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**NOT FOR
CONSTRUCTION**

DRAWING LIST		
Sheet Number	Sheet Name	2024.11.18 BID ISSUE
ARCHITECTURAL		
A001	DRAWING LIST, LEGENDS, ABBREVIATIONS	X
AD100	EXISTING CONDITIONS & DEMO PLAN - CAFETERIA LEVEL	X
AD101	EXISTING CONDITIONS & DEMO PLAN - FIRST FLOOR	X
AD102	EXISTING CONDITIONS & DEMO PLAN - ROOF PLAN	X
AD110	EXISTING CONDITIONS & DEMO RCP - CAFETERIA LEVEL	X
AD111	EXISTING CONDITIONS & DEMO RCP - FIRST FLOOR	X
A100	PROPOSED PLAN - CAFETERIA LEVEL	X
A102	PROPOSED ROOF PLAN	X
A110	PROPOSED RCP - CAFETERIA LEVEL	X
A111	PROPOSED RCP - FIRST FLOOR	X
A200	CAFETERIA EXTERIOR ELEVATIONS AT DISHWASHING	X
A600	SCHEDULES AND DETAILS	X

REFER TO MEPPP AND STRUCTURAL DRAWINGS FOR DRAWING LISTS

- CONSTRUCTION GENERAL NOTES**
- ALL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH SPECIFICATIONS IN DETERMINING THE FULL PROJECT SCOPE.
 - REFER TO MEP DWGS FOR MECHANICAL, ELECTRICAL, & PLUMBING WORK.
 - REFER TO STRUCTURAL DWGS FOR STRUCTURAL WORK.
 - DO NOT SCALE DRAWINGS: WRITTEN DIMENSIONS GOVERN PARTITION LOCATIONS, DIMENSIONS AND TYPES. IN CASE OF CONFLICT, NOTIFY ARCHITECT FOR WRITTEN CLARIFICATIONS PRIOR TO PROCEEDING W/ CONSTRUCTION. CONSTRUCTION PLAN BY ARCHITECT SUPERCEDES OTHER PLANS.
 - DIMENSIONS MARKED 'CLEAR' OR 'CLR' SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF FINISHES INCLUDING CARPET, VCT, ETC. CONTRACTOR SHALL NOT ADJUST DIMENSIONS WITHOUT WRITTEN INSTRUCTIONS FROM THE ARCHITECT.
 - DIMENSIONS SHOWN AS 'VIP' SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD BY LAYING OUT THE PARTITIONS. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY IN DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK IN THE AREA.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND JOB CONDITIONS PRIOR TO STARTING WORK AND SHALL REPORT TO THE ARCHITECT ANY DISCREPANCIES OR OMISSIONS WHICH WOULD INTERFERE WITH SATISFACTORY COMPLETION OF WORK.
 - ALL BUILDINGS DEPARTMENT PERMITS SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF WORK.
 - PROVIDE PORTABLE FIRE EXTINGUISHERS IN COMPLIANCE WITH INTERNATIONAL FIRE CODE SECTION 908.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO.
 - ALL ROOF AND EXTERIOR WALL PENETRATIONS TO BE COMPLETED AND SEALED BY GC. GC TO COORDINATE ALL ROOF AND EXTERIOR WALL PENETRATIONS WITH OTHER PRIMES AND PROVIDE ROOF REPAIRS/ INSTALLATION AS REQUIRED.

ALTERNATES

- ALTERNATE #1:**
BASE SCOPE: PROVIDE CEILING CASSETTE MINI-SPLIT SYSTEM IN OFFICE 14 AS DOCUMENTED.
ALTERNATE: PROVIDE CEILING CASSETTE MULTI-SPLIT SYSTEM IN OFFICES 15 & 16. (ALTERNATE INCLUDES SCOPE OF WORK FOR MC, GC, AND EQ).
- ALTERNATE #2:**
BASE SCOPE: ALL WORK ASSOCIATED TO CLASSROOM 18 NOT TO BE COMPLETED.
ALTERNATE: PROVIDE SCOPE AS DOCUMENTED TO ADD AIR CONDITIONING TO CLASSROOM 18 (ALTERNATE INCLUDES SCOPE OF WORK FOR MC, GC, AND EQ).

