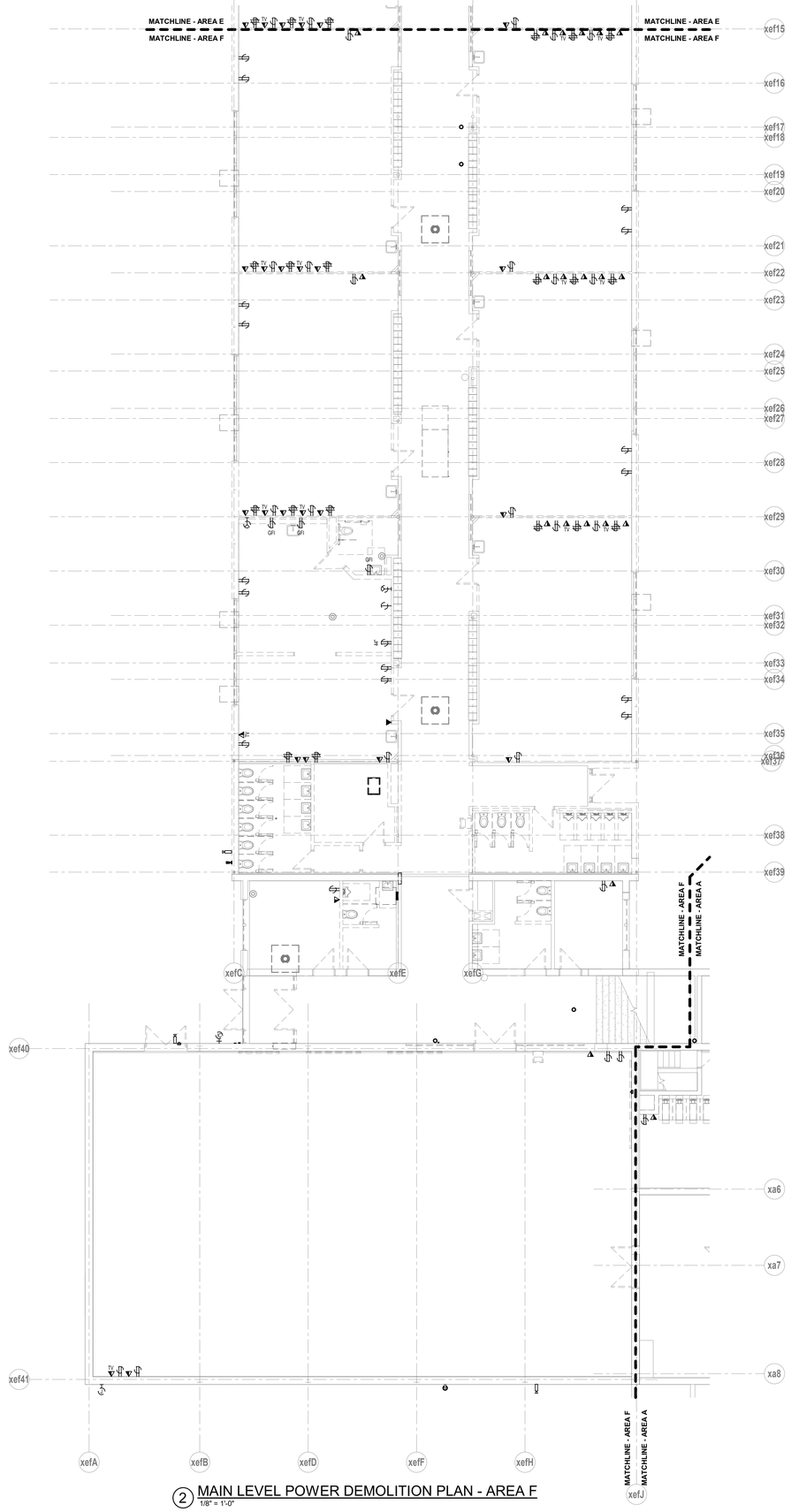
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1 MAIN LEVEL POWER DEMOLITION PLAN - AREA E
1/8" = 1'-0"

POWER DEMOLITION GENERAL NOTES

1. UNLESS OTHERWISE NOTED, PROVIDE DEMOLITION OF ALL TELEPHONE, DATA, INTERCOM, FIRE ALARM, COMMUNICATIONS, SECURITY, NOTIFICATION, AND ACCESS CONTROL EQUIPMENT AND CONTROLS WITHIN THE SPECIFIED PROJECT AREA.
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2 MAIN LEVEL POWER DEMOLITION PLAN - AREA F
1/8" = 1'-0"

KAESTLE BOOS associates, inc

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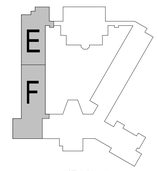
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REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL POWER DEMO PLANS - AREAS E & F

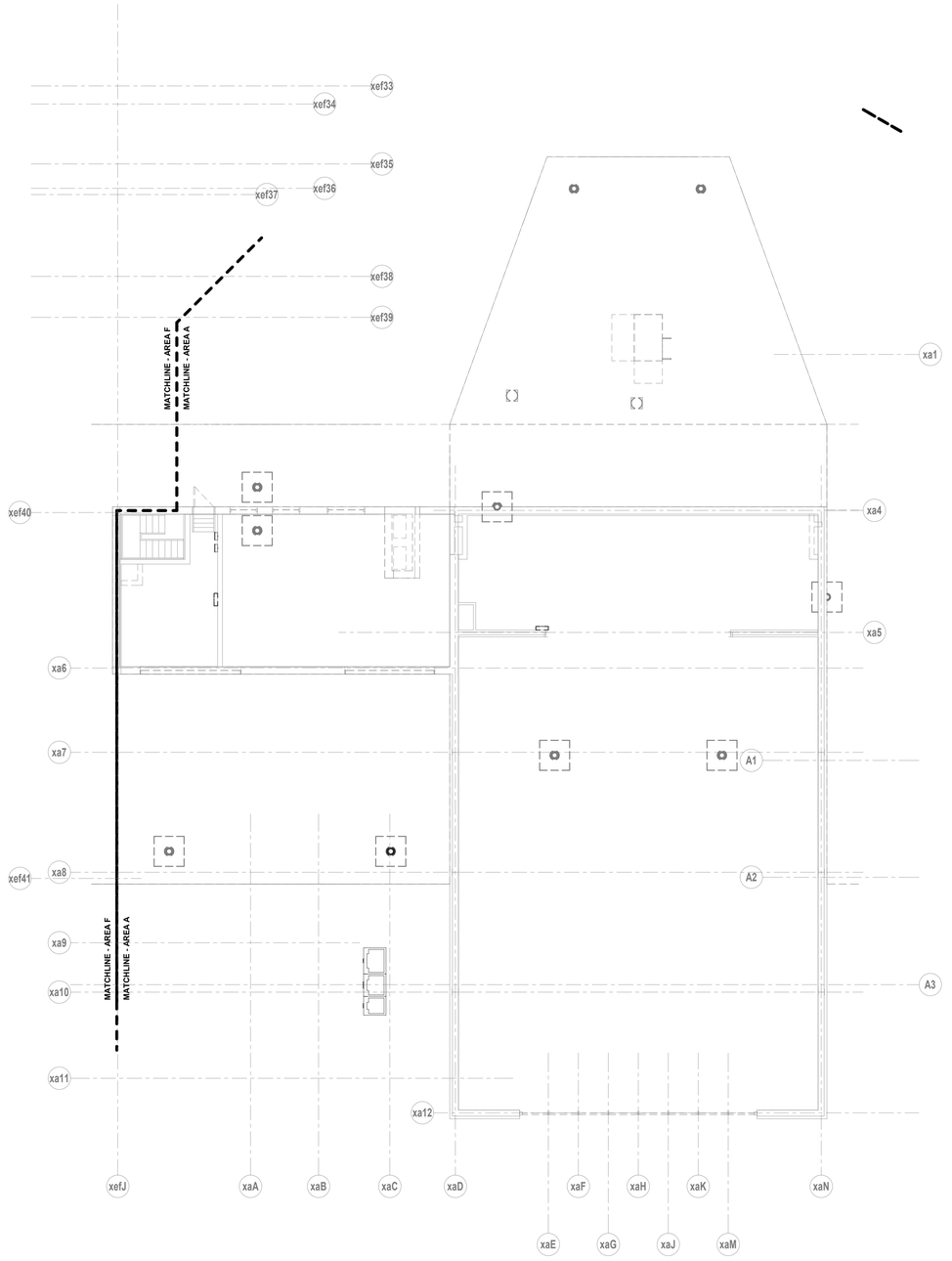
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POWER DEMOLITION GENERAL NOTES

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1 UPPER LEVEL POWER DEMOLITION PLAN - AREA A
1/8" = 1'-0"

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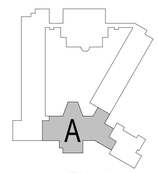
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

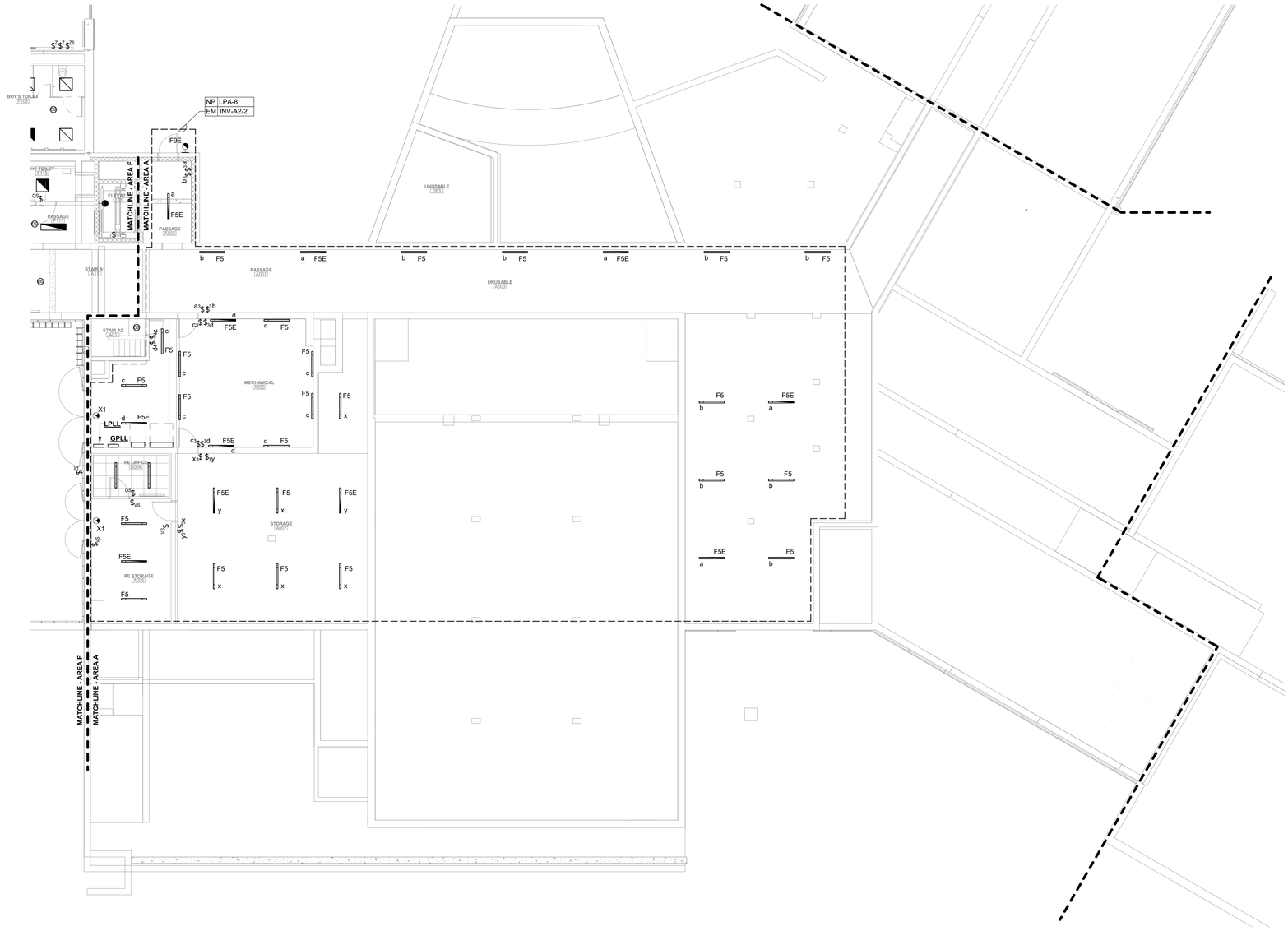
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

UPPER LEVEL POWER DEMO PLAN - AREA A

DRAWING NO.:
ED2.06

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1 LOWER LEVEL LIGHTING PLAN - AREA A
1/8" = 1'-0"

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KEY PLAN

SCALE: 1/8" = 1'-0"

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

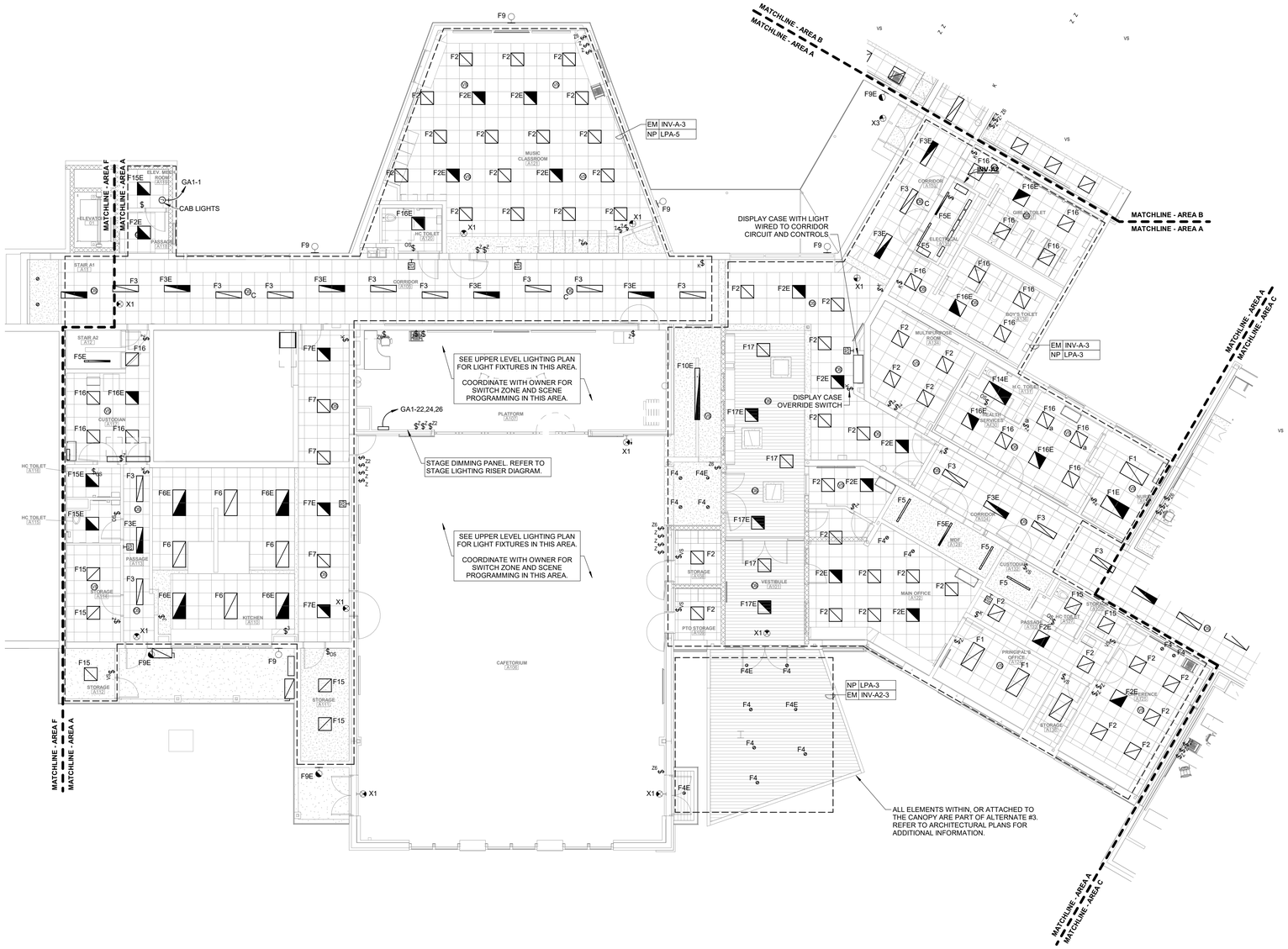
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

LOWER LEVEL LIGHTING PLAN - AREA A

DRAWING NO.:
E1.01

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1 MAIN LEVEL LIGHTING PLAN - AREA A
1/8" = 1'-0"

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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

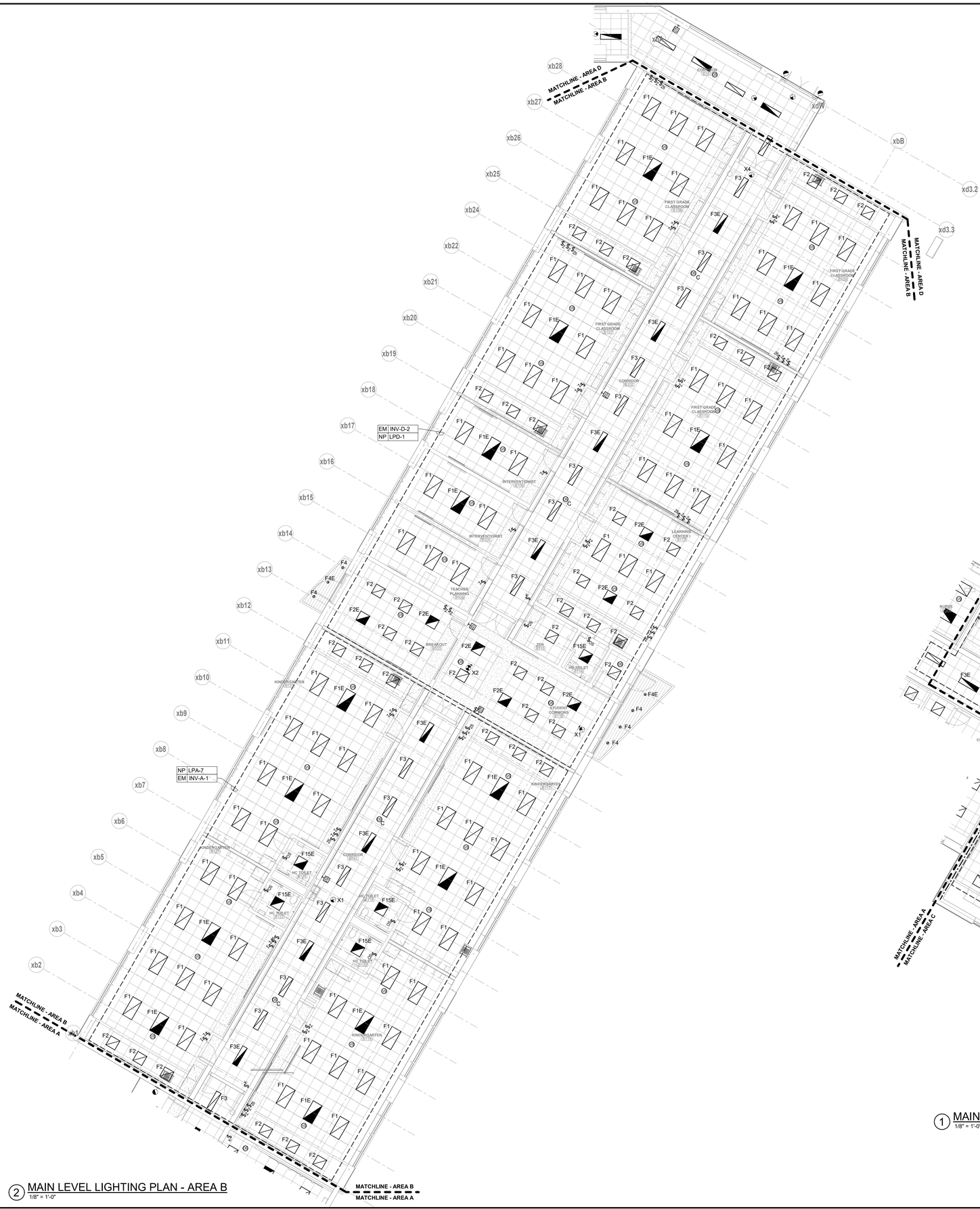
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PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL LIGHTING PLAN - AREA A

DRAWING NO.:
E1.02

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2 MAIN LEVEL LIGHTING PLAN - AREA B
1/8" = 1'-0"



1 MAIN LEVEL LIGHTING PLAN - AREA C
1/8" = 1'-0"

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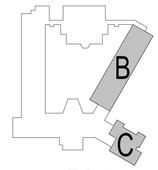
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

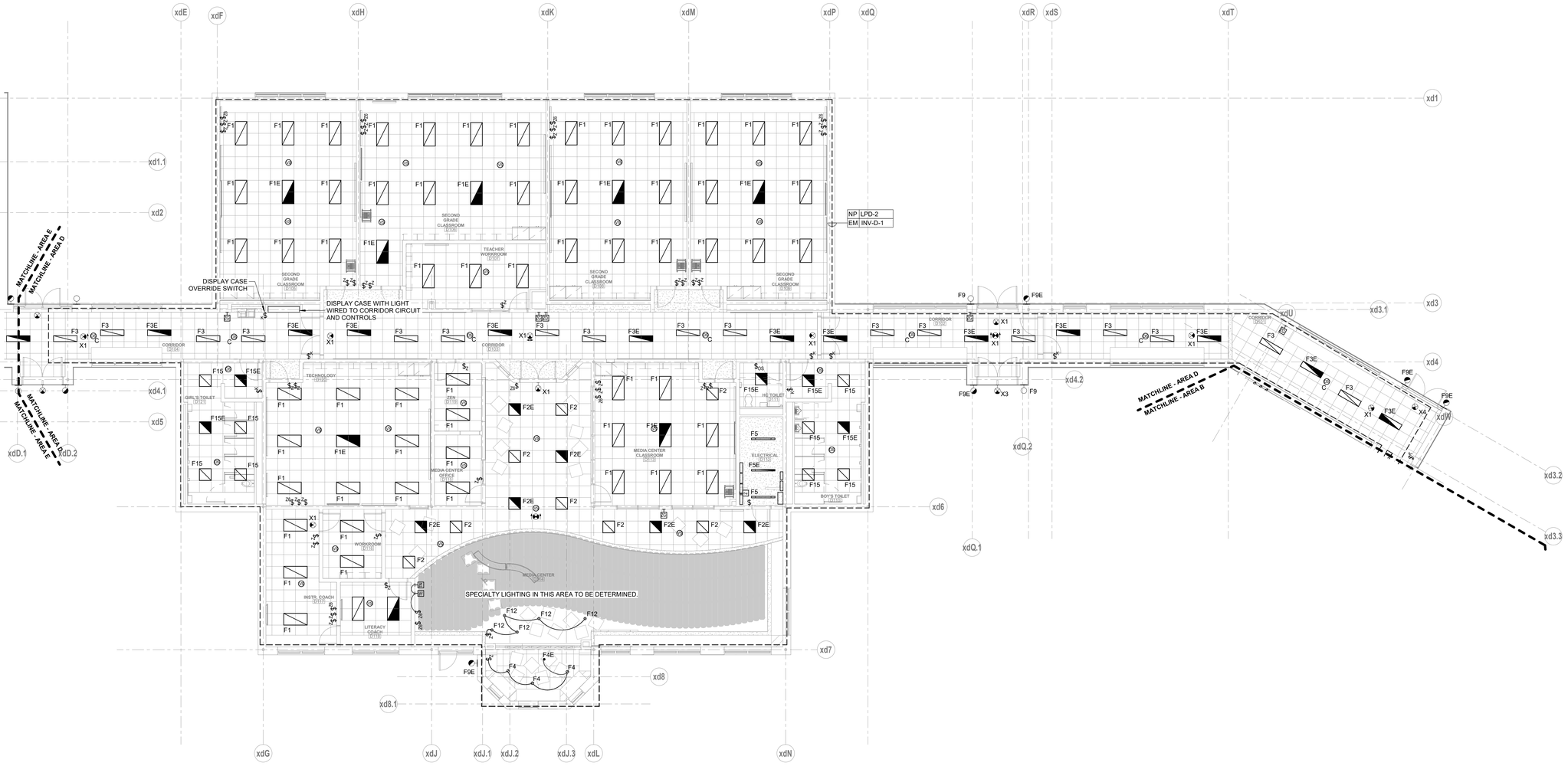
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MAIN LEVEL LIGHTING PLANS - AREAS B & C

DRAWING NO.:
E1.03

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1 MAIN LEVEL LIGHTING PLAN - AREA D
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

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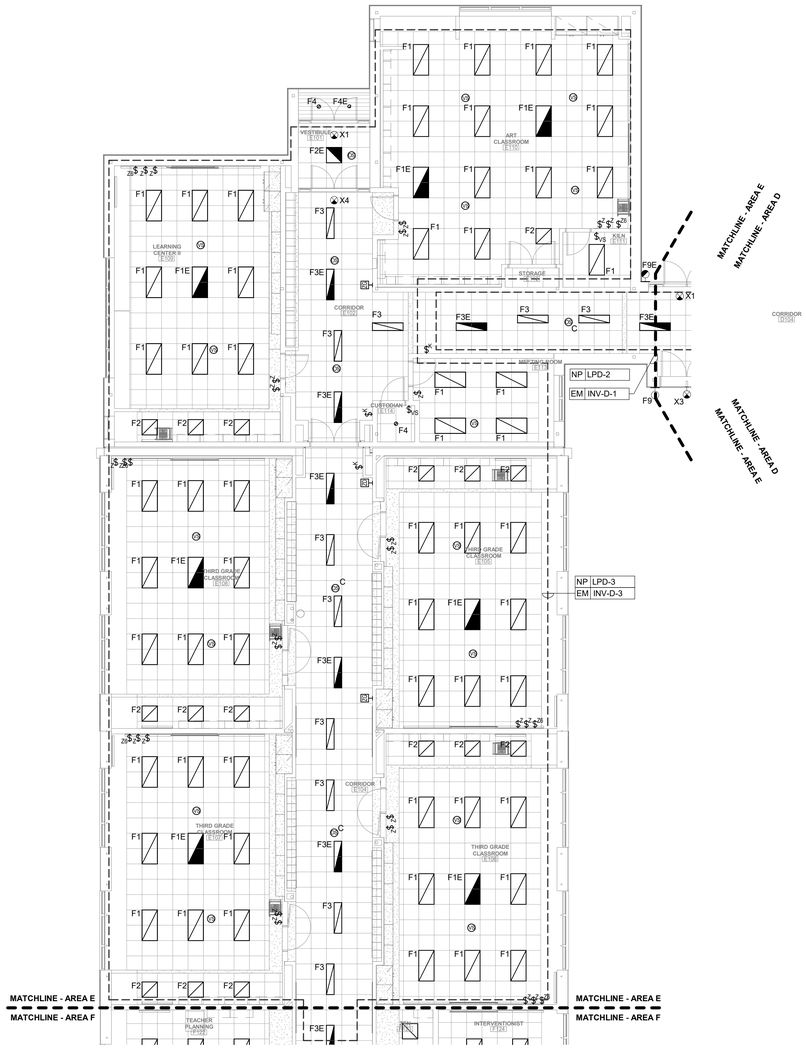
85 RESERVOIR ROAD
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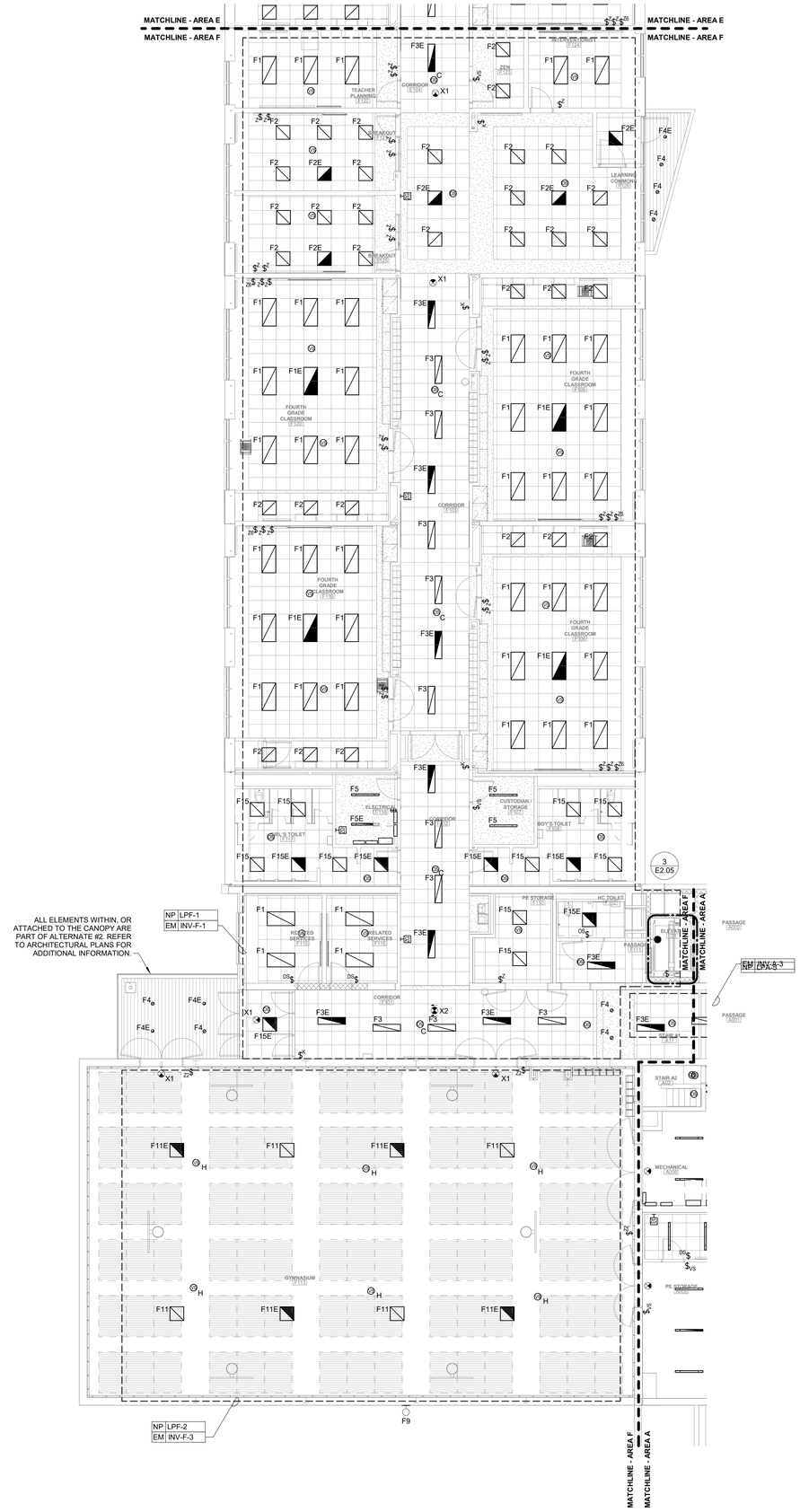
MAIN LEVEL LIGHTING PLAN - AREA D

DRAWING NO.:
E1.04

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1 MAIN LEVEL LIGHTING PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL LIGHTING PLAN - AREA F
1/8" = 1'-0"

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KEY PLAN

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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

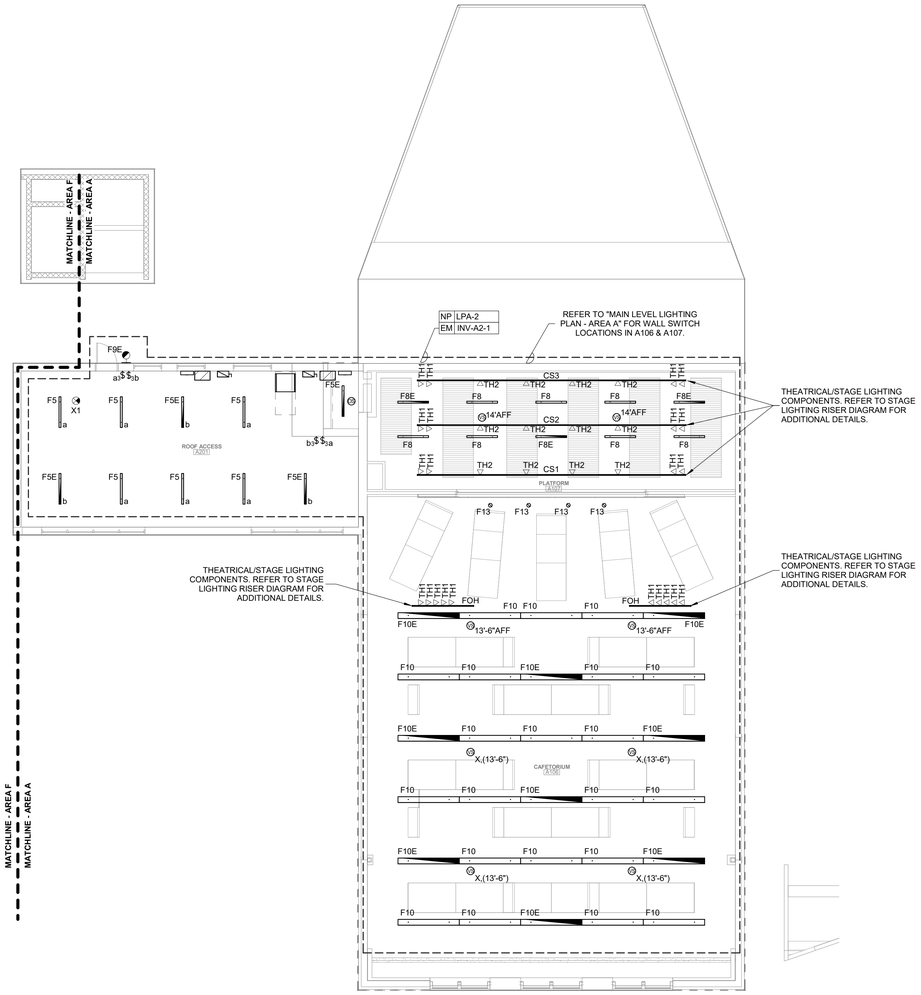
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MAIN LEVEL LIGHTING PLANS - AREAS E & F

DRAWING NO.:
E1.05

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1 UPPER LEVEL LIGHTING PLAN - AREA A
1/8" = 1'-0"

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PROJECT TRUE

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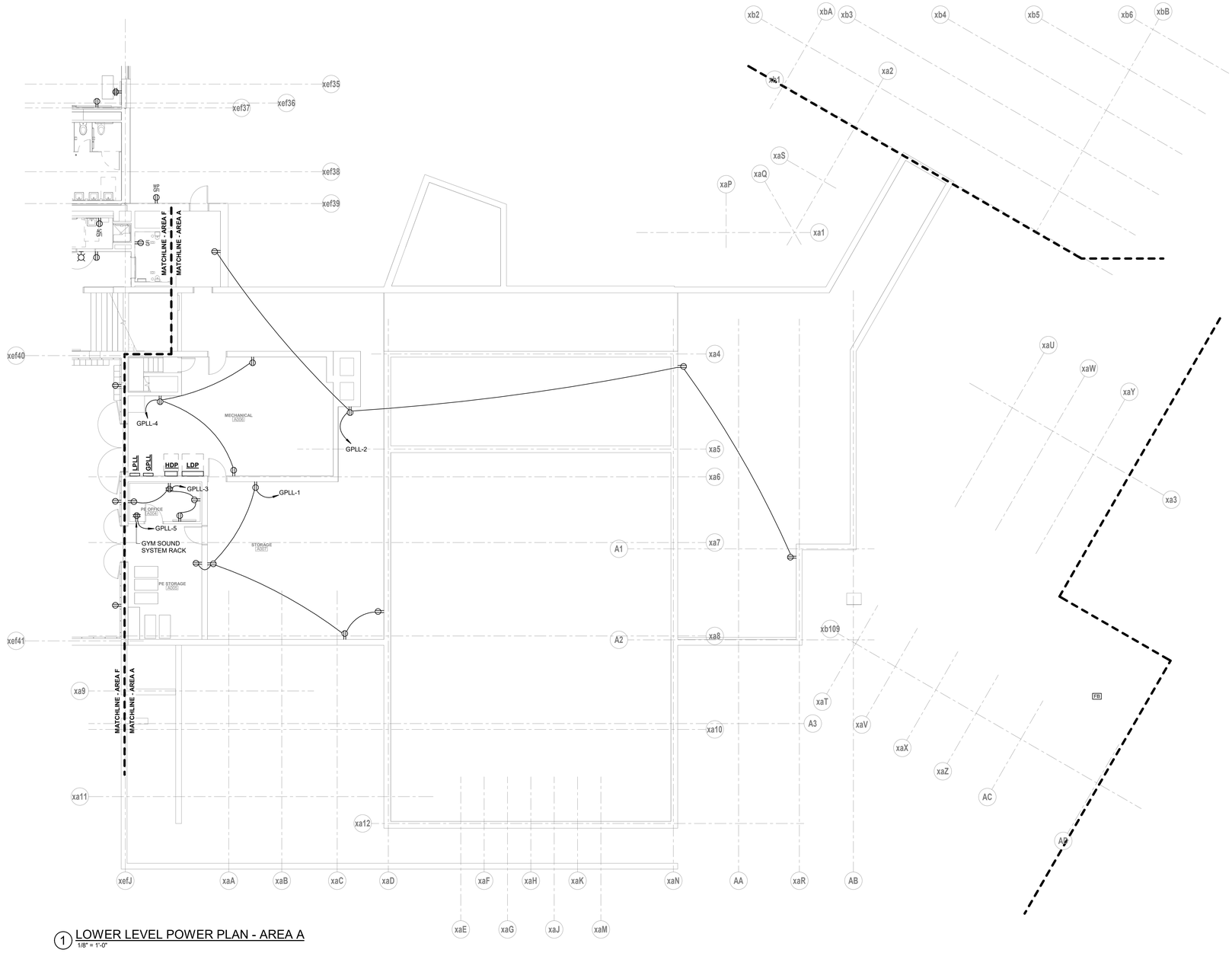
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UPPER LEVEL LIGHTING PLAN - AREA A

