

LAKE FOREST SCHOOL DISTRICT
RENOVATIONS TO
DELAWARE EARLY
CHILDHOOD CENTER - HVAC
UPGRADES

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ISSUED FOR:

BIDDING 30 JANUARY 2023

PROJECT INFO:

Lake Forest School District - Delaware Early Childhood Center - HVAC Upgrades

100 W. Mispillion Street
Harrington, Delaware 19952

SHEET INFO:

PROJECT NO: 21046

DRAWN BY: JAR

CHECKED BY: RAG

SCALE: AS NOTED

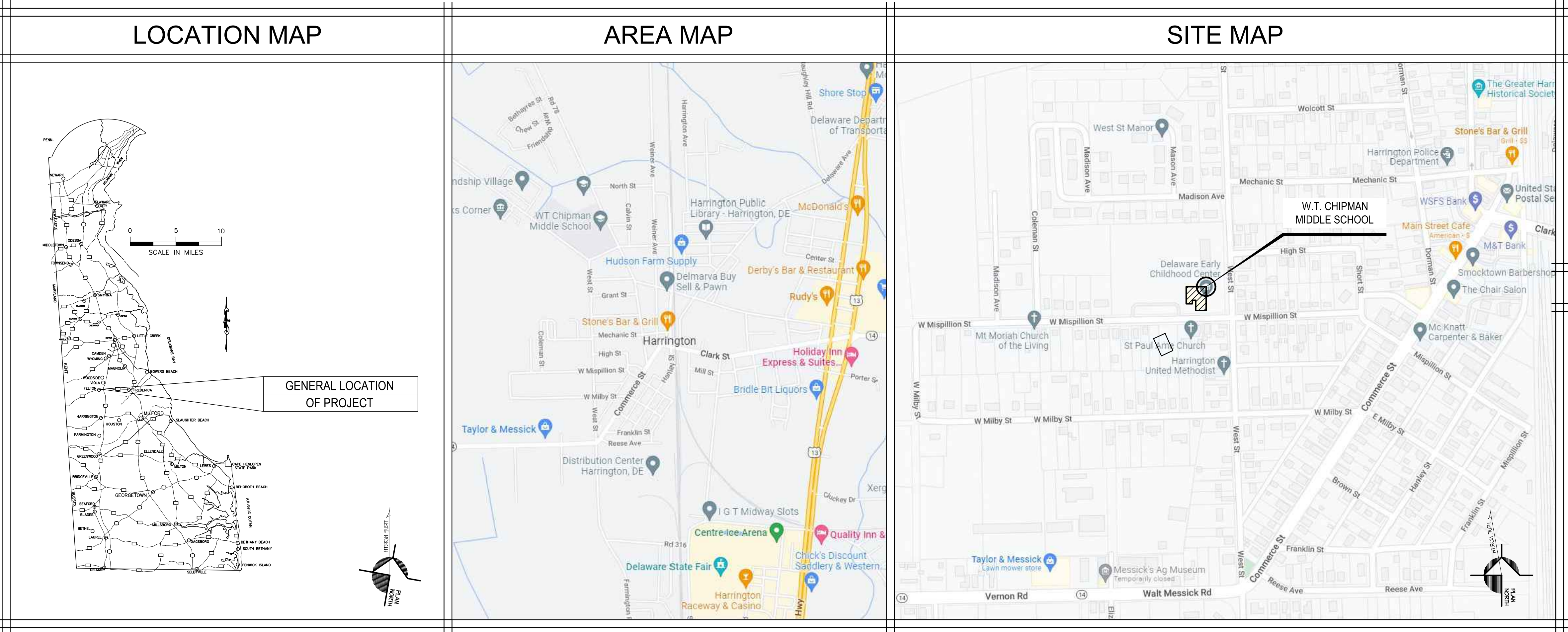
DATE: 30 JANUARY 2023

TITLE & NO.:

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COVER SHEET

CS-1



GENERAL NOTES

- THE NOTES ON THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. FOR INCONSISTENCIES BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS, THE STRICTER REQUIREMENT SHALL APPLY, AND THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE STRUCTURE IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. PROVIDE ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.
- ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.
- ANY AND ALL MODIFICATIONS TO THE STRUCTURAL ELEMENTS INDICATED ON THESE DRAWINGS MUST BE APPROVED IN ADVANCE BY BAKER, INGRAM & ASSOCIATES.

DESIGN LOADS

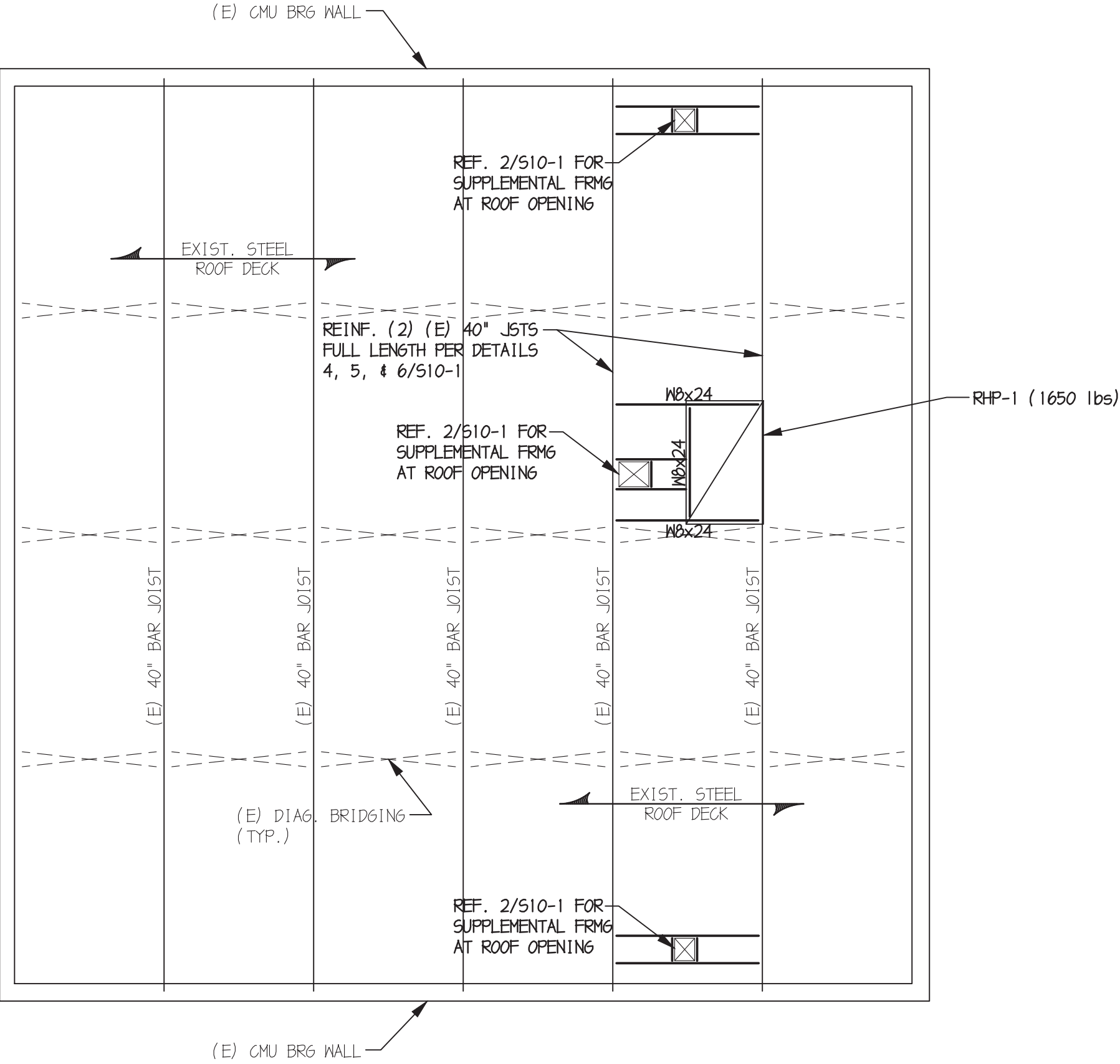
- BUILDING CODE: INTERNATIONAL BUILDING CODE (2018 EDITION).
- DESIGN LIVE LOADS:
ROOF 30 PSF MIN. + DRIFT

EXISTING CONDITIONS

- EXISTING CONDITIONS INDICATED ARE OBTAINED FROM AVAILABLE SOURCES (EXISTING DRAWINGS, FIELD SURVEYS, ETC.) AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. CONTRACTOR(S) SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
- SEE ARCH DRAWINGS FOR LIMITS OF DEMOLITION OF EXISTING CONSTRUCTION WHERE REQUIRED.

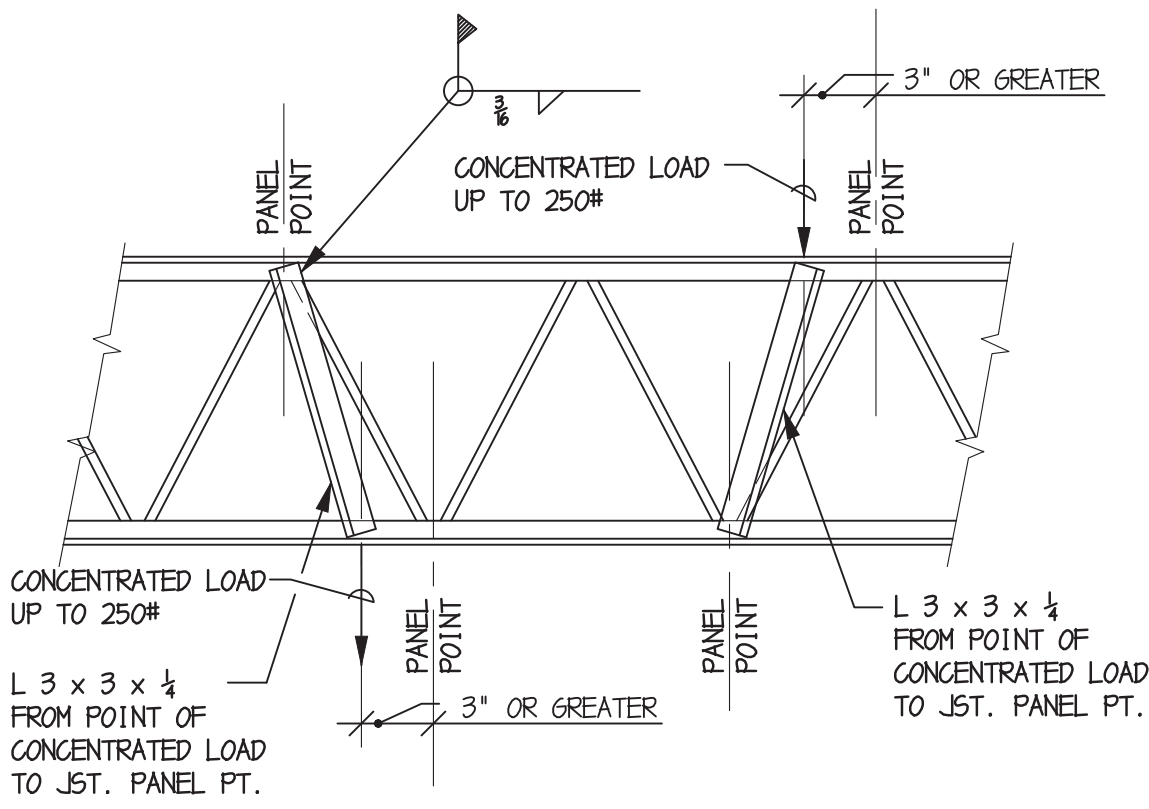
STRUCTURAL STEEL

- STRUCTURAL STEEL FABRICATION, ERECTION, AND CONNECTION DESIGN SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
STRUCTURAL STEEL WF SHAPES: ASTM A992
OTHER STRUCTURAL STEEL SHAPES: ASTM A36, U.N.O.
STEEL BARS, ANGLES & PLATES: ASTM A36, U.N.O.
ROUND PIPE: ASTM A53, TYPE E OR S
- ALL WELDING SHALL CONFORM TO AWS D1.1-LATEST EDITION. ELECTRODES SHALL BE E70XX.
- ALL ALUMINUM AND STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.
- SUBMIT ALL STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING, BUT NOT LIMITED TO THE LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
- THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR APPROVAL OF THE DESIGN PROFESSIONAL.
- FABRICATE BEAMS WITH THE NATURAL CAMBER UP.
- ALL STEEL NOT RECEIVING FIREPROOFING SHALL BE PAINTED WITH THE FABRICATOR'S RUST INHIBITIVE PRIMER. ALL STEEL EXPOSED TO WEATHER SHALL BE PAINTED WITH RUST INHIBITIVE PRIMER AND TOP COATED OR HOT DIPPED GALVANIZED AS INDICATED ON THE DRAWINGS.