- DEMOLITION GENERAL NOTES**
- THESE DRAWINGS ARE MEANT TO OUTLINE GENERAL SCOPE OF DEMOLITION FOR THE CONTRACTOR. THE SPECIFIC AREAS, ITEMS, DETAILS, MATERIALS, ETC. OF DEMOLITION WILL BE A RESULT OF FIELD CONDITIONS. THE INTENT IS THAT ALL DEMOLITION REQUIRED TO PROPERLY CONSTRUCT THIS PROJECT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR. THE CONTRACTOR WILL INSURE THAT THE EXIST. BUILDING REMAINS STRUCTURAL INTEGRITY AND REMAINS WATER AND WEATHER TIGHT DURING THE DEMOLITION AND CONSTRUCTION PHASES OF THE WORK.
 - CONTRACTOR MUST REVIEW NEW WORK INDICATED IN 'A' SERIES DRAWINGS AND COORDINATE DEMOLITION WORK WITH NEW WORK.
 - CONTRACTOR MUST COORDINATE ALL ARCHITECTURAL DEMOLITION WITH MECHANICAL/ELECTRICAL/PLUMBING DEMOLITION WORK AS SHOWN ON 'M', 'P', 'E' SERIES DRAWINGS. THE PRIME CONTRACTORS WILL BE RESPONSIBLE FOR THE CONTINUOUS INTERNAL UTILITIES DISTRIBUTION INCLUDING BUT NOT LIMITED TO THE WATER & ELECTRICAL DISTRIBUTION SYSTEMS.
 - CONTRACTOR MUST COORDINATE ALL ARCHITECTURAL DEMOLITION WITH STRUCTURAL DEMOLITION WORK AS SHOWN ON 'S' SERIES DRAWINGS.
 - NOT USED
 - CONTRACTOR MUST COORDINATE COURSE OF DEMOLITION WORK WITH OVERALL CONSTRUCTION SCHEDULE.
 - CAREFULLY COORDINATE ALL DEMOLITION WORK WITH EXIST. CONSTRUCTION TO REMAIN. ANY EXIST. CONSTRUCTION TO REMAIN THAT IS DAMAGED BY DEMOLITION SHALL BE REPAIRED/REPLACED TO MATCH ORIGINAL CONDITION. SEE SPECIFICATIONS FOR CLARIFICATION OF RESPONSIBILITY.
 - GENERAL CONTRACTOR IS RESPONSIBLE TO PATCH/REPAIR ALL FINISH SURFACES AFFECTED BY DEMOLITION WORK. SEE THE GENERAL REQUIREMENTS SECTIONS OF THE SPECIFICATION.
 - GENERAL CONTRACTOR SHALL COORDINATE, PRIOR TO ANY DEMOLITION, WHAT MATERIALS OR ITEMS OF EQUIPMENT ARE TO BE RETAINED BY THE OWNER. ALL OTHER DISMANTLED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PREMISES ACCORDING TO ALL APPLICABLE CODES.
 - CARE SHOULD BE TAKEN TO AVOID DISTURBING ANY SYSTEM LINES WHICH ARE TO REMAIN. PRIOR TO THE START OF CONSTRUCTION, GENERAL CONTRACTOR MUST COORDINATE W/ ELECTRICAL CONTRACTOR WHICH LINES ARE TO REMAIN IN SERVICE.
 - GENERAL CONTRACTOR MUST CAREFULLY COORDINATE DEMOLITION OF EXTERIOR WALLS WITH THE INTENT OF THE NEW CONSTRUCTION. ALL FOOTINGS AND STRUCTURAL MEMBERS SHALL REMAIN INTACT, UNLESS NOTED OTHERWISE. CONTRACTOR TO COORDINATE W/ STRUCTURAL DWGS.
 - THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING OF STRUCTURE PRIOR TO AND DURING DEMOLITION AND NEW CONSTRUCTION.
 - WHERE WALLS ARE INDICATED TO BE REMOVED, CONTRACTOR MUST FIELD VERIFY IF THE WALLS ARE STRUCTURAL BEARING WALLS. IF IT IS DETERMINED THAT THE WALLS TO BE REMOVED ARE BEARING, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TEMPORARY SUPPORT AT AREAS WHERE WALLS ARE TO BE REMOVED. IF THE CONTRACTOR CANNOT DETERMINE IF THE WALL IS BEARING, THE CONTRACTOR MUST CONTACT THE PROJECT STRUCTURAL ENGINEER FOR CLARIFICATION PRIOR TO COMMENCING WORK.