DRAWING NO.:
E1.06

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1 LOWER LEVEL POWER PLAN - AREA A
1/8" = 1'-0"

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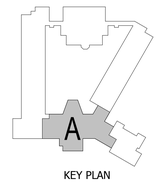
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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

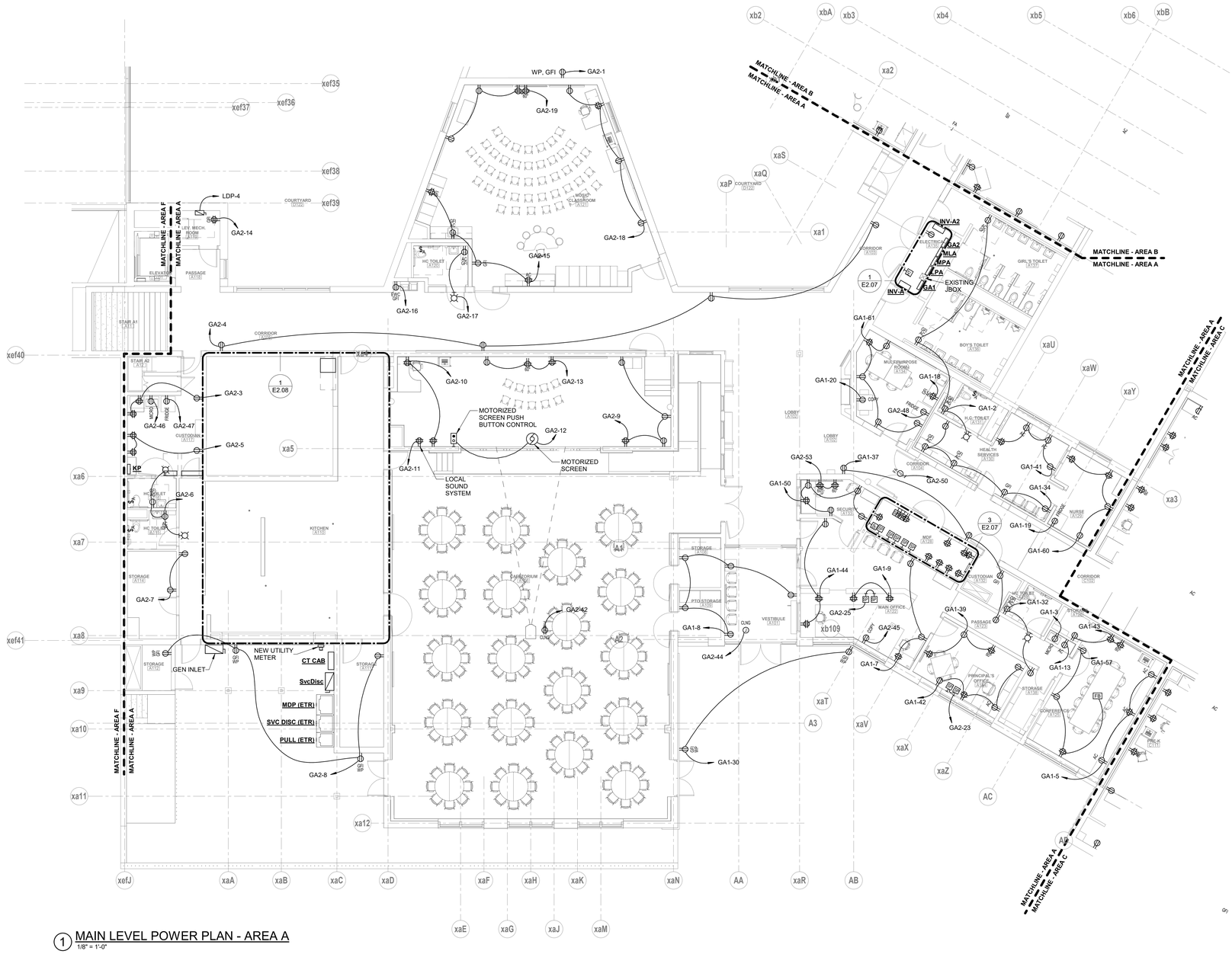
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

LOWER LEVEL POWER PLAN - AREA A

DRAWING NO.:
E2.01

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1 MAIN LEVEL POWER PLAN - AREA A
1/8" = 1'-0"

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL POWER PLAN - AREA A

DRAWING NO.:
E2.02

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2 MAIN LEVEL POWER PLAN - AREA B
1/8" = 1'-0"

1 MAIN LEVEL POWER PLAN - AREA C
1/8" = 1'-0"

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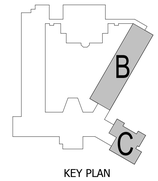
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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

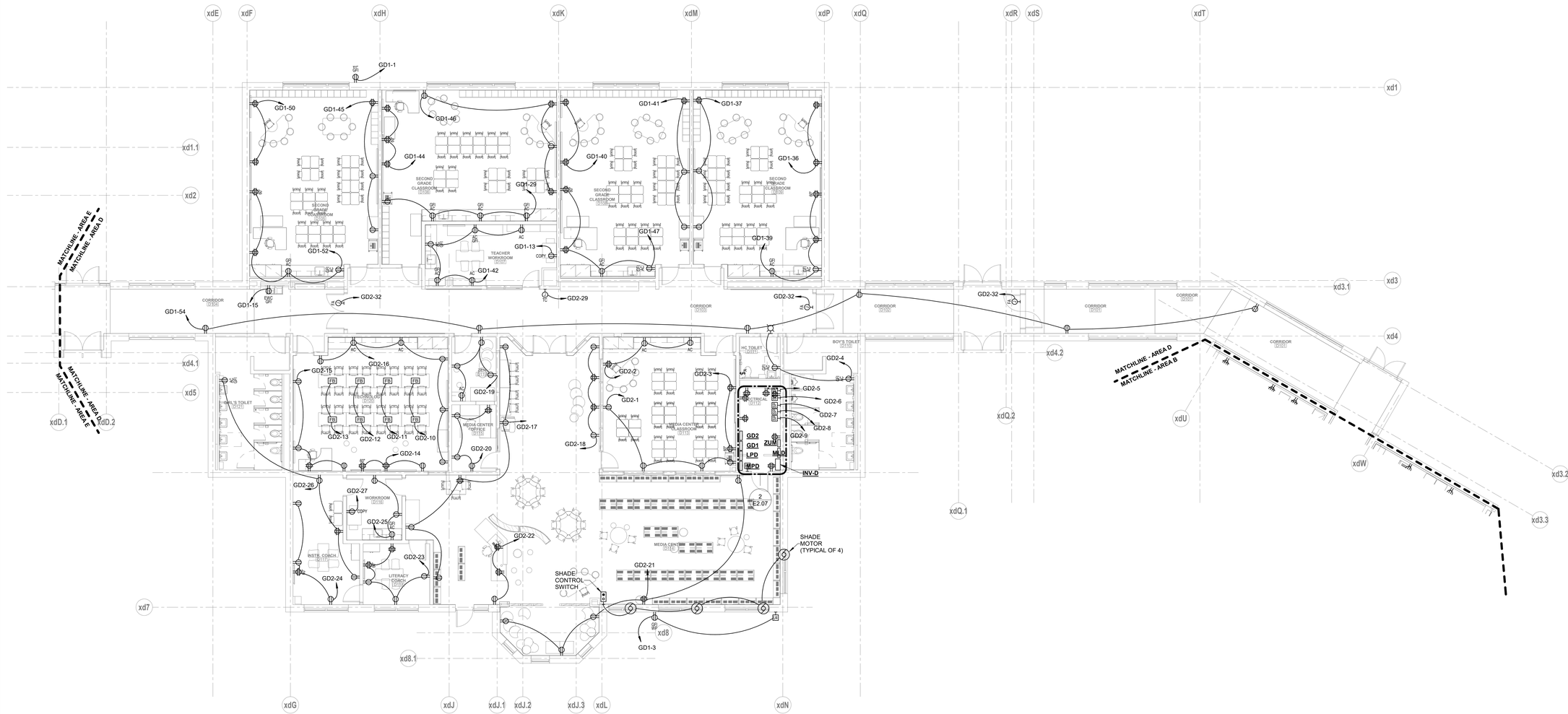
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MAIN LEVEL POWER PLANS - AREAS B & C

DRAWING NO.:
E2.03

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1 MAIN LEVEL POWER PLAN - AREA D
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

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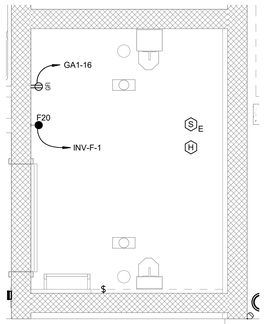
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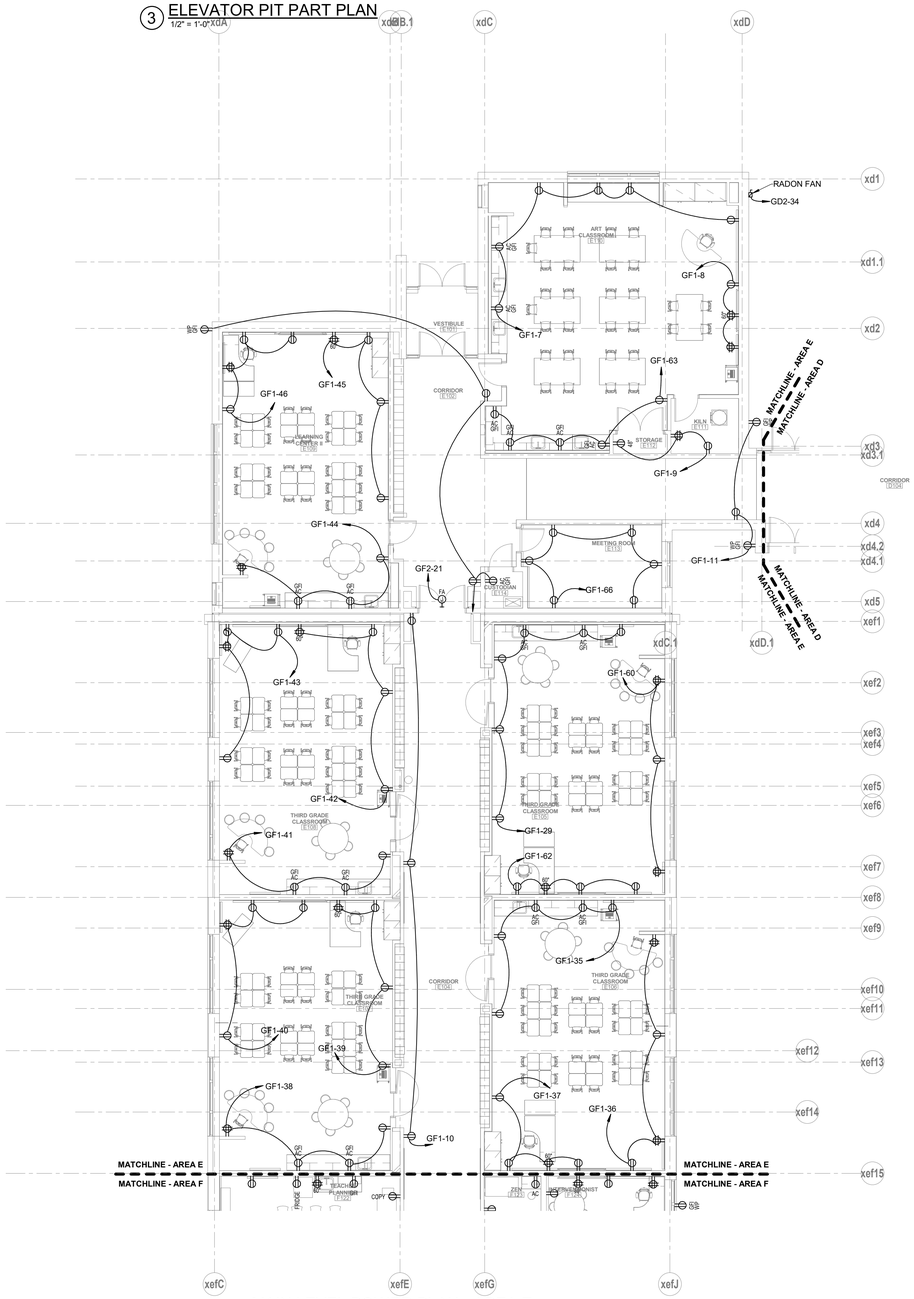
MAIN LEVEL POWER PLAN - AREA D

DRAWING NO.:
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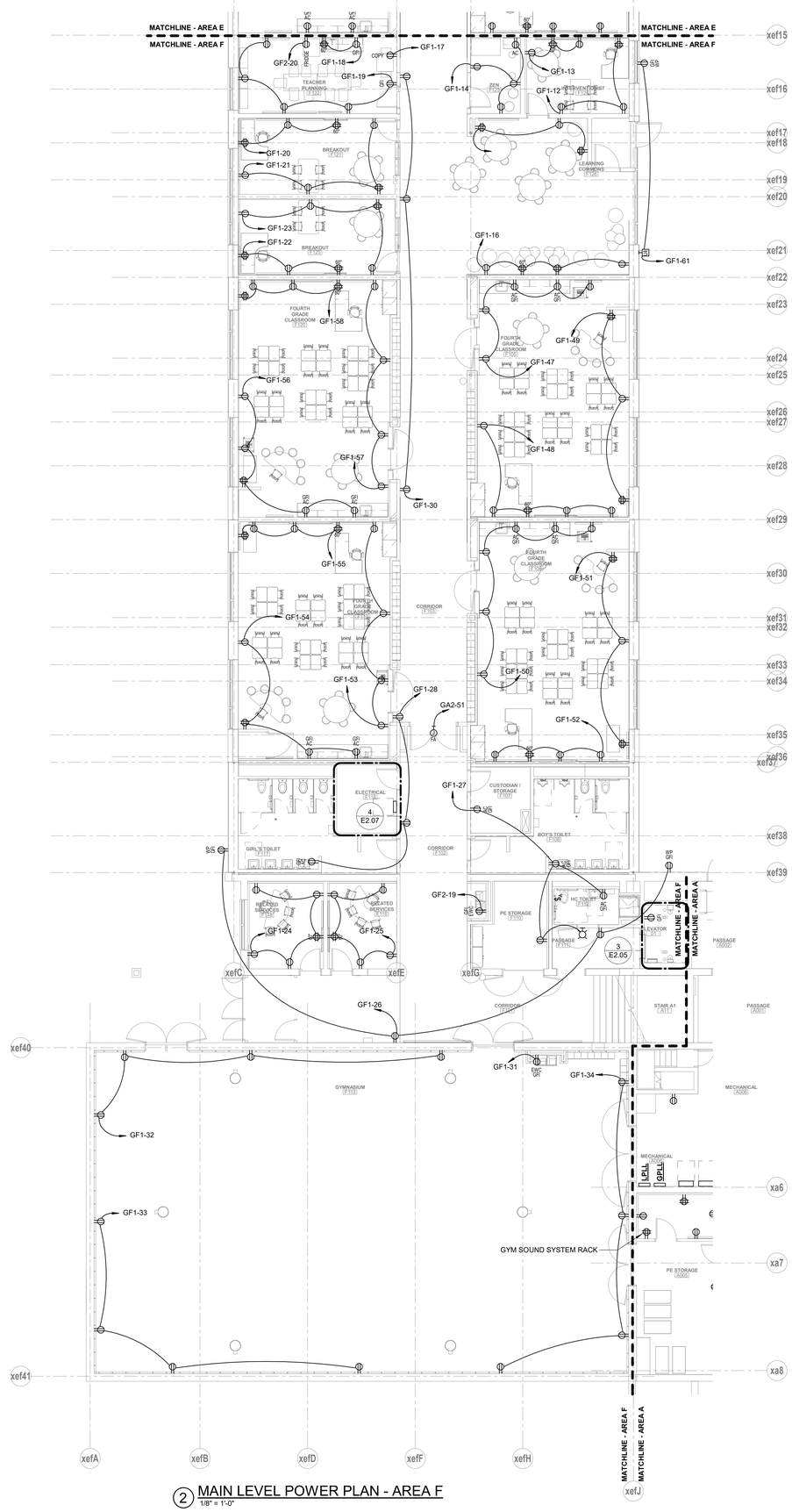
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3 ELEVATOR PIT PART PLAN
1/2" = 1'-0"



1 MAIN LEVEL POWER PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL POWER PLAN - AREA F
1/8" = 1'-0"

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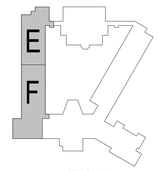
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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

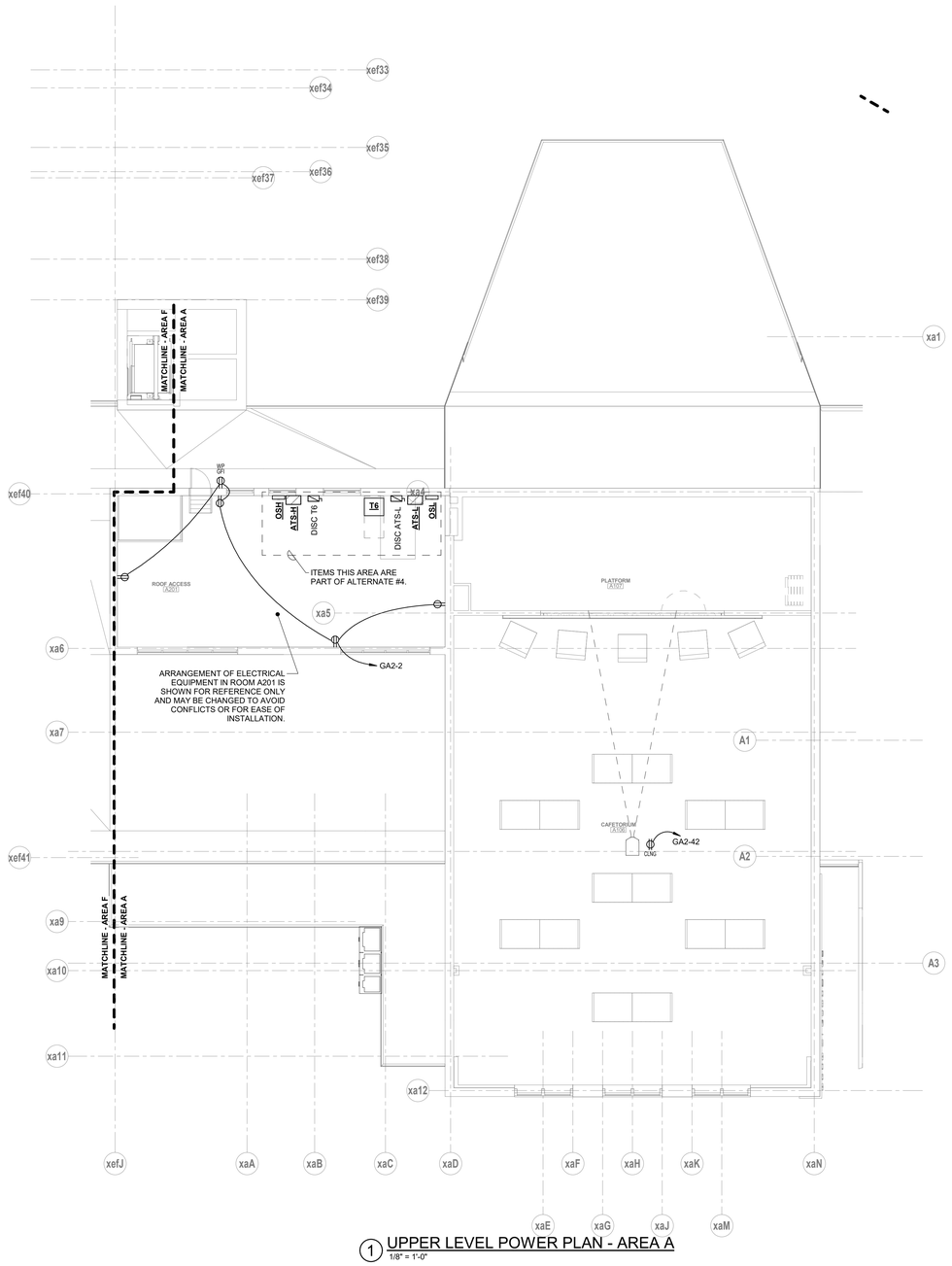
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MAIN LEVEL POWER PLANS - AREAS E & F

DRAWING NO.:
E2.05

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1 UPPER LEVEL POWER PLAN - AREA A
1/8" = 1'-0"

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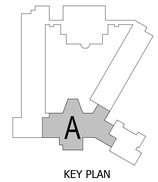
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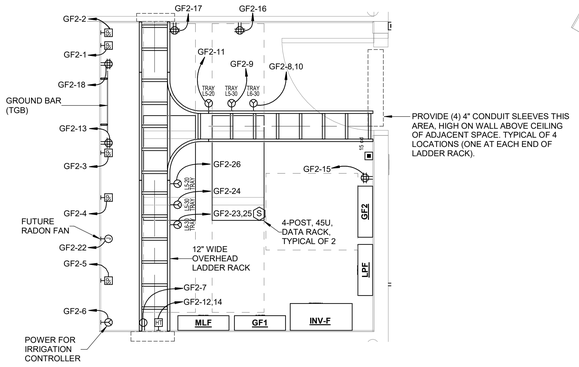
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UPPER LEVEL POWER PLAN - AREA A

DRAWING NO.:
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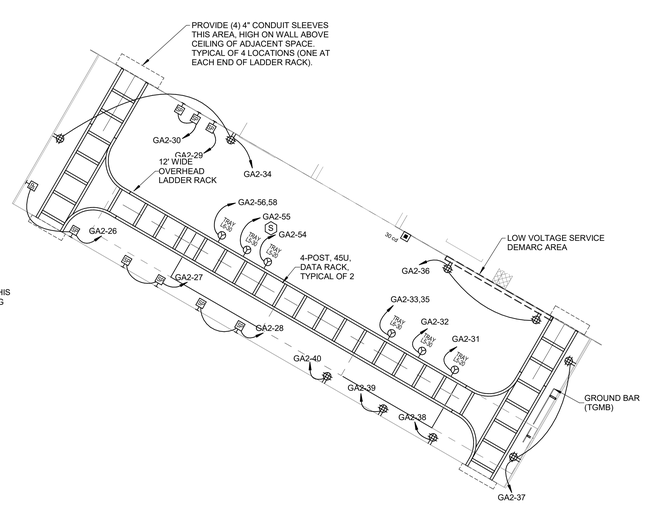
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NOTES:

1. COORDINATE WITH OWNER, ARCHITECT, AND SECURITY CONSULTANT FOR COORDINATED PLACEMENT OF ALL EQUIPMENT AND DEVICES. ENSURE ALL REQUIRED CLEARANCES ARE MAINTAINED.

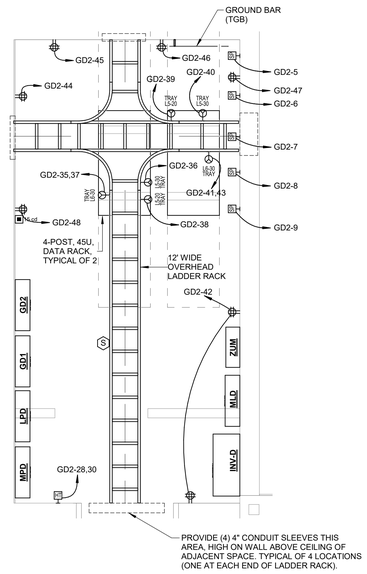
4 PART PLAN - ELECTRICAL F118
1/2" = 1'-0"



NOTES:

1. COORDINATE WITH OWNER, ARCHITECT, AND SECURITY CONSULTANT FOR COORDINATED PLACEMENT OF ALL EQUIPMENT AND DEVICES. ENSURE ALL REQUIRED CLEARANCES ARE MAINTAINED.

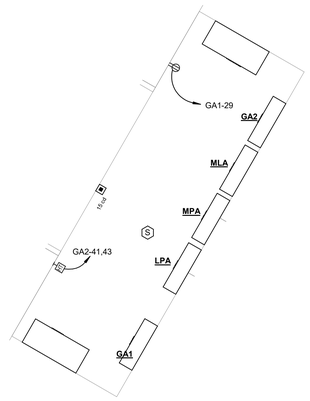
3 PART PLAN - MDF A128
1/2" = 1'-0"



NOTES:

1. COORDINATE WITH OWNER, ARCHITECT, AND SECURITY CONSULTANT FOR COORDINATED PLACEMENT OF ALL EQUIPMENT AND DEVICES. ENSURE ALL REQUIRED CLEARANCES ARE MAINTAINED.

2 PART PLAN - ELECTRICAL D112
1/2" = 1'-0"



1 PART PLAN - ELECTRICAL A135
1/2" = 1'-0"

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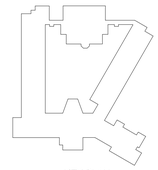
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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

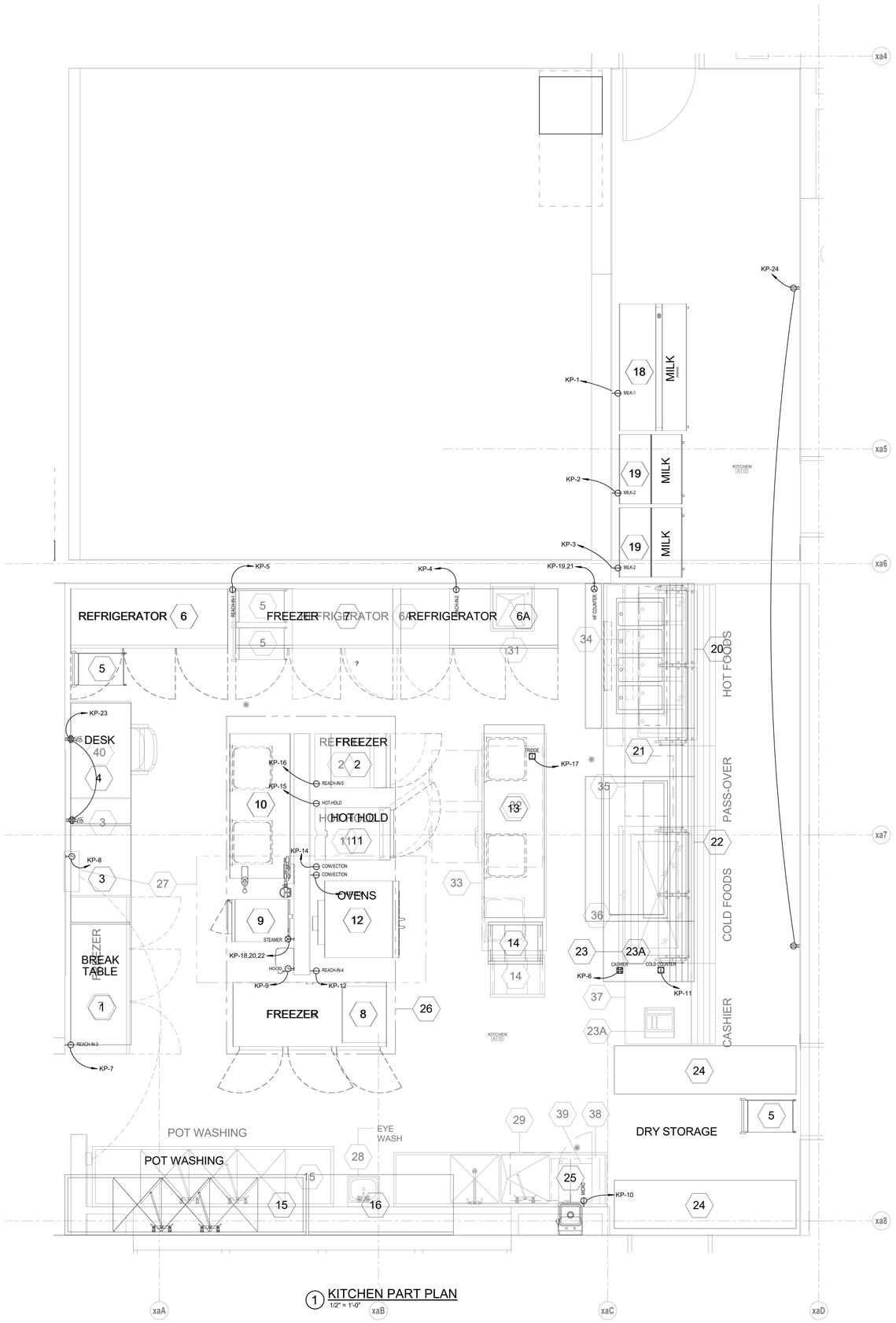
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PROJECT NO.: 18-000 DRAWN BY: CKD

PART PLANS

DRAWING NO.:
E2.07

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1 KITCHEN PART PLAN
1/2" = 1'-0"

FOOD-SERVICE POWER PLAN NOTES

1. INFORMATION SHOWN HEREON IS BASED ON FOOD-SERVICE CONSULTANT PLANS BY SCHIAVONE DESIGNS, LLC. THE MOST CURRENT SET OF THESE PLANS ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH THE FOOD-SERVICE CONSULTANT PLANS AND REFER TO THEM FOR ADDITIONAL INFORMATION TO BE USED IN CONJUNCTION WITH THE ELECTRICAL PLANS.
2. ALL KITCHEN EQUIPMENT RECEPTACLES, JUNCTION BOXES, AND DISCONNECT SWITCHES SHALL BE ORIENTED AND MOUNTED AT HEIGHTS INDICATED ON FOOD-SERVICE CONSULTANT PLANS. ALL EXACT LOCATIONS, ORIENTATIONS, AND MOUNTING HEIGHTS SHALL BE COORDINATED WITH FOOD-SERVICE CONSULTANT PLANS AND ARCHITECTURAL DRAWINGS/ELEVATIONS PRIOR TO INSTALLATION. REFER TO MILLWORK DRAWINGS FOR EXACT LOCATIONS AND INTEGRATION OF ALL RECEPTACLES.
3. UNLESS OTHERWISE NOTED, ALL RECEPTACLE LOCATIONS IN "KITCHEN A110" AND ALL FOOD PREPARATION AREAS SHALL BE CONNECTED TO CIRCUIT BREAKERS WITH INTEGRAL GFCI PROTECTION PER NEC REQUIREMENTS.
4. ALL JUNCTION BOX LOCATIONS FOR PERMANENTLY CONNECTED APPLIANCES SHALL BE CONNECTED TO CIRCUIT BREAKERS CAPABLE OF BEING LOCKED IN THE OPEN/OFF POSITION PER NEC REQUIREMENTS. JUNCTION BOXES AT ASSOCIATED EQUIPMENT SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBER.
5. DISCONNECT SWITCHES AND DEVICES ETC. LOCATED IN THE DISHWASH AREA SHALL BE IN NEMA 3R ENCLOSURES.
6. REFER TO FOOD SERVICE EQUIPMENT DRAWINGS FOR EXACT LOCATIONS OF BOXES, RECEPTACLES, MOUNTING HEIGHTS, AND TYPES OF CONNECTIONS.
7. ALL FACEPLATES FOR FOOD-SERVICE EQUIPMENT DEVICES IN FOOD-SERVICE AREAS SHALL BE BRUSHED STAINLESS STEEL.
8. EQUIPMENT/DEVICE TAGS ARE SHOWN FOR REFERENCE ONLY. REFER TO CURRENT FOOD-SERVICE PLANS FOR ADDITIONAL INFORMATION.
9. DESIGN BASED ON EXHAUST HOODS WITH INTEGRAL LIGHTS AND HOOD MOUNTED LIGHT SWITCH. PROVIDE CONNECTION FOR LIGHTS AS INDICATED.
10. CIRCUITS FOR DEVICES UNDER HOOD SHALL BE CONNECTED TO CIRCUIT BREAKERS WITH SHUNT TRIP FEATURE AND WIRED FOR SHUNT TRIP CONTROL VIA HOOD CONTROL PANEL. COORDINATE ALL REQUIREMENTS WITH FOODSERVICE CONSULTANT PLANS. BREAKERS FOR HOOD AND ANSUL SYSTEM SHALL HAVE FEATURES AS SPECIFIED BY FOODSERVICE CONSULTANT.