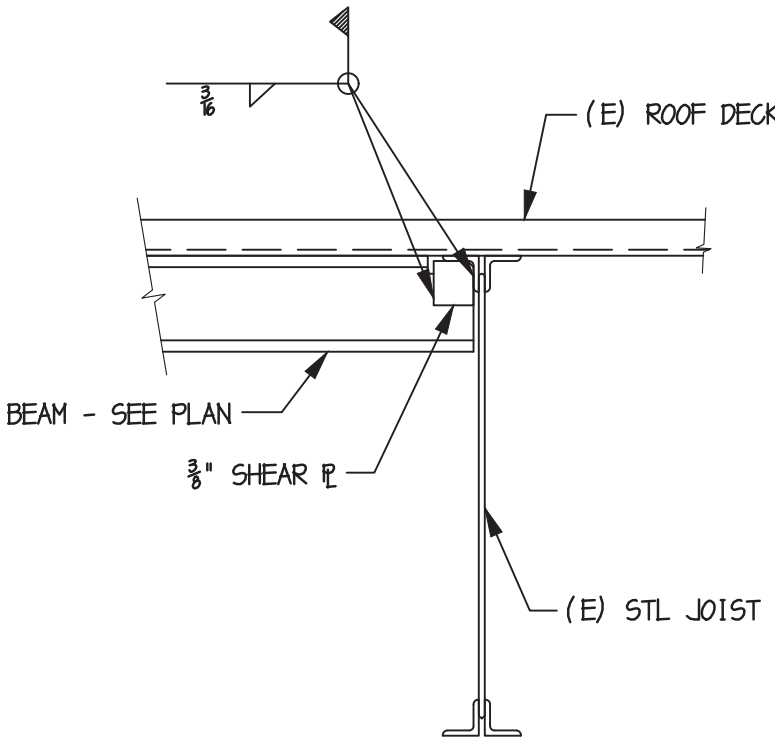
P1
S10-1
PARTIAL ROOF FRAMING PLAN
3/8\"/>

- NOTES:
- COORD. DIMENSIONS & LOCATIONS W/ EXIST. CONDITIONS, MECH. DRAWINGS, & FINAL UNIT MANUFACTURER'S SPECS.
 - VERIFY EXIST. CONDITIONS IN THE FIELD PRIOR TO FABRICATION.
 - BEAM TO BEAM CONNECTIONS TO BE MADE USING FULL DEPTH 3/8\"/>

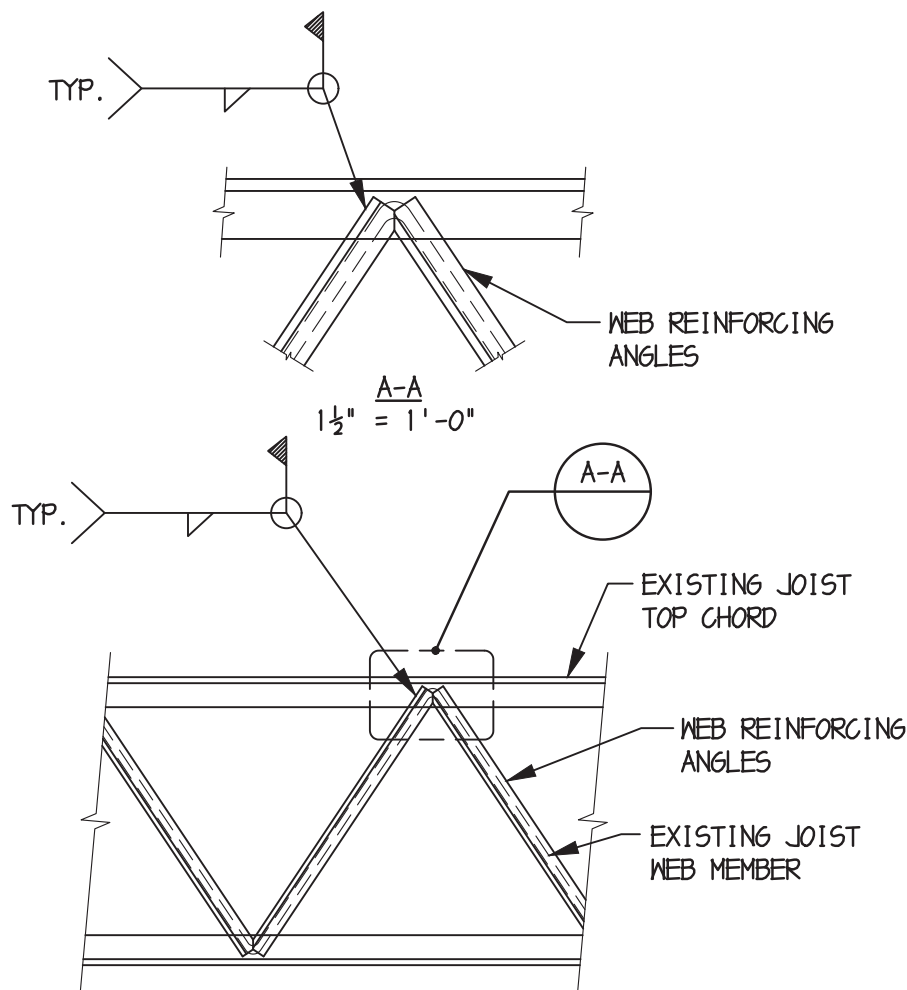


NOTE:
NO JOIST ANGLE REINF. REQ'D. FOR LOADS UP TO 50#.

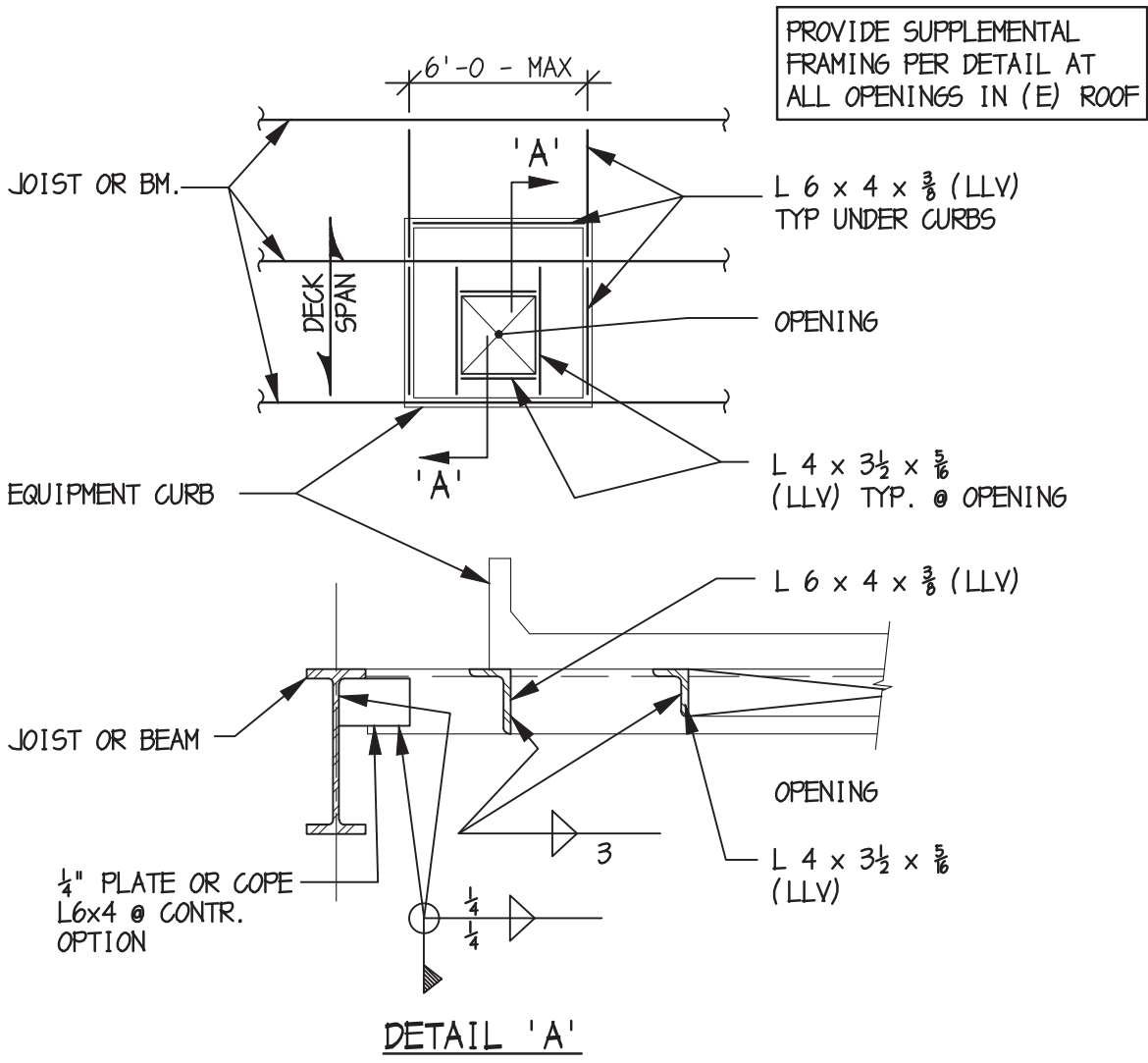
1
S10-1
POINT LOAD JOIST REINFORCING
3/8\"/>



3
S10-1
NEW BEAM - EXISTING JOIST CONNX.
3/8\"/>

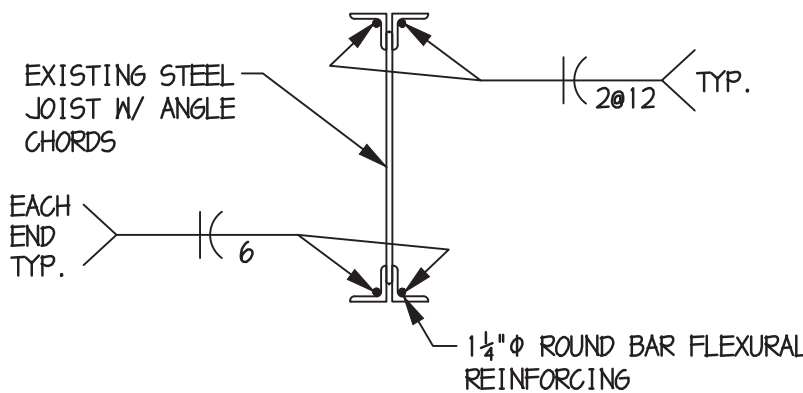


5
S10-1
WEB REINFORCEMENT (SHEAR)
3/8\"/>



NOTE:
COORD SIZE & LOCATION OF CURBS & OPENINGS W/ DIVISION 15 CONTR.