- CEILING LEGEND**
- 0'-0" CEILING HEIGHT
 - SUSPENSION GRID & 2' X 2' LAY-IN ACOUSTIC CEILING TILE
 - GWB SOFFIT OR CEILING
 - RECESSED DOWNLIGHT
 - 2'X2 RECESSED FLOURESCENT LIGHT FIXTURE
 - 1'X4 RECESSED FLOURESCENT LIGHT FIXTURE
 - WALL SCONCE
 - PENDANT MOUNTED LINEAR INDIRECT FIXTURE
 - SUPPLY AIR DIFFUSER
 - DIRECTIONAL SUPPLY AIR DIFFUSER
 - LINEAR SLOT DIFFUSER
 - RETURN AIR DIFFUSER
 - EXIT SIGN - WALL MOUNTED ILLUMINATED SINGLE & DOUBLE FACE DIRECTIONAL ARROWS AS INDICATED
 - EXIT SIGN - CEILING MOUNTED ILLUMINATED SINGLE & DOUBLE FACE DIRECTIONAL ARROWS AS INDICATED
 - CEILING MOUNTED SMOKE DETECTOR
 - FIRE ALARM SPEAKERS
 - PA SPEAKER
 - START OF CONSTRUCTION/CEILING WORK POINT

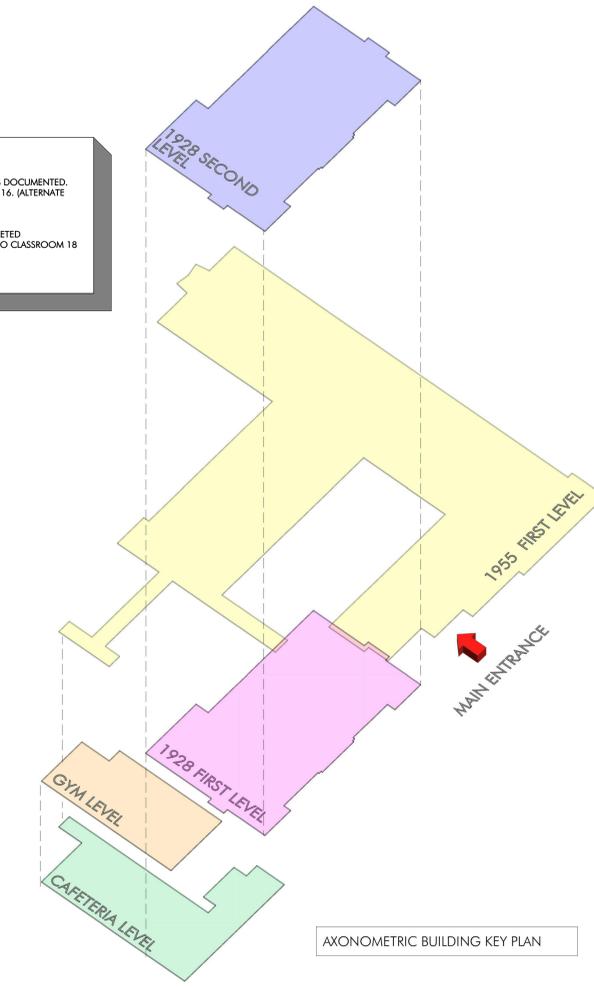
- POWER AND COMM. LEGEND**
- OUTLETS**
- WALL MTD. DUPLEX RECEPTACLE OUTLET
 - WALL MTD. DUPLEX RECEPTACLE OUTLET GFI = GROUND FAULT INTERRUPTER
 - WALL MTD. DUPLEX RECEPTACLE OUTLET W/ UNINTERRUPTED POWER SOURCE
 - WALL MTD. QUADRAPLEX RECEPTACLE
 - WALL MTD. QUADRAPLEX RECEPTACLE OUTLET GFI = GROUND FAULT INTERRUPTER
 - WALL MTD. DEDICATED DUPLEX RECEPTACLE OUTLET
 - WALL MTD. TEL. OUTLET
 - WALL MTD. DATA OUTLET
 - WALL MTD. COMBINATION TELEPHONE AND DATA OUTLET
 - 2 DATA / 2 PHONE JACKS (WALL MOUNTED OR BASE FEED)
 - JUNCTION BOX
- ALTERNATE SYMBOLS SELECTION. COORDINATE WITH PROJECT MEP ENGINEERS SYMBOLS