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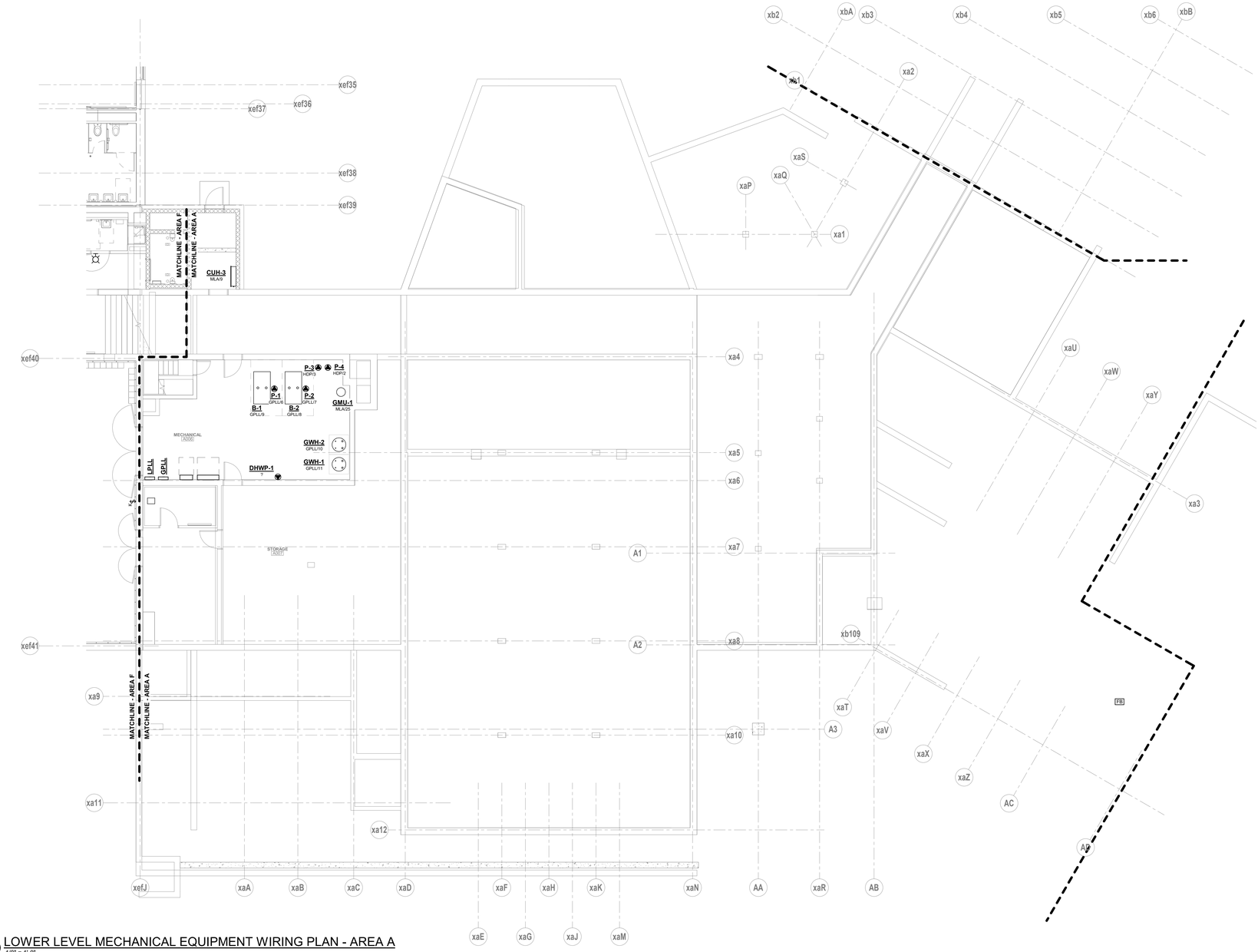
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PROJECT NO.: 18-000 DRAWN BY: CKD

KITCHEN PART PLAN

DRAWING NO.:
E2.08

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1 LOWER LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A
1/8" = 1'-0"

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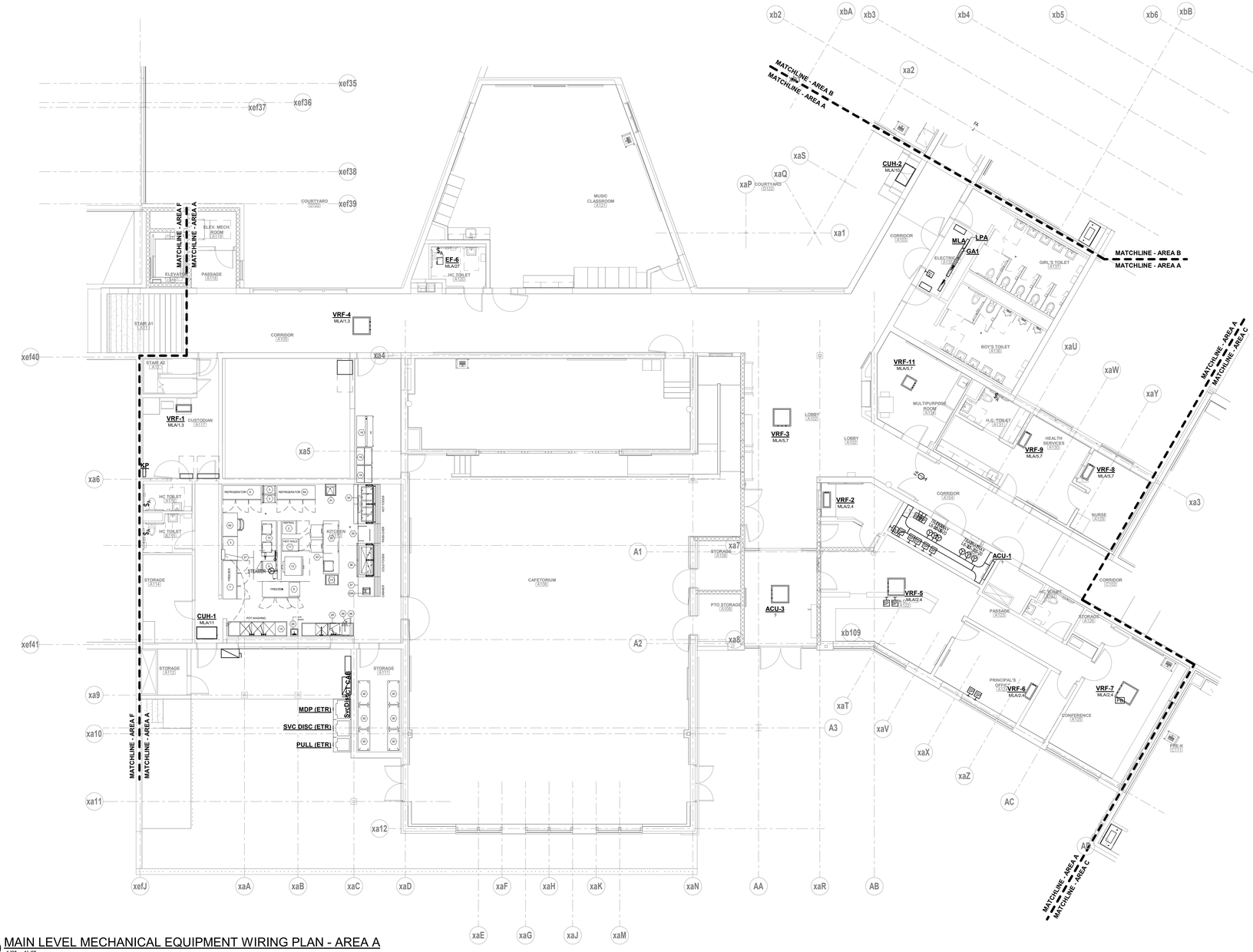
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LOWER LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A

DRAWING NO.: **E3.01**

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1 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A
1/8" = 1'-0"

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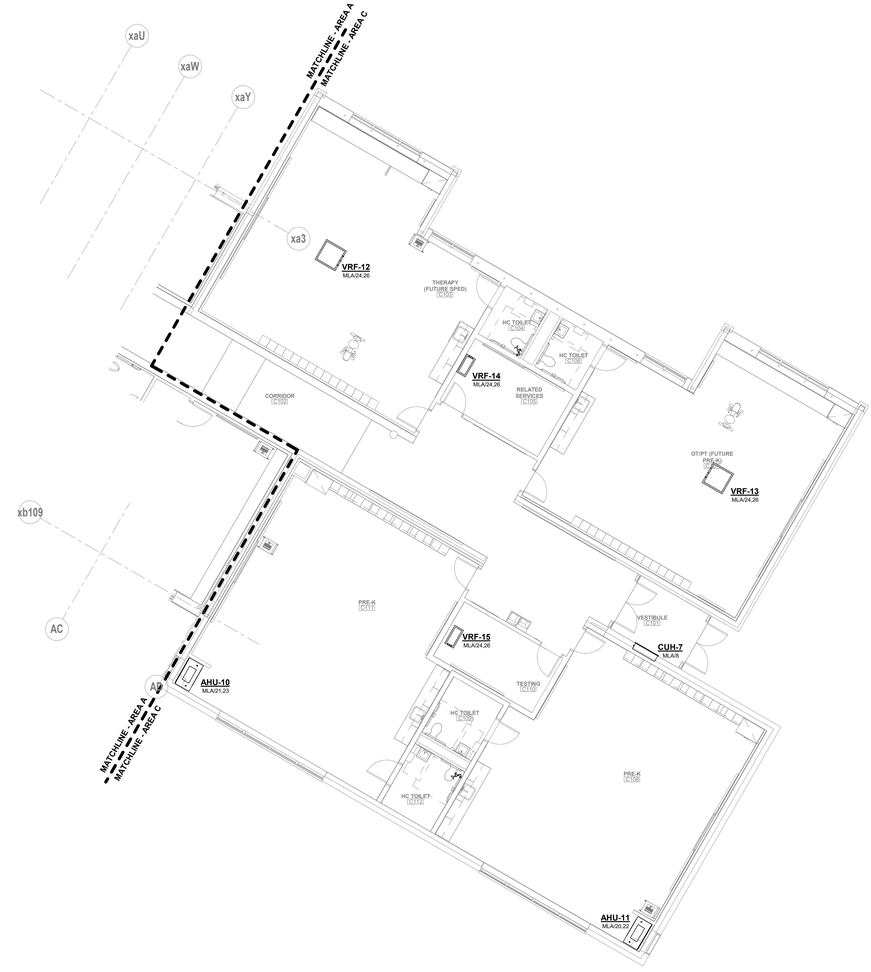
MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A

DRAWING NO.: **E3.02**

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1 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA B
1/8" = 1'-0"



2 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA C
1/8" = 1'-0"

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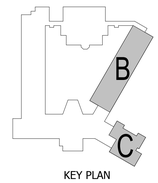
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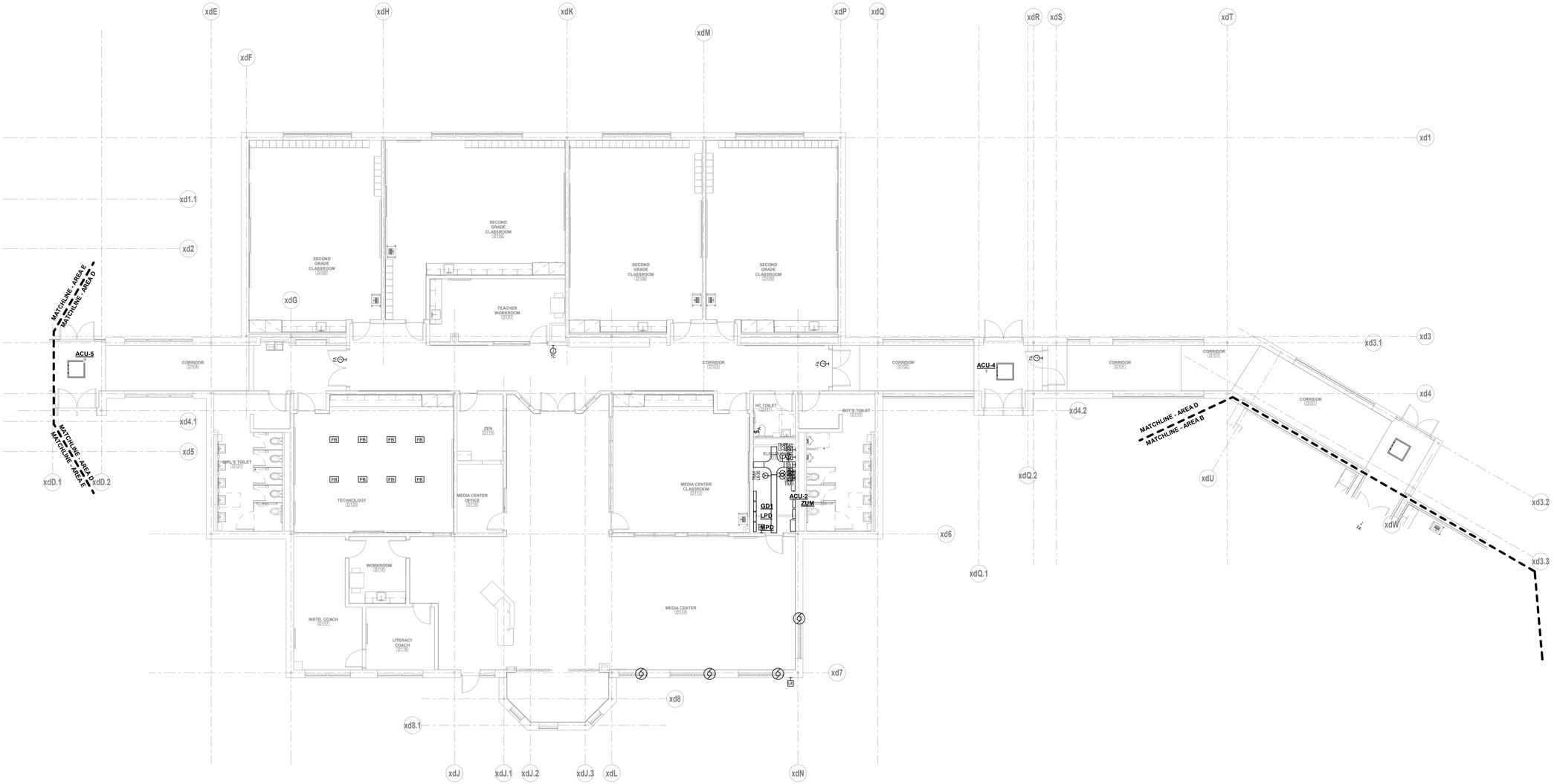
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MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLANS - AREAS B & C

DRAWING NO.:
E3.03

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1 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA D
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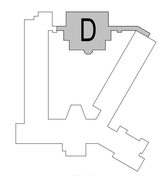
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PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

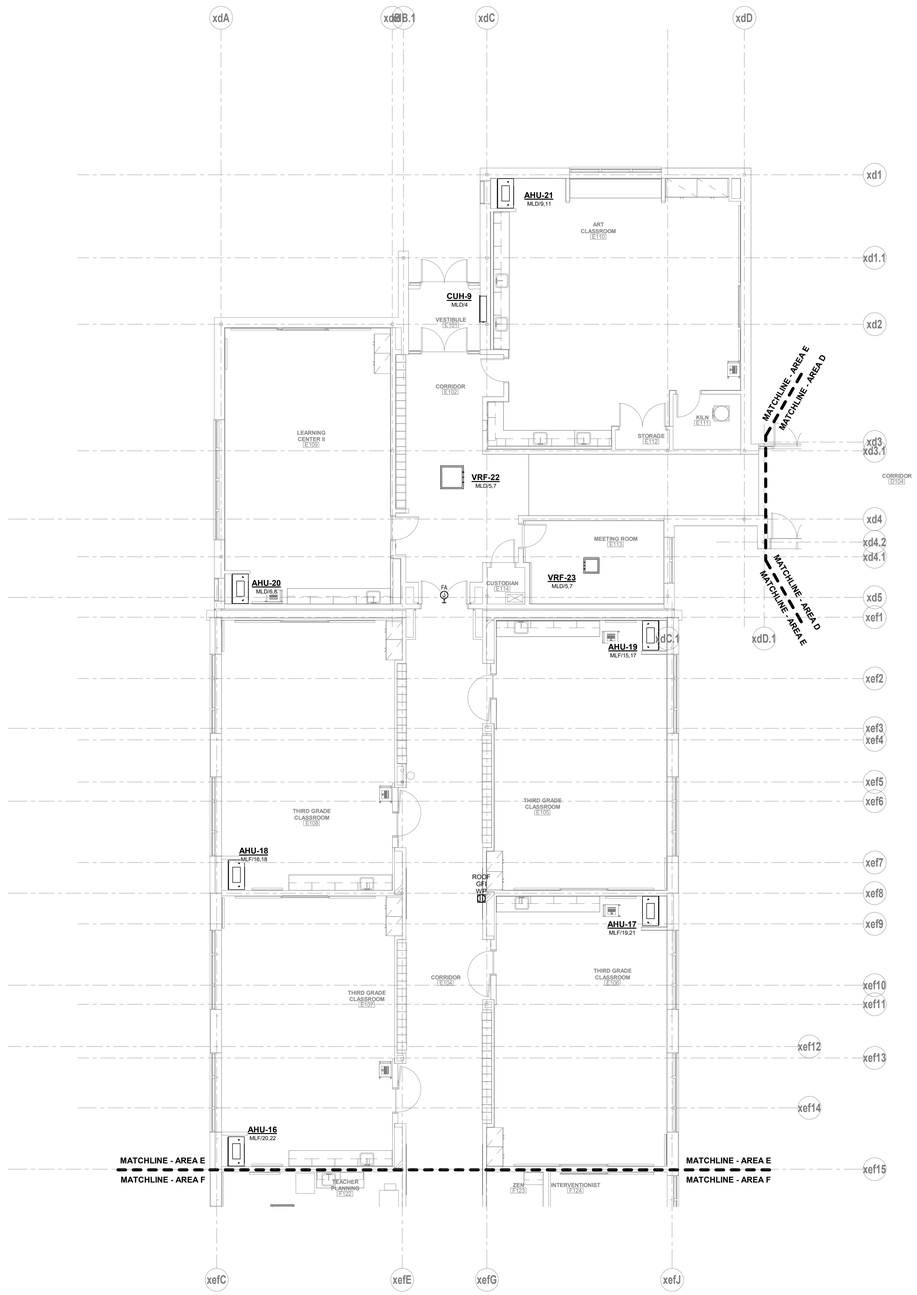
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

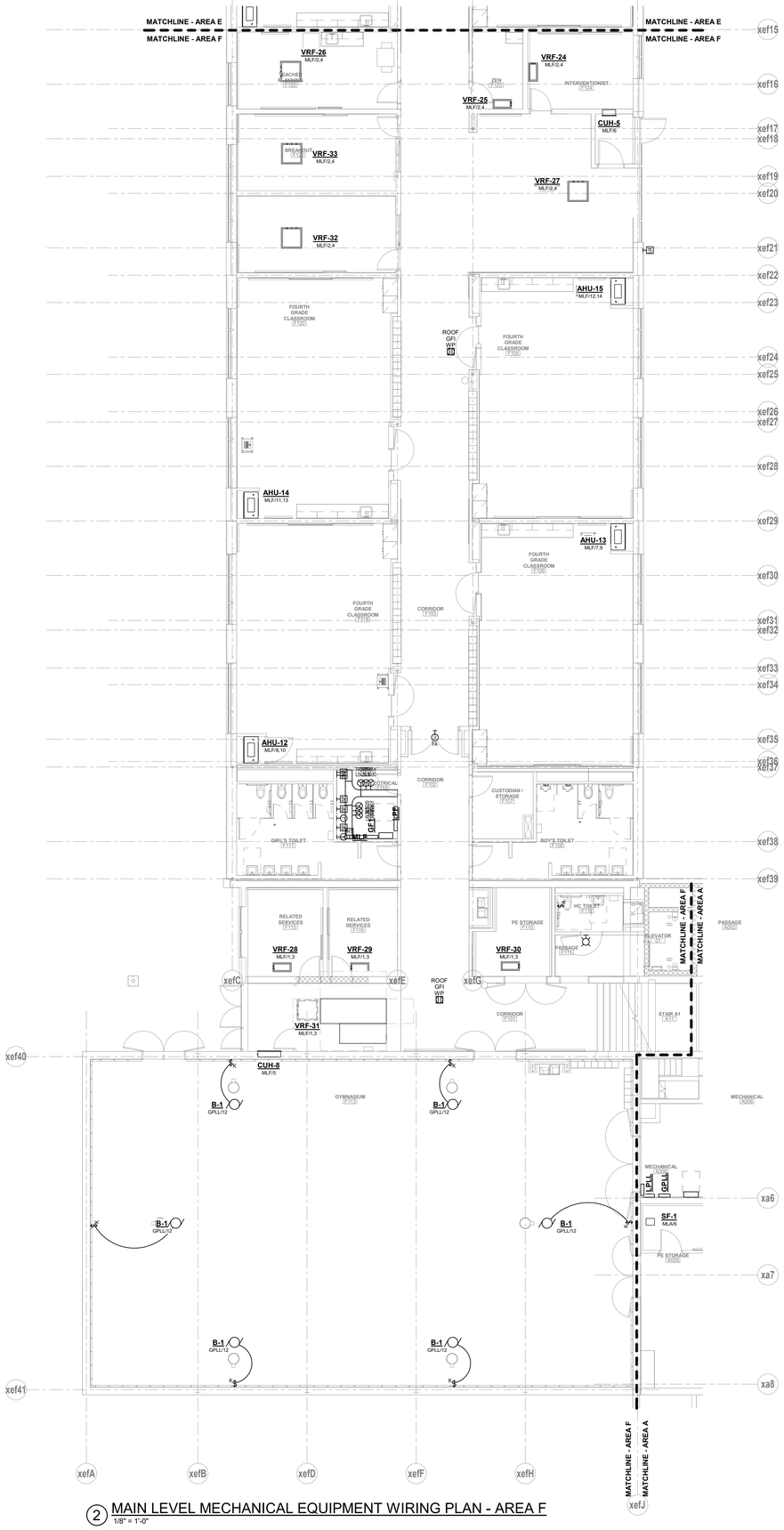
MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA D

DRAWING NO.:
E3.04

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1 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA F
1/8" = 1'-0"

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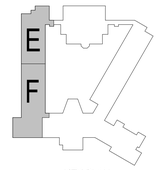
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DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

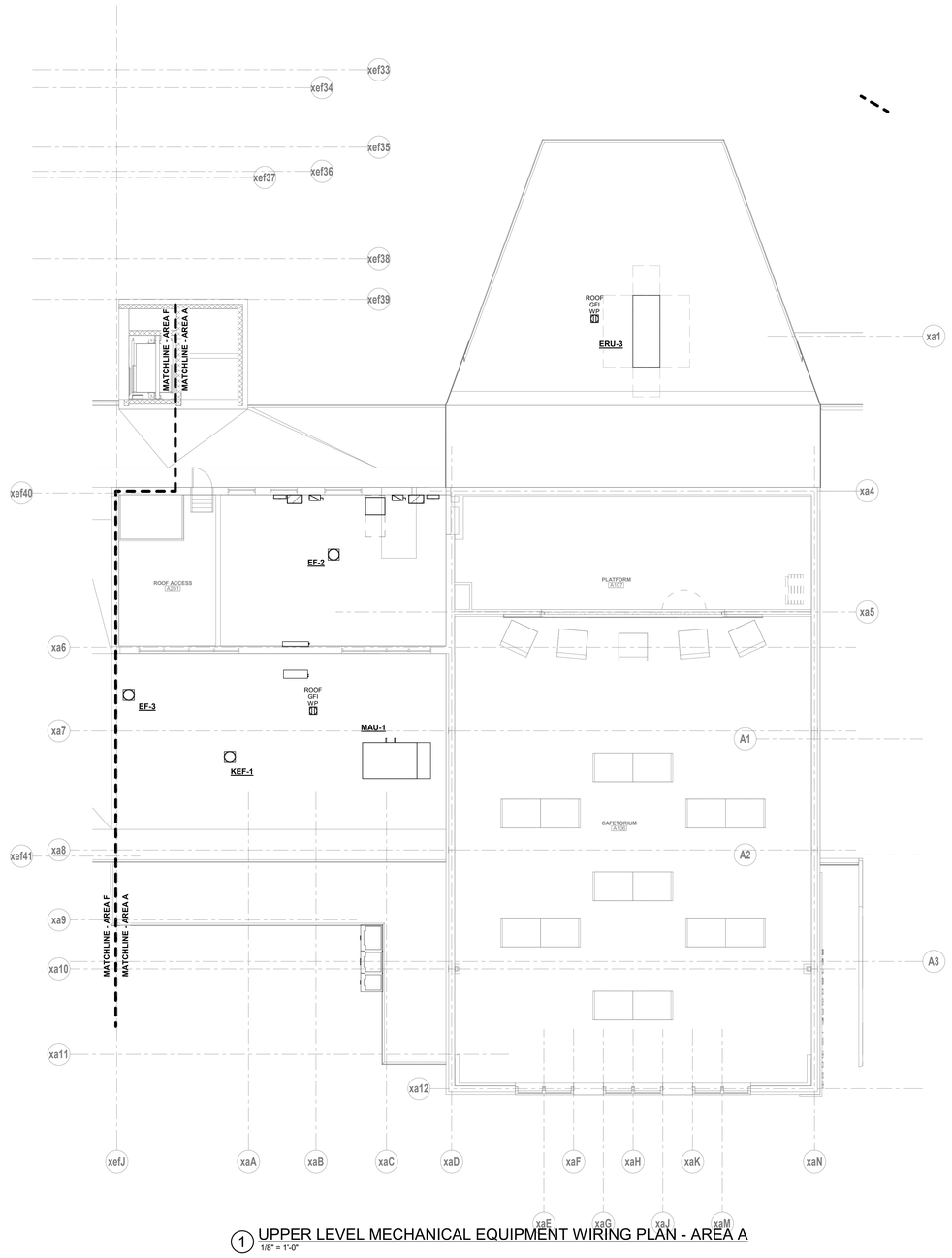
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MAIN LEVEL MECHANICAL EQUIPMENT WIRING PLANS - AREAS E & F

DRAWING NO.:
E3.05

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1 UPPER LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

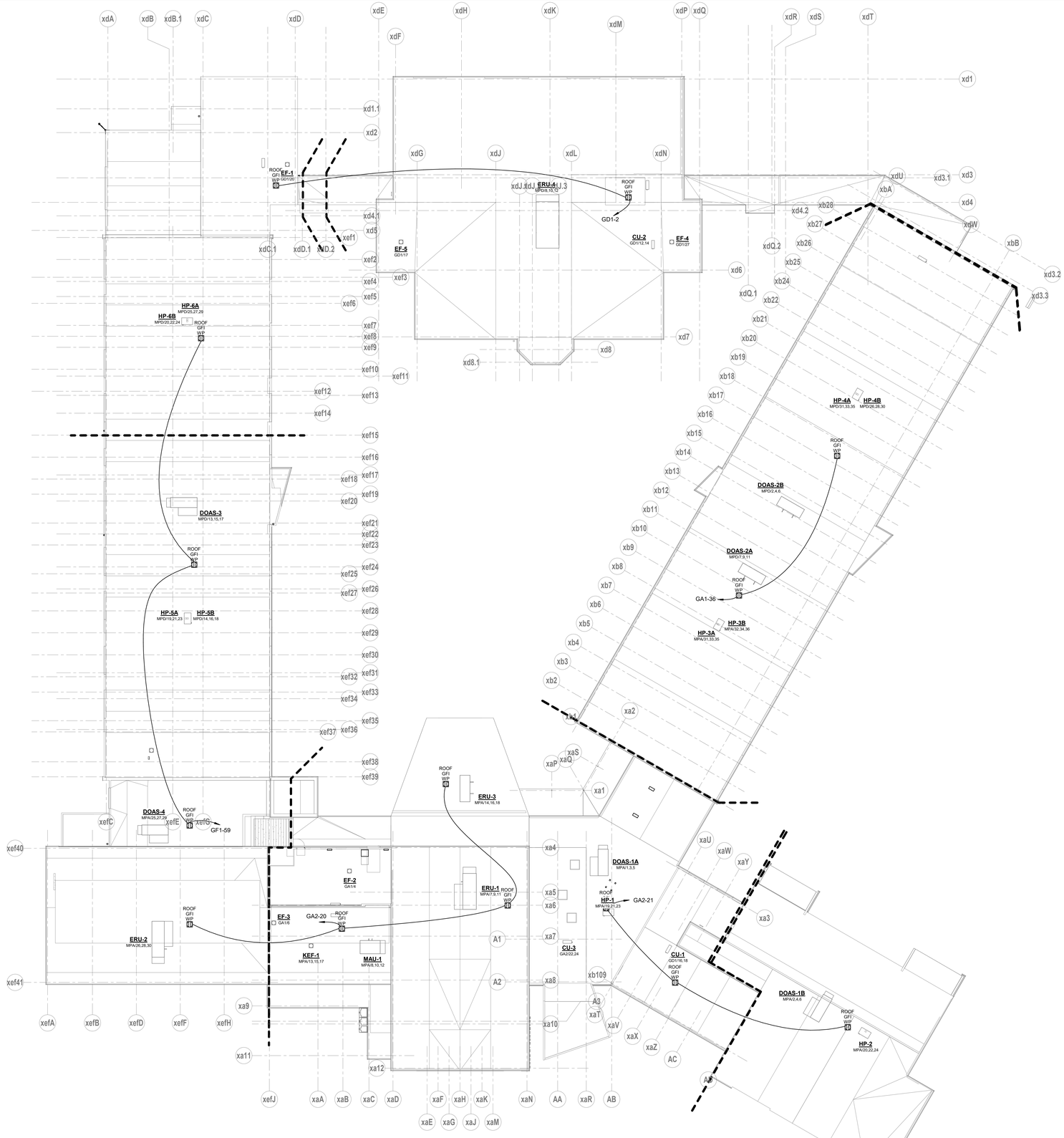
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UPPER LEVEL MECHANICAL EQUIPMENT WIRING PLAN - AREA A

DRAWING NO.:
E3.06

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1 ELECTRICAL ROOF PLAN
1/16" = 1'-0"

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0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

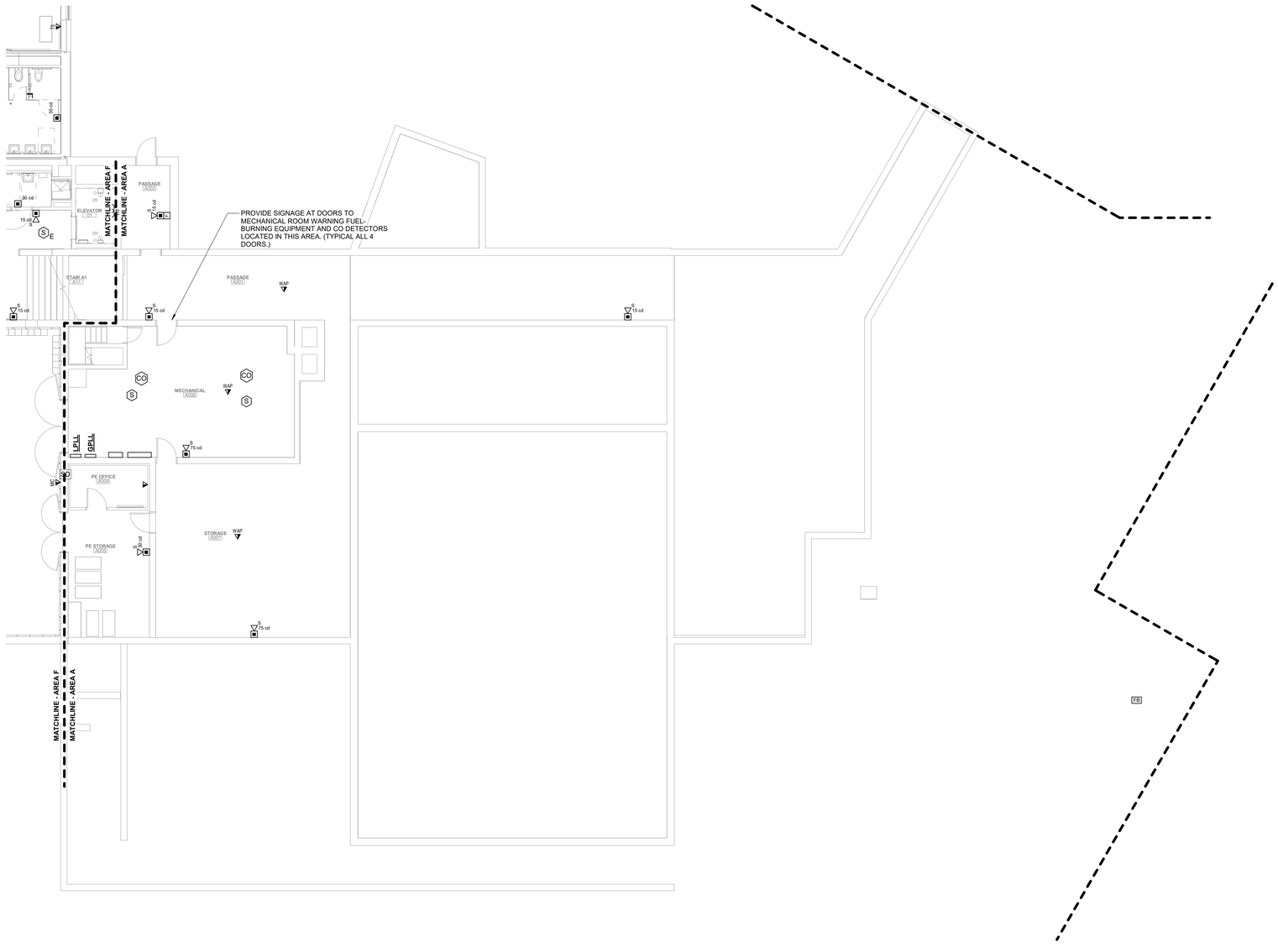
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ROOF LEVEL MECHANICAL WIRING PLAN

DRAWING NO.:
E3.07

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1 LOWER LEVEL LOW VOLTAGE PLAN - AREA A
1/8" = 1'-0"

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ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

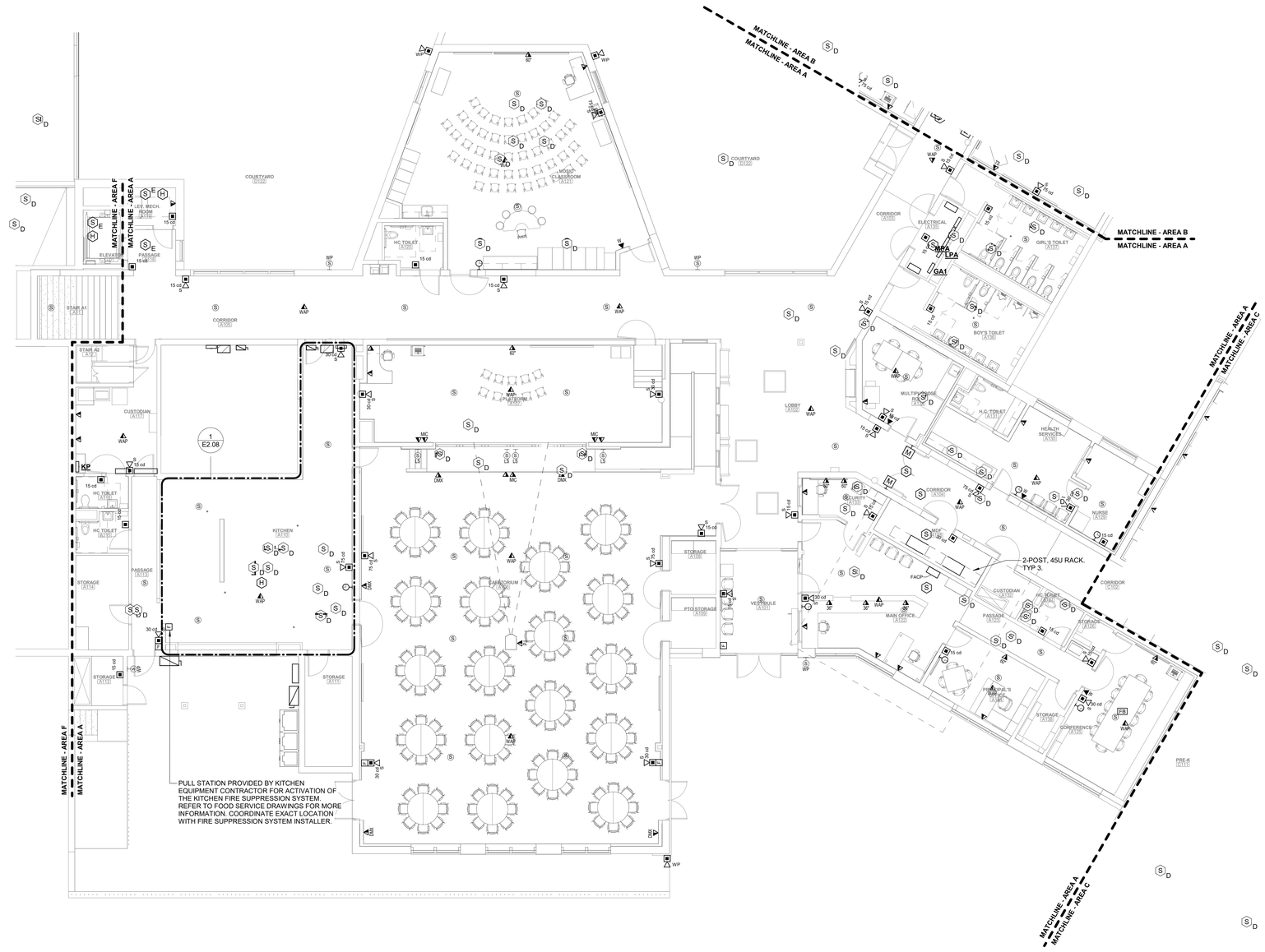
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PROJECT NO.: 18-000 DRAWN BY: CKD

LOWER LEVEL LOW VOLTAGE PLAN - AREA A

DRAWING NO.:
E4.01

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1 MAIN LEVEL LOW VOLTAGE PLAN - AREA A
1/8" = 1'-0"

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SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
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PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL LOW VOLTAGE PLAN - AREA A

DRAWING NO.:
E4.02

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1 MAIN LEVEL LOW VOLTAGE PLAN - AREA B
1/8" = 1'-0"

2 MAIN LEVEL LOW VOLTAGE PLAN - AREA C
1/8" = 1'-0"

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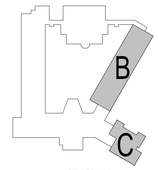
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KEY PLAN



SCALE: 1/8" = 1'-0"
0' 4' 8' 16'
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

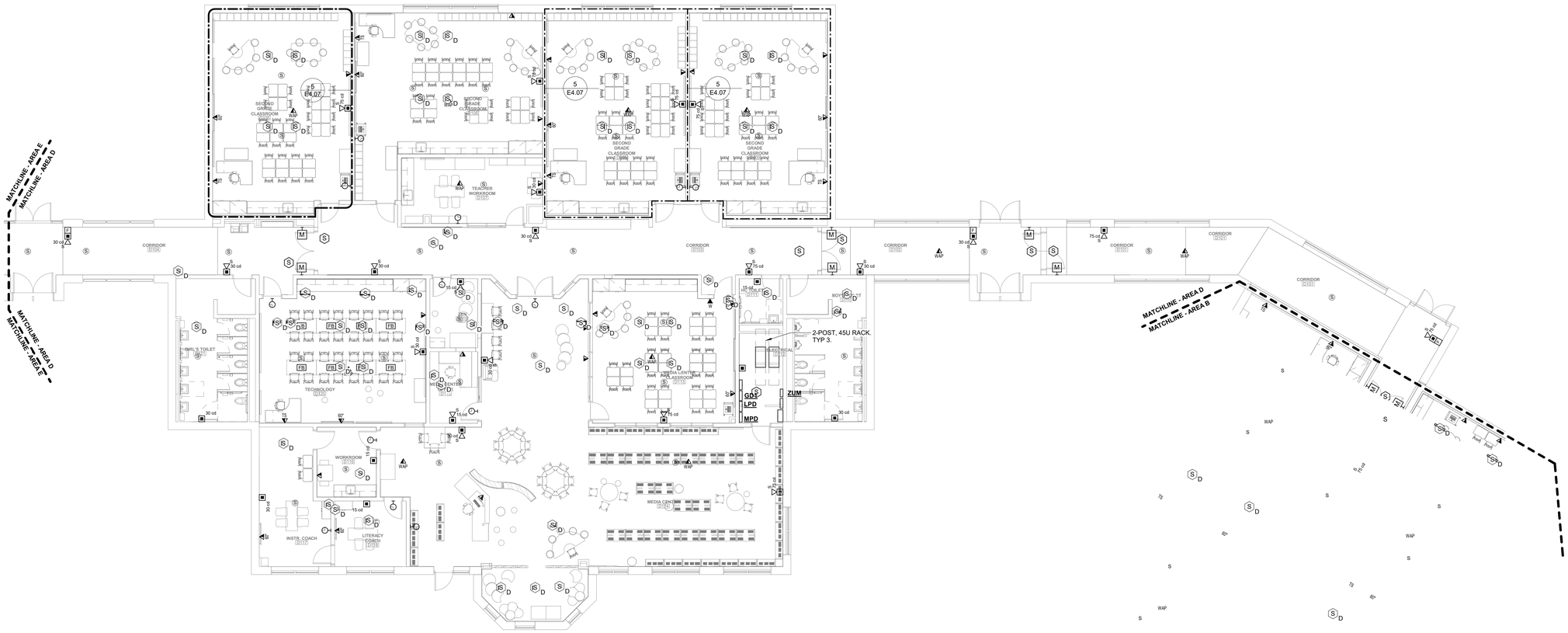
PROJECT NO.: 18-000 DRAWN BY: CKD

MAIN LEVEL LOW VOLTAGE PLANS - AREAS B & C

DRAWING NO.:

E4.03

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1 MAIN LEVEL LOW VOLTAGE PLAN - AREA D
1/8" = 1'-0"

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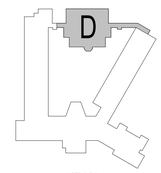
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KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16') PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