2
S10-1
FRMG @ ROOF EQUIP CURBS & OPNGS
3/8\"/>



4
S10-1
JOIST CHORD REINFORCEMENT (FLEXURE)
3/8\"/>

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STRUCTURAL ENGINEERS

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Lancaster, Pennsylvania Project Number D14682

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Haddon Heights, New Jersey mail@bakeringram.com

Annapolis, Maryland

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CHECKED BY: JDM

SCALE: AS NOTED

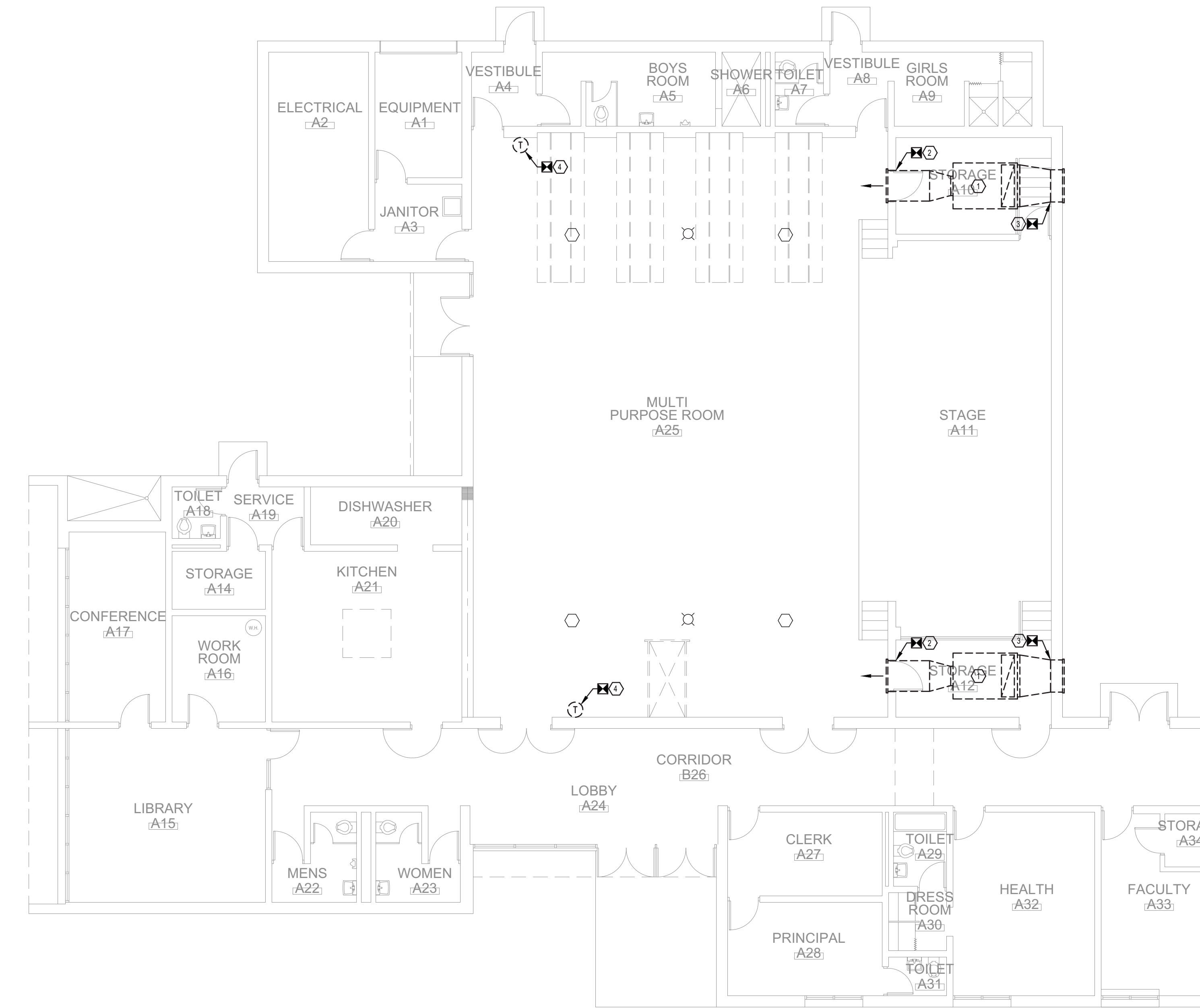
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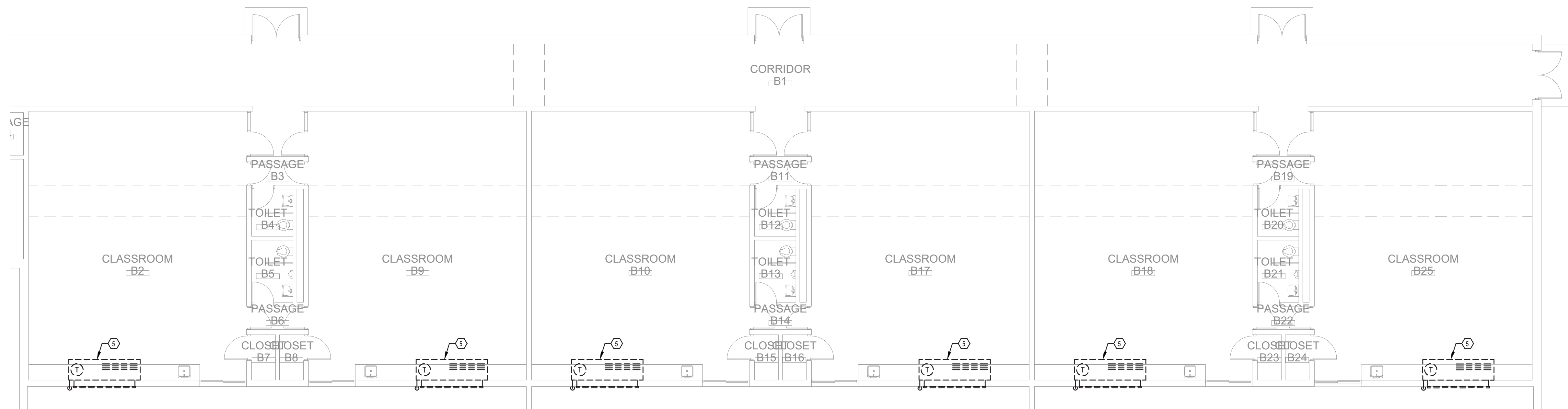
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STRUCTURAL
NOTES, PARTIAL
ROOF FRAMING
PLAN & DETAILS

S10-1



1 PARTIAL FLOOR PLAN - DEMOLITION - MECHANICAL
SCALE : 1/8" = 1'-0"



2 PARTIAL FLOOR PLAN - DEMOLITION - MECHANICAL
SCALE : 1/8" = 1'-0"

DEMOLITION NOTES

- 1 REMOVE H&V UNIT COMPLETELY, INCLUDING BUT NOT LIMITED TO UNIT, ELECTRIC HEATER, SUPPORTS, HANGERS, DUCTWORK, AND CONTROLS.
- 2 REMOVE 42"x16" SUPPLY LOUVER COMPLETELY. REFER TO ARCHITECTURAL DWGS. FOR WALL INFILL (BY OTHERS)
- 3 REMOVE 42"x20" OUTSIDE AIR INTAKE LOUVER COMPLETELY. REFER TO ARCHITECTURAL DWGS. FOR WALL INFILL (BY OTHERS).
- 4 REMOVE PNEUMATIC THERMOSTAT, CUT & CAP PNEUMATIC TUBING WITHIN WALL AND COVER WITH A METAL BLANK PLATE. FIELD VERIFY EXACT LOCATION.
- 5 REMOVE UNIT VENTILATOR COMPLETELY, INCLUDING BUT NOT BE LIMITED TO UNIT, LOUVER, WALL SLEEVE, CONTROLS, AND CONDENSATE DRAIN.

MECHANICAL LEGEND

	POINT OF DEMOLITION BETWEEN DEMO WORK & EXISTING WORK TO REMAIN	DSD	DUCT SMOKE DETECTOR
	POINT OF CONNECTION BETWEEN NEW WORK & EXISTING WORK TO REMAIN	(EX)	EXISTING WORK SHALL REMAIN
	THERMOSTAT	FC	FLEX CONNECTION
	THERMOSTAT WITH GUARD	HP	HEAT PUMP
	EXISTING WORK/EQUIPMENT TO BE REMOVED	(R)	EXISTING WORK TO BE REMOVED
	EXISTING WORK/EQUIPMENT TO REMAIN	RA	RETURN AIR
	NEW WORK/EQUIPMENT	RHP	ROOFTOP HEAT PUMP UNIT
	VOLUME DAMPER	RL	REFRIGERANT LIQUID
	CONICAL COLLAR WITH VOLUME DAMPER	RS	REFRIGERANT SUCTION
	PIPE ELBOW DOWN	SA	SUPPLY AIR
	PIPE ELBOW UP	UV	UNIT VENTILATOR
	TRANSITION/REDUCER		

GENERAL NOTES

1. MECHANICAL CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, FEES AND PERMITS FOR A COMPLETE INSTALLATION. ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS.
2. ALL COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION ARE NOT SHOWN ON THE DRAWINGS. REFER TO EQUIPMENT INSTALLATION INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS, INCLUDING REQUIRED CONNECTION LOCATIONS, TYPES & SIZES.
3. UNLESS SPECIFICALLY DIMENSIONED, THE WORK SHOWN ON THE DRAWINGS IS DIAGRAMMATIC ONLY TO SHOW GENERAL ARRANGEMENTS. THE DRAWINGS ARE NOT TO BE SCALED. PIPE AND DUCT ROUTING AND EQUIPMENT CONNECTION LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE. FIELD VERIFY CLEARANCES, DIMENSIONS, MATERIALS, AND EQUIPMENT REQUIREMENTS PRIOR TO CONSTRUCTION. RELOCATE CONDUITS, PIPING HANGERS, ETC. AS REQUIRED.
4. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO PERFORM ALL WORK NECESSARY TO PREPARE STRUCTURES FOR THE INSTALLATION OF MECHANICAL SYSTEMS. ALL HOLES, OPENINGS, AND DAMAGED MATERIALS CREATED DURING CONSTRUCTION SHALL BE PATCHED AND FINISHED.
5. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL CUTTING, PATCHING, FINISHING, AND PENETRATIONS REQUIRED BY THE INSTALLATIONS. ALL PENETRATIONS SHALL BE PATCHED AND SEALED. CUTTING OF BUILDING CONSTRUCTION MATERIALS SHALL CONFORM TO THE CHARACTERISTICS OF THE PARTICULAR MATERIAL INVOLVED AND SHALL NOT CREATE ANY STRUCTURAL WEAKNESS OR UNSIGHTLY APPEARANCE. ALL CUTTING SHALL MEET THE APPROVAL OF THE ARCHITECT AND/OR OWNER'S REPRESENTATIVE. COORDINATE WITH THE PARTY BEFORE COMMENCING.
6. ALL WORK, EQUIPMENT AND MATERIALS SHALL BE PROTECTED AT ALL TIMES. ALL DUCT AND PIPE OPENINGS SHALL BE PROPERLY CAPPED OR PLUGGED DURING INSTALLATION.
7. WHERE REQUIRED FOR CLEARANCE, TO AVOID INTERFERENCE OR EQUIPMENT CONNECTIONS, THE MECHANICAL CONTRACTOR SHALL OFFSET PIPES, DUCTS OR CONDUITS. NECESSARY SPECIAL FITTINGS OR ADAPTERS SHALL BE PROVIDED TO MAINTAIN GOOD FLOW CHARACTERISTICS. PROPERLY DRAIN AND DRIP WHERE NECESSARY.
8. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF HIS OWN PEOPLE. COMPLY WITH ALL OWNER'S SITE SAFETY CONDITIONS.
9. MECHANICAL CONTRACTOR SHALL MOUNT ALL THERMOSTATS AND ADJUSTABLE SENSORS IN FINISHED OCCUPIED ROOMS AT ADA HEIGHT OF 48 INCHES.
10. FOR ANY MATERIALS AND EQUIPMENT REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT, THE OWNER'S REPRESENTATIVE SHALL APPROVE FINAL DISPOSITION OF ALL SUCH MATERIAL FOR RETENTION AND STORAGE, OR REMOVAL FROM THE SITE BY THE CONTRACTOR.
11. FOR EXISTING SYSTEMS, PROVIDE ALL HEAT TRAPS AND OR WET TAPS AS REQUIRED.