- FIRE ALARM AND SAFETY**
- FIRE ALARM SPEAKER
 - PA SPEAKER
 - FIRE WARDEN STATION
 - COMBINATION HORN & STROBE
 - MANUAL FIRE ALARM PULL STATION (SEE MTG. HEIGHT SCHEDULE)
 - WALL MOUNTED STROBE
 - CARD READER
 - FEC (FIRE EXTINGUISHER CABINET)
 - FE (FIRE EXTINGUISHER - WALL MOUNTED)

ARCHITECTURAL ABBREVIATIONS

ACOUSTIC TILE	ACST
ACOUSTIC TILE ABOVE FINISHED FLOOR	ACT
ADJACENT	ADJ
ADJUSTABLE	ADJST
ALUMINUM	AL OR ALUM
ARCHITECT, ARCHITECTURAL	ARCH
BOARD	BD
BOTTOM OF BUILDING	B.O. (BOT. OF)
CABINET	CAB
CARPET	CPT
CEILING	CLS
CEILING JOIST	C.J.
CENTER LINE	CL OR C
CLEAR	CLR
COLD WATER	CW
COLUMN	COL
CONCRETE	CONC
CONCRETE MASONRY UNIT	CMU
CONSTRUCTION	CONST
CONTINUOUS	CONT
CUBIC FEET	CU FT
DEMOLITION	DEMO
DIAMETER	DA
DIMENSION	DIM
DOWN	DN
DRAWING	DWG
EACH	EA
ELECTRIC	ELEC
ELECTRIC WATER COOLER	EWC
EQUIPMENT	EQUIP
ESTIMATE	EST
EXISTING	OR FT
FEET	FT
FINISH	FIN
FINISH FLOOR	F.F.
FIRE EXTINGUISHER	F.E.C.
FIRE EXTINGUISHER CABINET	F.E.C.
FIRE RETARDANT TREATED FURNITURE	F.R.T.
FLOURESCENT	FLOR
FURNITURE	FURN
GAUGE	GA
GENERAL CONTRACTOR	GC
GIPSUM WALL BOARD	GWB
HARDWARE	HW
HEIGHT	HT OR HGHT
HOLLOW CORE WOOD	HCW
HOLLOW METAL	HM
HECKENDORN SHILES ARCHITECTS	HSA
HORIZONTAL	HORIZ
HOT WATER	HW
INCH	OR IN
INSULATION	INSUL
INTERIOR	I OR JB
JUNCTION BOX	JOB
LAVATORY	LAV
MANUFACTURER	MFR
MASONRY OPENING	MO
MARBLUM	MAX
MECHANICAL	MECH
METAL	MTL
MINIUM	MINS
MISCELLANEOUS	MSC
MOUNTING	MTG
NOMINAL	NOM
NOT IN CONTRACT	NIC
NOT TO SCALE	NTS
OPPOSITE	OPP
PAINT, PAINTED	PT, PTD
PLASTIC LAMINATE	PLAM
PLYWOOD	PWD
QUANTITY	QTY
QUARRY TILE	QT
RADIUS	R
REFERENCE	REF
REVISION (REVISED)	REHIF
REVISION	REQD
REVISION (REVISED)	REVTD
ROOM	RM
ROUGH OPENING	RO
RAIN WATER CONDUCTOR	RWC
SIMILAR	SIM
SOLID CORE	SC
SPECIFICATIONS	SPECS
SQUARE FEET	SF OR SQ. FT.
SQUARE INCHES	SQ. IN.
STAINLESS STEEL	S.S.
STANDARD	STD
STEEL	STL
SUSPENDED	SUSP
SYSTEM	SYS
TELEPHONE	TEL
TOP OF	T.O.
TYPICAL	TYP
UNLESS NOTED OTHERWISE	UNO
VALUE ENGINEERING	VE
VERIFY IN THE FIELD	VF
VERTICAL	VERT
VCT	VCT
VINYL COMPOSITION TILE	VVC
VINYL WALLCOVERING	VWC
WATER CLOSET	WC
WIDTH	W
WITHOUT	WO
WOOD	WD
WORK POINT	WP
YARD	YD