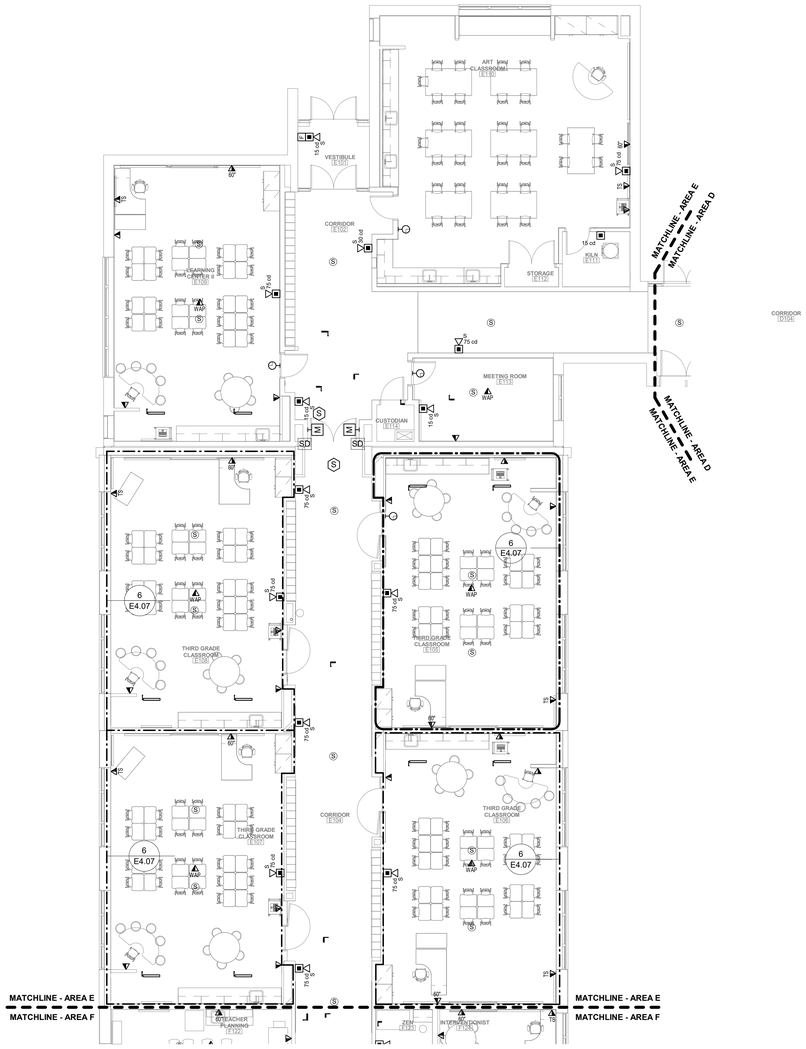
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PROJECT NO.: 18-000 DRAWN BY: CKD

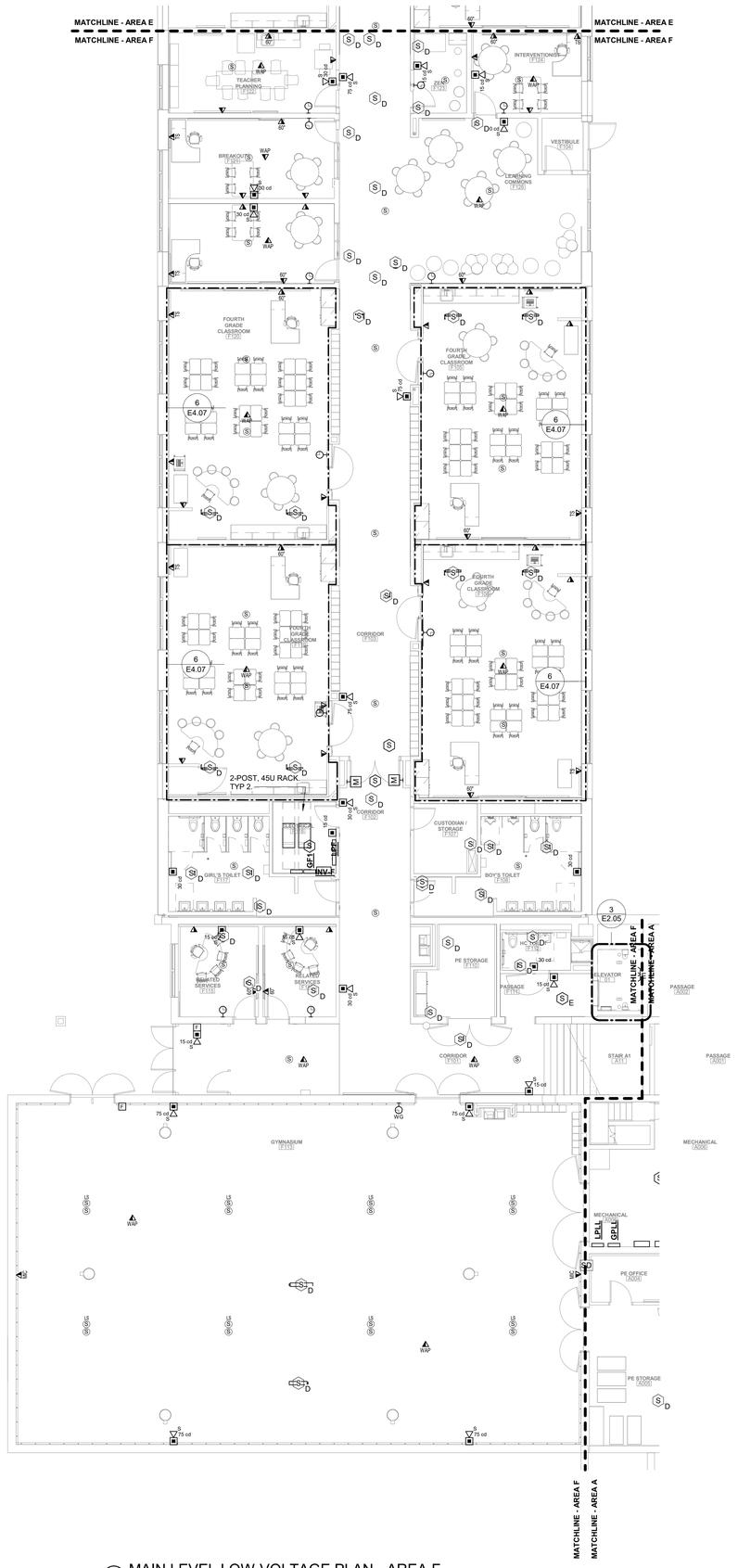
MAIN LEVEL LOW VOLTAGE PLAN - AREA D

DRAWING NO.:
E4.04

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1 MAIN LEVEL LOW VOLTAGE PLAN - AREA E
1/8" = 1'-0"



2 MAIN LEVEL LOW VOLTAGE PLAN - AREA F
1/8" = 1'-0"

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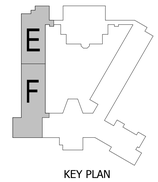
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

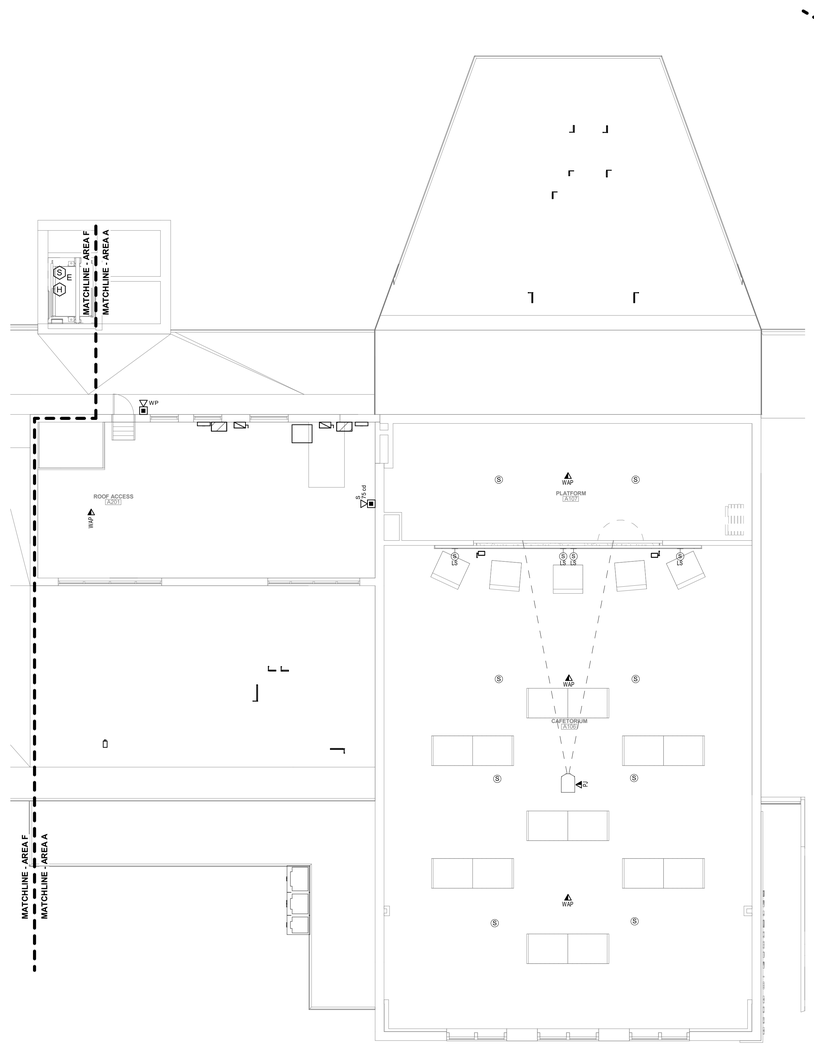
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MAIN LEVEL LOW VOLTAGE PLANS - AREAS E & F

DRAWING NO.:
E4.05

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1 UPPER LEVEL LOW VOLTAGE PLAN - AREA A
1/8" = 1'-0"

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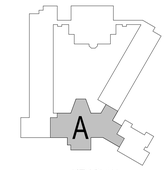
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

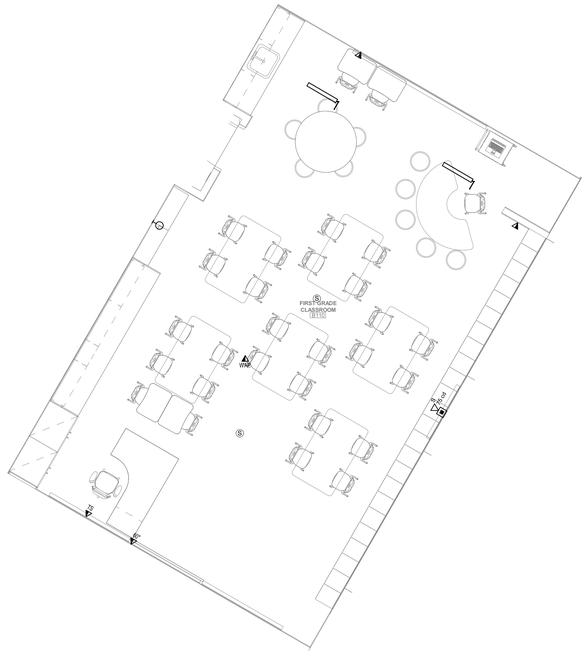
UPPER LEVEL LOW VOLTAGE PLAN - AREA A

DRAWING NO.:
E4.06

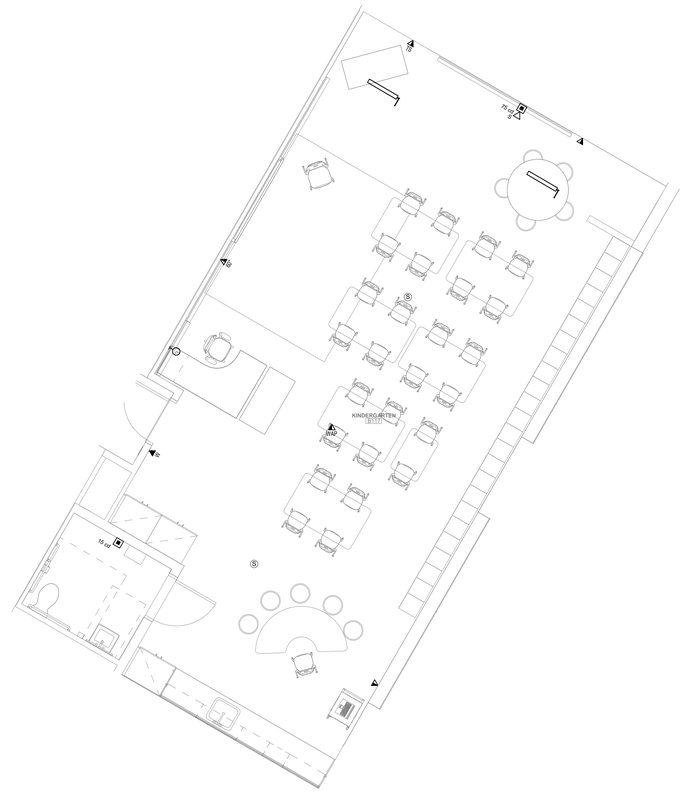
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TYPICAL PLAN GENERAL NOTES

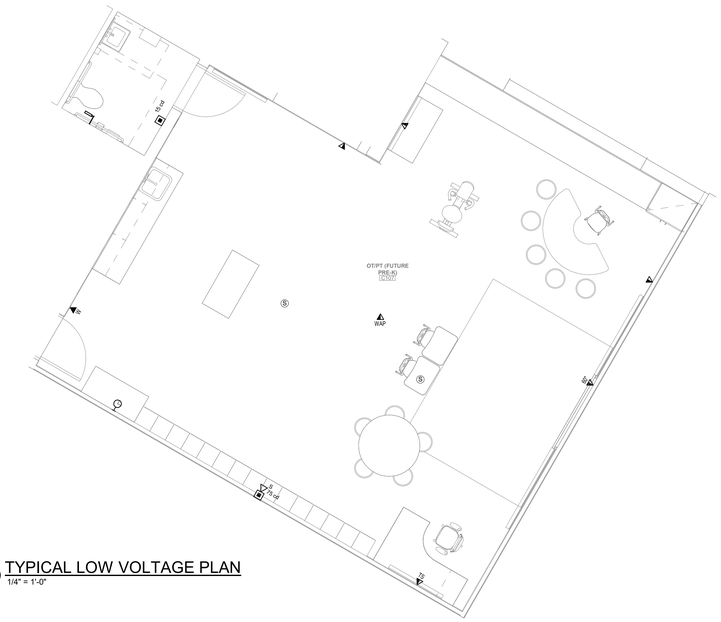
1. TYPICAL PLANS MAY BE MIRRORED, REVERSED, OR SLIGHTLY DIFFERENT THAN ON ACTUAL FLOOR PLAN.



1 TYPICAL LOW VOLTAGE PLAN
1/4" = 1'-0"



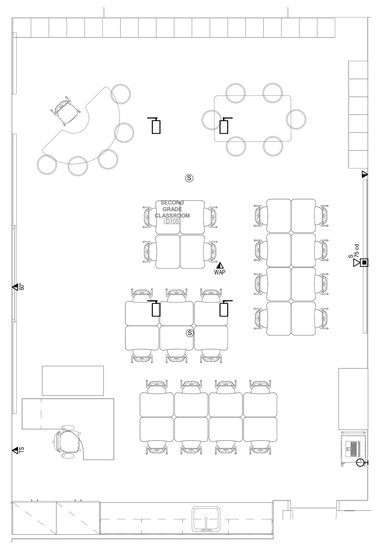
2 TYPICAL LOW VOLTAGE PLAN
1/4" = 1'-0"



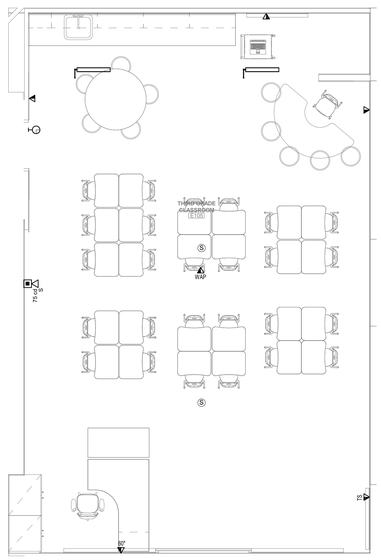
3 TYPICAL LOW VOLTAGE PLAN
1/4" = 1'-0"



4 TYPICAL LOW VOLTAGE PLAN
1/4" = 1'-0"



5 TYPICAL LOW VOLTAGE PLAN
1/4" = 1'-0"



6 TYPICAL LOW VOLTAGE PLAN - LV6
1/4" = 1'-0"

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

TYPICAL LOW VOLTAGE PLANS

DRAWING NO.:
E4.07

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ELECTRICAL RISER DIAGRAM KEY NOTES

1. THREE SETS OF (4) #4/0 AWG, (1) #2 AWG GROUND, MINIMUM 2-1/2" CONDUIT.
2. PROVIDE JUNCTION BOX AT PANEL TO REDUCE CONDUCTORS TO MAXIMUM SIZE & QUANTITY ACCOMMODATED BY TERMINATION LUGS.
3. FOUR SETS OF: (4) 500 KCMIL, (1) #4/0 AWG, 4" CONDUIT.
4. SCOPE OF WORK IN THIS AREA TO BE PRICED SEPARATELY AS: **ALTERNATE #4**.
5. CONDUITS EXPECTED TO BE ROUTED VIA FLOOR TRENCH THROUGH LOWER LEVEL, THEN BELOW GRADE EXTERIOR, THEN FLOOR TRENCH TO TERMINATION LOCATION IN ELECTRIC ROOM IN AREA D. PROVIDE WALL MOUNTED JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OR AS REQUIRED BY CODE.
6. STUB UP SPARE CONDUITS 12" AFF IN ACCESSIBLE AREA PROXIMAL TO PANELS HDP AND LDP. CAP AND LABEL EACH CONDUIT.
7. CONDUITS EXPECTED TO BE ROUTED VIA FLOOR TRENCH THROUGH LOWER LEVEL. PROVIDE WALL MOUNTED JUNCTION BOXES AS REQUIRED TO FACILITATE INSTALLATION OR AS REQUIRED BY CODE.
8. REFER TO PANEL SCHEDULE FOR CIRCUIT BREAKER ADDITIONS.
9. (4) 4" CONDUITS FOR LOW VOLTAGE SERVICE PROVIDER CABLES. COORDINATE WITH EACH PROVIDER FOR REQUIREMENTS. CONDUITS EXPECTED TO BE ROUTED FROM UTILITY POLE TO LOWER LEVEL VIA PENETRATION IN FOUNDATION WALL UNDER CAFETORIUM, THEN ROUTED IN CRAWL SPACE TO NEW DEMARC IN MDF. COORDINATE FINAL ROUTING IN FIELD. ONE CONDUIT SHALL BE DEDICATED TO EACH OF THE FOLLOWING SERVICE PROVIDERS: CROWN CASTLE, COX, FRONTIER, SPARE.
10. ATS-L: ASCO 300 SERIES, 208V, 260A, NEMA-1, OPEN TRANSITION, SOLID NEUTRAL, 3 POLE, REMOTE ANNUNCIATOR, 5 YEAR WARRANTY, 72EE CONNECTIVITY ACCESSORY, SURGE SUPPRESSOR ON LOAD SIDE, ACCESSORY 18RX, INPHASE MONITORING. PROVIDE WITH AUXILIARY CONTACTS FOR BMS, FIRE ALARM, AND SECURITY. PROVIDE WITH CONNECTIVITY ACCESSORIES TO PERMIT DAISY CHAINING OF BOTH ATS UNITS FOR COMMUNICATION TO ANNUNCIATOR.
11. ATS-H: ASCO 300 SERIES, 480V, 400A, NEMA-1, OPEN TRANSITION, SOLID NEUTRAL, 3 POLE, REMOTE ANNUNCIATOR, 5 YEAR WARRANTY, 72EE CONNECTIVITY ACCESSORY, SURGE SUPPRESSOR ON LOAD SIDE, ACCESSORY 18RX, INPHASE MONITORING. PROVIDE WITH AUXILIARY CONTACTS FOR BMS, FIRE ALARM, AND SECURITY. PROVIDE WITH CONNECTIVITY ACCESSORIES TO PERMIT DAISY CHAINING OF BOTH ATS UNITS FOR COMMUNICATION TO ANNUNCIATOR.
12. 1" CONDUITS WITH CONDUCTORS FOR COMMUNICATION AS FOLLOWS: START SIGNAL TO GENERATOR INLET, COMMUNICATIONS TO BMS, FIRE ALARM, SECURITY, AND REMOTE ANNUNCIATORS LOCATED IN SECURITY OFFICE. ONE CONDUIT SHOWN FOR REFERENCE ONLY. PROVIDE QUANTITY AS REQUIRED.
13. TRANSFORMER SECONDARY GROUND PER NEC REQUIREMENTS. PROVIDE FULL SIZE BONDING JUMPER.
14. 112.5 KVA DRY TYPE TRANSFORMER. 480V DELTA PRIMARY, 208Y/120V SECONDARY. DESIGN BASED ON SQUARE-D EXN112T3H.
15. WIRE TROUGH WITH FEEDER TAP FOR "DISC-T6". SIZE AS REQUIRED.
16. GENERATOR INLET: 400A, 480V, SINGLE-THROW, FUSIBLE (WITH 400A FUSES), NON-SWITCHED NEUTRAL, CAM LOCK CONNECTOR COMPARTMENT FOR CONNECTION TO PORTABLE GENERATOR. BASIS OF DESIGN IS POWER ASSEMBLIES "CAMLOCK CONNECTION SWITCH" MODEL: CCS-S-F-N-S-6.
17. NEW 800A, 480V, 3P, 4W SERVICE EQUIPMENT.
18. EXISTING HANDHOLE TO BE REMOVED.
19. EXISTING 2,000A, 208Y/120V SERVICE EQUIPMENT TO REMAIN.
20. SERVICE GROUND PER NEC REQUIREMENTS. PROVIDE ALL ADDITIONAL BONDING TO NEW AND EXISTING GROUNDING ELECTRODES ON SITE PER NEC REQUIREMENTS.
21. EXISTING CONDUIT FOR LOW VOLTAGE SERVICES TO BUILDING. TO BE REMOVED.
22. EXISTING LOW VOLTAGE PROVIDER DEMARC EQUIPMENT TO BE REMOVED.
23. EXISTING CONDUITS AND CONDUCTORS. REMOVE AND REINSTALL TO ACCOMMODATE REWORK OF EXTERIOR CONCRETE WALK AND NEW RAMP AND REMOVAL OF HANDHOLE. COORDINATE WITH CIVIL PLANS.
24. NEW PRIMARY CONDUITS AND CONDUCTORS. CONDUITS BY ELECTRICAL CONTRACTOR, CONDUCTORS BY UTILITY. COORDINATE ALL REQUIREMENTS WITH UTILITY.
25. NEW UTILITY TRANSFORMER, PAD, & VAULT. TRANSFORMER BY UTILITY COMPANY. ELECTRICAL CONTRACTOR TO PROVIDE PAD AND VAULT PER UTILITY COMPANY REQUIREMENTS.
26. TRANSFORMER GROUNDING AS REQUIRED BY UTILITY COMPANY AND NEC.
27. 8-CHANNEL REMOTE GENERATOR ANNUNCIATOR PANEL (ASCO 5350) LOCATED IN SECURITY OFFICE. COORDINATE PLACEMENT LOCATION WITH ARCHITECT. PROVIDE CONDUIT AND CONDUCTORS TO ONE ATS AND PROVIDE DAISY CHAIN WIRING VIA CONNECTIVITY MODULES TO PERMIT COMMUNICATION OF BOTH ATS UNITS TO ANNUNCIATOR.
28. COORDINATE LOCATION OF DISCONNECT TO SATISFY TAP RULE WITH SPECIFIED CONDUCTORS. INCREASE SIZE OF TAP CONDUCTORS AS REQUIRED FOR CODE COMPLIANCE.

GENERAL NOTES

1. PROVIDE ALL WORK SHOWN, UNLESS INDICATED AS EXISTING TO REMAIN (ETR).
2. COORDINATE WITH CIVIL PLANS FOR LOCATION OF TRANSFORMERS, AND AREA OF DISTURBANCE FOR NEW CONCRETE WALKWAY AND RAMP NEAR EXTERIOR KITCHEN ENTRANCE DOOR.
3. COORDINATE ALL WORK WITH UTILITY COMPANY REQUIREMENTS.
4. EXISTING 1,200A SWITCHBOARD TO REMAIN IN SERVICE UNTIL FULLY OFFLOADED DURING FINAL PHASE OF PROJECT, AT WHICH TIME IT IS TO BE COMPLETELY REMOVED. FEEDERS SHALL BE REMOVED, BUT CONDUITS SHALL REMAIN AS SPARE. INSTALL PULL CORDS IN SPARE CONDUITS AND PROVIDE LABELS INDICATING SPARE, AND TO WHICH SWITCHBOARD THEY ARE CONNECTED.
5. PROVIDE LABELING AT EACH SERVICE EQUIPMENT AS REQUIRED BY NEC AND LOCAL AHJ FOR BUILDINGS WITH MULTIPLE SERVICES.
6. PROVIDE SUBMETER SENSORS FOR ALL PANEL & SWITCHBOARD FEEDERS (INCLUDING SUBPANELS) AND ON THE LOAD SIDE OF EACH SERVICE DISCONNECT.
7. ALL SERVICE EQUIPMENT MUST BE UTILITY COMPANY APPROVED.
8. COORDINATE ALL ELECTRIC SERVICE WORK, INCLUDING ALL REQUIRED OUTAGES, WITH LOCAL ELECTRIC COMPANY:
9. FOR NEW 800A SERVICE REFER TO THE FOLLOW:
   - A. EVERSOURCE NEW SERVICE REQUEST #: 662-2663
   - B. EVERSOURCE FIELD ENGINEER: ALISHA SAXBY, 705 WEST JOHNSON AVE | CHESHIRE, CT 06410 OFFICE: (203) 271-4770 | FAX: (203) 271-4754 | ALISHA.MIKULAK-SAXBY@EVERSOURCE.COM
10. COORDINATE WITH OWNER FOR LOW VOLTAGE SERVICE PROVIDER INFORMATION.
11. ALL CONDUIT ROUTING TO BE COORDINATED IN FIELD TO MAXIMIZE EASE OF INSTALLATION. PROVIDE JUNCTION BOXES ALONG ROUTE AS REQUIRED BY CODE AND TO FACILITATE INSTALLATION.
12. PROVIDE SURGE PROTECTION AT EACH SERVICE, AND ALL NEXT LEVEL PANELS.

FEEDER SCHEDULE

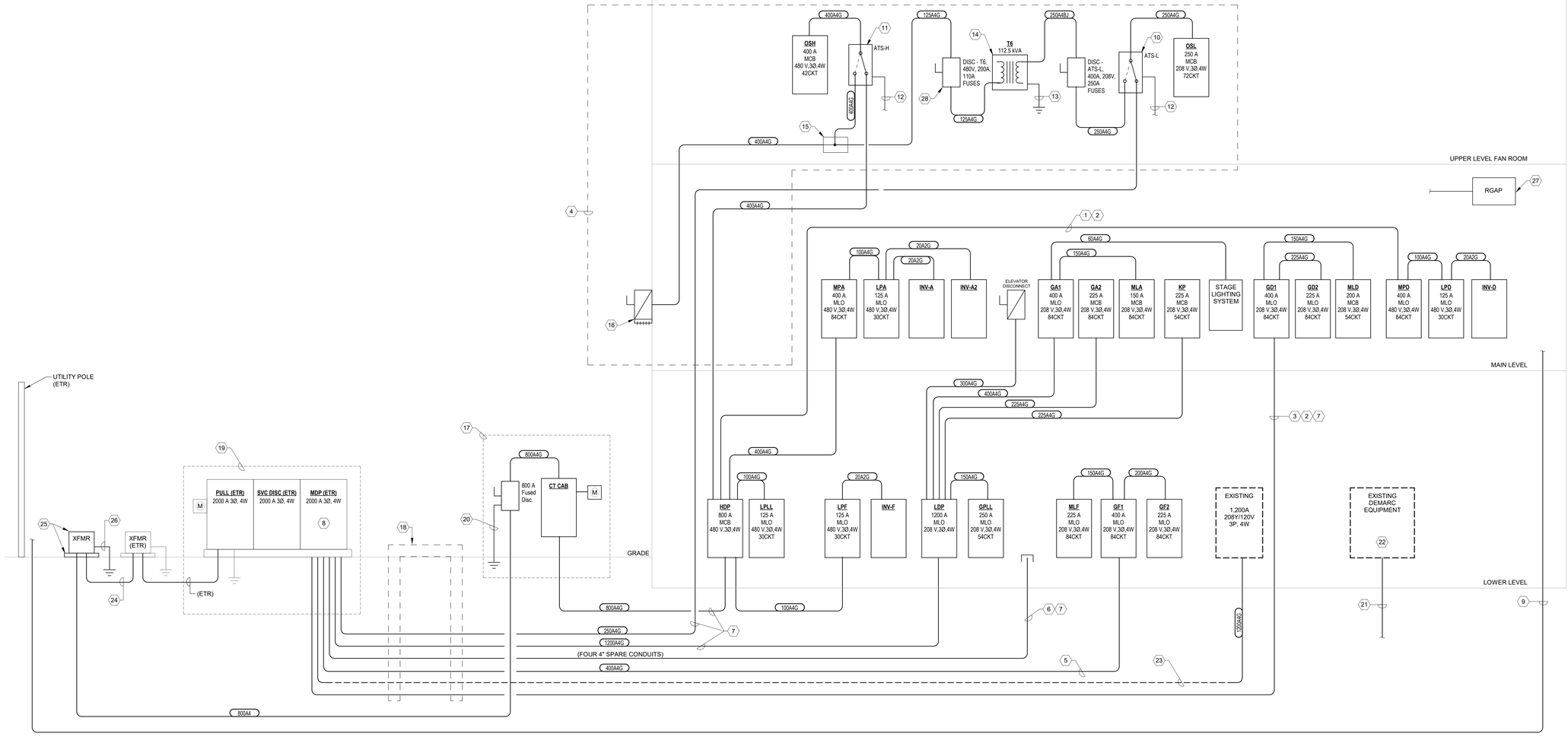
KEY	CONDUIT & CONNECTORS
20A2G	3/4" C - 2#12, 1#12G
60A4G	1-1/4" C - 4#4, 1#10G
100A4G	2" C - 4#1, 1#6G
125A4G	2" C - 4#1/0, 1#6G
150A4G	2" C - 4#1/0, 1#6G
200A4G	2" C - 4#3/0, 1#6G
225A4G	2-1/2" C - 4#4/0, 1#4G
250A4BJ	2-1/2" C - 4#250, 1#2G
250A4G	2-1/2" C - 4#250, 1#4G
300A4G	2-1/2" C - 4#350, 1#4G
400A4G	2 [2" C - 4#3/0, 1#3G]
800A4	3 [2-1/2" C - 4#300]
800A4G	3 [2-1/2" C - 4#300, 1#1/0G]
1200A4G	4 [3" C - 4#350, 1#3/0G]
3000A4	8 [3" C - 4#500]

3-PHASE DRY TYPE TRANSFORMER SCHEDULE

LABEL	KVA	PRIMARY (480V, 3P) AMPS	PRIMARY (480V, 3P) OVERCURRENT PROTECTION	SECONDARY (208V, 3P) AMPS	SECONDARY (208V, 3P) OVERCURRENT PROTECTION
T1	9	11	20A, 3P	25	30A, 3P
T2	15	18	30A, 3P	42	50A, 3P
T3	30	36	50A, 3P	83	100A, 3P
T4	45	54	70A, 3P	125	150A, 3P
T5	75	90	125A, 3P	208	250A, 3P
T6	112.5	135	175A, 3P	312	400A, 3P
T7	150	180	225A, 3P	416	500A, 3P
T8	225	270	350A, 3P	625	700A, 3P
T9	300	360	500A, 3P	833	1000A, 3P
T10	500	600	800A, 3P	1388	1600A, 3P

NOTES:

1. PROVIDE TRANSFORMER SECONDARY NEUTRAL BONDING TO NEAREST NEC APPROVED GROUNDING ELECTRODE, PER NEC REQUIREMENTS, AND PROVIDE FULL SIZE SYSTEM BONDING JUMPER.
2. SECONDARY OVERCURRENT PROTECTION SHALL BE THE MAIN CIRCUIT BREAKER IN THE PANEL SERVED, OR AN INDIVIDUALLY MOUNTED CIRCUIT BREAKER.
3. SECONDARY OVERCURRENT PROTECTION DEVICE SHALL BE LOCATED TO COMPLY WITH THE SECONDARY TAP CONDUCTOR MAXIMUM LENGTH REQUIREMENT LISTED BELOW.
4. TRANSFORMER SECONDARY TAP CONDUCTORS SHALL MEET THE FOLLOWING REQUIREMENTS:
   - A. AMPACITY RATING SHALL NOT BE LESS THAN THE RATING OF THE SECONDARY OVERCURRENT PROTECTION DEVICE.
   - B. MAXIMUM CONDUCTOR LENGTH SHALL BE 25' FROM TRANSFORMER SECONDARY TERMINATION LUGS TO THE TERMINATION LUGS IN THE SECONDARY OVERCURRENT PROTECTION DEVICE.
   - C. CONDUCTORS SHALL BE INSTALLED IN APPROVED METAL RACEWAY FOR PROTECTION FROM PHYSICAL DAMAGE.
5. PROVIDE TRANSFORMER AND OVERCURRENT PROTECTION DEVICES WITH TERMINATION LUGS SIZED TO ACCEPT SPECIFIED CONDUCTORS WITHOUT THE NEED FOR REDUCERS OR ADAPTERS.
6. THE PRIMARY OVERCURRENT PROTECTION DEVICE SHALL SERVE AS THE PRIMARY DISCONNECTING MEANS AND SHALL BE LOCATED WITHIN SITE OF THE TRANSFORMER, OR IT SHALL BE LOCKABLE PER NEC REQUIREMENTS AND ITS LOCATION SHALL BE MARKED ON THE TRANSFORMER WITH A PERMANENT LABEL PER THE SPECIFICATIONS.
7. GROUNDING AND OVERCURRENT PROTECTION SPECIFIED ON THIS SCHEDULE SHALL BE PROVIDED WHETHER SHOWN ON PLAN OR NOT.



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ISSUE DATE

DATE	DESCRIPTION
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REVISIONS

DATE	DESCRIPTION

KEY PLAN

SCALE: 1/8" = 1'-0" (0' 4' 8' 16') PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

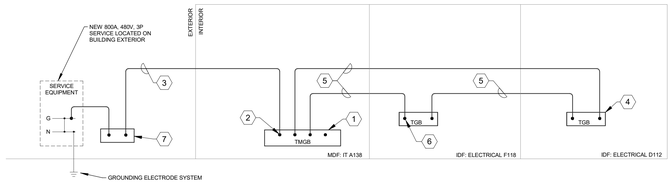
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PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL POWER RISER DIAGRAM

DRAWING NO.:
E5.01

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GROUNDING RISER DIAGRAM KEYNOTES

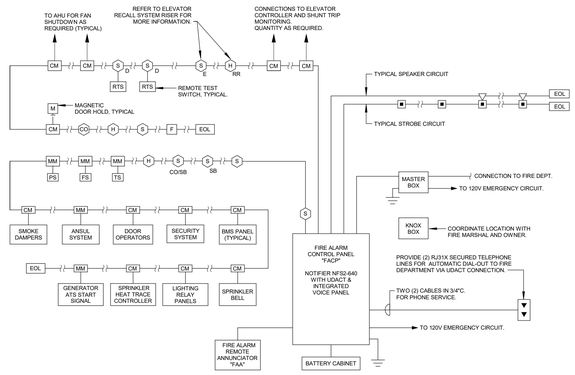
1. TELECOMMUNICATIONS MAIN GROUNDING BUSBAR "TMGB". 20" X 4" X 1/4" COPPER GROUND BAR WITH INSULATORS, BRACKETS, AND MOUNTING HARDWARE FROM MANUFACTURER. MOUNT IN READILY ACCESSIBLE LOCATION ON WALL. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL CONNECTIONS. (DESIGN BASED ON PANDUIT: GB4B0624TPI-1. EQUALS BY ERICO, CHATSWORTH, AND EATON ARE ACCEPTABLE.) VERIFY LENGTH WITH OWNER'S IT REPRESENTATIVE.
2. LISTED GROUNDING CONNECTION UTILIZING LUGS APPROVED AND SUPPLIED BY BUSBAR MANUFACTURER. (TYPICAL)
3. BONDING CONDUCTOR FOR TELECOMMUNICATIONS "BCT". BOND TO THE SERVICE EQUIPMENT GROUND. SIZE SHALL MATCH LARGEST "TBB" CONDUCTOR, BUT SHALL NOT BE SMALLER THAN 4/0 AWG.
4. TELECOMMUNICATIONS GROUNDING BUSBAR "TGB". 12" X 4" X 1/4" COPPER GROUND BAR WITH INSULATORS, BRACKETS, AND MOUNTING HARDWARE FROM MANUFACTURER. MOUNT IN READILY ACCESSIBLE LOCATION ON WALL. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL CONNECTIONS. (DESIGN BASED ON PANDUIT: GB4B0306TPI-1. EQUALS BY ERICO, CHATSWORTH, AND EATON ARE ACCEPTABLE.) VERIFY LENGTH WITH OWNER'S IT REPRESENTATIVE. (TYPICAL)
5. TELECOMMUNICATIONS BONDING BACKBONE CONDUCTOR "TBB". REFER TO CHART FOR SIZE. (TYPICAL)
6. LISTED GROUNDING CONNECTION. IRREVERSIBLE HI COMPRESSION CRIMP SPLICE OR OTHER APPROVED CONNECTION. (TYPICAL).
7. ELECTRIC SERVICE GROUND BAR. SAME AS TMGB, EXCEPT WITH TINNED COPPER, AND FASTENED WITH STAINLESS STEEL TRUSS SPANNER SECURITY SCREWS. LOCATE CONVENIENT TO SERVICE EQUIPMENT.