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BIDDING 30 JANUARY 2023

PROJECT INFO:

Lake Forest School
District - Delaware
Early Childhood
Center - HVAC
Upgrades

100 W. Mispillion Street
Harrington, Delaware 19952

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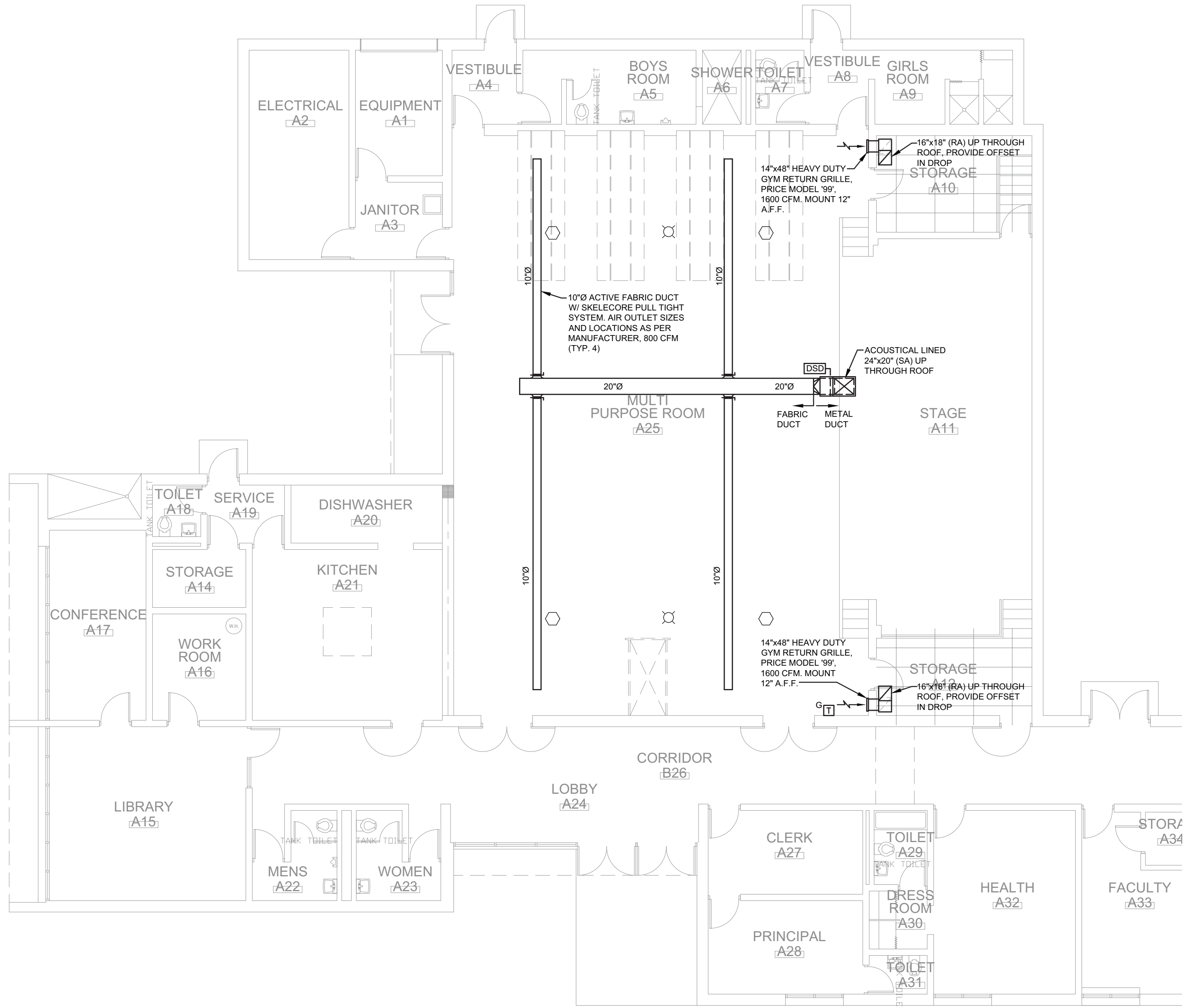
PROJECT NO: 21046
DRAWN BY: DEG
CHECKED BY: SAJ
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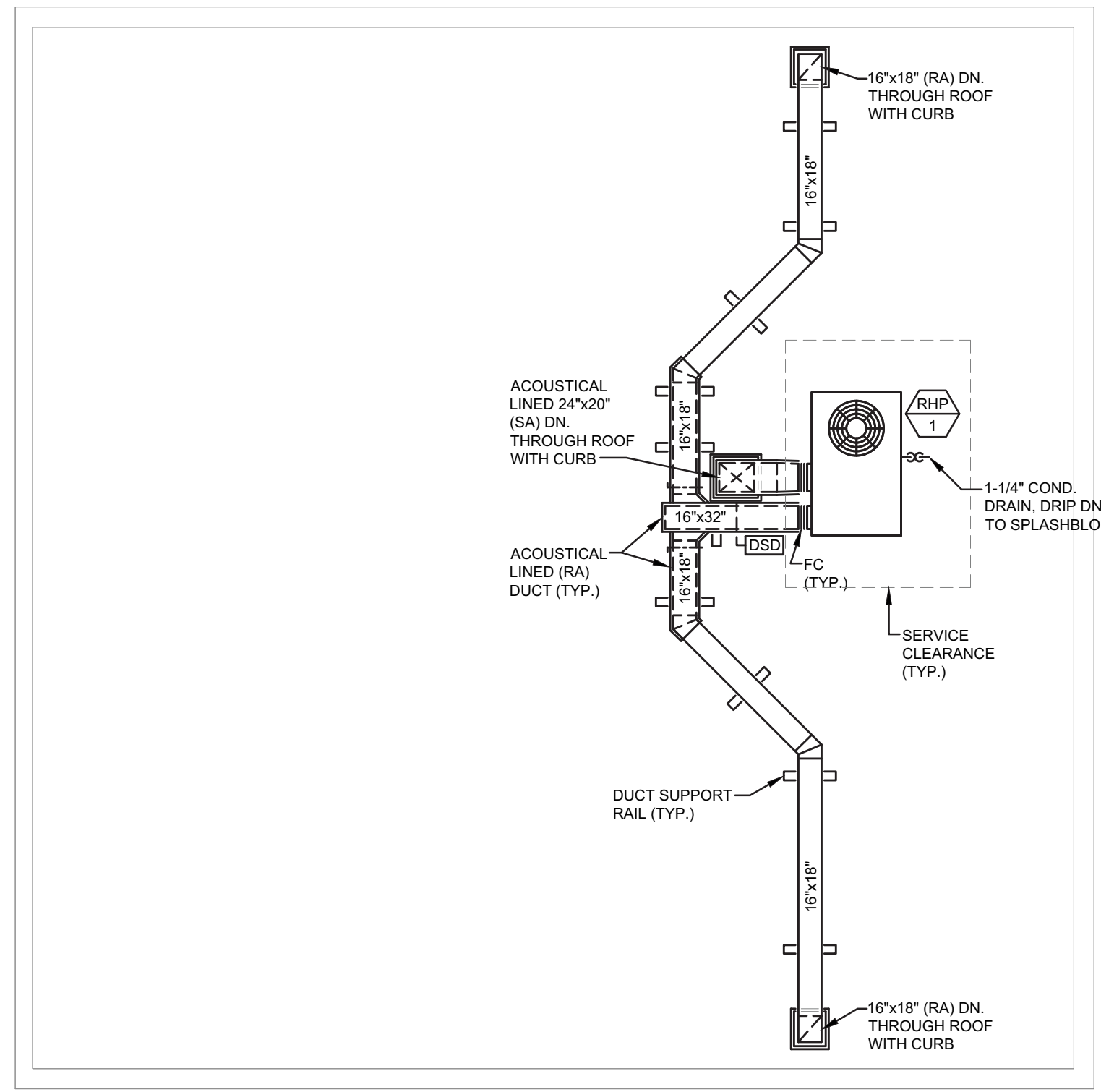
FLOOR PLANS
DEMOLITION
MECHANICAL

MD-1



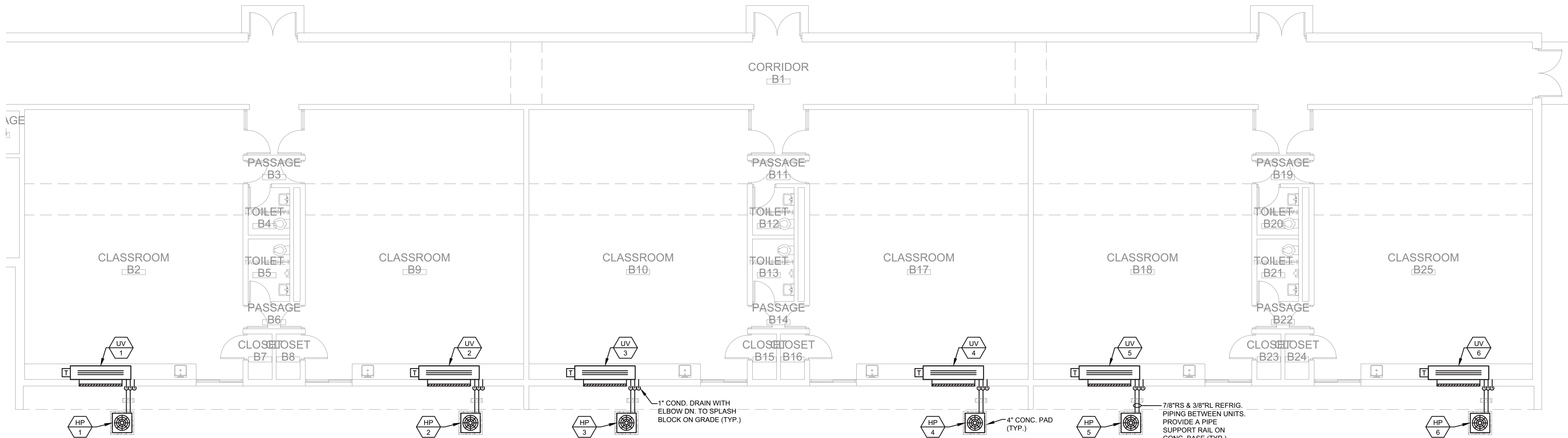
1 PARTIAL FLOOR PLAN - NEW WORK - MECHANICAL