TBB CONDUCTOR SIZE VS LENGTH

TBB/GE LINEAR LENGTH (FEET)	MINIMUM TBB/GE SIZE (AWG)
LESS THAN 13	6
14 - 20	4
21 - 26	3
27 - 33	2
34 - 41	1
42 - 52	1/0
53 - 66	2/0
67 - 84	3/0
85 - 105	4/0
106 - 125	250 KCMIL
126 - 150	300 KCMIL
151 - 175	350 KCMIL
176 - 250	500 KCMIL
251 - 300	600 KCMIL
GREATER THAN 300	750 KCMIL

** ALL CONDUCTOR SIZES BASED ON COPPER **

2 GROUNDING RISER DIAGRAM
NOT TO SCALE



GENERAL NOTES:

1. FIRE ALARM SYSTEM SHALL BE NOTIFIER NFS2-640 WITH INTEGRATED VOICE PANEL. ALTERNATES AND SUBSTITUTIONS ARE NOT PERMITTED.
2. FOR ADDITIONAL INFORMATION REFER TO SYMBOL LEGEND, ABBREVIATIONS LIST, AND ALL NOTES AND SPECIFICATIONS.
3. COORDINATE ALL REQUIREMENTS WITH LOCAL FIRE DEPARTMENT
4. PROVIDE ALL FIRE ALARM DEVICE WIRING PER MANUFACTURER'S SPECIFICATIONS.
5. PROVIDE EXTRA POWER SUPPLIES AND TRANSPONDERS (WIRED TO NEW DEDICATED 120V EMERGENCY CIRCUITS) WHERE REQUIRED BY MANUFACTURER.
6. TYPICAL DEVICES SHOWN IN RISER. REFER TO FLOOR PLANS FOR DEVICE QUANTITIES AND LOCATIONS.
7. REFER TO FIRE PROTECTION DRAWINGS FOR LOCATIONS AND QUANTITIES OF FLOW AND TAMPER SWITCHES.
8. CARBON MONOXIDE DETECTORS SHALL BE CONNECTED AS A SEPARATE ZONE FOR ONLY A SUPERVISORY SIGNAL TO THE FACP AND ALL REMOTE ANNUNCIATORS WHEN ACTIVATED.
9. PROVIDE CO DETECTORS WITHIN ALL ROOMS WITH FUEL BURNING EQUIPMENT. THIS INCLUDES ALL BOILER ROOMS, MECHANICAL ROOMS, AND ALL OTHER SPACES WITH FUEL BURNING EQUIPMENT.
10. CO DETECTORS SHALL MEET OR EXCEED UL 2075.
11. CO DETECTORS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS, AND AS REMOTELY FROM THE HEATING APPLIANCE AS POSSIBLE, AND IN ACCORDANCE WITH NFPA 720.
12. CO DETECTOR TESTING AND MAINTENANCE SHALL BE PROVIDED PER MFG INSTRUCTIONS, AND NFPA 720.
13. PROVIDE SIGNAGE AT DOORS TO ROOMS WITH FUEL BURNING EQUIPMENT WARNING FUEL-BURNING EQUIPMENT AND CO DETECTORS LOCATED IN THAT AREA. THIS INCLUDES ALL BOILER ROOMS, MECHANICAL ROOMS, AND ALL OTHER SPACES WITH FUEL BURNING EQUIPMENT.
14. CONTRACTOR IS RESPONSIBLE FOR SIZING BATTERY CABINET CAPABLE OF SUPPORTING BUILDING FIRE ALARM SYSTEM IN THE EVENT OF A POWER FAILURE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
15. REFER TO HVAC DRAWINGS FOR LOCATIONS AND QUANTITIES OF DUCT SMOKE DETECTORS AND SMOKE DAMPERS. REMOTE TEST SWITCHES SHALL BE FLUSHED IN CEILING DIRECTLY BELOW DUCT SMOKE DETECTOR (OR IN CLOSEST DROPPED CEILING TO DETECTOR), UNLESS OTHERWISE NOTED.
16. UNLESS OTHERWISE NOTED IN SPECIFICATIONS, ALL WIRING SHALL BE IN CONDUIT, OR MC CABLE WHERE PERMITTED.
17. TWO ADDRESSABLE LOOPS SHOWN PER PANEL. PROVIDE AS REQUIRED.
18. LOCATE ONE SMOKE DETECTOR ON CEILING ABOVE EACH FACP AND FATP CABINET.
19. LOCATE BATTERY CABINET IN SAME ROOM AS THE PANEL IT IS CONNECTED TO.
20. PROVIDE ISOLATION MODULES AT ALL FLOOR SEPARATIONS, AFTER EVERY 50TH DEVICE, AND AT EVERY SPACE DESIGNATED FOR FUTURE USE OR OCCUPANCY.
21. PROVIDE SYSTEM WITH A DOCUMENTATION PACKAGE IN ACCORDANCE WITH NFPA 72 REQUIREMENTS. LOCATE CABINET IN FIRE ALARM CONTROL PANEL (FACP).

1 FIRE ALARM RISER DIAGRAM
NOT TO SCALE

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

SCALE: 1/8" = 1'-0" (0', 4', 8', 16')

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

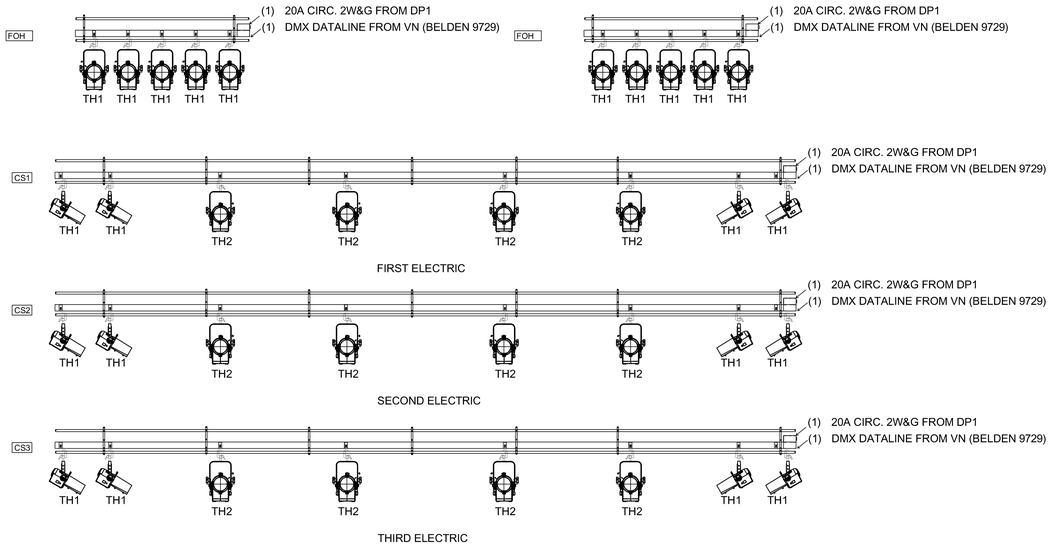
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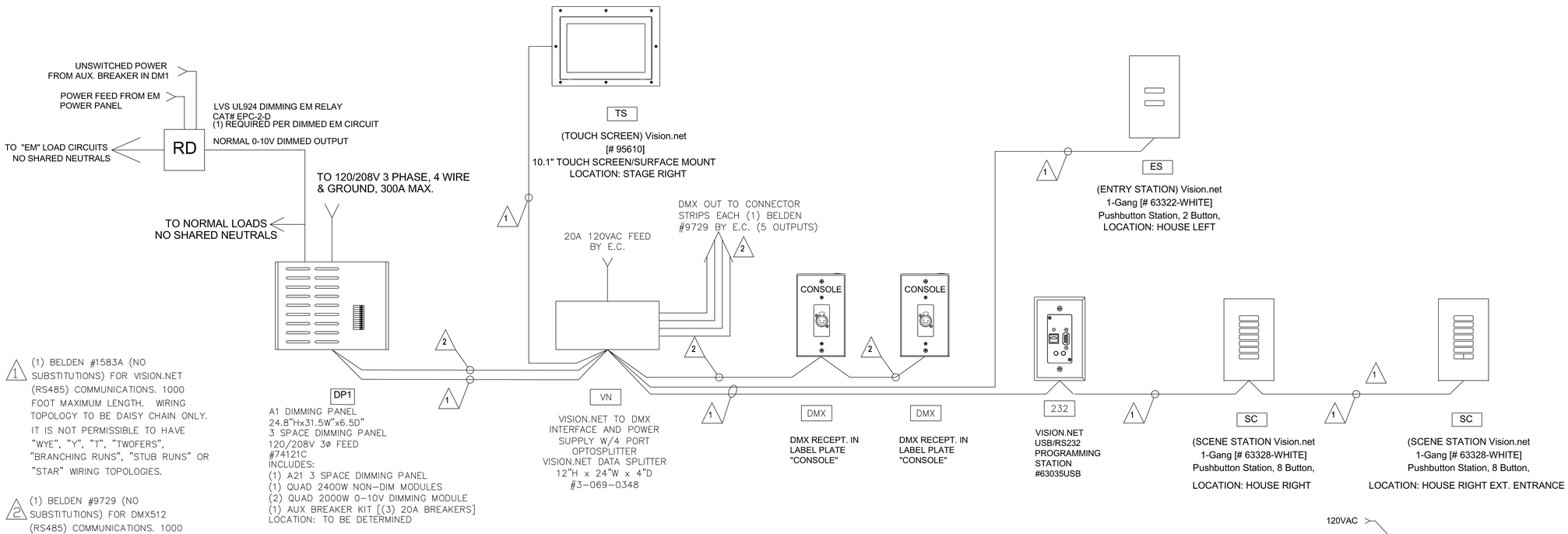
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ELECTRICAL RISER DIAGRAMS

DRAWING NO.:
E5.02

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1 (1) BELDEN #1583A (NO SUBSTITUTIONS) FOR VISION.NET (RS485) COMMUNICATIONS. 1000 FOOT MAXIMUM LENGTH. WIRING TOPOLOGY TO BE DAISY CHAIN ONLY. IT IS NOT PERMISSIBLE TO HAVE "WYE", "Y", "T", "TWOFERS", "BRANCHING RUNS", "STUB RUNS" OR "STAR" WIRING TOPOLOGIES.

2 (1) BELDEN #9729 (NO SUBSTITUTIONS) FOR DMX512 (RS485) COMMUNICATIONS. 1000 FOOT MAXIMUM LENGTH. WIRING

IT IS NOT PERMISSIBLE TO HAVE "WYE", "Y", "T", "TWOFERS",

"STAR" WIRING TOPOLOGIES.

DP1 DIMMIN PANEL SCHEDULE

CIRCUIT	DESCRIPTION	LOAD TYPE	FIXT. TYPE	DIM/ NON-DIM	MAX WATTAGE
DP1	APRON DOWN LIGHTS	0-10V	F13	DIM	2000W
DP2	HOUSE LIGHTS ROW 1	0-10V	F10	DIM	2000W
DP3	HOUSE LIGHTS ROW 2	0-10V	F10	DIM	2000W
DP4	HOUSE LIGHTS ROW 3	0-10V	F10	DIM	2000W
DP5	HOUSE LIGHTS ROW 4	0-10V	F10	DIM	2000W
DP6	HOUSE LIGHTS ROW 5	0-10V	F10	DIM	2000W
DP7	HOUSE LIGHTS ROW 6	0-10V	F10	DIM	2000W
DP8	SPARE	0-10V		DIM	2000W
DP9	FOH THEATRICAL LIGHTING	LED SW	TH1	NON-DIM	2400W
DP10	1ST ELECTRIC	LED SW	TH1/TH2	NON-DIM	2400W
DP11	2ND ELECTRIC	LED SW	TH1/TH2	NON-DIM	2400W
DP12	3RD ELECTRIC	LED SW	TH1/TH2	NON-DIM	2400W

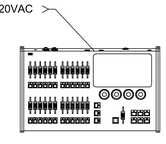
DISTRIBUTION SCHEDULE

TYPE	QYT.	PART NUMBER	DESCRIPTION
FOH	2	450-8-(1/5-520DUP)-R-17=HW-1-XLRF-5DR	8' CONNECTOR STRIP, (1) CIRCUITS/(5) 20A DUPLEX RECEPTACLES/(1) XLRF
CS1-3	3	450-35-(1/8-520DUP)-L-17=HW-1-XLRF-5DR	35' CONNECTOR STRIP, (1) CIRCUITS/(8) 20A DUPLEX RECEPTACLES/(1) XLRF

INCLUDE GRID IRON JUNCTION BOXES AS REQUIRED FOR THE CONNECTOR STRIPS.

THEATRICAL FIXTURE SCHEDULE

FIXTURE TYPE	QYT.	MANUFACTURER	PART NUMBER	DESCRIPTION	FIXTURE WATTAGE	CONNECTOR TYPE	NOTES
TH1	16	STRAND/VARILITE	64511-002	ACCLAIM LED ZOOMSPOT	150	EDISON	INCLUDE C-CLAMP & SAFETY CABLE
TH2	12	STRAND/VARILITE	64511-001	ACCLAIM LED FRESNEL	150	EDISON	INCLUDE C-CLAMP & SAFETY CABLE
EC TO INCLUDE THE FOLLOWING CABLES							
(15) 5' DMX JUMPER CABLES							
(15) 10' DMX JUMPER CABLES							



PROVIDE (1) STRAND FLX S24 CONSOLE OR EQUAL
INCLUDE:
(1) 25' DMX CONTROL CABLE

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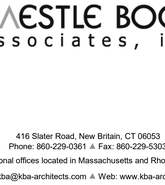
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REVISIONS

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

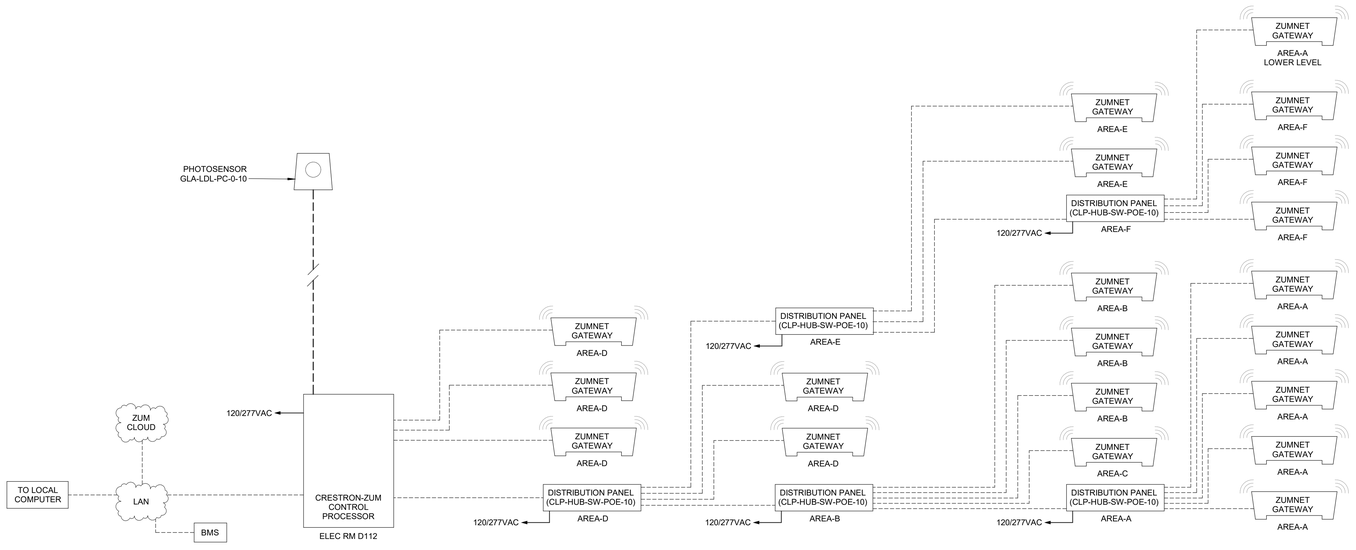
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STAGE LIGHTING RISER DIAGRAM

DRAWING NO.:
E5.03

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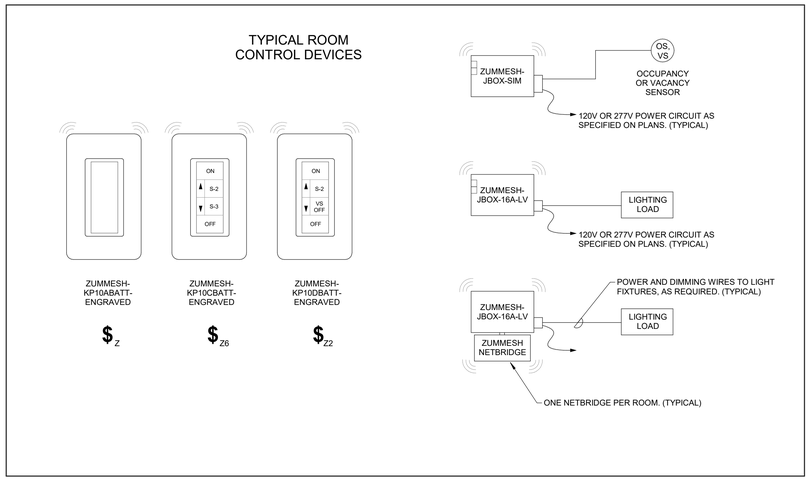


GENERAL NOTES:

1. DETAIL IS TYPICAL. REFER TO FLOOR PLANS FOR SPECIFICATIONS OF CONTROLS AND FIXTURES.
2. CRESTRON ZUM PRODUCTS IS THE BASIS OF DESIGN. SYSTEM SHALL BE FULLY NETWORKED, AND COMPRISE WIRELESS WALL SWITCHES WITH WIRED SENSORS AND POWER PACKS. REFER TO TYPICAL ROOM CONTROL DEVICES SHOWN IN DETAIL.
3. PROVIDE FACTORY ENGRAVING ON ALL WALL CONTROL DEVICES AND BUTTONS PER ARCHITECTS LABELING REQUIREMENTS.
4. FACTORY COMMISSIONING SHALL BE PROVIDED FOR ALL SYSTEM COMPONENTS (SENSORS, PHOTOCELLS, CONTROLS, ETC.).
5. POWER PACKS NOT SHOWN ON PLANS. PROVIDE QUANTITY AND TYPE OF POWER PACKS AS REQUIRED FOR PROPER OPERATION OR EACH FIXTURE AND CONTROL DEVICE.
6. DO NOT EXCEED MAXIMUM NUMBER OF DEVICES IN EACH AREA FOR PROPER FUNCTIONALITY.
7. REFER TO FLOOR PLANS FOR QUANTITY AND TYPE OF SENSORS AND CONTROLS.
8. ROOM VACANCY SENSORS SHALL BE SET FOR MANUAL ON, AUTO OFF OPERATION. TIMEOUT AFTER 30 MINUTES.
9. PROVIDE ALL LOW VOLTAGE CONTROL WIRING AS REQUIRED FOR PROPER OPERATION OF ALL FIXTURES FROM ASSOCIATED CONTROLS (INCLUDES DIMMERS, OCCUPANCY SENSORS, SCENE CONTROL SWITCHES, ETC.).
10. VERIFY COMPATIBILITY OF PRODUCTS WITH LIGHT FIXTURES BEING CONTROLLED AND PROVIDE APPROPRIATE DEVICES FOR PROPER OPERATION.
11. FIRST ZUMNET-BRIDGE SHOULD BE WITHIN 100 FEET OF ZUMNET-GATEWAY. SUBSEQUENT ZUMNET-BRIDGE(S) SHOULD BE WITHIN 100 FEET OF PREVIOUS ZUMNET-BRIDGE.
12. LAST ZUMNET-BRIDGE SHOULD BE WITHIN 250 FEET OF A ZUMNET-GATEWAY.
13. WIRELESS DEVICES WITHIN THE SAME ROOM SHOULD BE ACQUIRED TO THE SAME ZUMNET-BRIDGE / ZUMNET-GATEWAY.
14. ZUMNET-GATEWAY SHOULD NOT BE MOUNTED CLOSER THAN 15 FEET FROM EACH OTHER.
15. ZUMNET-GATEWAY SHOULD BE MOUNTED ON SAME FLOOR AS WIRELESS DEVICES THAT ARE TO BE WIRELESSLY CONNECTED TO THAT GATEWAY.
16. ZUMNET-GATEWAY SHOULD BE MOUNTED AT LEAST 15 FEET FROM WI-FI ACCESS POINTS.
17. ZUMNET-GATEWAY SHOULD BE MOUNTED AT LEAST 15 FEET FROM LARGE METAL OBJECTS TO AVOID RF "SHADOWS".
18. ZUMNET-GATEWAY ANTENNA SHOULD BE POSITIONED ON A VERTICAL PLANE.
19. MOUNTING THE ZUMNET-GATEWAY ON A METAL SURFACE SHOULD BE AVOIDED, HOWEVER WHEN UNAVOIDABLE, THE ANTENNAE SHOULD BE MOUNTED ON A HORIZONTAL PLANE.
20. REFER TO ALL MFG INSTALLATION INSTRUCTIONS.
21. LOCATE PHOTOSENSOR ON ROOF IN LOCATION WITH CLEAR VIEW OF SKY. COORIDATE LOCATION WITH ARCHITECT.

WIRE LEGEND:

- CAT-6 ETHERNET CABLE.
- CRESTRON PLENUM RATED "CRESNET" CABLE: (1) PAIR #18AWG, (1) 22 AWG TWISTED PAIR. COORDINATE REQUIREMENTS WITH MFG.
- POWER WIRING TO LIGHTING LOADS, POWER PACKS, AND DEVICE POWER SUPPLIES AS INDICATED. PROVIDE 0-10V CONTROL WIRING WHERE DIMMING CONTROLS ARE SPECIFIED.



1 LIGHTING CONTROLS RISER DIAGRAM
NOT TO SCALE

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

LIGHTING CONTROLS RISER DIAGRAM

DRAWING NO.:
E5.04

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LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	MODEL	LAMPS			VOLTAGE	REMARKS
			LUMENS	WATTAGE	LUMENS/WATT		
B1	GARDCO	PBL-42-14L-200-WW-G2-3-UNV	965 lm	11 W	91 lm/W	277 V	EXTERIOR LED BOLLARD FIXTURE
F1	DAYBRITE	2FGXG-38L-4-RS-UNV-DIM	3800 lm	31 W	123 lm/W	277 V	ARCHITECTURAL CENTER DIFFUSER 2X4
F1E	DAYBRITE	2FGXG-38L-4-RS-UNV-DIM	3800 lm	31 W	123 lm/W	277 V	SAME AS TYPE F1, EXCEPT WIRED TO EMERGENCY
F2	DAYBRITE	2FGXG-38L-2-RS-UNV-DIM	3800 lm	28 W	136 lm/W	277 V	ARCHITECTURAL CENTER DIFFUSER 2X2
F2E	DAYBRITE	2FGXG-38L-2-RS-UNV-DIM	3800 lm	28 W	136 lm/W	277 V	SAME AS TYPE F2, EXCEPT WIRED TO EMERGENCY
F3	DAYBRITE	1FGXG-38L-4-RS-UNV-DIM	3800 lm	27 W	141 lm/W	277 V	ARCHITECTURAL CENTER DIFFUSER 1X4
F3E	DAYBRITE	1FGXG-38L-4-RS-UNV-DIM	3800 lm	27 W	141 lm/W	277 V	SAME AS TYPE F3, EXCEPT WIRED TO EMERGENCY
F4	HE WILLIAMS	6DR-TL-L30-8-40-UNV	3000 lm	27 W	112 lm/W	277 V	6" RECESSED DOWNLIGHT, SUITABLE FOR WET LOCATIONS UNDER COVERED CEILINGS
F4E	HE WILLIAMS	6DR-TL-L30-8-40-UNV	3000 lm	27 W	112 lm/W	277 V	SAME AS TYPE F4, EXCEPT WIRED TO EMERGENCY
F5	DAYBRITE	FSS-440L-840-UNV-DIM	4000 lm	31 W	129 lm/W	277 V	4' LED UTILITY ROOM STRIP
F5E	DAYBRITE	FSS-440L-840-UNV-DIM	4000 lm	31 W	129 lm/W	277 V	SAME AS TYPE F5, EXCEPT WIRED TO EMERGENCY
F6	LA LIGHTING	GCR721-4HE-4L-AMF-PA2	3272 lm	25 W	129 lm/W	277 V	LENSED CLEANROOM 2X4 WITH STEEL CONSTRUCTION AND GASKET SEALED DOOR
F6E	LA LIGHTING	GCR721-4HE-4L-AMF-PA2	3272 lm	25 W	129 lm/W	277 V	SAME AS TYPE F6, EXCEPT WIRED TO EMERGENCY
F7	LA LIGHTING	GCR721-3HE-2L-AMF-PA2	2447 lm	19 W	129 lm/W	277 V	LENSED CLEANROOM 2X2 WITH STEEL CONSTRUCTION AND GASKET SEALED DOOR
F7E	LA LIGHTING	GCR721-3HE-2L-AMF-PA2	2447 lm	19 W	129 lm/W	277 V	SAME AS TYPE F7, EXCEPT WIRED TO EMERGENCY
F8	DAYBRITE	FSS-470L-UNV-DIM	7000 lm	58 W	121 lm/W	277 V	4' LED HI BAY UTILITY STRIP
F8E	DAYBRITE	FSS-470L-UNV-DIM	7000 lm	58 W	121 lm/W	277 V	SAME AS TYPE F8, EXCEPT WIRED TO EMERGENCY
F9	GARDCO	101L-32L-530-WW-G1-3-UNV	2944 lm	28 W	106 lm/W	277 V	EXTERIOR LED WALL SCONCE
F9E	GARDCO	101L-32L-530-WW-G1-3-UNV	2944 lm	28 W	106 lm/W	277 V	SAME AS TYPE F9, EXCEPT WIRED TO EMERGENCY
F10	LEDALIGHT	77-2-6-L-AD-08-G	4600 lm	33 W	139 lm/W	277 V	LINEAR SONA SUSPENDED PENDANT WITH UPPER & LOWER LIGHT ENGINES, SUSPENDED DIRECT/INDIRECT MOUNTING (50-60% DN), 8 FT RUN LENGTH, 2CCT DIMMING (UP/DOWN)
F10E	LEDALIGHT	77-2-6-L-A-08-G	4600 lm	33 W	139 lm/W	277 V	SAME AS TYPE F10, EXCEPT WIRED TO EMERGENCY
F11	VISION ENGINEERING	VHB3-L3-90D-50K	38610 lm	269 W	144 lm/W	277 V	HI-BAY LED GYM LIGHT WITH INTEGRATED WIRE GUARD, INTEGRAL SURGE PROTECTION.
F11E	VISION ENGINEERING	VHB3-L3-90D-50K	38610 lm	269 W	144 lm/W	277 V	SAME AS TYPE F11, EXCEPT WIRED TO EMERGENCY
F12	BARN LIGHT VENICE PENDANT	BLE-CYLV-LRG-LED16.8	1600 lm	17 W	94 lm/W	277 V	VENICE CYLINDER LED PENDANT WITH 277V DRIVER. ALL AESTHETIC OPTIONS TBD BY ARCHITECT.
F13	LIGHTOLIER	C6S-DL-15-8-40-M-Z10-U-CL	1500 lm	15 W	100 lm/W	277 V	6" PENDANT CYLINDER
F14	DAYBRITE	2FPZ-38L-835-4-DS-UNV	3800 lm	29 W	129 lm/W	277 V	2X4 LENSED FLAT PANEL LED.
F14E	DAYBRITE	2FPZ-38L-835-4-DS-UNV	3800 lm	29 W	129 lm/W	277 V	SAME AS TYPE F14, EXCEPT WIRED TO EMERGENCY
F15	DAYBRITE	2FPZ-30L-835-2-DS-UNV	3000 lm	23 W	130 lm/W	277 V	2X2 LENSED FLAT PANEL LED
F15E	DAYBRITE	2FPZ-30L-835-2-DS-UNV	3000 lm	23 W	130 lm/W	277 V	SAME AS TYPE F15, EXCEPT WIRED TO EMERGENCY
F16	DAYBRITE	2FPZ-38L-835-2-DS-UNV	3800 lm	29 W	132 lm/W	277 V	SAME AS F15, EXCEPT HIGHER LUMEN PACKAGE
F16E	DAYBRITE	2FPZ-38L-835-2-DS-UNV	3800 lm	29 W	132 lm/W	277 V	SAME AS TYPE F16, EXCEPT WIRED TO EMERGENCY
F17	3G LIGHTING	3G-SKU24-L45-S80-UNV-DIM	4500 lm	40 W	113 lm/W	277 V	2X2 KUBO SURFACE MOUNTED FIXTURE WITH SANDBLASTED ACRYLIC DIFFUSER WITH MITERED CORNERS, 5 YEAR WARRANTY, DAMP LOCATION LISTED
F17E	3G LIGHTING	3G-SKU24-L45-S80-UNV-DIM	4500 lm	40 W	113 lm/W	277 V	2X2 KUBO SURFACE MOUNTED FIXTURE WITH SANDBLASTED ACRYLIC DIFFUSER WITH MITERED CORNERS, 5 YEAR WARRANTY, DAMP LOCATION LISTED
F20	ANP LIGHTING	PR-GUP100-NA-W-4000-RTCN CW	2000 lm	16 W	125 lm/W	277 V	WALL MOUNT ELEVATOR LIGHT WITH WIRE GUARD, WIDE DISTRIBUTION.
SF1	HADCO	B9-D-W-SP1	2031 lm	19 W	107 lm/W	277 V	GROUND MOUNTED B9 FLEXSCAPE LED ACCENT LINE-VOLTAGE LUMINAIR FOR FLAGPOLE LIGHTING WITH WARM 3000K COLOR, NARROW SPOT BEAM, 2031 LUMENS, IP66 RATED, WET LOCATION LISTED, POWDER COAT FINISH.
SL3	GARDCO	ECF-S-32L-530-WW-G2-AR-3-UNV	7417 lm	56 W	132 lm/W	277 V	ECO-FORM, GEN-2, SINGLE HEAD LED POLE MOUNTED SITE LIGHTING LUMINAIRE WITH 32 LEDS, 530 MA DRIVE CURRENT, WARM WHITE 3000K COLOR TEMP, 70 CRI, ARM MOUNT, UNIVERSAL VOLTAGE, O-10V DIMMING DRIVER, TYPE 2 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING. LUMINAIRE SHALL BE MOUNTED TO 16'-7" GARDCO STRAIGHT SQUARE STEEL POLE (SS-CB-4-11-16FT 7IN-D1-DT5) ON CONCRETE BASE EXTENDING 5" ABOVE FINISHED GRADE, FOR LUMINAIRE INSTALL HEIGHT OF 17' ABOVE FINISHED GRADE. PROVIDE D1 DRILLING FOR REQUIRED NUMBER OF LIGHT HEADS AS WELL AS SECURITY CAMERAS WHERE INDICATED ON SECURITY PLANS.
SL4S	GARDCO	ECF-S-32L-530-WW-G2-AR-4-UNV	7417 lm	56 W	132 lm/W	277 V	ECO-FORM, GEN-2, SINGLE HEAD LED POLE MOUNTED SITE LIGHTING LUMINAIRE WITH 32 LEDS, 530 MA DRIVE CURRENT, WARM WHITE 3000K COLOR TEMP, 70 CRI, ARM MOUNT, UNIVERSAL VOLTAGE, O-10V DIMMING DRIVER, TYPE 2 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING. LUMINAIRE SHALL BE MOUNTED TO 16'-7" GARDCO STRAIGHT SQUARE STEEL POLE (SS-CB-4-11-16FT 7IN-D1-DT5) ON CONCRETE BASE EXTENDING 5" ABOVE FINISHED GRADE. FOR LUMINAIRE INSTALL HEIGHT OF 17' ABOVE FINISHED GRADE. PROVIDE D1 DRILLING FOR REQUIRED NUMBER OF LIGHT HEADS AS WELL AS SECURITY CAMERAS WHERE INDICATED ON SECURITY PLANS.
SL5A	GARDCO	ECF-S-32L-530-WW-G2-AR-5W-UNV	7417 lm	56 W	132 lm/W	277 V	ECO-FORM, GEN-2, SINGLE HEAD LED POLE MOUNTED SITE LIGHTING LUMINAIRE WITH 32 LEDS, 530 MA DRIVE CURRENT, WARM WHITE 3000K COLOR TEMP, 70 CRI, ARM MOUNT, UNIVERSAL VOLTAGE, O-10V DIMMING DRIVER, TYPE 2 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING. LUMINAIRE SHALL BE MOUNTED TO 16'-7" GARDCO STRAIGHT SQUARE STEEL POLE (SS-CB-4-11-16FT 7IN-D1-DT5) ON CONCRETE BASE EXTENDING 5" ABOVE FINISHED GRADE, FOR LUMINAIRE INSTALL HEIGHT OF 17' ABOVE FINISHED GRADE. PROVIDE D1 DRILLING FOR REQUIRED NUMBER OF LIGHT HEADS AS WELL AS SECURITY CAMERAS WHERE INDICATED ON SECURITY PLANS.
SL5B	GARDCO	ECF-S-32L-530-WW-G2-AR-5W-UNV	14834 lm	112 W	132 lm/W	277 V	ECO-FORM, GEN-2, DUAL HEAD LED POLE MOUNTED SITE LIGHTING LUMINAIRE WITH 32 LEDS, 530 MA DRIVE CURRENT, WARM WHITE 3000K COLOR TEMP, 70 CRI, ARM MOUNT, UNIVERSAL VOLTAGE, O-10V DIMMING DRIVER, TYPE 2 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING. LUMINAIRE SHALL BE MOUNTED TO 16'-7" GARDCO STRAIGHT SQUARE STEEL POLE (SS-CB-4-11-16FT 7IN-D1-DT5) ON CONCRETE BASE EXTENDING 5" ABOVE FINISHED GRADE, FOR LUMINAIRE INSTALL HEIGHT OF 17' ABOVE FINISHED GRADE. PROVIDE D1 DRILLING FOR REQUIRED NUMBER OF LIGHT HEADS AS WELL AS SECURITY CAMERAS WHERE INDICATED ON SECURITY PLANS.
SLB	GARDCO	ECF-S-32L-530-WW-G2-AR-BLC-UNV	7417 lm	56 W	132 lm/W	277 V	ECO-FORM, GEN-2, SINGLE HEAD LED POLE MOUNTED SITE LIGHTING LUMINAIRE WITH 32 LEDS, 530 MA DRIVE CURRENT, WARM WHITE 3000K COLOR TEMP, 70 CRI, ARM MOUNT, UNIVERSAL VOLTAGE, O-10V DIMMING DRIVER, TYPE 2 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING. LUMINAIRE SHALL BE MOUNTED TO 16'-7" GARDCO STRAIGHT SQUARE STEEL POLE (SS-CB-4-11-16FT 7IN-D1-DT5) ON CONCRETE BASE EXTENDING 5" ABOVE FINISHED GRADE, FOR LUMINAIRE INSTALL HEIGHT OF 17' ABOVE FINISHED GRADE. PROVIDE D1 DRILLING FOR REQUIRED NUMBER OF LIGHT HEADS AS WELL AS SECURITY CAMERAS WHERE INDICATED ON SECURITY PLANS.
WP3	GARDCO	101L-32L-530-WW-G1-3-UNV	5200 lm	52 W	100 lm/W	277 V	EXTERIOR LOW PROFILE LED WALL SCONCE, SUITABLE FOR WET LOCATIONS, 32 LEDS, 530 MA DRIVE CURRENT, TYPE 3 DISTRIBUTION, INTEGRAL MOTION SENSOR WITH ADJUSTABLE TIME DELAY AND ADJUSTABLE BI-LEVEL DIMMING.
X1				5 W			
X2	EVENLITE	TRE6-EM-W/SC		5 W		277 V	EXIT SIGN - DUAL FACE, EDGE LIT
X3	EVENLITE	CDW-EM-U-2H-CT		5 W		277 V	EXIT SIGN - EXTERIOR WET LOCATION, VANDAL RESISTANT, 2 HOUR BATTERY LIFE, OPERATION TO -20 DEGREE C
X4	EVENLITE	TRE-EM-W/SC		5 W		277 V	EXIT SIGN - SINGLE FACE - WITH CT SYMBOL OF ACCESSIBILITY

EQUIPMENT COORDINATION SCHEDULE

NOTE: REFER TO WIRE SCHEDULE FOR CONDUCTOR SIZING FOR EACH PIECE OF EQUIPMENT.

TAG	EQUIPMENT INFORMATION					CIRCUIT INFORMATION				CONTROL			STARTER			DISCONNECT			REMARKS
	FLA	MCA	MOCP	VOLT	PH	PANEL	NO.	APPARENT LOAD	LOAD CLASSIFICATION	TYPE	FURNISH	INSTALL	TYPE	FURNISH	INSTALL	TYPE	FURNISH	INSTALL	
	0 A	0 A	15 A	208 V	1			0 VA	MTR										
ACU-1	0.2 A	0.5 A	15 A	208 V	1			35 VA	HVAC	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	T	DIV. 26	DIV. 26	
ACU-2	0.2 A	0.5 A	15 A	208 V	1			35 VA	HVAC	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	T	DIV. 26	DIV. 26	
ACU-3	0 A	0.6 A	15 A	208 V	1			0 VA	MTR	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	TBD	TBD	TBD	
ACU-4	0 A	0.6 A	15 A	208 V	1			0 VA	MTR	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	TBD	TBD	TBD	
ACU-5	0 A	0.6 A	15 A	208 V	1			0 VA	MTR	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	TBD	TBD	TBD	
ACU-6	0 A	0.5 A	15 A	208 V	1			0 VA	HVAC	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	TBD	TBD	TBD	
ACU-7	0 A	0.6 A	15 A	208 V	1			0 VA	MTR	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	TBD	TBD	TBD	
AHU-1	5.4 A	8.6 A	15 A	208 V	1	MLA	12,14	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-2	5.4 A	8.6 A	15 A	208 V	1	MLA	13,15	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-3	5.4 A	8.6 A	15 A	208 V	1	MLA	16,18	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-4	5.4 A	8.6 A	15 A	208 V	1	MLA	17,19	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-5	5.4 A	8.6 A	15 A	208 V	1	MLD	20,22	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-6	5.4 A	8.6 A	15 A	208 V	1	MLD	17,19	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-7	5.4 A	8.6 A	15 A	208 V	1	MLD	14,16	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-8	5.4 A	8.6 A	15 A	208 V	1	MLD	13,15	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-9	5.4 A	8.6 A	15 A	208 V	1	MLD	10,12	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-10	5.4 A	8.6 A	15 A	208 V	1	MLA	21,23	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-11	5.4 A	8.6 A	15 A	208 V	1	MLA	20,22	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-12	5.4 A	8.6 A	15 A	208 V	1	MLF	8,10	1,123 VA	MTR	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-13	5.4 A	8.6 A	15 A	208 V	1	MLF	7,9	1,123 VA	MTR	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-14	5.4 A	8.6 A	15 A	208 V	1	MLF	11,13	1,123 VA	MTR	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-15	5.4 A	8.6 A	15 A	208 V	1	MLF	12,14	1,123 VA	MTR	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-16	5.4 A	8.6 A	15 A	208 V	1	MLF	20,22	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-17	5.4 A	8.6 A	15 A	208 V	1	MLF	19,21	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-18	5.4 A	8.6 A	15 A	208 V	1	MLF	16,18	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-19	5.4 A	8.6 A	15 A	208 V	1	MLF	15,17	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-20	5.4 A	8.6 A	15 A	208 V	1	MLD	6,8	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
AHU-21	5.4 A	8.6 A	15 A	208 V	1	MLD	9,11	1,123 VA	HVAC	BMS	DIV. 23	DIV. 23	VFD	DIV. 23	DIV. 23	NFS-M	MANUF.	MANUF.	
B-1	13.5 A	16.9 A	20 A	120 V	1	GPLL	9	1,620 VA	HEAT	BMS	DIV. 23	DIV. 23	SPP	MANUF.	MANUF.	NFS	DIV. 26	DIV. 26	
B-1	1.4 A	1.8 A	0 A	120 V	1	GPLL	12	168 VA	MTR	KS-M	MANUF.	DIV. 26	SPP	MANUF.	MANUF.	T

Branch Panel: MPD

Location: ELECTRICAL D112 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: HDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1 | **MCB Rating:** 400 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1					5.7 4.2							2
3	PANEL LP-D		100 A	3		4.6 4.2		3	20 A		DOAS-2B	4
5							0.1 4.2					6
7					3.6 29.7							8
9	DOAS-2A		20 A	3		3.6 29.7		3	125 A		ERU-4	10
11							3.6 29.7					12
13					4.2 6.2							14
15	DOAS-3		25 A	3		4.2 6.2		3	40 A		HP-5B	16
17							4.2 6.2					18
19					6.2 4.7							20
21	HP-5A		40 A	3		6.2 4.7		3	25 A		HP-6B	22
23							6.2 4.7					24
25					4.7 4.7							26
27	HP-6A		25 A	3		4.7 4.7		3	25 A		HP-4B	28
29							4.7 4.7					30
31					4.7 0.0							32
33	HP-4A		25 A	3		4.7 0.0		3	20 A	--	Spare	34
35							4.7 0.0					36
37	Spare	--	20 A	1	0.0 0.0							38
39	Spare	--	20 A	1		0.0 0.0		3	25 A	--	Spare	40
41	Spare	--	20 A	1			0.0 0.0					42
43	Spare	--	20 A	1	0.0 0.0							44
45	Spare	--	20 A	1		0.0 0.0		3	40 A	--	Spare	46
47	Spare	--	20 A	1			0.0 0.0					48
49	Spare	--	20 A	1	0.0 0.0							50
51	Spare	--	20 A	1		0.0 0.0		2	20 A	--	Spare	52
53	Spare	--	20 A	1			0.0 0.0					54
55	Spare	--	20 A	1	0.0 0.0			2	30 A	--	Spare	56
57	Space	--	--	1		-- --		1	--	--	Space	58
59	Space	--	--	1			-- --	1	--	--	Space	60
61	Space	--	--	1	-- --			1	--	--	Space	62
63	Space	--	--	1		-- --		1	--	--	Space	64
65	Space	--	--	1			-- --	1	--	--	Space	66
67	Space	--	--	1	-- --			1	--	--	Space	68
69	Space	--	--	1		-- --		1	--	--	Space	70
71	Space	--	--	1			-- --	1	--	--	Space	72
73	Space	--	--	1	-- --			1	--	--	Space	74
75	Space	--	--	1		-- --		1	--	--	Space	76
77	Space	--	--	1			-- --	1	--	--	Space	78
79	Space	--	--	1	-- --			1	--	--	Space	80
81	Space	--	--	1		-- --		1	--	--	Space	82
83	Space	--	--	1			-- --	1	--	--	Space	84
			Total Load:		78.4 kVA	77.2 kVA	72.8 kVA					
			Total Amps:		285.4 A	281.2 A	262.8 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	217,956 VA	100.00%	217,956 VA		
Other	677 VA	100.00%	677 VA	**Total Conn. Load:**	228,365 VA
LITES	9,732 VA	125.00%	12,165 VA	**Total Est. Demand:**	230,798 VA
				Total Conn.:	274.7 A
				Total Est. Demand:	277.6 A

Notes:

Branch Panel: MPA

Location: ELECTRICAL A135 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: HDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1 | **MCB Rating:** 400 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1					6.4 4.2							2
3	HVAC		35 A	3		6.4 4.2		3	20 A		DOAS-1B	4
5							6.4 4.2					6
7					13.3 8.9							8
9	ERU-1		60 A	3		13.3 8.9		3	45 A		MAU-1	10
11							13.3 8.9					12
13					1.3 3.9							14
15	KEF-1		20 A	3		1.3 3.9		3	20 A		ERU-3	16
17							1.3 3.9					18
19					4.7 6.2							20
21	HP-1		25 A	3		4.7 6.2		3	40 A		HP-2	22
23							4.7 6.2					24
25					4.2 13.0							26
27	DOAS-4		25 A	3		4.2 13.0		3	60 A		ERU-2	28
29							4.2 13.0					30
31					4.7 4.7							32
33	HP-3A		25 A	3		4.7 4.7		3	25 A		HP-3B	34
35							4.7 4.7					36
37					5.9							38
39	PANEL LP-A		100 A	3		3.6						40
41							2.8					42
43												44
45												46
47												48
49												50
51												52
53												54
55												56
57												58
59												60
61												62
63												64
65												66
67												68
69												70
71												72
73												74
75												76
77												78
79												80
81												82
83												84
			Total Load:		81.2 kVA	78.9 kVA	78.1 kVA					
			Total Amps:		293.5 A	285.4 A	282.1 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	195,342 VA	100.00%	195,342 VA		
MTR	30,595 VA	121.74%	37,246 VA	**Total Conn. Load:**	238,257 VA
LITES	12,320 VA	125.00%	15,400 VA	**Total Est. Demand:**	247,988 VA
				Total Conn.:	286.6 A
				Total Est. Demand:	298.3 A

Notes:

Distribution Panel: HDP

Location: MECHANICAL A006 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 800 A
Enclosure: NEMA 1 | **MCB Rating:** 800 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	Load
1	PANEL LPLL		100 A	3	0 VA
2	P-4		25 A	3	11,639 VA
3	P-3		25 A	3	11,639 VA
4	PANEL - MPA		400 A	3	238,257 VA
5	PANEL MP-D		400 A	3	228,365 VA
6	PANEL LP-F		100 A	3	6,354 VA
7	ATS-H	--	400 A	3	0 VA
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	413,298 VA	100.00%	413,298 VA		
Other	677 VA	100.00%	677 VA	**Total Conn. Load:**	496,255 VA
MTR	53,874 VA	112.35%	60,525 VA	**Total Est. Demand:**	510,008 VA
LITES	28,407 VA	125.00%	35,508 VA	**Total Conn.:**	596.9 A
				Total Est. Demand:	613.4 A

Notes:

Branch Panel: MLA

Location: ELECTRICAL A135 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: GA1 | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1 | **MCB Rating:** 150 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	VRF-1 & 4		15 A	2	0.1 0.2			2	15 A		VRF-2 & 5 & 6 & 7	2
3						0.1 0.2						4
5	VRF-3, 8, 9, 11		15 A	2			0.2 0.0	1	15 A		SF1	6
7					0.2 0.1			1	15 A		CUH-7	8
9	CUH-3		20 A	1		0.1 0.1		1	15 A		CUH-2	10
11	CUH-1		15 A	1			0.1 0.6					12
13	AHU-2		15 A	2	0.6 0.6			2	15 A		AHU-1	14
15						0.6 0.6						16
17	AHU-4		15 A	2			0.6 0.6	2	15 A		AHU-3	18
19					0.6 0.6							20
21	AHU-10		15 A	2		0.6 0.6		2	15 A		AHU-11	22
23							0.6 0.2					24
25	gmu-1		20 A	1	1.2 0.2			2	15 A		VRF- 12, 13, 14, 15	26
27	EF-6		15 A	1		0.1						28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
43												44
45												46
47												48
49												50
51												52
53												54
55												56
57												58
59												60
61												62
63												64
65												66
67												68
69												70
71												72
73												74
75												76
77												78
79												80
81												82
83												84
			Total Load:		4.2 kVA	2.8 kVA	2.8 kVA					
			Total Amps:		34.9 A	23.4 A	23.3 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	9,196 VA	100.00%	9,196 VA		
MTR	109 VA	116.51%	127 VA	**Total Conn. Load:**	9,785 VA
HEAT	480 VA	100.00%	480 VA	**Total Est. Demand:**	9,803 VA
				Total Conn.:	27.2 A
				Total Est. Demand:	27.2 A

Notes:

Branch Panel: MLD

Location: ELECTRICAL D112 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: GD1 | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1 | **MCB Rating:** 200 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1												2
3	VRF - 16, 17, 18, 19, 20, 21		15 A	2	0.3							4
5						0.3 0.1		1	15 A		CUH-10	6
7	VRF-22, 23		15 A	2			0.1 0.6					8
9					0.1 0.6			2	15 A		AHU-20	10
11	AHU-21		15 A	2		0.6 0.6						12
13							0.6 0.6	2	15 A		AHU-9	14
15	AHU-8		15 A	2	0.6 0.6							16
17						0.6 0.6		2	15 A		AHU-7	18
19	AHU-6		15 A	2			0.6 0.1	1	15 A		CUH-4	20
21	Spare	--	20 A	1	0.6 0.6							22
23	Spare	--	20 A	1		0.0 0.6		2	15 A		AHU-5	24
25	Spare	--	20 A	1			0.0 0.0			--	Spare	26
27	Spare	--	20 A	1	0.0 0.0			2	15 A			28
29	Spare	--	20 A	1		0.0 0.0						30
31	Spare	--	20 A	1			0.0 0.0	2	20 A	--	Spare	32
33	Spare	--	20 A	1	0.0 0.0							34
35	Spare	--	20 A	1		0.0 0.0		2	25 A	--	Spare	36
37	Spare	--	20 A	1			0.0 0.0					38
39	Space	--	--	1	0.0 0.0			2	30 A	--	Spare	40
41	Space	--	--	1		-- --		1	--	--	Space	42
43	Space	--	--	1			-- --	1	--	--	Space	44
45	Space	--	--	1	-- --			1	--	--	Space	46
47	Space	--	--	1		-- --		1	--	--	Space	48
49	Space	--	--	1			-- --	1	--	--	Space	50
51	Space	--	--	1	-- --			1	--	--	Space	52
53	Space	--	--	1		-- --		1	--	--	Space	54
			Total Load:		3.2 kVA	3.3 kVA	2.5 kVA					
			Total Amps:		27.9 A	28.2 A	20.5 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	8,707 VA	100.00%	8,707 VA		
HEAT	240 VA	100.00%	240 VA	**Total Conn. Load:**	8,947 VA
				Total Est. Demand:	8,947 VA
				Total Conn.:	24.8 A
				Total Est. Demand:	24.8 A

Notes:

Branch Panel: MLF

Location: ELECTRICAL F118 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: GF1 | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1 | **MCB Rating:** 200 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	VRF-28, 29, 30, 31		15 A	2	0.1 0.3			2	15 A		VRF - 24, 26, 25, 27, 32, 33	2
3						0.1 0.3						4
5	CUH-9		15 A	1			0.1 0.1	1	15 A		CUH-5	6
7	AHU-13		15 A	2	0.6 0.6			2	15 A		AHU-12	8
9						0.6 0.6						10
11	AHU-14		15 A	2			0.6 0.6	2	15 A		AHU-15	12
13					0.6 0.6							14
15	AHU-19		15 A	2		0.6 0.6		2	15 A		AHU-18	16
17							0.6 0.6					18
19	AHU-17		15 A	2	0.6 0.6			2	15 A		AHU-16	20
21						0.6 0.6						22
23	Spare	--	20 A	1			0.0 0.0	2	15 A	--	Spare	24
25	Spare	--	20 A	1	0.0 0.0							26
27	Spare	--	20 A	1		0.0 0.0		2	20 A	--	Spare	28
29	Spare	--	20 A	1			0.0 0.0					30
31	Spare	--	20 A	1	0.0 0.0			2	25 A	--	Spare	32
33	Spare	--	20 A	1		0.0 0.0						34
35	Spare	--	20 A	1			0.0 0.0	2	30 A	--	Spare	36
37	Spare	--	20 A	1	0.0 0.0							38
39	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	40
41	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	42
43	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	44
45	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	46
47	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	48
49	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	50
51	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	52
53	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	54
55	Space	--	--	1	-- --			1	--	--	Space	56
57	Space	--	--	1		-- --		1	--	--	Space	58
59	Space	--	--	1			-- --	1	--	--	Space	60
61	Space	--	--	1	-- --			1	--	--	Space	62
63	Space	--	--	1		-- --		1	--	--	Space	64
65	Space	--	--	1			-- --	1	--	--	Space	66
67	Space	--	--	1	-- --			1	--	--	Space	68
69	Space	--	--	1		-- --		1	--	--	Space	70
71	Space	--	--	1			-- --	1	--	--	Space	72
73	Space	--	--	1	-- --			1	--	--	Space	74
75	Space	--	--	1		-- --		1	--	--	Space	76
77	Space	--	--	1			-- --	1	--	--	Space	78
79	Space	--	--	1	-- --			1	--	--	Space	80
81	Space	--	--	1		-- --		1	--	--	Space	82
83	Space	--	--	1			-- --	1	--	--	Space	84
			Total Load:		3.8 kVA	3.8 kVA	2.5 kVA					
			Total Amps:		33.5 A	33.5 A	20.7 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	5,391 VA	100.00%	5,391 VA		
MTR	4,493 VA	106.25%	4,774 VA	**Total Conn. Load:**	10,124 VA
HEAT	240 VA	100.00%	240 VA	**Total Est. Demand:**	10,405 VA
				Total Conn.:	28.1 A
				Total Est. Demand:	28.9 A

Notes:

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL PANEL SCHEDULES

DRAWING NO.:
E6.02

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Branch Panel: GA1

Location: ELECTRICAL A135 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: LDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	ELEVATOR CAB LITES		20 A	1	0.1 0.5			1	20 A		RCPT - BATHS A131, A136, A137	2
3	RCPT - A123 MICROWAVE		20 A	1		0.2 0.7		1	15 A		EF-2	4
5	RCPT		20 A	1			0.5 0.7	1	15 A		EF-3	6
7	RCPT - A122		20 A	1	0.7 0.9			1	20 A		RCPT - A101, A108, A109	8
9	RCPT - A122		20 A	1		0.7 1.1		1	20 A		RCPT B119	10
11	RCPT B119		20 A	1			0.9 1.1	1	20 A		RCPT B121	12
13	RCPT - A123 (COFFEE COUNTER)		20 A	1	1.2 1.2			1	20 A		RCPT - CORR C102 H20 COOLER	14
15	RCPT		20 A	1		1.1 0.2		1	20 A		RCPT - ELEVATOR PIT	16
17	RCPT - C108		20 A	1			1.3 1.5	1	20 A		RCPT - A134	18
19	RCPT - A129		20 A	1	1.6 1.6			1	20 A		RCPT - COPIER A134	20
21						4.2 3.3						22
23	PANEL - MLA		150 A	3			2.8 3.3	3	60 A		STAGE DIMMING PANEL	24
25					2.8 3.3							26
27	RCPT - CORR B101		20 A	1		0.4 0.7		1	20 A		RCPT - B116	28
29	RCPT- A135		20 A	1			0.2 0.4	1	20 A		RCPT - EXTERIOR	30
31	RCPT - C111		20 A	1	0.9 0.4			1	20 A		RCPT - A138, BATH A127	32
33	RCPT - C110		20 A	1		0.9 0.9		1	20 A		RCPT - A130	34
35	RCPT - CORR C102		20 A	1			0.7 0.4	1	20 A		RCPT - ROOF	36
37	RCPT - A123, A132, CORR A102		20 A	1	0.7 0.9			1	20 A		RCPT - C108	38
39	RCPT - A124		20 A	1		0.9 1.0		1	20 A		RCPT B121	40
41	RCPT - A130		20 A	1			0.9 0.9	1	20 A		RCPT - A124	42
43	RCPT - A125		20 A	1	0.9 0.9			1	20 A		RCPT - A122	44
45	RCPT B123		20 A	1		1.1 1.1		1	20 A		RCPT - C107	46
47	RCPT B123		20 A	1			1.0 1.1	1	20 A		RCPT B123	48
49	RCPT - B117		20 A	1	1.0 1.1			1	20 A		RCPT - SECURITY A133	50
51	RCPT - C103		20 A	1		1.1 1.1		1	20 A		RCPT - B103	52
53	RCPT - C108		20 A	1			1.1 1.1	1	20 A		RCPT - C103	54
55	RCPT - C107		20 A	1	1.1 1.1			1	20 A		RCPT - B117	56
57	RCPT - A125		20 A	1		1.1 1.1		1	20 A		RCPT - C103	58
59	RCPT - B117		20 A	1			1.1 1.1	1	20 A		RCPT - A129	60
61	RCPT - A134		20 A	1	1.1 1.1			1	20 A		RCPT B121	62
63	RCPT - C111		20 A	1		1.5 1.1		1	20 A		RCPT - C111	64
65	RCPT - C107		20 A	1			1.1 1.1	1	20 A		RCPT B119	66
67	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	68
69	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	70
71	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	72
73	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	74
75	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	76
77	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	78
79	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	80
81	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	82
83	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	84
			Total Load:		25.0 kVA	25.4 kVA	24.2 kVA					
			Total Amps:		209.6 A	212.3 A	202 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	9,196 VA	100.00%	9,196 VA		
MTR	1,501 VA	111.59%	1,675 VA	**Total Conn. Load:**	74,617 VA
RCPT	53,340 VA	59.37%	31,670 VA	**Total Est. Demand:**	55,646 VA
LITES	10,100 VA	125.00%	12,625 VA	**Total Conn.:**	207.1 A
HEAT	480 VA	100.00%	480 VA	**Total Est. Demand:**	154.5 A

Notes:

Branch Panel: GA2

Location: ELECTRICAL A135 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: LDP | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1 | **MCB Rating:** 225 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	RCPT - EXTERIOR COURTYARD		20 A	1	0.2 0.9			1	20 A		RCPT - FAN ROOM	2
3	RCPT - A117		20 A	1		0.9 0.7		1	20 A		RCPT - CORR A105 & A103	4
5	RCPT - A117		20 A	1	0.4 0.7			1	20 A		RCPT - BATHS A115, A116	6
7	RCPT - A114		20 A	1			0.9 0.4	1	20 A		RCPT - A111, A112, EXTERIOR	8
9	RCPT - STAGE		20 A	1		0.9 0.7		1	20 A		RCPT - STAGE	10
11	RCPT - STAGE SOUND SYSTEM		20 A	1			0.4 1.0	1	20 A		STAGE MOTORIZED SCREEN	12
13	RCPT - STAGE		20 A	1	0.9 0.4			1	20 A		RCPT - ELEVATOR MACH RM	14
15	RCPT - A121		20 A	1		1.1 1.2		1	20 A		RCPT - WATER COOLER CORR A105	16
17	RCPT - TOILET A120		20 A	1			0.2 1.3	1	20 A		RCPT - A121	18
19	RCPT - A121		20 A	1	1.4 0.7			1	20 A		RCPT - ROOF	20
21	RCPT - ROOF		20 A	1		0.5 1.4		2	20 A		CU-3	22
23	SECURITY - A124		20 A	1			0.6 1.4					24
25	SECURITY - A122		20 A	1	0.6 0.6			1	20 A		SECURITY - MDF	26
27	SECURITY - MDF		20 A	1		0.6 0.6		1	20 A		SECURITY - MDF	28
29	SECURITY - MDF		20 A	1			0.3 0.6	1	20 A		SECURITY - MDF	30
31	MDF RACK OUTLET		20 A	1	1.9 2.9			1	30 A		MDF RACK OUTLET	32
33	MDF RACK OUTLET		30 A	2		2.5 0.7		1	20 A		RCPT - MDF	34
35							2.5 0.7	1	20 A		RCPT - MDF	36
37	RCPT - MDF		20 A	1	0.7 0.4			1	20 A		RCPT - MDF	38
39	RCPT - MDF		20 A	1		0.4 0.4		1	20 A		RCPT - MDF	40
41	HEAT TRACE CONTROLLER - A135		30 A	2	2.5 1.2			1	20 A		RCPT - CAFE PROJECTOR	42
43							2.5 0.2	1	20 A		POWER FOR FUTURE SIGN	44
45	COPIER - A122		20 A	1		1.6 1.2		1	20 A		RCPT - MICROWAVE - A117	46
47	RCPT - FRIDGE - A117		20 A	1			1.2 1.2	1	20 A		RCPT - FRIDGE - A134	48
49	RCPT - WATER COOLER CORR B101		20 A	1	1.2 0.3			1	20 A		FIRE ALARM DEVICES	50
51	FIRE ALARM DEVICES		20 A	1		0.3 0.5		1	20 A		FIRE ALARM DEVICES	52
53	RCPT - MONITORS A133		20 A	1			0.7 1.9	1	20 A		RCPT - DATA RACK - MDF	54
55	RCPT - DATA RACK - MDF		30 A	1	2.9 2.5			2	30 A		RCPT - DATA RACK - MDF	56
57						2.5						58
59												60
61												62
63												64
65												66
67												68
69												70
71												72
73												74
75												76
77												78
79												80
81												82
83												84
			Total Load:		23.2 kVA	18.6 kVA	17.9 kVA					
			Total Amps:		194.1 A	156.1 A	148.9 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	2,746 VA	100.00%	2,746 VA		
Other	11,092 VA	100.00%	11,092 VA	**Total Conn. Load:**	59,662 VA
MTR	1,000 VA	125.00%	1,250 VA	**Total Est. Demand:**	52,292 VA
RCPT	25,240 VA	69.81%	17,620 VA	**Total Conn.:**	165.6 A
SPEC	19,584 VA	100.00%	19,584 VA	**Total Est. Demand:**	145.1 A

Notes:

Distribution Panel: MDP (ETR)

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: Floor | **Wires:** 4 | **Mains Rating:** 2000 A
Enclosure: NEMA 1 | **MCB Rating:** 2000 A

Notes:
PANEL IS EXISTING TO REMAIN

CKT	Circuit Description	Type	Trip	Poles	Load
1	EXISTING 1,200A FEED TO BUILDING (TO BECOME SPARE AT END OF PROJECT	--	1200 A	3	0 VA
2	PANEL - LDP		1200 A	3	232,037 VA
3	PANEL - GPD		400 A	3	100,852 VA
4	PANEL - GPF		600 A	3	90,030 VA
5	ATS-L	--	250 A	3	0 VA
6	Spare	--	200 A	3	0 VA
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
ELEV	35,414 VA	100.00%	35,414 VA		
HVAC	31,532 VA	100.00%	31,532 VA	**Total Conn. Load:**	422,919 VA
Other	24,276 VA	100.00%	24,276 VA	**Total Est. Demand:**	318,670 VA
MTR	15,890 VA	103.78%	16,490 VA	**Total Conn.:**	1173.9 A
RCPT	192,300 VA	52.60%	101,150 VA	**Total Est. Demand:**	884.5 A
FIRE ALARM	1,600 VA	100.00%	1,600 VA		
LITES	10,100 VA	125.00%	12,625 VA		
SPEC	61,252 VA	100.00%	61,252 VA		
KTCH	46,356 VA	65.00%	30,131 VA		
HEAT	4,200 VA	100.00%	4,200 VA		

Notes:

Branch Panel: GD1

Location: ELECTRICAL D112 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: MDP (ETR) | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	RCPT - EXTERIOR		20 A	1	0.2 0.4			1	20 A		RCPT - ROOF	2
3	RCPT - EXTERIOR COURTYARD		20 A	1		0.2 0.5		1	20 A		RCPT - B113	4
5	RCPT - EXTERIOR AREA B		20 A	1			0.4 0.5	1	20 A		RCPT - CORR B102	6
7	RCPT - B105		20 A	1	0.7 1.6			1	20 A		RCPT - COPIER B104	8
9	RCPT - B104		20 A	1		1.1 0.7		1	20 A		RCPT - B110	10
11	RCPT - B113		20 A	1			1.0 1.4	2	20 A		CU-2	12
13	RCPT - D107 COPIER		20 A	1	1.6 1.4							14
15	RCPT - CORR D103 H2O		20 A	1		1.2 1.4		2	20 A		CU-1	16
17	EF-5		15 A	1			0.7 1.4					18
19					3.2 0.7			1	15 A		EF-1	20
21	PANEL - MLD		150 A	3		3.3 14.6						22
23							2.5 15.3	3	225 A		Panel GPD2	24
25	RCPT B108		20 A	1	0.7 16.9							26
27	EF-4		15 A	1		0.7 0.7		1	20 A		RCPT B109	28
29	RCPT D106		20 A	1			0.7 0.7	1	20 A		RCPT B107	30
31	RCPT - B113		20 A	1	0.7 0.7			1	20 A		RCPT - B105	32
33	RCPT B107		20 A	1		0.7 0.7		1	20 A		RCPT - B106	34
35	RCPT - B106		20 A	1			0.7 0.7	1	20 A		RCPT D109	36
37	RCPT D109		20 A	1	0.7 0.9			1	20 A		RCPT B108	38
39	RCPT D109		20 A	1		1.1 0.7		1	20 A		RCPT D108	40
41	RCPT D108		20 A	1			0.7 0.9	1	20 A		RCPT - D107	42
43	RCPT - B110		20 A	1	1.1 1.1			1	20 A		RCPT D106	44
45	RCPT - D105		20 A	1		0.7 1.1		1	20 A		RCPT D106	46
47	RCPT D108		20 A	1			1.1 1.1	1	20 A		RCPT B109	48
49	RCPT B108		20 A	1	1.1 0.7			1	20 A		RCPT - D105	50
51	RCPT B109		20 A	1		1.1 0.7		1	20 A		RCPT - D105	52
53	RCPT B107		20 A	1			1.1 1.1	1	20 A		RCPT - CORRIDORS AREA D	54
55	RCPT - B110		20 A	1	1.1 1.2			1	20 A		RCPT - FRIDGE - B104	56
57	RCPT - B113		20 A	1		1.1						58
59												60
61												62
63												64
65												66
67												68
69	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	70
71	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	72
73	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	74
75	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	76
77	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	78
79	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	80
81	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	82
83	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	84
			Total Load:		36.7 kVA	32.3 kVA	31.8 kVA					
			Total Amps:		306.6 A	269.7 A	265.3 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	14,198 VA	100.00%	14,198 VA		
Other	6,342 VA	100.00%	6,342 VA	**Total Conn. Load:**	100,852 VA
MTR	3,088 VA	105.63%	3,262 VA	**Total Est. Demand:**	77,376 VA
RCPT	57,300 VA	58.73%	33,650 VA	**Total Conn.:**	279.9 A
SPEC	19,684 VA	100.00%	19,684 VA	**Total Est. Demand:**	214.8 A
HEAT	240 VA	100.00%	240 VA		

Notes:

Branch Panel: GF1

Location: ELECTRICAL F118 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: MDP (ETR) | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1 | **MCB Rating:** 400 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1					12.9 3.8							2
3	PANEL - GF2		200 A	3		7.0 3.8		3	150 A		PANEL - MLF	4
5							12.0 2.5					6
7	RCPT - E110		20 A	1	1.1 0.9			1	20 A		RCPT - E110	8
9	RCPT - E111, E112		20 A	1		0.7 0.5		1	20 A		RCPT - CORR E104	10
11	RCPT - E102 & EXTERIOR		20 A	1			0.5 0.7	1	20 A		RCPT - F124	12
13	RCPT - F124		20 A	1	0.7 0.7			1	20 A		RCPT - F123	14
15	RCPT - F126		20 A	1		0.5 0.9		1	20 A		RCPT - F126	16
17	RCPT - COPIER F122		20 A	1			1.6 0.5	1	20 A		RCPT - F122	18
19	RCPT - F122		20 A	1	0.9 0.7			1	20 A		RCPT - F121	20
21	RCPT - F121		20 A	1		0.7 0.7		1	20 A		RCPT - F125	22
23	RCPT - F125		20 A	1			0.7 1.1	1	20 A		RCPT - F115	24
25	RCPT - F116		20 A	1	1.1 0.7			1	20 A		RCPT - CORR F101, F111, & EXTERIOR	26
27	RCPT - F107, F108, F110, F112		20 A	1		0.8 0.5		1	20 A		RCPT - F117, CORRS F103 & F102	28
29	RCPT - E105		20 A	1			1.1 0.5	1	20 A		RCPT - CORR F103	30
31	RCPT - GYM WATER COOLER		20 A	1	1.2 0.7			1	20 A		RCPT - GYM	32
33	RCPT - GYM		20 A	1		0.7 0.7		1	20 A		RCPT - GYM	34
35	RCPT E106		20 A	1			0.9 1.1	1	20 A		RCPT E106	36
37	RCPT E106		20 A	1	0.9 0.9			1	20 A		RCPT E107	38
39	RCPT E107		20 A	1		0.9 0.9		1	20 A		RCPT E107	40
41	RCPT E108		20 A	1			0.9 0.9	1	20 A		RCPT E108	42
43	RCPT E108		20 A	1	0.9 0.9			1	20 A		RCPT E109	44
45	RCPT E109		20 A	1		0.9 0.9		1	20 A		RCPT E109	46
47	RCPT F105		20 A	1			0.9 0.9	1	20 A		RCPT F105	48
49	RCPT F105		20 A	1	0.5 1.1			1	20 A		RCPT F106	50
51	RCPT F106		20 A	1		0.5 0.7		1	20 A		RCPT F106	52
53	RCPT - F119		20 A	1			0.7 0.7	1	20 A		RCPT F119	54
55	RCPT F119		20 A	1	0.7 0.9			1	20 A		RCPT F120	56
57	RCPT F120		20 A	1		0.7 0.7		1	20 A		RCPT F120	58
59	RCPT - ROOF		20 A	1			0.5 0.9	1	20 A		RCPT - E105	60
61	RCPT - COURTYARD RECEPTACLES		20 A	1	0.2 0.9			1	20 A		RCPT - E105	62
63	RCPT - E110		20 A	1		0.9 0.7		1	20 A		RCPT - CORR E102, E114	64
65	Spare	--	20 A	1			0.0 1.1	1	20 A		RCPT - E113	66
67	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	68
69	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	70
71	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	72
73	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	74
75	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	76
77	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	78
79	Spare	--	20 A	1	0.0 0.0			1	20 A	--	Spare	80
81	Spare	--	20 A	1		0.0 0.0		1	20 A	--	Spare	82
83	Spare	--	20 A	1			0.0 0.0	1	20 A	--	Spare	84
			Total Load:		33.4 kVA	25.7 kVA	30.9 kVA					
			Total Amps:		285.3 A	214.4 A	263.7 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	5,391 VA	100.00%	5,391 VA		
Other	6,842 VA	100.00%	6,842 VA	**Total Conn. Load:**	90,030 VA
MTR	4,493 VA	106.25%	4,774 VA	**Total Est. Demand:**	69,171 VA
RCPT	52,280 VA	59.56%	31,140 VA	**Total Conn.:**	249.9 A
SPEC	20,784 VA	100.00%	20,784 VA	**Total Est. Demand:**	192 A
HEAT	240 VA	100.00%	240 VA		

Notes:

Branch Panel: GPLL

Location: MECHANICAL A006 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: LDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 250 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A	B	C	Poles	Trip	Type	Circuit Description	CKT
1	RCPT - A005, A007		20 A	1	0.9 0.7			1	20 A		RCPT - BSMT	2
3	RCPT - A004		20 A	1		0.9 0.5		1	20 A		RCPT - BSMT MECH ROOM	4
5	RCPT - GYM SOUND SYSTEM		20 A	1			0.4 2.4	1	40 A		P-1	6
7	P-2		40 A	1	2.4 1.6			1	20 A		B-2	8
9	B-1		20 A	1		1.6 0.6		1	15 A		GWH-2	10
11	GWH-1		15 A	1			0.6 1.0	1	20 A		BASKETBALL HOOP MOTORS	12
13												14
15												16
17												18
19												20
21												22
23												24
25												26
27												28
29												30
31												32
33												34
35												36
37												38
39												40
41												42
43												44
45												46
47												48
49												50
51												52
53												54
			Total Load:		5.6 kVA	3.7 kVA	4.4 kVA					
			Total Amps:		47.9 A	30.5 A	37.3 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
MTR	5,808 VA	110.33%	6,408 VA		
RCPT	3,420 VA	100.00%	3,420 VA	**Total Conn. Load:**	13,668 VA
SPEC	1,200 VA	100.00%	1,200 VA	**Total Est. Demand:**	14,268 VA
HEAT	3,240 VA	100.00%	3,240 VA	**Total Conn.:**	37.9 A
				Total Est. Demand:	39.6 A

Notes:

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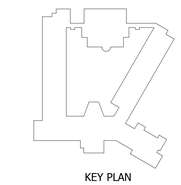
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL PANEL SCHEDULES

DRAWING NO.:
E6.03

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Branch Panel: LPA

Location: ELECTRICAL A135 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: MPA | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	LIGHTING INVERTER - INV-A		20 A	1	2.2	1.3					1	20 A		LITES - Upper LVL - A201, A107, A106	2
3	LITES - AREA A - MAIN LVL		20 A	1			1.8	1.1			1	20 A		LIGHTING INVERTER - INV-A2	4
5	LITES - AREA A - MAIN LVL		20 A	1					1.1	1.6	1	20 A		LITES - AREA - C	6
7	LITES - AREA B		20 A	1	1.6	0.7					1	20 A		LITES - AREA -A LOWER LEVEL	8
9	LITES - FRONT PARKING POLES		20 A	1			0.6	0.1			1	20 A		LITES - EXTERIOR FRONT BOLLARD...	10
11	LITES - EXTERIOR PKG WALLPACKS		20 A	1					0.1						12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
			Total Load:		5.9 kVA		3.6 kVA		2.8 kVA						
			Total Amps:		21.6 A		13.5 A		10.2 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LITES	12,320 VA	125.00%	15,400 VA		
				Total Conn. Load:	12,320 VA
				Total Est. Demand:	15,400 VA
				Total Conn.:	14.8 A
				Total Est. Demand:	18.5 A

Notes:

Distribution Panel: LDP

Location: MECHANICAL A006 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: MDP (ETR) | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 1200 A
Enclosure: NEMA 1 | **MCB Rating:** 1200 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	Load
1	PANEL - GPLL		150 A	3	13,668 VA
2	PANEL - KP		225 A	3	48,676 VA
3	PANEL - GA2		225 A	3	59,662 VA
4	ELEVATOR		300 A	3	35,414 VA
5	PANEL - GPA		400 A	3	74,617 VA
6	Spare	--	225 A	3	0 VA
7	Spare	--	225 A	3	0 VA
8	Spare	--	150 A	3	0 VA
9	Spare	--	150 A	3	0 VA
10	Spare	--	70 A	3	0 VA
11	Spare	--	70 A	3	0 VA
12	Space	--	--	1	--
13	Space	--	--	1	--
14	Space	--	--	1	--
15	Space	--	--	1	--
16	Space	--	--	1	--
17	Space	--	--	1	--
18	Space	--	--	1	--
19	Space	--	--	1	--
20	Space	--	--	1	--

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
ELEV	35,414 VA	100.00%	35,414 VA		
HVAC	11,942 VA	100.00%	11,942 VA	**Total Conn. Load:**	232,037 VA
Other	11,092 VA	100.00%	11,092 VA	**Total Est. Demand:**	182,577 VA
MTR	8,309 VA	107.22%	8,909 VA	**Total Conn.:**	644.1 A
RCPT	82,720 VA	56.04%	46,360 VA	**Total Est. Demand:**	506.8 A
FIRE ALARM	1,600 VA	100.00%	1,600 VA		
LITES	10,100 VA	125.00%	12,625 VA		
SPEC	20,784 VA	100.00%	20,784 VA		
KTCH	46,356 VA	65.00%	30,131 VA		
HEAT	3,720 VA	100.00%	3,720 VA		

Notes:

Branch Panel: KP

Location: MECHANICAL A006 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: LDP | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1 | **MCB Rating:** 225 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	MILK COOLER		20 A	1	1.5	0.8					1	20 A		MILK COOLER	2
3	MILK COOLER		20 A	1			0.5	0.8			1	20 A		REACH IN FRIDGE	4
5	REACH IN FRIDGE		20 A	1					1.4	0.4	1	20 A		CASHIER STATION	6
7	REACH IN FREEZER		20 A	1	1.7	1.6					1	20 A		FIRE SUPPRESSION PANEL	8
9	EXHAUST HOOD LIGHTS		20 A	1			0.3	1.3			1	20 A		MICROWAVE	10
11	COLD FOOD COUNTER		20 A	1					1.7	1.9	1	20 A		REACH IN FREEZER	12
13	CONVECTION OVEN		20 A	1	1.5	1.5					1	20 A		CONVECTION OVEN	14
15	HOT HOLDING CABINET		20 A	1			1.5	0.9			1	20 A		REACH IN FRIDGE	16
17	UNDERCOUNTER FRIDGE		20 A	1					0.5	5.5					18
19	HOT FOOD COUNTER		60 A	2	4.4	5.5					3	60 A		CONVECTION STEAMER	20
21							4.4	5.5							22
23	RCPT- DESK		20 A	1					3.4	0.4	1	20 A		RCPT - SERVING LINE	24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
43															44
45															46
47															48
49															50
51															52
53															54
			Total Load:		18.4 kVA		15.2 kVA		15.1 kVA						
			Total Amps:		153.6 A		126.5 A		125.7 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
RCPT	720 VA	100.00%	720 VA		
FIRE ALARM	1,600 VA	100.00%	1,600 VA	**Total Conn. Load:**	48,676 VA
KTCH	46,356 VA	65.00%	30,131 VA	**Total Est. Demand:**	32,451 VA
				Total Conn.:	135.1 A
				Total Est. Demand:	90.1 A