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



3 PARTIAL ROOF PLAN - NEW WORK - MECHANICAL

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



2 PARTIAL FLOOR PLAN - NEW WORK - MECHANICAL

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



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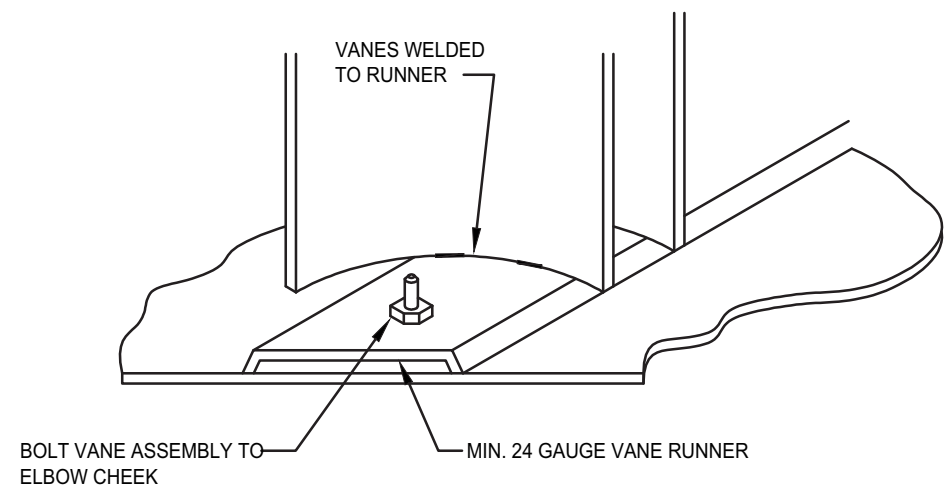
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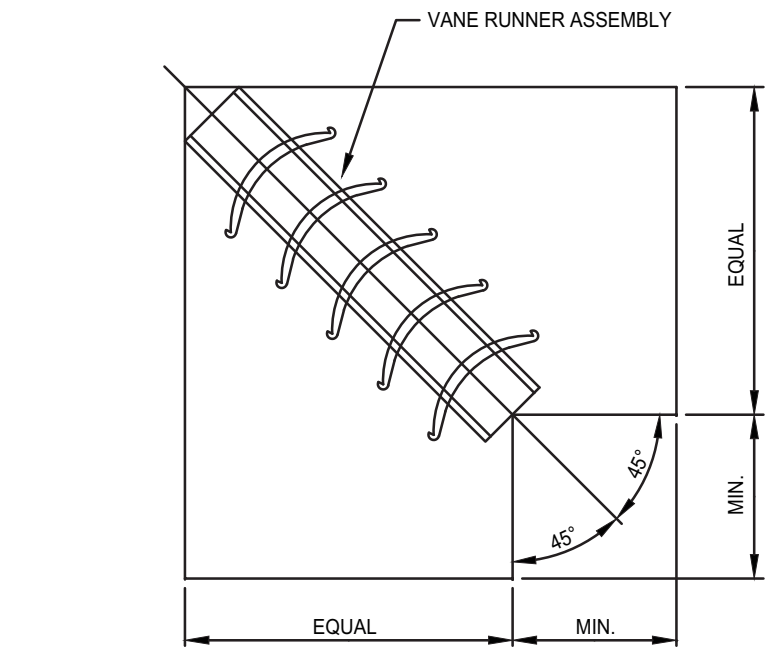
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FLOOR PLANS
NEW WORK
MECHANICAL

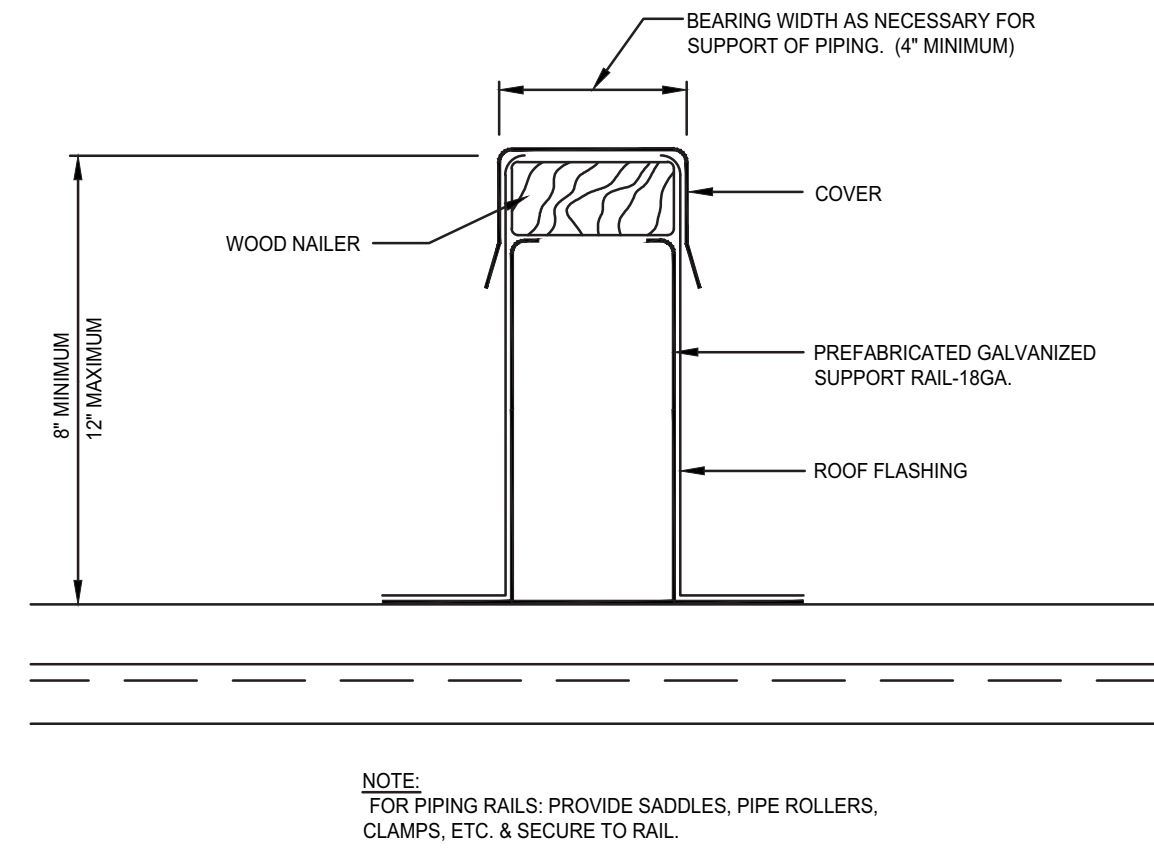
M10-1



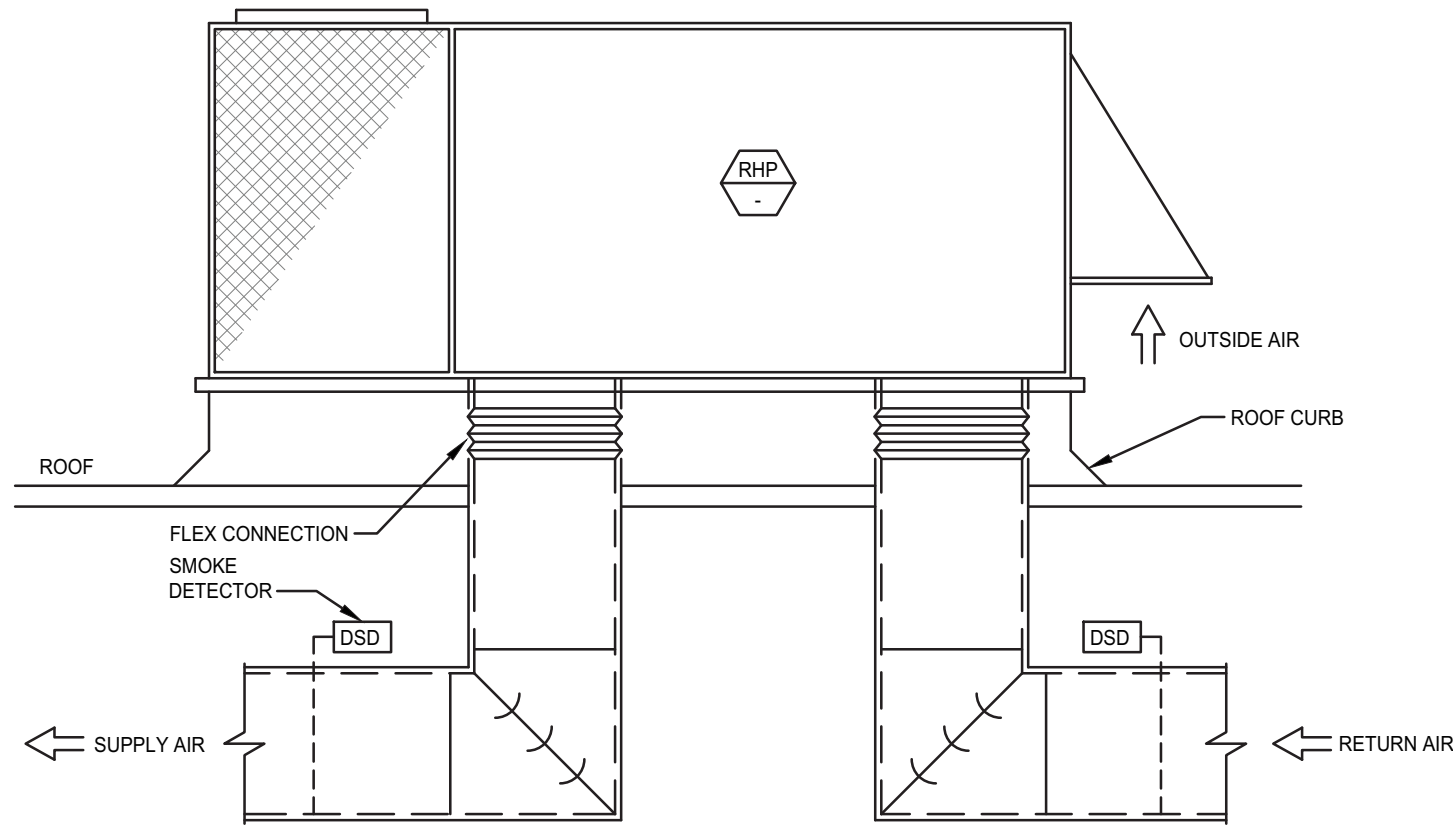
VANE RUNNER ASSEMBLY DETAIL
NOT TO SCALE



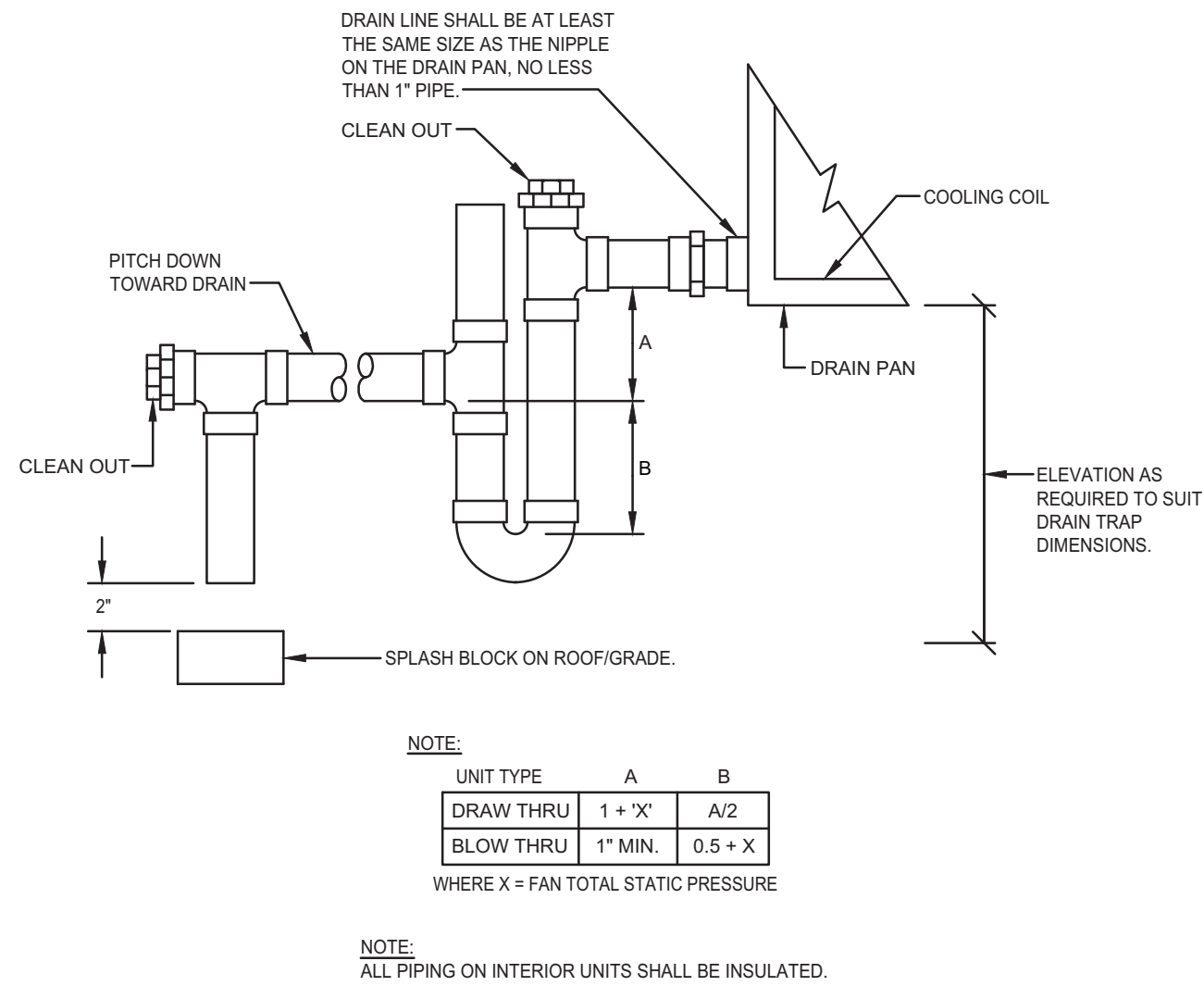
VANED ELBOW DETAIL
NOT TO SCALE



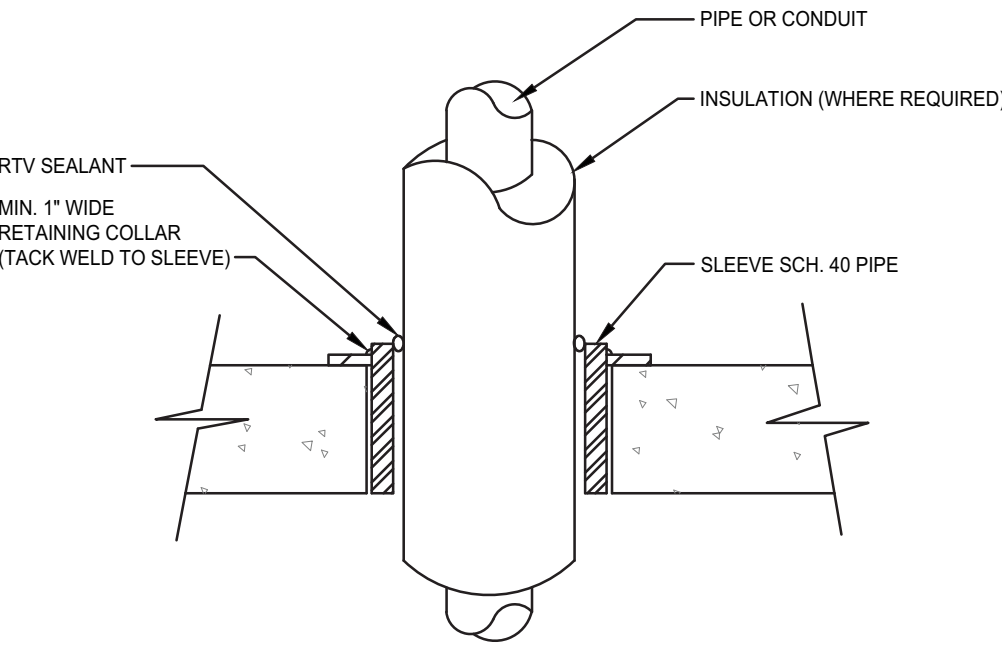
ROOF DUCTWORK / PIPING SUPPORT RAIL DETAIL
NOT TO SCALE



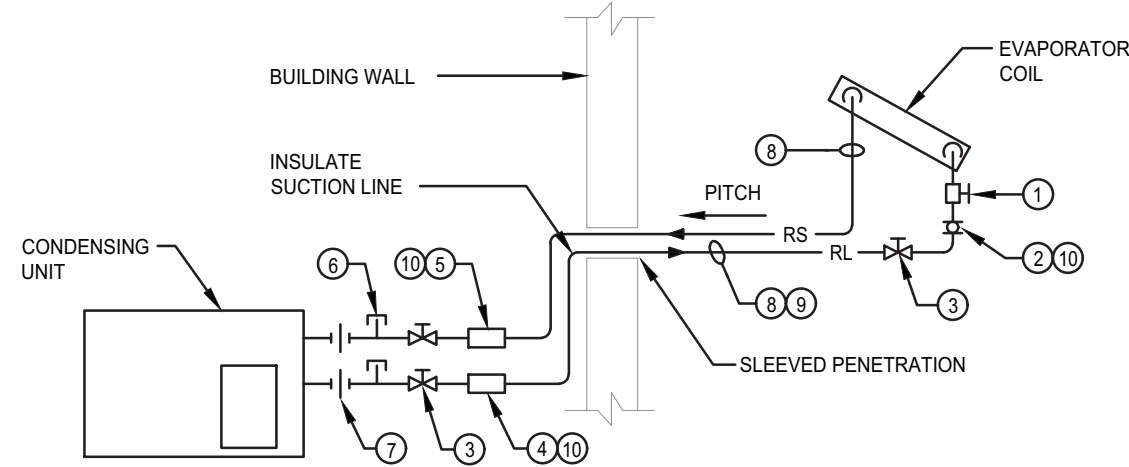
PACKAGED ROOFTOP UNIT DETAIL
NOT TO SCALE



CONDENSATE DRAIN TRAP DETAIL
NOT TO SCALE




SLEEVE DETAIL
NOT TO SCALE



REFRIGERATION PIPING DETAIL
NOT TO SCALE

- COMPONENTS LIST**
- 1 THERMOSTATIC EXPANSION VALVE
 - 2 MOISTURE INDICATOR/SIGHT GLASS
 - 3 DIAPHRAM PACKLESS VALVE
 - 4 FILTER DRIER (REPLACEABLE CORE)
 - 5 SUCTION LINE FILTER
 - 6 PURGE/CHARGE CONNECTION. REFRIGERANT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER RESISTANCE CAPS OR SHALL BE OTHERWISE SECURED TO PREVENT UNAUTHORIZED ACCESS.
 - 7 QUICK COUPLING
 - 8 LINE SIZE AS PER MANUFACTURER'S REQUIREMENT.
 - 9 INSULATE LIQUID LINE IF METERING DEVICE IS MOUNTED IN CONDENSING UNIT.
 - 10 COORDINATE INLINE DEVICES WITH THE SYSTEM MANUFACTURER'S INSTALLATION INSTRUCTIONS. DELETE THESE ITEMS IF SO INDICATED BY THE MANUFACTURER.
- NOTE:**
CONFIRM WITH MANUFACTURER ALL COMPONENTS BEING PROVIDED WITH SYSTEM. IF NOT PROVIDED BY MANUFACTURER, CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE.

ROOFTOP HEAT PUMP UNIT SCHEDULE																											
																											
EQUIPMENT NUMBER	LOCATION	SA CFM	OA CFM (1)	ESP (IN. W.C.)	TSP (IN. W.C.)	HP	RPM	COOLING (R-410A)						HEATING @ 47°				AUX. ELECTRIC HEAT	VOLT/ PHASE	ELECTRIC DATA					MAKE & MODEL	WEIGHT (LBS)	NOTES
								TOTAL MBH	SENS MBH	EAT (°F)		LAT (°F)		EER	MBH	EAT (°F)	LAT (°F)	KW @ 460 VOLT / 3 PH.		MCA	MOCP	FACTORY STARTER	FACTORY DISCONNECT	SPP			
										Db	Wb	Db	Wb														
RHP-1	ROOF	3200	500	1.0	1.6	2.75	1381	115	85	78	65	55	54	11.5	115	59	91	27	460/3	64	70	NO	NO	YES	TRANE MODEL 'WHC120'	1617	2
NOTES: 1. OA QUANTITY HAS BEEN REDUCED FROM 1000 CFM TO 500 CFM WITH THE USE OF THE PLASMA-AIRE PURIFICATION SYSTEM. 2. RHP-1 SHALL BE PROVIDED WITH ROOF CURB, ECONOMIZER, MERV 13 FILTERS, POWERED EXHAUST, PHASE MONITOR, AND PROGRAMMABLE ZONE TEMPERATURE SENSOR.																											

<div><div>UV</div><div>N</div></div> PLAN SYMBOL		UNIT VENTILATOR SCHEDULE																								
EQUIPMENT NUMBER	AREA SERVED	FAN DATA				COOLING (R-410A)								AUX. ELECTRIC HEATER				ELECTRIC DATA							MAKE & MODEL	NOTES
		SA CFM	OA CFM (1)	SPEED	HP	TOTAL MBH	SENS. MBH	EAT (°F)				TOTAL MBH	KW	EAT (°F)	LAT (°F)	VOLT/ PHASE	MCA	MOCP	FACTORY STARTER	FACTORY DISCONNECT	SPP					
								Db	Wb	Db	Wb															
UV-1	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
UV-2	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
UV-3	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
UV-4	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
UV-5	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
UV-6	CLASSROOM	1250	125	HIGH	1/4	33	24	77	65	56	55	33.3	9.75	65	90	460/3	18.6	20	NO	YES	YES	TRANE MODEL 'VUVE1254'	1,2,3,4			
NOTES: 1. OA QUANTITY HAS BEEN REDUCED FROM 325 CFM TO 125 CFM WITH THE USE OF THE PLASMA-AIRE PURIFICATION SYSTEM. REFER TO SEPARATE SCHEDULE. 2. PROVIDE VERTICAL UNIT WITH ECM MOTOR, END PANELS, MERV 13 FILTER, ELECTRIC HEATER, WALL BOX WITH LOUVER, FLANGE & GRILLE, CSTI CONTROLLER, TOGGLE DISCONNECT SWITCH, AND STAND ALONE BUILT-IN CONTROLS WITH TIME CLOCK. 3. UNIT SHALL BE 21 1/4" DEEP. 4. FINAL COLOR SELECTION BY ARCHITECT/OWNER.																										