Notes:

Branch Panel: LPLL

Location: MECHANICAL A006 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: HDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1															2
3															4
5															6
7															8
9															10
11															12
13															14
15															16
17															18
19															20
21															22
23															24
25															26
27															28
29															30
			Total Load:		0.0 kVA		0.0 kVA		0.0 kVA						
			Total Amps:		0 A		0 A		0 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
				Total Conn. Load:	0 VA
				Total Est. Demand:	0 VA
				Total Conn.:	0 A
				Total Est. Demand:	0 A

Notes:

Branch Panel: LPF

Location: ELECTRICAL F118 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: HDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	LITES - AREA - F		20 A	1	2.9	1.1					1	20 A		LITES - GYM	2
3	INV-F		20 A	1			1.7	0.1			1	20 A		LITES - SIDE BOLLARDS	4
5	LITES - SIDE PARKING LOT POLES		20 A	1					0.6						6
7															8
9	Space	--	--	1			--	--			1	--	--	Space	10
11	Space	--	--	1					--	--	1	--	--	Space	12
13	Space	--	--	1	--	--					1	--	--	Space	14
15	Space	--	--	1			--	--			1	--	--	Space	16
17	Space	--	--	1					--	--	1	--	--	Space	18
19	Space	--	--	1	--	--					1	--	--	Space	20
21	Space	--	--	1			--	--			1	--	--	Space	22
23	Space	--	--	1					--	--	1	--	--	Space	24
25	Space	--	--	1	--	--					1	--	--	Space	26
27	Space	--	--	1			--	--			1	--	--	Space	28
29	Space	--	--	1					--	--	1	--	--	Space	30
			Total Load:		3.9 kVA		1.8 kVA		0.6 kVA						
			Total Amps:		14.9 A		7.1 A		2.2 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LITES	6,354 VA	125.00%	7,943 VA		
				Total Conn. Load:	6,354 VA
				Total Est. Demand:	7,943 VA
				Total Conn.:	7.6 A
				Total Est. Demand:	9.6 A

Notes:

Branch Panel: LPD

Location: ELECTRICAL D112 | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: MPD | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	LITES - AREA B		20 A	1	2.2	3.5					1	20 A		LITES - AREA - D	2
3	LITES - AREA - E		20 A	1			2.5	2.1			1	20 A		INV-D	4
5	LITES - COURTYARD BOLLARDS		20 A	1					0.1	0.0	1	20 A	--	Spare	6
7	Spare	--	20 A	1	0.0	0.0					1	20 A	--	Spare	8
9	Spare	--	20 A	1			0.0	0.0			1	20 A	--	Spare	10
11	Space	--	--	1					--	--	1	--	--	Space	12
13	Space	--	--	1	--	--					1	--	--	Space	14
15	Space	--	--	1			--	--			1	--	--	Space	16
17	Space	--	--	1					--	--	1	--	--	Space	18
19	Space	--	--	1	--	--					1	--	--	Space	20
21	Space	--	--	1			--	--			1	--	--	Space	22
23	Space	--	--	1					--	--	1	--	--	Space	24
25	Space	--	--	1	--	--					1	--	--	Space	26
27	Space	--	--	1			--	--			1	--	--	Space	28
29	Space	--	--	1					--	--	1	--	--	Space	30
			Total Load:		5.7 kVA		4.6 kVA		0.1 kVA						
			Total Amps:		23.1 A		18.9 A		0.5 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	677 VA	100.00%	677 VA		
LITES	9,732 VA	125.00%	12,165 VA	**Total Conn. Load:**	10,409 VA
				Total Est. Demand:	12,842 VA
				Total Conn.:	12.5 A
				Total Est. Demand:	15.4 A

Notes:

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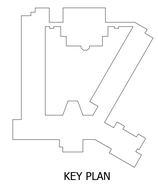
RZ Design Associates, Inc.
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750 OLD MAIN STREET
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL PANEL SCHEDULES

DRAWING NO.:
E6.04

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Branch Panel: GF2

Location: ELECTRICAL F118 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: GF1 | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	SECURITY		20 A	1	0.3	0.3					1	20 A		SECURITY	2
3	SECURITY		20 A	1			0.3	0.3			1	20 A		SECURITY	4
5	SECURITY		20 A	1					0.3	1.2	1	20 A		IRRIGATION CONTROLLER	6
7	RCPT - F118		20 A	1	0.2	2.5					2	30 A		RCPT - DATA RACK - F118	8
9	RCPT - DATA RACK - F118		30 A	1			2.9	2.5							10
11	RCPT - DATA RACK - F118		20 A	1					1.9	2.5	2	30 A		HEAT TRACE CONTROLLER - F118	12
13	RCPT - F118		20 A	1	0.4	2.5									14
15	RCPT - F118		20 A	1			0.4	0.4			1	20 A		RCPT - F118	16
17	RCPT - F118		20 A	1					0.4	0.4	1	20 A		RCPT - F118	18
19	RCPT - WATER COOLER CORR F102		20 A	1	1.2	1.2					1	20 A		RCPT - FRIDGE F122	20
21	FIRE ALARM DEVICES		20 A	1			0.3	0.1			1	20 A		FUTURE RADON FAN	22
23	RCPT - DATA RACK - F118		30 A	2					2.5	2.9	1	30 A		RCPT - DATA RACK - F118	24
25					2.5	1.9					1	20 A		RCPT - DATA RACK - F118	26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
43															44
45															46
47															48
49															50
51															52
53															54
55															56
57															58
59															60
61															62
63															64
65															66
67															68
69															70
71															72
73															74
75															76
77															78
79															80
81															82
83															84
				Total Load:	12.9 kVA		7.0 kVA		12.0 kVA						
				Total Amps:	114.3 A		58.7 A		106.5 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	6,842 VA	100.00%	6,842 VA		
RCPT	4,380 VA	100.00%	4,380 VA	**Total Conn. Load:**	32,006 VA
SPEC	20,784 VA	100.00%	20,784 VA	**Total Est. Demand:**	32,006 VA
				Total Conn.:	88.8 A
				Total Est. Demand:	88.8 A

Notes:

Branch Panel: GD2

Location: ELECTRICAL D112 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: GD1 | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	RCPT - D113		20 A	1	0.7	0.5					1	20 A		RCPT - D113	2
3	RCPT - D113		20 A	1			0.5	0.4			1	20 A		RCPT D111, D110	4
5	SECURITY		20 A	1					0.0	0.0	1	20 A		SECURITY	6
7	SECURITY		20 A	1	0.0	0.0					1	20 A		SECURITY	8
9	SECURITY		20 A	1			0.0	0.7			1	20 A		RCPT - D120	10
11	RCPT - D120		20 A	1					0.7	0.7	1	20 A		RCPT - D120	12
13	RCPT - D120		20 A	1	0.7	0.7					1	20 A		RCPT - D120	14
15	RCPT - D120		20 A	1			0.9	1.1			1	20 A		RCPT - D120	16
17	RCPT - D114		20 A	1					0.9	0.7	1	20 A		RCPT - D114	18
19	RCPT - D119		20 A	1	0.7	0.9					1	20 A		RCPT - D115	20
21	RCPT - D114		20 A	1			0.9	0.5			1	20 A		RCPT - D114	22
23	RCPT - D118		20 A	1					1.1	0.9	1	20 A		RCPT - D117	24
25	RCPT - D166		20 A	1	0.5	0.7					1	20 A		RCPT - D121, D117	26
27	RCPT - COPIER D116		20 A	1			1.6	2.5							28
29	TEMP CONTROLS		20 A	1					0.1	2.5	2	30 A		HEAT TRACE CONTROLLER - D112	30
31	MOTORIZED SHADES - D114		20 A	1	1.0	0.8					1	20 A		FIRE ALARM DEVICES	32
33	FIRE ALARM DEVICES		20 A	1			0.5	0.1			1	20 A		RADON FAN	34
35	RCPT - DATA RACK - D112		30 A	2					2.5	2.9	1	30 A		RCPT - DATA RACK - D112	36
37					2.5	1.9					1	20 A		RCPT - DATA RACK - D112	38
39	RCPT - DATA RACK - D112		20 A	1			1.9	2.9			1	30 A		RCPT - DATA RACK - D112	40
41	RCPT - DATA RACK - D112		30 A	2					2.5	0.7	1	20 A		RCPT - D112	42
43					2.5	0.4					1	20 A		RCPT - D112	44
45	RCPT - D112		20 A	1			0.4	0.4			1	20 A		RCPT - D112	46
47	RCPT - D112		20 A	1					0.4	0.4	1	20 A		RCPT - D112	48
49															50
51															52
53															54
55															56
57															58
59															60
61															62
63															64
65															66
67															68
69															70
71															72
73															74
75															76
77															78
79															80
81															82
83															84
				Total Load:	14.6 kVA		15.3 kVA		16.9 kVA						
				Total Amps:	121.7 A		128 A		142.1 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	6,342 VA	100.00%	6,342 VA		
MTR	1,000 VA	106.25%	1,063 VA	**Total Conn. Load:**	46,806 VA
RCPT	19,780 VA	75.28%	14,890 VA	**Total Est. Demand:**	41,979 VA
SPEC	19,684 VA	100.00%	19,684 VA	**Total Conn.:**	129.9 A
				Total Est. Demand:	116.5 A

Notes:

PANEL OSL & OSH ARE PART OF ALTERNATE #4.
CIRCUIT BREAKERS, CIRCUIT DESCRIPTIONS, AND LOADS ARE SHOWN FOR REFERENCE INFORMATION ONLY. ALL CIRCUITS ARE CURRENTLY DESIGNATED IN OTHER PANELS THROUGHOUT THE PROJECT AND WILL NEED TO BE REASSIGNED AS INDICATED IF ALTERNATE #4 IS ADOPTED. REFER TO FLOORPLANS FOR LOCATION, AND RISER DIAGRAM FOR ADDITIONAL INFORMATION.

Branch Panel: OSL

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1 | **MCB Rating:** 250 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	MILK COOLER	--	20 A	1	1.5	0.6					1	20 A	--	SECURITY - A124	2
3	MILK COOLER	--	20 A	1			0.5	0.6			1	20 A	--	SECURITY - A122	4
5	REACH IN FRIDGE	--	20 A	1					1.4	0.6	1	20 A	--	SECURITY - MDF	6
7	REACH IN FREEZER	--	20 A	1	1.7	0.6					1	20 A	--	SECURITY - MDF	8
9	UNDERCOUNTER FRIDGE	--	20 A	1			0.5	0.6			1	20 A	--	SECURITY - MDF	10
11	REACH IN FRIDGE	--	20 A	1					0.9	0.6	1	20 A	--	SECURITY - MDF	12
13	REACH IN FREEZER	--	20 A	1	1.9	0.6					1	20 A	--	SECURITY - MDF	14
15	REACH IN FRIDGE	--	20 A	1			0.8	0.6			1	20 A	--	SECURITY - MDF	16
17	MILK COOLER	--	20 A	1					0.8	0.6	1	20 A	--	SECURITY - F118	18
19	FIRE ALARM	--	20 A	1	1.6	0.6					1	20 A	--	SECURITY - F118	20
21	UPS - DATA RACK - MDF	--	30 A	1			3.0	0.6			1	20 A	--	SECURITY - F118	22
23	UPS - DATA RACK - MDF	--	30 A	1					3.0	0.6	1	20 A	--	SECURITY - F118	24
25	UPS - DATA RACK - F118	--	30 A	1	3.0	0.6					1	20 A	--	SECURITY - F118	26
27	UPS - DATA RACK - F118	--	30 A	1			3.0	0.6			1	20 A	--	SECURITY - D112	28
29	UPS - DATA RACK - D112	--	30 A	1					3.0	0.6	1	20 A	--	SECURITY - D112	30
31	UPS - DATA RACK - D112	--	30 A	1	3.0	0.6					1	20 A	--	SECURITY - D112	32
33	CUH-1	--	20 A	1			0.1	0.6			1	20 A	--	SECURITY - D112	34
35	CUH-2	--	20 A	1					0.1	0.6	1	20 A	--	SECURITY - D112	36
37	CUH-3	--	20 A	1	0.1	1.6					1	20 A	--	B1	38
39	CUH-4	--	20 A	1			0.1	1.6			1	20 A	--	B2	40
41	CUH-5	--	20 A	1					0.1	2.4	1	40 A	--	P1	42
43	CUH-7	--	20 A	1	0.1	2.4					1	40 A	--	P2	44
45	CUH-8	--	20 A	1			0.1	1.7			2	20 A	--	CU-1	46
47	CUH-9	--	20 A	1					0.1	1.7					48
49	CUH-10	--	20 A	1	0.1	1.7					2	20 A	--	CU-2	50
51	BMS PANEL	--	20 A	1			1.6	1.7							52
53	Spare	--	20 A	1					0.0	1.4	2	20 A	--	CU-3	54
55	Spare	--	20 A	1	0.0	1.4									56
57	Spare	--	20 A	1			0.0	1.7			2	20 A	--	CU-4	58
59	Spare	--	20 A	1					0.0	1.7					60
61	Spare	--	20 A	1	0.0	1.7					2	20 A	--	CU-5	62
63	Spare	--	20 A	1			0.0	1.7							64
65	Spare	--	20 A	1					0.0						66
67	Spare	--	20 A	1	0.0										68
69	Spare	--	20 A	1			0.0								70
71	Spare	--	20 A	1					0.0						72
				Total Load:	25.5 kVA		21.8 kVA		20.3 kVA						
				Total Amps:	214.1 A		183.3 A		168.8 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Spare	67,480 VA	100.00%	67,480 VA		
				Total Conn. Load:	67,480 VA
				Total Est. Demand:	67,480 VA
				Total Conn.:	187.3 A
				Total Est. Demand:	187.3 A

Notes:

Branch Panel: OSH

Location: | **Volts:** 480/277 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1 | **MCB Rating:** 400 A

Notes:
If A.I.C. Rating not provided, refer to short circuit analysis requirement in contract specifications.

CKT	Circuit Description	Type	Trip	Poles	A		B		C		Poles	Trip	Type	Circuit Description	CKT
1	INV-A	--	20 A	1	2.8	13.3									2
3	INV-A2	--	20 A	1			2.8	13.3			3	60 A	--	ERU-1	4
5	INV-D	--	20 A	1					2.8	13.3					6
7	INV-F	--	20 A	1	2.8	13.0									8
9							3.9	13.0			3	60 A	--	ERU-2	10
11	P-3	--	25 A	3					3.9	13.0					12
13					3.9	29.7									14
15							3.9	29.7			3	125 A	--	ERU-4	16
17	P-4	--	25 A	3					3.9	29.7					18
19					3.9										20
21															22
23															24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42
				Total Load:	69.4 kVA		66.6 kVA		66.6 kVA						
				Total Amps:	250.4 A		240.3 A		240.3 A						

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Spare	202,468 VA	100.00%	202,468 VA		
				Total Conn. Load:	202,468 VA
				Total Est. Demand:	202,468 VA
				Total Conn.:	243.5 A
				Total Est. Demand:	243.5 A

Notes:

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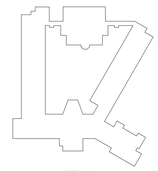
ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL PANEL SCHEDULES

DRAWING NO.:
E6.05

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Branch Panel: INV-A2

Location: ELECTRICAL A135 | **Volts:** 277 Single | **A.I.C. Rating:**
Supply From: LPA | **Phases:** 1 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 2 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
DEVICE IS NOT AN ELECTRIC PANEL.
EMERGENCY LIGHTING INVERTER BASIS OF DESIGN IS MYERS EMERGENCY POWER SYSTEMS MODEL EM-4 WITH 277V SINGLE PHASE INPUT/OUTPUT VOLTAGE, 2800 KW, SIX 20A SINGLE PHASE OUTPUT BREAKERS, CIRCUIT BREAKER LOCKS, MAINTENANCE BYPASS, BATTERY STRAPPING, BACNET IP, 5 YR WARRANTY, MFG...

CKT	Circuit Description	Type	Trip	Poles	B		Poles	Trip	Type	Circuit Description	CKT
1	LITES - EMERGENCY - UPPER LEVEL - A		20 A	1	0.6	0.4	1	20 A		LITES - EMMERGENCY - AREA A (LL)	2
3	LITES		20 A	1	0.1						4
5											6
7											8
9											10
11											12
13											14
15											16
17											18
					Total Load:	1.1 kVA					
					Total Amps:	3.9 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LITES	1,072 VA	125.00%	1,340 VA		
				Total Conn. Load:	1,072 VA
				Total Est. Demand:	1,340 VA
				Total Conn.:	3.9 A
				Total Est. Demand:	4.8 A

Notes:

INVERTER: INV-A

Location: ELECTRICAL A135 | **Volts:** 277 Single | **A.I.C. Rating:**
Supply From: LPA | **Phases:** 1 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 2 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
DEVICE IS NOT AN ELECTRIC PANEL.
EMERGENCY LIGHTING INVERTER BASIS OF DESIGN IS MYERS EMERGENCY POWER SYSTEMS MODEL EM-4 WITH 277V SINGLE PHASE INPUT/OUTPUT VOLTAGE, 2800 KW, SIX 20A SINGLE PHASE OUTPUT BREAKERS, CIRCUIT BREAKER LOCKS, MAINTENANCE BYPASS, BATTERY STRAPPING, BACNET IP, 5 YR WARRANTY, MFG...

CKT	Circuit Description	Type	Trip	Poles	A		Poles	Trip	Type	Circuit Description	CKT
1	LITES - EMERGENCY - AREA B		20 A	1	0.4	0.0	1	20 A	--	Spare	2
3	LITES - EMERGENCY - AREA A		20 A	1	1.3	0.0	1	20 A	--	Spare	4
5	LITES - EMERGENCY - AREA C		20 A	1	0.4	0.0	1	20 A	--	Spare	6
7	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	8
9	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	10
11	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	12
13	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	14
15	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	16
17	UNAVAILABLE	--	20 A	1	0.0	0.0	1	20 A	--	UNAVAILABLE	18
					Total Load:	2.2 kVA					
					Total Amps:	8 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LITES	2,203 VA	125.00%	2,753 VA		
				Total Conn. Load:	2,203 VA
				Total Est. Demand:	2,753 VA
				Total Conn.:	8 A
				Total Est. Demand:	9.9 A

Notes:

Branch Panel: INV-F

Location: ELECTRICAL F118 | **Volts:** 277 Single | **A.I.C. Rating:**
Supply From: LPF | **Phases:** 1 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 2 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
DEVICE IS NOT AN ELECTRIC PANEL.
EMERGENCY LIGHTING INVERTER BASIS OF DESIGN IS MYERS EMERGENCY POWER SYSTEMS MODEL EM-4 WITH 277V SINGLE PHASE INPUT/OUTPUT VOLTAGE, 2800 KW, SIX 20A SINGLE PHASE OUTPUT BREAKERS, CIRCUIT BREAKER LOCKS, MAINTENANCE BYPASS, BATTERY STRAPPING, BACNET IP, 5 YR WARRANTY, MFG...

CKT	Circuit Description	Type	Trip	Poles	B		Poles	Trip	Type	Circuit Description	CKT
1	LITES - EMERGENCY AREA F		20 A	1	0.7						2
3	LITES - Emergency - GYM		20 A	1	1.1						4
5											6
7											8
9											10
11											12
13											14
15											16
17											18
					Total Load:	1.7 kVA					
					Total Amps:	6.3 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LITES	1,740 VA	125.00%	2,175 VA		
				Total Conn. Load:	1,740 VA
				Total Est. Demand:	2,175 VA
				Total Conn.:	6.3 A
				Total Est. Demand:	7.9 A

Notes:

Branch Panel: INV-D

Location: ELECTRICAL D112 | **Volts:** 277 Single | **A.I.C. Rating:**
Supply From: LPD | **Phases:** 1 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 2 | **Mains Rating:** 125 A
Enclosure: NEMA 1

Notes:
DEVICE IS NOT AN ELECTRIC PANEL.
EMERGENCY LIGHTING INVERTER BASIS OF DESIGN IS MYERS EMERGENCY POWER SYSTEMS MODEL EM-4 WITH 277V SINGLE PHASE INPUT/OUTPUT VOLTAGE, 2800 KW, SIX 20A SINGLE PHASE OUTPUT BREAKERS, CIRCUIT BREAKER LOCKS, MAINTENANCE BYPASS, BATTERY STRAPPING, BACNET IP, 5 YR WARRANTY, MFG...

CKT	Circuit Description	Type	Trip	Poles	B		Poles	Trip	Type	Circuit Description	CKT
1	LITES - Emergency - AREA - D		20 A	1	1.2	0.5	1	20 A		LITES - EMERGENCY - AREA B	2
3	LITES - EMERGENCY AREA E		20 A	1	0.4						4
5											6
7											8
9											10
11											12
13											14
15											16
17											18
					Total Load:	2.1 kVA					
					Total Amps:	7.5 A					

Legend:
Blank = Standard, AFI = Arc Fault Circuit Interrupter, GFI = Ground Fault Circuit Interrupter, EPD = Equipment Protection Device, ST = Shunt Trip Circuit Breaker, HACR = Heating, Air Conditioning, Refrigeration Circuit Breaker

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	210 VA	100.00%	210 VA		
LITES	1,859 VA	125.00%	2,324 VA		
				Total Conn. Load:	2,069 VA
				Total Est. Demand:	2,534 VA
				Total Conn.:	7.5 A
				Total Est. Demand:	9.1 A

Notes:

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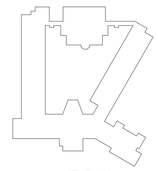
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

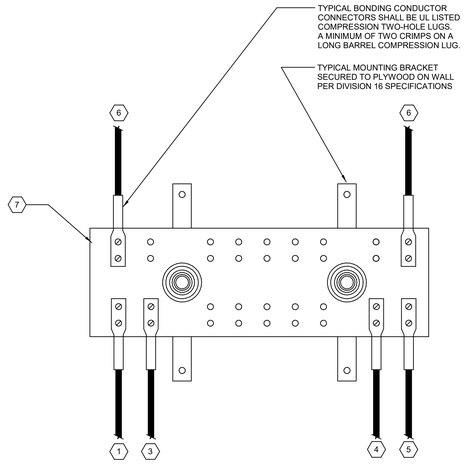
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

LIGHTING INVERTER SCHEDULES

DRAWING NO.:
E6.06

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GROUNDING & BONDING DETAIL NOTES

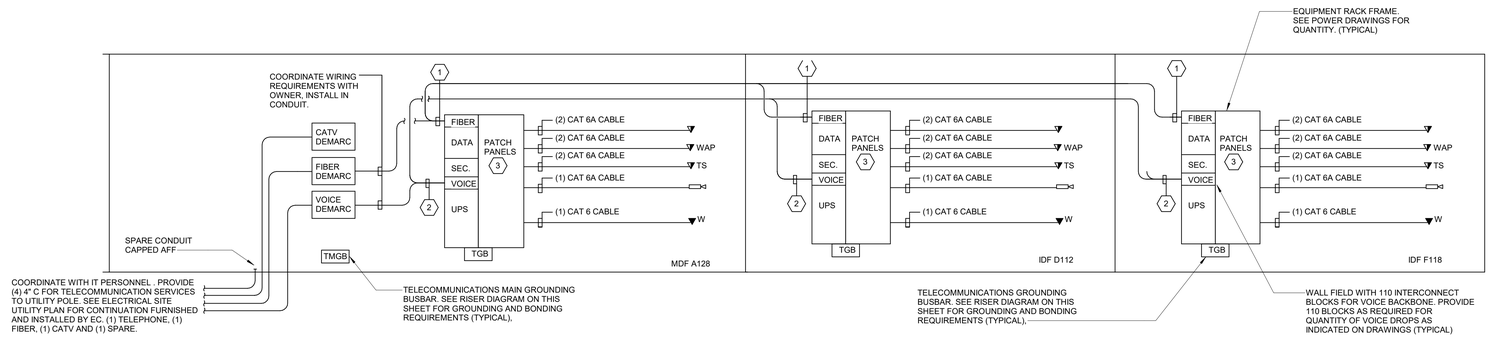
1. PROVIDE 2"C SLEEVE PATHWAY AT EACH FLOOR AND WALL PENETRATIONS FOR THE TELECOMMUNICATION BONDING BACKBONE(TBB). COORDINATE PROPER PENETRATIONS WITH FIRESTOPPING IN FIELD.
3. CONTINUITY TESTING MEASUREMENTS OF THE GROUNDING RESISTANCE TO NOT EXCEED 0.1 OHM BETWEEN
   A.THE TMGB AND THE NEAREST GROUNDING ELECTRODE.
   B.EACH TGB AND THE NEAREST GROUNDING ELECTRODE.
   C.EACH TGB AND PATHWAYS(S),RACK(S),CABINET(S) AND APPLICABLE EQUIPMENT.
4. PROVIDE BONDING CONDUCTORS (BCT) TO BUILDING STEEL, DOMESTIC COLD WATER PIPE AND GROUND BAR IN PANELBOARDS SERVING TELECOMMUNICATIONS EQUIPMENT ROOM IN ADDITION TO THE TELECOMMUNICATIONS BONDING BACKBONE CONDUCTOR.

KEYED GROUNDING AND BONDING NOTES

1. BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT) TO BUILDING GROUNDING ELECTRODE. REFER TO GROUNDING CONDUCTOR SIZING CHART.
2. TELECOMMUNICATIONS BONDING BACKBONE CONDUCTOR (TBB). REFER TO CONDUCTOR SIZING CHART ON THIS DRAWING.
3. BCT TO NEAREST BUILDING METALLIC DOMESTIC COLD WATER PIPE. UTILIZE BRONZE WATER PIPE GROUNDING CLAMP CONNECTION TO WATER PIPE.
4. BCT TO BUILDING STEEL. UTILIZE EXOTHERMIC WELDING CONNECTION TO BUILDING STEEL.
5. BCT TO NEAREST BUILDING ELECTRICAL PANELBOARD GROUND BAR. UTILIZE LISTED CONNECTOR TO PANELBOARD GROUND BUS.
6. BCT TO TELECOMMUNICATIONS CABLE RUNWAYS(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT. DAISY CHAINING OF BCT AT RELAY RACKS IS NOT ACCEPTACLE. EACH RACK IS TO HAVE A BCT TO A COMPRESSION LUG TAP TO THE DEDICATED HOMERUN BCT BACK TO THE TGB.
7. TELECOMMUNICATIONS MAIN GROUNDING BUSBAR AND TELECOMMUNICATIONS GROUNDING BUSBAR SHALL MINIMUM SIZE OF 1/4"H x4"W x36"L, AND BE UL LISTED. BUSBAR SHALL HAVE TWO MOUNTING BRACKETS AND INSULATORS. ACCEPTABLE MANUFACTURERS ARE: PANDUIT,CHATSWORTH, ERITECH, HARGER AND HOMACO. UTILIZE BUSBAR MANUFACTURER FOR COMPRESSION TWO-HOLE LUGS.

2 TELECOMMUNICATIONS GROUNDING BUSBAR DETAIL

NOT TO SCALE



NOTES:

1. TYPICAL DEVICES SHOWN. REFER TO DRAWINGS FOR ACTUAL COUNTS AND RESULTING QUANTITIES OF CABLE REQUIRED.
2. REFER TO DRAWINGS AND SPECIFICATIONS WIRING, RACEWAY AND PATHWAY REQUIREMENTS.
3. COORDINATE TERMINATION AND LABELING OF ALL CABLES, EQUIPMENT, RACK FRAMES AND CABINETS WITH THE OWNER.
4. COORDINATE WITH OWNER FOR ARRANGEMENT OF PATCH PANELS AND EQUIPMENT IN DATA RACKS.

TELECOMMUNICATIONS WORK OUTLET LEGEND

SYMBOL	DESCRIPTION
▼	VOICE/DATA OUTLET: (2)-DATA
TS ▼	VOICE/DATA TEACHER OUTLET: (2)-DATA
WAP ▼	WIRELESS ACCESS POINT OUTLET: (2)-DATA MODULAR JACKS
▼W	WALL PHONE OUTLET: (1)-VOICE MODULAR JACKS
FB	FLOOR BOX: (2)-DATA MODULAR JACKS, (1) VOICE MODULAR JACK

TELECOMMUNICATIONS RISER DIAGRAM KEY NOTES

1. (1) 24-STRAND 50/125 MICRON MULTI-MODE FIBER OPTIC CABLE; (1) 12-STRAND 8.2 MICRON SINGLE MODE FIBER OPTIC CABLE. CABLE SHALL BE YELLOW WITH INTERLOCKED ALUMINUM ARMOR.
2. (1) 100-PAIR CAT 3 CABLE.
3. PROVIDE EACH EQUIPMENT RACK WITH THE FOLLOWING PATCH PANELS:
   -(1) FIBER OPTIC PATCH PANEL
   -(1) 24 PORT PATCH PANEL (SECURITY)
   -(1) 24 PORT PATCH PANEL (WAP)
   -(3) 48 PORT PATCH PANELS (DATA)
   PROVIDE WITH ALL ACCESSORIES PER DIV. 27 SPECIFICATIONS

1 TELECOMMUNICATIONS RISER DIAGRAM

NOT TO SCALE

KAESTLE BOOS associates, inc

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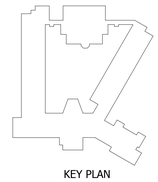
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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION



KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

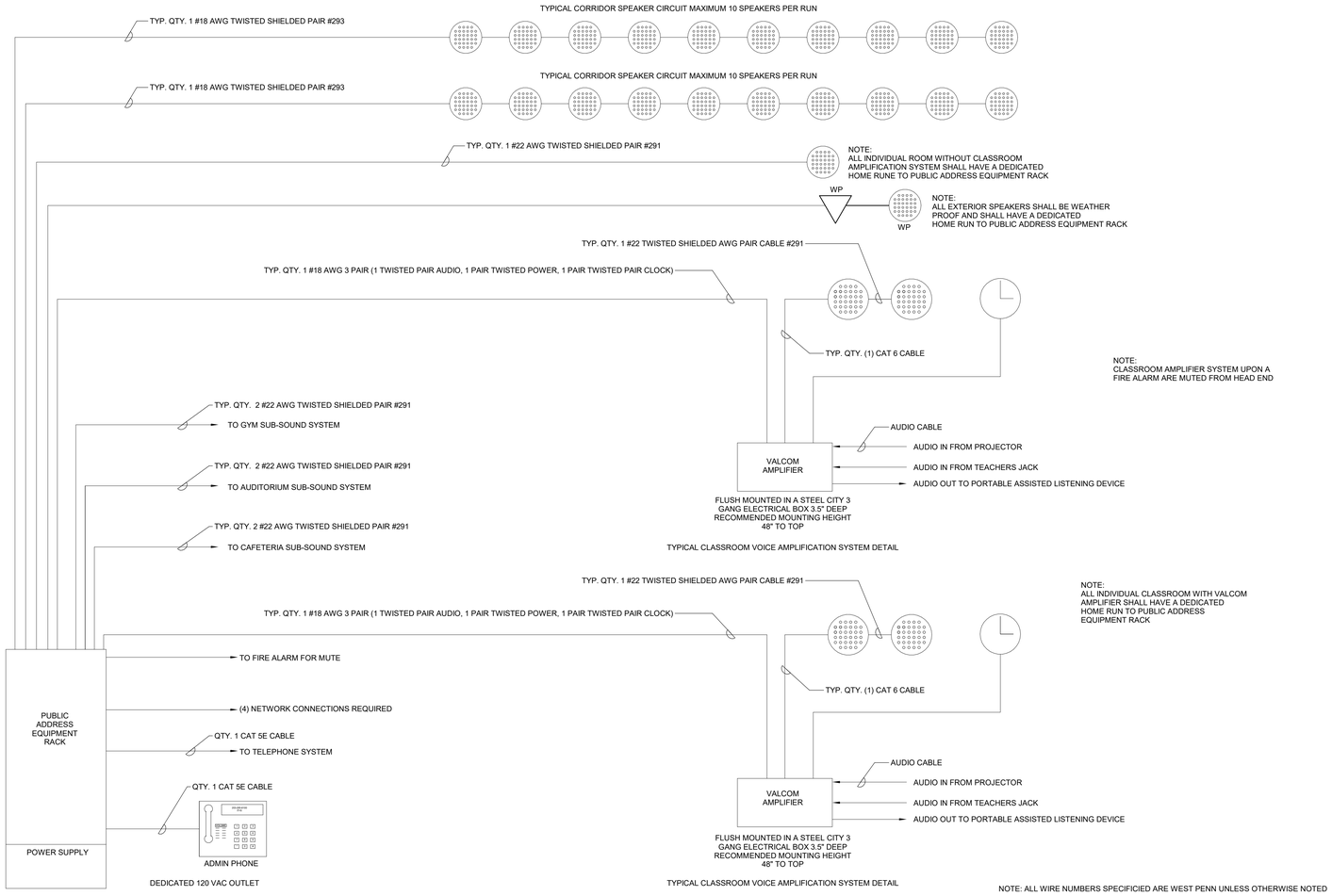
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

TEL/COM DETAILS

DRAWING NO.:
E7.01

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1 PA SYSTEM RISER
NOT TO SCALE

KAESTLE BOOS
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KEY PLAN

SCALE: 1/8" = 1'-0"

PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

PA SYSTEM DETAILS

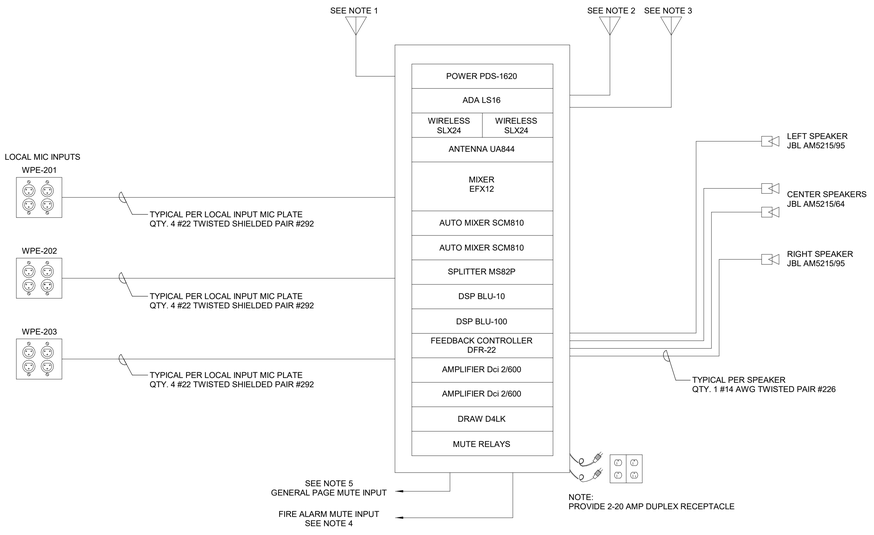
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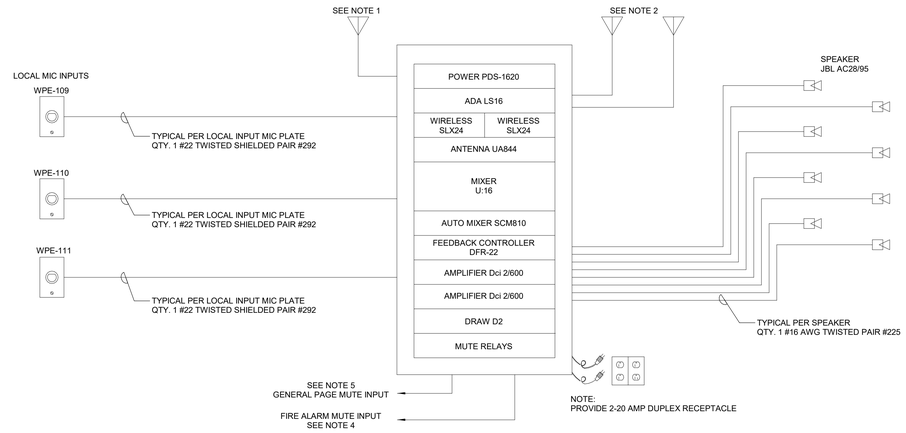
NOTES:

1. LISTEN ADA PROVIDED WITH LOCAL ANTENNA LA22 KIT, INSTALL IN PROXIMITY TO EQUIPMENT CABINET.
2. REMOTE ANTENNA KIT HARDWARE (UA505\UA825) PROVIDED. PLACE ANTENNAS 16-18 INCHES APART IN PROXIMITY TO CABINET.
3. PROVIDE AUDIO FEED FROM LOCAL PROJECTOR. SEE RELATED DRAWING.
4. PROVIDE FIRE ALARM RELAY CONTACTS FOR LOCAL SOUND MUTE.
5. PROVIDE FEED FROM INTERCOM SYSTEM TO LOCAL CABINET FOR PAGING.
6. ALL WIRE NUMBERS SPECIFIED ARE WEST PENN UNLESS OTHERWISE NOTED.

CAFETORIUM LOCAL SOUND SYSTEM



GYMNASIUM LOCAL SOUND SYSTEM



1 SOUND SYSTEM RISER
NOT TO SCALE

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ISSUE DATE

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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

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KEY PLAN

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SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

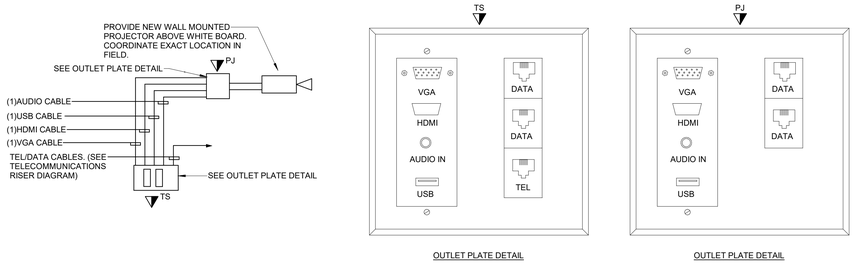
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NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

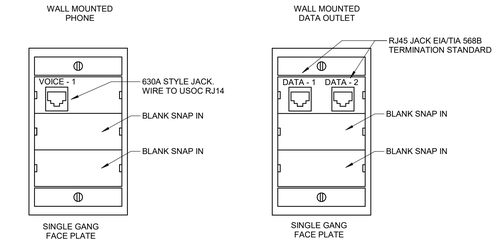
SOUND SYSTEM DETAILS

DRAWING NO.:
E7.03

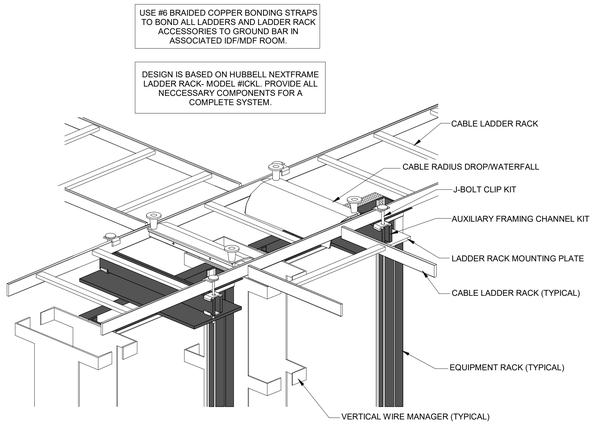
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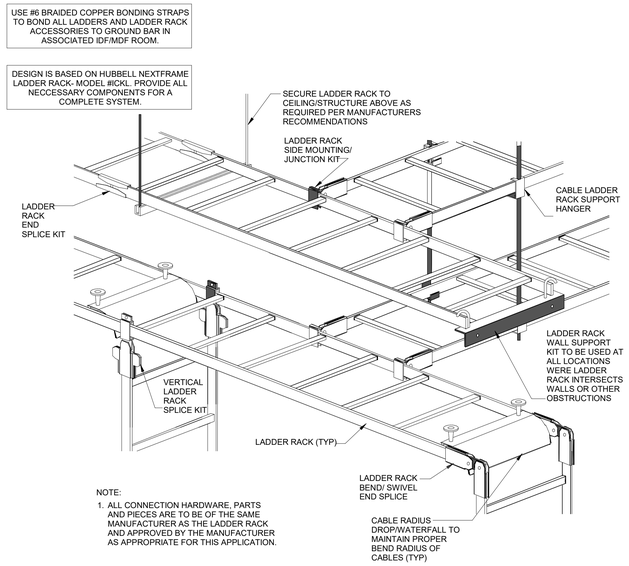
2 PROJECTOR WIRING DETAIL
NOT TO SCALE



1 TECHNOLOGY FACE PLATE CONFIGURATIONS
NOT TO SCALE



3 LADDER RACK
NOT TO SCALE



4 LADDER RACK CONNECTION
NOT TO SCALE

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

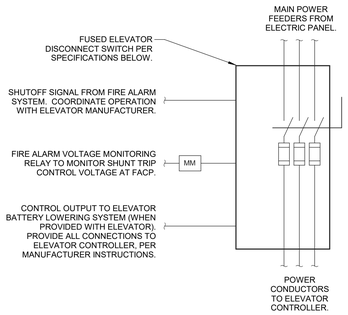
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL DETAILS

DRAWING NO.:
E7.04

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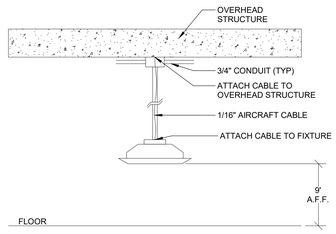
SWITCH SPECIFICATIONS:

1. SWITCH SHALL BE EATON BUSSMANN SERIES QUIK-SPEC POWER MODULE SWITCH ELEVATOR DISCONNECT, OR APPROVED EQUAL WITH THE FOLLOWING FEATURES:
   - A. RATING OF 208 V, 3 POLE, 400 A. PROVIDE WITH (3) 200 A TIME-DELAY FUSES. FUSES TYPE SHALL BE AS SPECIFIED BY ELEVATOR MFG.
   - B. INTEGRAL 120V SHUNT-TRIP CAPABILITY.
   - C. FIRE ALARM VOLTAGE MONITORING RELAY.
   - D. MINIMUM TWO (2) SETS OF N.O./N.C. AUXILIARY CONTACTS.
   - E. GREEN POWER INDICATOR PILOT LIGHT.
   - F. KEYED TEST SWITCH
   - G. INTEGRAL CONTROL TRANSFORMER.

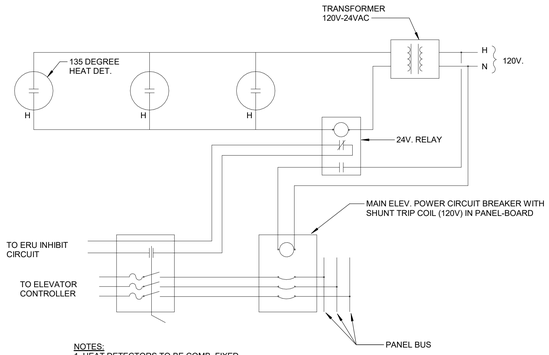
GENERAL NOTES:

1. ALL CONTROL WIRING SHALL BE MINIMUM #14 AWG UNLESS OTHERWISE NOTED.
2. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE ALL WIRING AND CONNECTIONS WITH THE ELEVATOR MANUFACTURER, AND TO PROVIDE ALL CONNECTIONS AND TERMINATE ALL WIRING AS REQUIRED BY ELEVATOR MANUFACTURER, FOR PROPER OPERATION OF ALL FUNCTIONS.
3. WIRES ARE INDICATED SCHEMATICALLY. PROVIDE QUANTITY AND SIZE AS REQUIRED FOR ALL REQUIRED CONNECTIONS.
4. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. DESIGN BASED ON THE FOLLOWING ELEVATOR CHARACTERISTICS:
   - A. MFG: THYSSEN KRUPP
   - B. MOTOR: 30HP, 208V, 3P
     - a. 94.3 RATED AMPS
     - b. 283 STARTING AMPS
     - c. 4 CONTROL AMPS
6. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH APPROVED ELEVATOR SHOP DRAWINGS AND ELEVATOR MFG TO ENSURE PROPER FUSE SIZE AND TYPE ARE PROVIDED.

1 ELEVATOR DISCONNECT SWITCH DETAIL
NOT TO SCALE

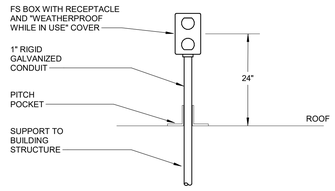


2 PENDANT FIXTURE DETAIL
NOT TO SCALE

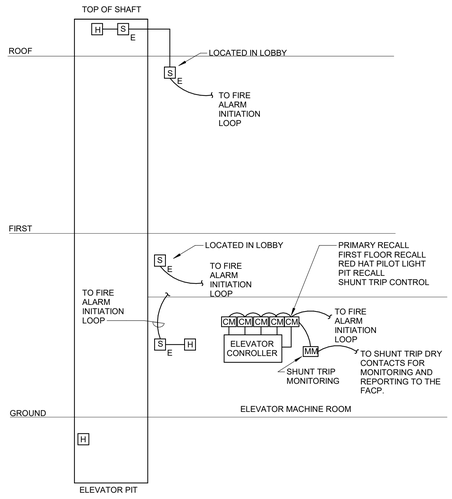


NOTES:
1. HEAT DETECTORS TO BE COMB. FIXED TEMPIRATE OF RISE TYPE RATED 135 F. MOUNT ADJCENT TO SPRINKLER HEADS IN SHAFT AND ELEV. MACHINE ROOM.
2. TRANSFORMER TO BE 120VAC-24VAC. LOCATE IN ELEV. MACHINE ROOM - EDWARDS#598.
3. RELAY TO BE 24 VOLR WITH 120V. RATED N.O. AND N.C. CONTACT. (2P,1T)

3 ELEVATOR SHUTDOWN WIRING SCHEMATIC
NOT TO SCALE

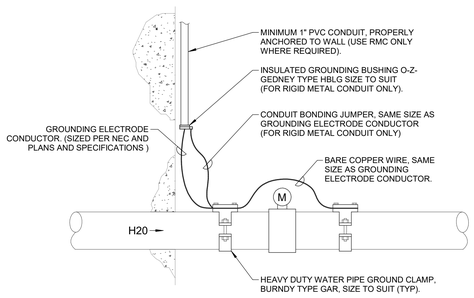


4 ROOF RECEPTACLE - MOUNTING DETAIL
NOT TO SCALE

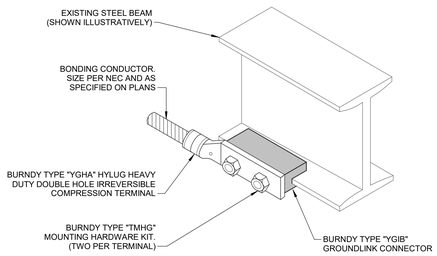


NOTES:
1. DO NOT INSTALL CONDUIT IN ELEVATOR SHAFT.
2. COORDINATE LOCATION OF ALL DEVICES WITH ELEVATOR VENDOR.

5 ELEVATOR RECALL RISER DETAIL
NOT TO SCALE



6 WATER MAIN GROUNDING DETAIL
NOT TO SCALE



NOTES:
1. WIDE FLANGE BEAM SHOWN. USE WITH OTHER STRUCTURAL ELEMENTS ONLY AS SPECIFIED BY MANUFACTURER.
2. INSTALL ACCORDING TO MANUFACTURER'S SPECIFICATIONS, USING MANUFACTURER'S RECOMMENDED INSTALLATION TOOLS.
3. PREPARE BEAM SURFACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
4. UPON COMPLETION OF INSTALLATION REPAIR & RESTORE ALL DISTURBED FIREPROOFING AND CORROSION PROTECTION.
5. DETAIL SHOWS ONLY COMPONENT FAMILY TYPES. COORDINATE WITH MANUFACTURER TO DETERMINE EXACT PART NUMBER APPROPRIATE FOR SIZE/TYPE OF EACH BEAM AND BONDING CONDUCTOR.

7 BONDING TO BUILDING STEEL DETAIL
NOT TO SCALE

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ISSUE DATE

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JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

SCALE: 1/8" = 1'-0" (0', 4', 8', 16') PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

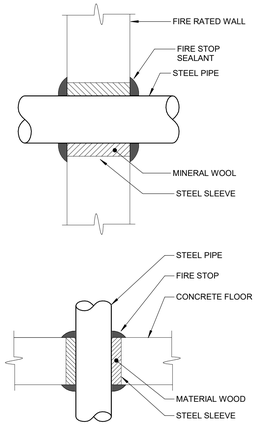
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

ELECTRICAL DETAILS

DRAWING NO.:
E7.05

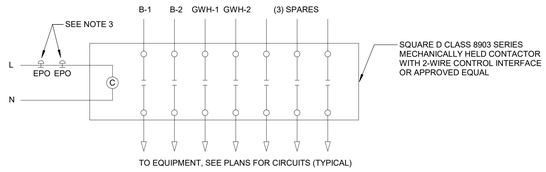
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NOTES:

1. 4" STEEL PIPE MAXIMUM (REFER TO FLOOR PLANS FOR SIZE REQUIREMENTS).
2. 6" DIA. OPENING (MAX) WITH STEEL SLEEVE.
3. SLEEVE: 4" OF 4PCF MINERAL WOOL IN OPENING.
4. APPLY FIRE STOP SEALANT THICKNESS MANUFACTURE'S INSTALLATION INSTRUCTIONS. APPLY SEALANT OVER MINERAL WOOL ON EACH SIDE OF PENETRATION.

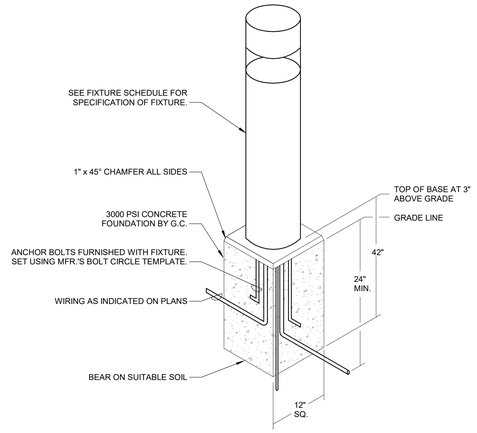
4 CONDUIT/SLEEVE WALL & FLOOR PENETRATION DETAILS
NOT TO SCALE



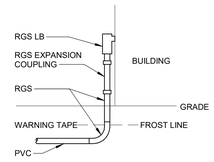
NOTES

1. PROVIDE CONTACTOR WITH QUANTITY OF POLES REQUIRED TO SHUT POWER DOWN TO EQUIPMENT LISTED PLUS (3) SPARE POLES. COORDINATE LOCATION IN MECHANICAL ROOM IN FIELD.
2. COORDINATE CONNECTIONS TO EQUIPMENT/CONTROL PANELS IN FIELD.
3. EPO TOGGLE SWITCHES AS SHOWN ON THE DRAWINGS.

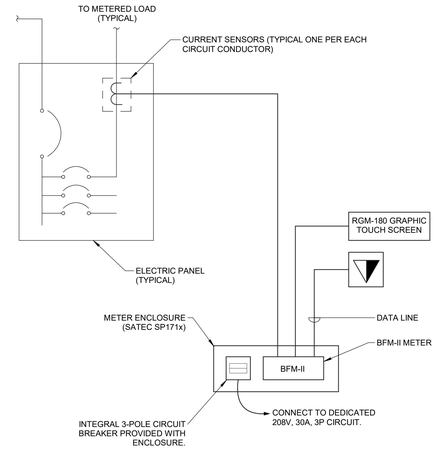
3 BOILER ROOM EPO DETAIL
NOT TO SCALE



2 BOLLARD BASE DETAIL
NOT TO SCALE



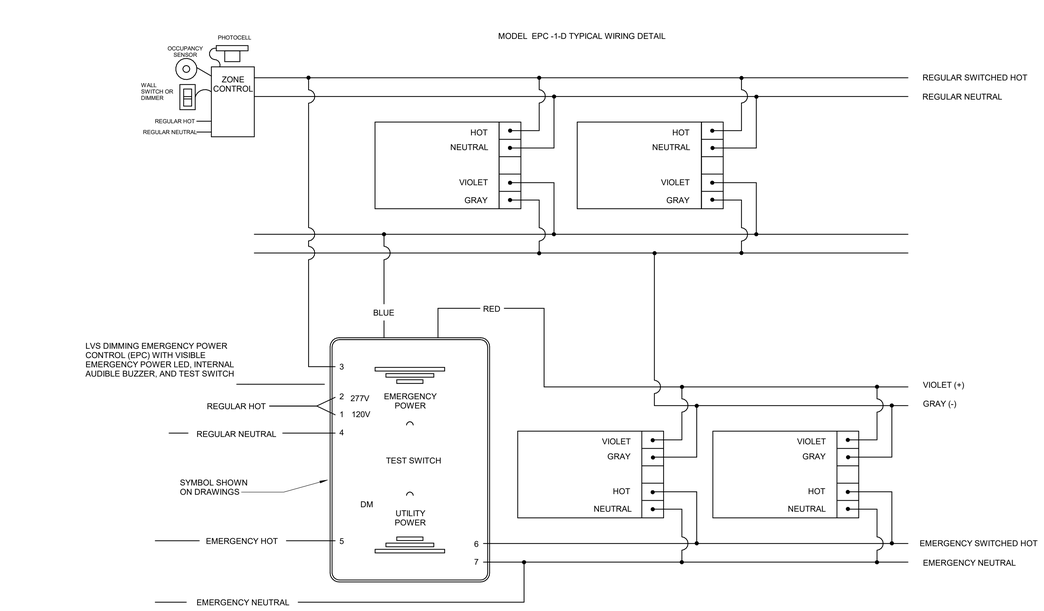
6 CONDUIT CONNECTION TO BUILDING DETAIL
NOT TO SCALE



NOTES:

1. BASIS OF DESIGN IS SATEC PRODUCTS WITH ALL COMPONENTS FURNISHED BY SATEC.
2. EACH METER SHALL BE BFM-II, PROVIDED WITH ENOUGH MODULES FOR ALL SPECIFIED METERING LOADS PLUS 4 FUTURE LOADS.
3. PROVIDE QUANTITY OF METERS AS REQUIRED TO SUPPORT ALL REQUIRED MODULES (INCLUDING FUTURE LOADS) AT ALL VOLTAGES.
4. METER SHALL BE PROVIDED WITH APPROPRIATELY SIZED SATEC ENCLOSURE WITH INTEGRAL MOUNTING RAIL AND 3-POLE DISCONNECT CIRCUIT BREAKER.
5. METER ENCLOSURE SHALL BE MOUNTED WALL IN MAIN ELECTRIC ROOM UNLESS OTHERWISE NOTED.
6. CURRENT SENSORS SHALL BE SPLIT CORE, SIZED FOR EACH LOAD.
7. PROVIDE CURRENT SENSORS WITHIN PANELS SERVING LOAD. PROVIDE EXTERNAL JUNCTION BOX ADJACENT TO PANEL IF THERE IS INADEQUATE SPACE IN PANEL FOR SENSORS AND WIRES. PROVIDE SENSORS ON LINE SIDE OF MAIN CIRCUIT BREAKER WHEN ENTIRE PANEL IS BEING METERED.
8. PROVIDE DATA LINE TO ADJACENT TELE/DATA OUTLET PER SATEC SPECIFICATIONS.
9. MOUNT TOUCH SCREEN ADJACENT TO METER ENCLOSURE. COORDINATE WITH ARCHITECT FOR EXACT PLACEMENT.
10. REFER TO PLANS AND SPECIFICATIONS FOR INFORMATION ON LOADS BEING METERED.

1 SUBMETERING DETAIL - SATEC
NOT TO SCALE



SEQUENCE OF OPERATION:

1. THE ROOM SWITCH, MOTION SENSOR, TIME CLOCK, PHOTOCELL TURNS ON BOTH REGULAR AND EMERGENCY LUMINARIES SIMULTANEOUSLY.
2. EMERGENCY POWER IS DERIVED FROM AN ON-SITE GENERATOR OR INVERTER.
3. DURING NORMAL POWER INTERRUPTION THE LPC RELAY CLOSES CONTACT "X", WHICH TURNS ON THE EMERGENCY LOADS, BYPASSING ALL LIGHTING CONTROLS.

REGULAR POWER WIRING		
WIRE #	COLOR	CONNECTION
1	BLACK	REGULAR HOT (120V)
2	ORANGE	REGULAR HOT (120V)
3	RED	SWITCHED HOT
4	WHITE	REGULAR NEUTRAL

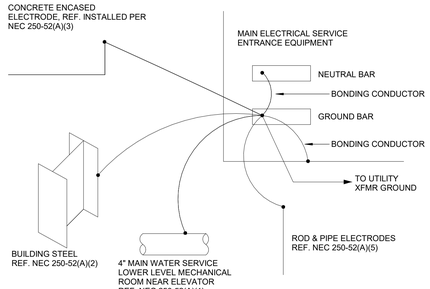
EMERGENCY POWER WIRING		
WIRE #	COLOR	CONNECTION
5	BLACK	REGULAR HOT (120V)
6	ORANGE	EMERGENCY LOAD HOT
7	WHITE/BLUE STRIPE	EMERGENCY NEUTRAL

PLENUM CABLE LOW VOLTAGE	
BLACK	DIMMER VIOLET(+)
	EMERGENCY LOAD
RED	VIOLET (+)
BLACK	CAP OFF

NOTE

ZONE CONTROL DEVICE CAN BE ANY COMBINATION OF THE FOLLOWING :
a) INTELLIGENT ZONE CONTROLLER INCLUDING BOTH LOW VOLTAGE DIMMING OUTPUT & LINE VOLTAGE SWITCHING OUTPUT.
b) LINE VOLTAGE SWITCHING DEVICE (SUCH AS OCCUPANCY SENSOR CONTACT, TIME CLOCK, RELAY PANEL) & LOW VOLTAGE DIMMING DEVICE INCLUDING PHOTOCELLS, WALL DIMMERS & OTHER LOW VOLTAGE DIMMING SIGNALS (0-10V OR DIGITAL).

7 DUAL CIRCUIT EMERGENCY LIGHTING MONITORING RELAY SCHEMATIC
NOT TO SCALE



NOTES:

A. REFER TO GROUNDING ELECTRODE TABLE FOR CONNECTIONS REQUIRED AS RELATED TO THIS PROJECT.

B. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH NEC ARTICLE 250.

GROUNDING ELECTRODE CONNECTIONS AVAILABILITY AND REQUIREMENTS FOR THIS PROJECT			
NEC REFERENCE	AVAIL. YES	REQ'D YES	NOTES
250-52(A)(1)	X	X	1
250-52(A)(2)	X	X	1
250-52(A)(3)	X	X	1,4
250-52(A)(4)			2
250-52(A)(5)	X	X	2
250-52(A)(6)	X		2
250-52(A)(7)	X		2

GROUNDING ELECTRODE CONDUCTOR SIZE:3/0 AWG COPPER

NOTES:

1. NEC ARTICLE 250-52 INDICATES A PRIORITY LIST OF GROUNDING ELECTRODE CONNECTIONS WITH (1) BEING THE HIGHEST PRIORITY AND (7) BEING THE LOWEST.
2. CONNECTION TO ITEMS MADE UNDER ARTICLE 250-52(A)(4),(5),(6) & (7) SHALL NOT SUBSTITUTE CONNECTIONS TO 250-52 (1), (2), OR (3), UNLESS NONE OF THESE SYSTEMS ARE AVAILABLE.
3. GROUNDING ELECTRODE SYSTEM INSTALLATION SHALL COMPLY WITH NEC ARTICLE 250.53.
4. REFER TO NEC ARTICLE 250.50, EXCEPTION.

5 GROUNDING ELECTRODE SYSTEM DETAIL
NOT TO SCALE

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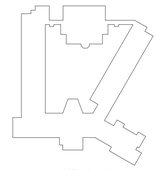
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KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

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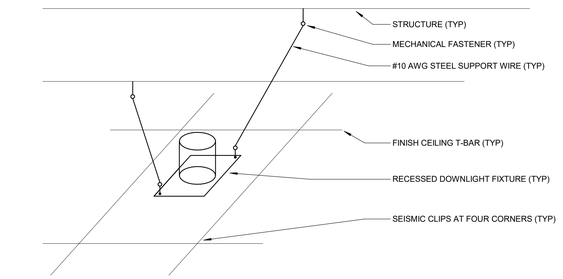
85 RESERVOIR ROAD
NEWINGTON, CT 06111

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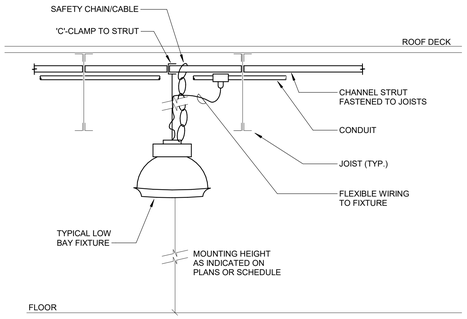
ELECTRICAL DETAILS

DRAWING NO.:
E7.06

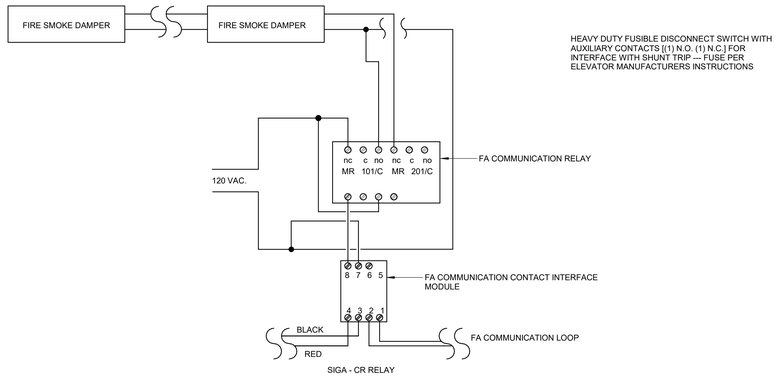
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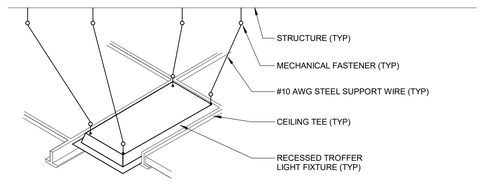
3 TYPICAL RECESSED DOWNLIGHT SUPPORT DETAIL
NOT TO SCALE



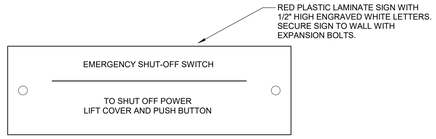
2 HIGH BAY FIXTURE MOUNTING DETAIL
NOT TO SCALE

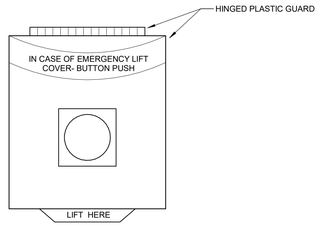


1 TYPICAL 120V FIRE/SMOKE DAMPER WIRING
NOT TO SCALE

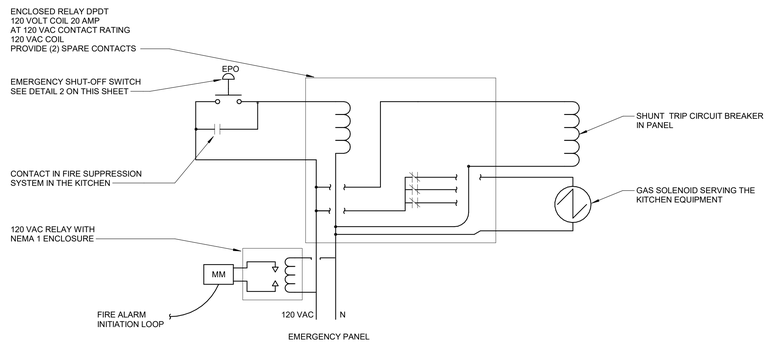


4 TYPICAL RECESSED TROFFER LIGHT SUPPORT DETAIL
NOT TO SCALE



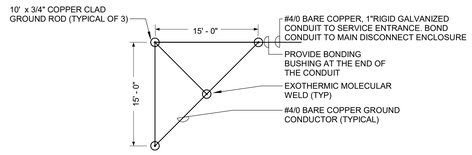


5 EMERGENCEY SHUT-OFF SWITCH WITH PLASTIC GUARD DETAIL
NOT TO SCALE

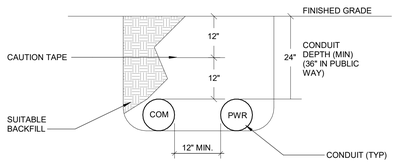


(ALL WIRING SHALL BE IN CONDUIT UNLESS OTHERWISE NOTED)

6 EMERGENCY SHUT-OFF DETAIL
NOT TO SCALE



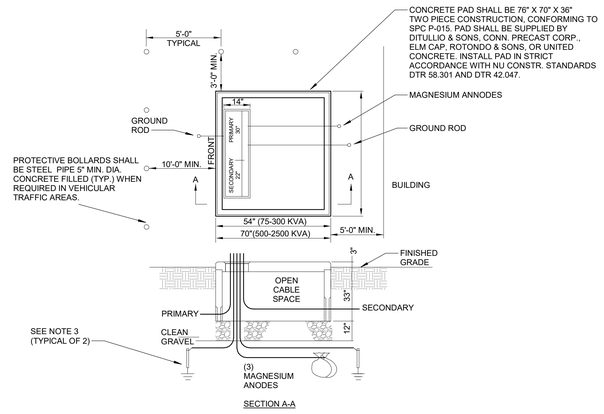
7 GROUND ROD POISE DETAIL
NOT TO SCALE



UNDERGROUND CAUTION TAPE: PERMANENT, BRIGHT -COLORED, CONTINUOUS PRINTED, VINYL TAPE FOR PERMANENT DIRECT- BURIAL SERVICE, AND WITH THE FOLLOWING FEATURES:

1. NOT LESS THAN 6 INCHES WIDE BY 4 MILS THICK.
2. EMBEDDED CONTINUOUS METALLIC STRIP OR CORE.
3. PRINTED LEGEND THAT INDICATES TYPE OF UNDERGROUND LINE.

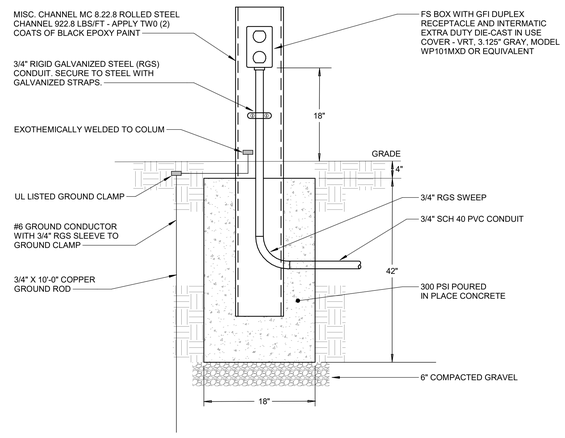
10 TRENCH DETAIL
NOT TO SCALE



NOTES:

1. PRIMARY CABLE:
   A. INSTALL DIRECT - BURIED CABLES A MINIMUM OF 30 INCHES BELOW GRADE.
   B. INSTALL CABLES IN CONDUIT A MINIMUM OF 24 INCHES BELOW GRADE.
   C. LOOP CABLES IN PIT BEFORE MAKING CONNECTIONS.
2. SECONDARY CABLE:
   LEAVE ENOUGH CABLE TO EXTEND 6 FEET ABOVE PAD FOR FUTURE CONNECTING TO TRANSFORMERS WITH HIGHER SECONDARY TERMINALS. E.C. TO PROVIDE CABLES ENTERING THROUGH THE REAR KNOCKOUT AND SHALL BE CONFINED TO THE AREA DEFINED AS THE SECONDARY CABLE AREA.
3. COPPER CLAD GROUND RODS-INSTALL IN TRENCH AND CONNECT #2 COPPER CONDUCTORS FROM RODS THROUGH PAD OPENING AND EXTENDING 5 FEET ABOVE PAD. MINIMUM SEPARATION OF GROUND RODS IS 8 FEET.
4. MEET ALL UTILITY COMPANY REQUIREMENTS

9 TRANSFORMER PAD DETAIL
NOT TO SCALE



8 PEDESTAL RECEPTACLE - MOUNTING DETAIL
NOT TO SCALE

KAESTLE BOOS associates, inc

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ISSUE DATE

DATE	DESCRIPTION
JANUARY 14, 2022	PHASE 1 OF 3

REVISIONS

DATE	DESCRIPTION

KEY PLAN

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"
PROJECT TRUE

ANNA REYNOLDS ELEMENTARY SCHOOL RENOVATIONS

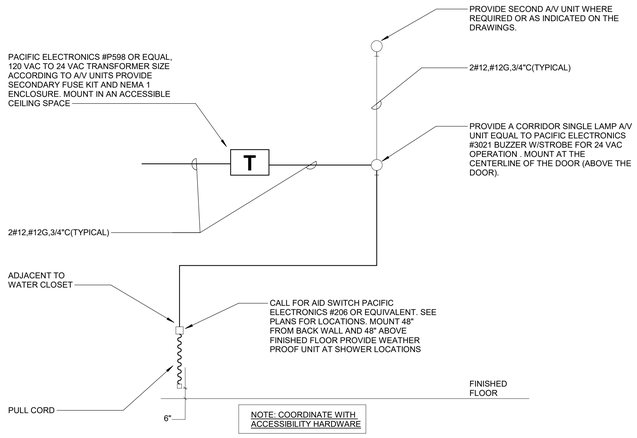
85 RESERVOIR ROAD
NEWINGTON, CT 06111

PROJECT NO.: 18-000 DRAWN BY: CKD

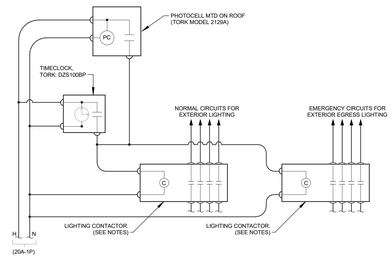
ELECTRICAL DETAILS

DRAWING NO.:
E7.07

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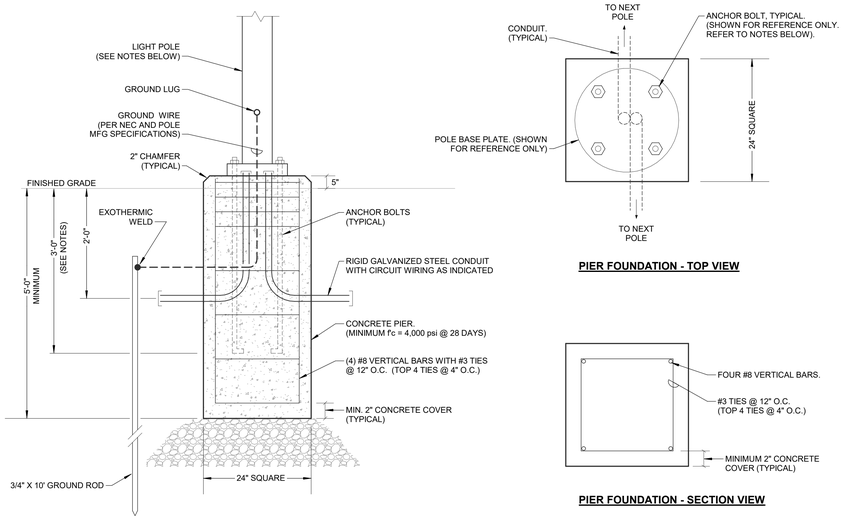
3 TYPICAL CALL FOR AID WIRING DETAIL
NTS



NOTES:

1. ALL WIRING FOR SITE LIGHTING SHALL BE #10 AWG, MINIMUM.
2. NORMAL CIRCUITS SHALL BE ON DIFFERENT CONTACTOR THAN EMERGENCY.
3. LIGHTING CONTACTOR SHALL BE 30 AMP, MECHANICALLY HELD, SQUARE-D CLASS 8203, MODEL LOX, WITH QUANTITY OF NORMALLY OPEN CONTACTS AS REQUIRED AND CONTROL VOLTAGE TO MATCH VOLTAGE OF CONTROL CIRCUIT SPECIFIED. PROVIDE WITH ENCLOSURE APPROPRIATE FOR MOUNTING LOCATION.
4. MOUNT ALL COMPONENTS, EXCEPT PHOTOCELL, ON WALL IN ELECTRIC CLOSET ADJACENT TO NORMAL POWER LIGHTING PANEL.
5. PROVIDE SUPERVISORY BYPASS RELAYS TO MONITOR NORMAL POWER LIGHTING CIRCUIT AND FULLY ILLUMINATE ALL EMERGENCY LIGHT FIXTURES UPON LOSS OF NORMAL LIGHTING CIRCUIT IN SAME AREA.

1 CKD - TIMECLOCK & PHOTOCELL
NOT TO SCALE



NOTES:

1. CONCRETE SHALL BE: MINIMUM f'c = 4,000 PSI @ 28 DAYS.
2. ASSUMES 3,000 PSF MAXIMUM ALLOWABLE VERTICAL FOUNDATION PRESSURE.
3. ASSUMES 200 PCF ALLOWABLE LATERAL BEARING.
4. GEOTECHNICAL ENGINEER MUST REVIEW EXISTING SOIL CONDITIONS AT EACH EXCAVATION PRIOR TO LIGHT POLE PIER PLACEMENT. PROVIDE CRUSHED STONE BELOW BASE OF PIER AND APPROVED BACKFILL MATERIAL, AS MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER.
5. ANCHOR BOLTS SHOWN FOR REFERENCE ONLY. COORDINATE ANCHOR BOLT QUANTITY, DIAMETER, GEOMETRY, AND EMBEDMENT DEPTH WITH LIGHT POLE MANUFACTURER.
6. REBAR TO BE ASTM A-615, GRADE 60. REBAR SHALL BE EPOXY COATED PER ASTM-775/775M.
7. LIGHT POLE AND PIER FOUNDATION SHOWN ILLUSTRATIVELY FOR PLANNING AND PRICING PURPOSES ONLY. ELECTRICAL CONTRACTOR'S SHALL INCLUDE A DELEGATED DESIGN OF NEW PIER FOUNDATIONS FOR EACH LIGHT POLE, AND SHALL INCLUDE:
   A. COORDINATION WITH APPROVED LIGHT POLE MANUFACTURER TO OBTAIN ALL STRUCTURAL LOADING INFORMATION REQUIRED BY THE FOUNDATION DESIGN ENGINEER.
   B. PRIOR TO INSTALLATION PROVIDE ARCHITECT WITH FINAL FOUNDATION DESIGN DRAWINGS FOR REVIEW AND APPROVAL BY DESIGN TEAM. DRAWINGS SHALL BE SIGNED AND SEALED BY A LICENSED CONNECTICUT PROFESSIONAL STRUCTURAL ENGINEER.
   C. PROVIDE FOUNDATION DESIGN WITH ALL REQUIRED GEOTECHNICAL INFORMATION.
   D. DESIGN MUST NOT IMPACT OTHER SITE ELEMENTS OR INFRINGE ON ANY PARKING AREAS OR WALKWAYS.
   E. FOUNDATION DESIGN MUST INCLUDE ALL APPURTENANCES ON POLE INCLUDING LIGHT HEAD, SUPPORT ARM, AND CAMERA.

2 LIGHT POLE FOUNDATION DETAIL
NOT TO SCALE

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