<div><div>HP N</div><div>PLAN SYMBOL</div></div>		HEAT PUMP CONDENSING UNIT SCHEDULE																
EQUIPMENT NUMBER	SYSTEM SERVED	COMPRESSOR MOTOR		CONDENSER FAN MOTOR			ELECTRICAL DATA				VOLT/ PHASE	MBH	MEDIUM	CONDENSER E.A.T. DB(°F)	EER	MAKE & MODEL	NOTES	
		QTY.	RLA	QTY.	HP	FLA	MCA	FACTORY STARTER	FACTORY DISCONNECT	SPP								
HP-1	UV-1	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
HP-2	UV-2	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
HP-3	UV-3	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
HP-4	UV-4	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
HP-5	UV-5	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
HP-6	UV-6	1	4.3	1	1/8	0.4	6	NO	NO	YES	460/3	36	R-410A	95	11.5	TRANE MODEL '4TWA4036A'	-	
NOTES:																		

AIR PURIFICATION SCHEDULE									
SYSTEM	ORIGINAL OA CFM	REDUCED OA CFM	ELECTRICAL		MIN. ION DENSITY (IONS/CC)	MAKE & MODEL	NOTES		
			VOLT	WATTS					
RHP-1	1000	500	24	2.2	60M IONS/CC PER 0.5 INCH OF BAR	PLASMA AIR INT. MODEL 'PB-018'	1,2		
UV-1	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
UV-2	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
UV-3	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
UV-4	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
UV-5	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
UV-6	325	125	24	1	800-1500 IONS/CC	PLASMA AIR INT. MODEL '600'	1		
NOTES: 1. MOUNT ON AIR INLET SIDE OF COOLING COIL. 2. POWER SUPPLY SHALL HAVE PLASMA "ON" INDICATION LIGHT.									

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ISSUED FOR:
BIDDING 30 JANUARY 2023

PROJECT INFO:
Lake Forest School
District - Delaware
Early Childhood
Center - HVAC
Upgrades

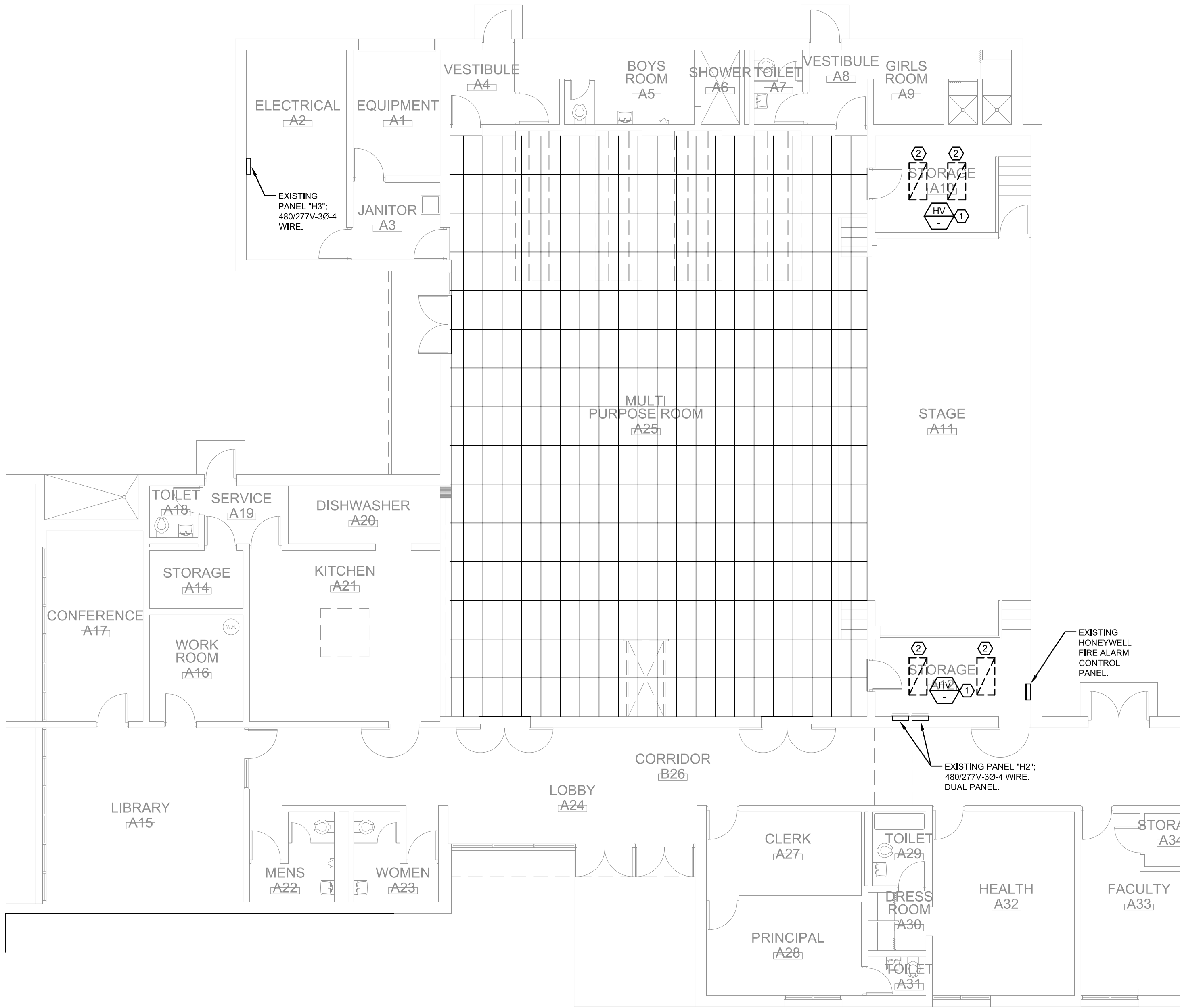
100 W. Misspillion Street
Harrington, Delaware 19952

SHEET INFO:
PROJECT NO: 21046
DRAWN BY: DEG
CHECKED BY: SAJ
SCALE: AS NOTED
DATE: 30 JANUARY 2023

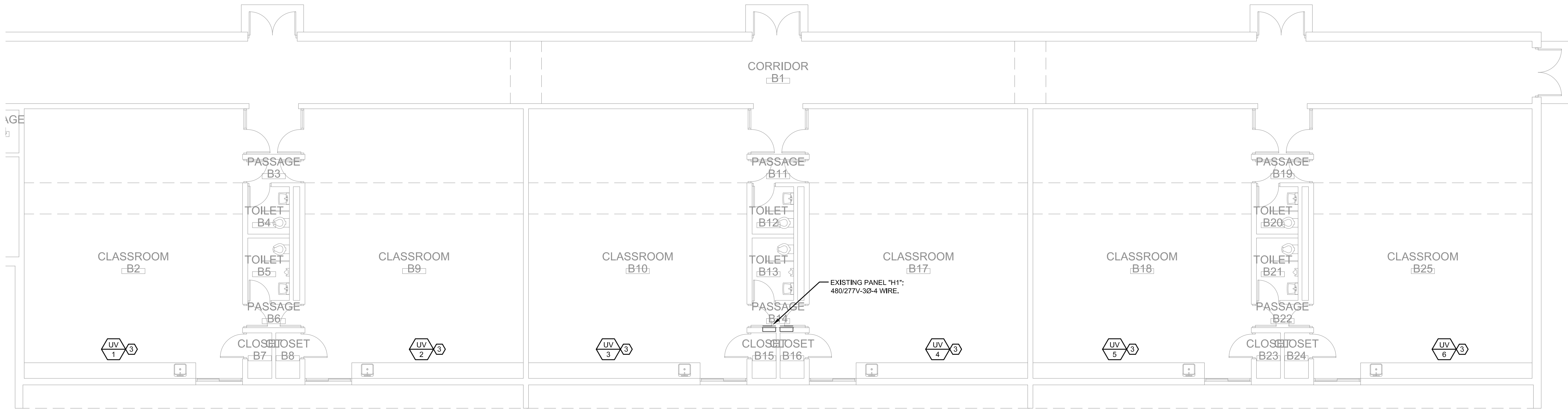
TITLE & NO.:

SCHEDULES &
DETAILS
MECHANICAL

M11-1



1 PARTIAL FLOOR PLAN - DEMOLITION - ELECTRICAL
SCALE : 1/8" = 1'-0"



2 PARTIAL FLOOR PLAN - DEMOLITION - ELECTRICAL
SCALE : 1/8" = 1'-0"

DEMOLITION NOTES

1. DISCONNECT AND REMOVE FEED COMPLETE TO SOURCE. CIRCUIT BREAKERS TO BE REMOVED AND TURNED OVER TO OWNER.
2. DISCONNECT AND SAFE OFF CIRCUIT TO EXISTING LIGHT FIXTURE. REMOVE FIXTURE COMPLETE. REFER TO NEW WORK PLANS FOR ADDITIONAL WORK. SWITCH CONTROL AND CIRCUIT TO REMAIN AND BE REUSED.
3. DISCONNECT AND SAFE OFF CIRCUIT TO UNIT. UPON COMPLETION OF INSTALLATION OF NEW UNIT RECONNECT BACK TO EXISTING CIRCUIT.

DEMO LEGEND

- 2 X 4 RECESSED TROFFER
- ELECTRIC PANELBOARD SURFACE/FLUSH MOUNTED

GENERAL NOTES

1. ALL ELECTRICAL WORK TO BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES WHERE APPLICABLE.
2. REFER TO PROJECT SPECIFICATIONS WHICH ACCOMPANY THESE DRAWINGS AND ARE PART OF THE CONTRACT.
3. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL FIELD CONDITIONS BEFORE STARTING PROJECT.
4. ELECTRICAL CONTRACTOR TO BE RESPONSIBLE FOR ALL FINAL CONNECTIONS TO ALL EQUIPMENT.
5. ELECTRICAL CONTRACTOR SHALL SEAL ALL WALL / FLOOR PENETRATIONS AND COMPARTMENTALIZATION WALLS WITH A UL APPROVED FIRE STOP. REFER TO ARCHITECTURAL DRAWINGS. FOR ALL LOCATIONS.
6. DRAWINGS AREA DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED.
7. THERE SHALL BE NO ELECTRICAL SYSTEMS OR HARDWARE INSTALLED ON THIS PROJECT THAT IS NOT UL LISTED.
8. ALL BRANCH CIRCUITING INSTALLED IN UNFINISHED AREAS SUCH AS MECHANICAL SPACES WILL REQUIRE THAT THESE CIRCUITS BE INSTALLED IN EMT CONDUIT. NM, AC OR MC CABLE WILL NOT BE ACCEPTED.



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22.015

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Early Childhood
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Upgrades

100 W. Mispillion Street
Harrington, Delaware 19952

SHEET INFO:

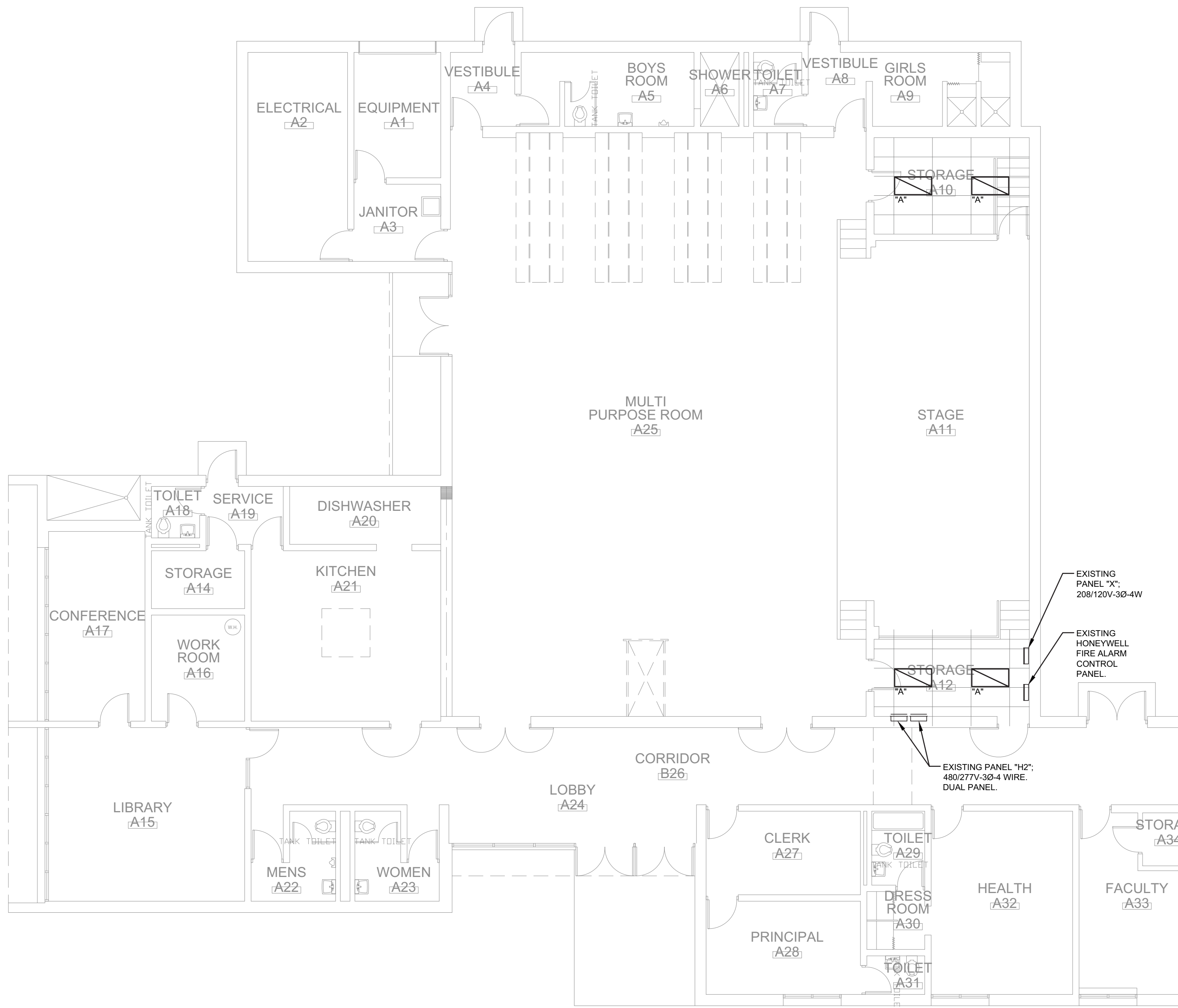
PROJECT NO: 21046
DRAWN BY: DMG
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TITLE & NO.

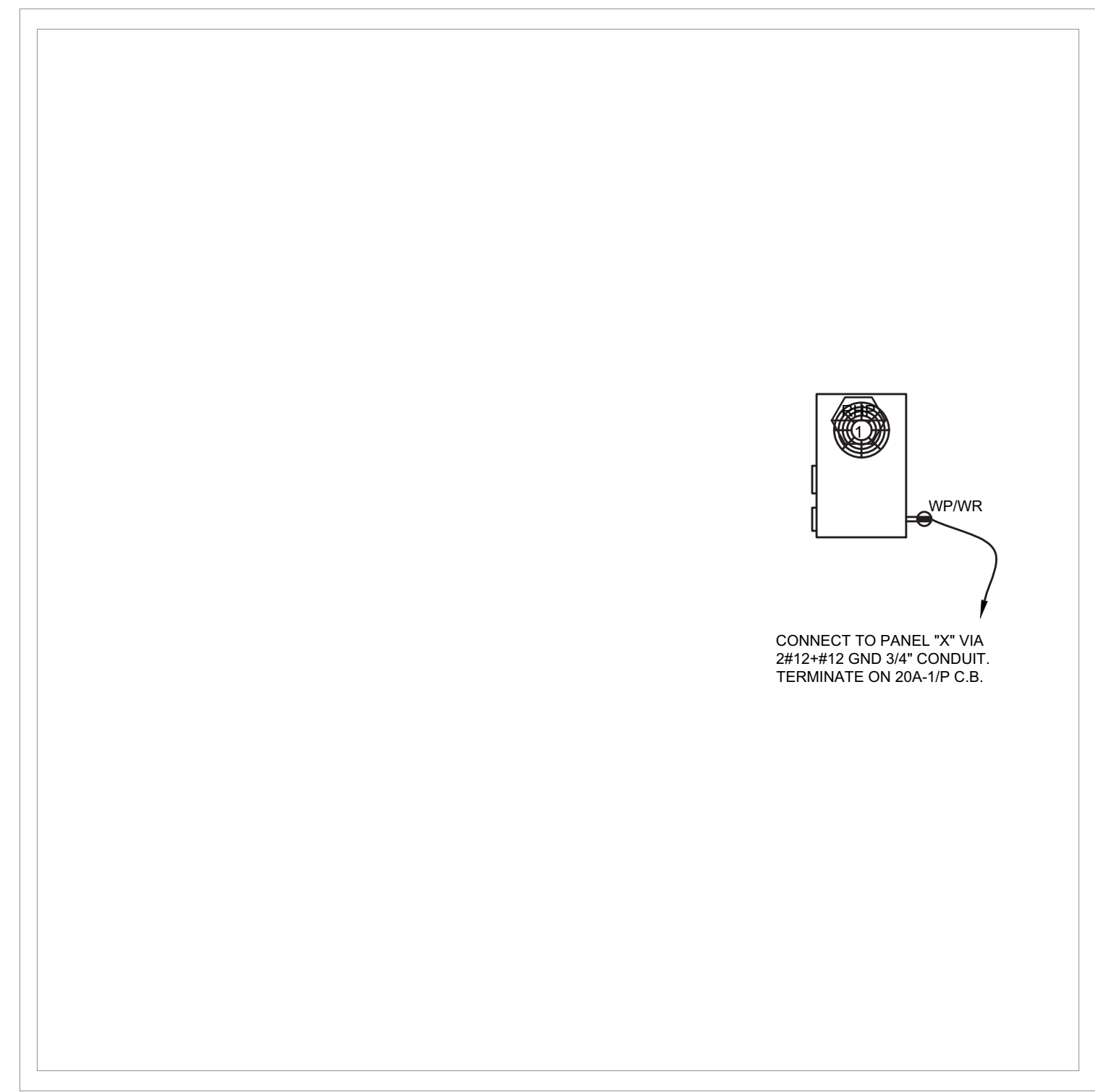
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FLOOR PLANS
DEMOLITION
ELECTRICAL

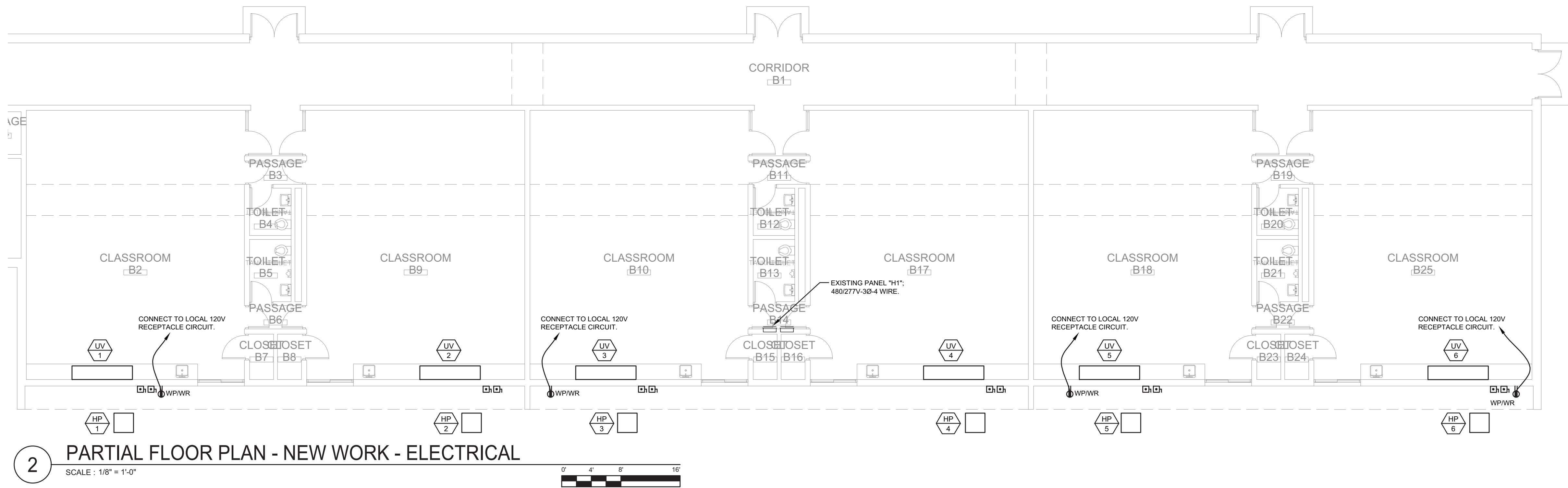
ED-1



1 PARTIAL FLOOR PLAN - NEW WORK - ELECTRICAL
SCALE : 1/8" = 1'-0"



3 PARTIAL ROOF PLAN - NEW WORK - ELECTRICAL
SCALE : 1/8" = 1'-0"



2 PARTIAL FLOOR PLAN - NEW WORK - ELECTRICAL
SCALE : 1/8" = 1'-0"



LIGHT FIXTURE SCHEDULE							
NOTES: 1. EQUIVALENT FIXTURE PACKAGES MAY BE SUBMITTED FROM THESE LIGHTING REPRESENTATIVES: DIGITAL ELEMENTS, DIVERSIFIED LIGHTING, ILLUMINATIONS, LIGHTING SOLUTIONS, AND PENN LIGHTING. FIXTURES SUBMITTED AS EQUIVALENTS SHALL BE OF THE SAME TYPE, DIMENSION, ACCESS TO DRIVERS, AND LAMPS, PERFORMANCE AND QUALITY OF THOSE SPECIFIED. EQUIVALENT MANUFACTURERS MUST MEET ALL CRITERIA OF THE BASE FIXTURE SPECIFIED. ANY DEVIATIONS WHICH DO NOT REFLECT THE BASE FIXTURE WILL RESULT IN A REJECTED SHOP DRAWING DURING SUBMITTAL PERIOD. 2. ALL FIXTURE COLORS, FINISHES, AND MOUNTING HEIGHTS SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO APPROVAL OF SHOP DRAWINGS. 3. ALL LED DRIVERS SHALL BE INTEGRAL HIGH EFFICIENCY UNIVERSAL INPUT VOLTAGE DRIVERS, RATED FOR 50,000 HOURS AT 70% LUMEN MAINTENANCE, UNLESS NOTED OTHERWISE.							
TYPE	MANUFACTURER	CATALOG NUMBER	LAMPS	MOUNTING	OPERATING VOLTAGE	REMARKS	
A	LITELINE	LEDP-24-WH-40-50-120/277	50W LED, 4000°K, 6300 LUMENS, CRI 80+	RECESSED, CEILING	UNV	2'W X 4'L LED FLAT PANEL, ALUMINUM FRAME, T-BAR MOUNTING, OPAL PMMA LENS, 0-10V DIMMING.	



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SCHEDULES
DETAILS, LEGENDS
ELECTRICAL

E11-1