- ARCHITECTURAL SYMBOLS LEGEND**
- ROOM IDENTIFICATION: ROOM NAME (101), ROOM IDENTIFICATION (101B)
 - DOOR IDENTIFICATION: DOOR IDENTIFICATION (1 AXW)
 - ENLARGED PLAN OR DETAIL MARK: ENLARGED PLAN OR DETAIL MARK (1 XXX)
 - MULTIPLE ELEVATION REFERENCE: MULTIPLE ELEVATION REFERENCE (1 AXW)
 - ELEVATION REFERENCE: ELEVATION REFERENCE (1 AXW)
 - SECTION REFERENCE: SECTION REFERENCE (SIM)
 - WORKING POINT OR DATUM: WORKING POINT OR DATUM (WP)
 - PARTITION TYPE: PARTITION TYPE (XX)
 - COLUMN GRID: COLUMN GRID (XX)
 - NORTH ARROW: NORTH ARROW (PLAN NORTH)
 - SPOT ELEVATION TAG: SPOT ELEVATION TAG (100.5)
 - FINISH TAG: FINISH TAG (P-1)
 - PLUMBING FIXTURE TAG: PLUMBING FIXTURE TAG (X-XX)
 - EQUIPMENT TAG: EQUIPMENT TAG (XX)
 - FINISH FLOOR ELEVATION TAG: FINISH FLOOR ELEVATION TAG (1)
 - WINDOW TAG: WINDOW TAG (1)
 - EXISTING CONSTRUCTION: EXISTING CONSTRUCTION (---)
 - DEMOLISH, REMOVE CONSTRUCTION: DEMOLISH, REMOVE CONSTRUCTION (---)
 - NEW CONSTRUCTION: NEW CONSTRUCTION (---)
 - BUILT-IN CASEWORK: BUILT-IN CASEWORK (---)
 - SOFFIT, OPEN ABOVE: SOFFIT, OPEN ABOVE (---)
 - REMOVE DOOR, FRAME, & HARDWARE: REMOVE DOOR, FRAME, & HARDWARE (---)



ISSUE HISTORY

A	DATE	ISSUED FOR
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SHEET TITLE
**DRAWING LIST,
LEGENDS,
ABBREVIATIONS**
DRAWING NUMBER

A001

**AGCS STATE ROAD
KITCHEN AND
OFFICE HVAC**

110 E State Rd, West Grove, PA
19390

HSA PROJECT # :24-018



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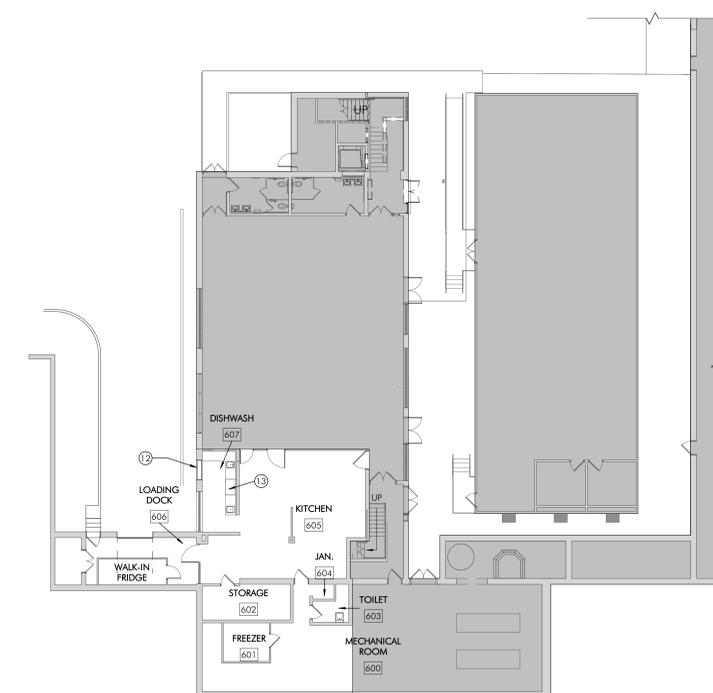
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SHEET NOTES

1. ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO
2. GC TO COORDINATE ALL ROOF PENETRATIONS WITH OTHER PRIMES AND PROVIDE ROOF REPAIRS/INSTALLATION AS REQUIRED.
3. REFER TO A001 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
4. REFER TO MEPPP DWGS FOR ADDL INFORMATION.
5. REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
6. ALL INTERIOR WALL PENETRATIONS TO BE MADE BY PRIME CONTRACTOR REQUIRING THE PENETRATION. UNO, EACH PRIME IS RESPONSIBLE FOR PROTECTION AND REPAIR IF NEEDED) OF EXISTING CONDITIONS TO REMAIN (INCLUDING BY NOT LIMITED TO FLOORING, WALLS, FURNITURE).
7. IN ROOM AREAS IDENTIFIED FOR CEILING TILE AND/OR GRID REMOVAL AND REINSTALLATION, GC TO COMPLETE SCOPE OF WORK. GC, ME, AND EC MUST COORDINATE TOGETHER FOR APPROPRIATE EXTENTS OF CEILINGS TO BE REMOVED.
8. IN AREAS NOT SHOWN IN ARCHITECTURAL SCOPE OF WORK IN WHICH INFRASTRUCTURE NEEDS TO RUN ABOVE CEILINGS, PRIMES COMPLETING THE WORK ARE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF TILES. ANY DAMAGE TO TILES, GRIDS, OR FIXTURES WILL REQUIRE REPLACEMENT AND IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR COMPLETING THE WORK.
9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.

DEMOLITION KEYNOTES

1. REMOVE ACT CEILING
2. REMOVE LIGHT FIXTURES. REFER TO ELECTRICAL DWGS FOR ADDL INFO
3. REMOVE GWB CEILING AND FRAMING AS REQUIRED
4. REMOVE ACT CEILING TILE, ACT GRID TO REMAIN
5. REMOVE PORTION OF EXISTING ACT CEILING TILES AND GRID TO ACCOMMODATE NEW HOOD
6. EXISTING HEATING EQUIPMENT TO REMAIN
7. REMOVE ACT CEILING TILES AS REQUIRED FOR NEW MECHANICAL EQUIPMENT INSTALLATION. STORE FOR REINSTALLATION. REFER TO MECH DWGS FOR ADDL INFO
8. REMOVE EXISTING LIGHT FIXTURES
9. REMOVE AND STORE EXISTING LIGHT FIXTURES FOR RELOCATION
10. REMOVE EXISTING GLASS PANEL FROM FRAME. MODIFY FRAME AS REQUIRED FOR NEW INFILL PANEL. REFER TO S/JAD 1.0 FOR ADDL INFO.
11. REMOVE ACT TILE AND GRID AS NECESSARY FOR INSTALLATION OF STRUCTURAL REINFORCEMENT
12. EXISTING EIFS INFILL OF EXISTING MASSCHRY OPENING. REMOVE PORTION OF EIFS INFILL AND FRAMING AS REQUIRED FOR NEW MECHANICAL EXHAUST. REFER TO MECHANICAL DWGS AND A200 FOR ADDL INFO
13. EXISTING DISHWASHER TO REMAIN
14. PROVIDE OPENING IN EXTERIOR WALL FOR NEW CONDENSATE LINE. REFER TO MECH DWGS FOR ADDL INFO.
15. EXISTING SERVER. PROVIDE PROTECTION DURING CONSTRUCTION TO ENSURE EQUIPMENT IS PROTECTED.
16. COORDINATE ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT
17. REMOVE EXISTING MECHANICAL EQUIPMENT. REFER TO MECH DWGS FOR ADDL INFO.
18. SUPPORT AND PROTECT EXISTING CEILING FIXTURES TO REMAIN FOR REINSTALLATION.



1. EXISTING CONDITIONS & DEMOLITION PLAN - CAFETERIA LEVEL
AD100 1/16" = 1'-0"



LEGEND

OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

A:	DATE	ISSUED FOR
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SHEET TITLE

**EXISTING CONDITIONS
& DEMO PLAN -
CAFETERIA LEVEL**

DRAWING NUMBER

AD100

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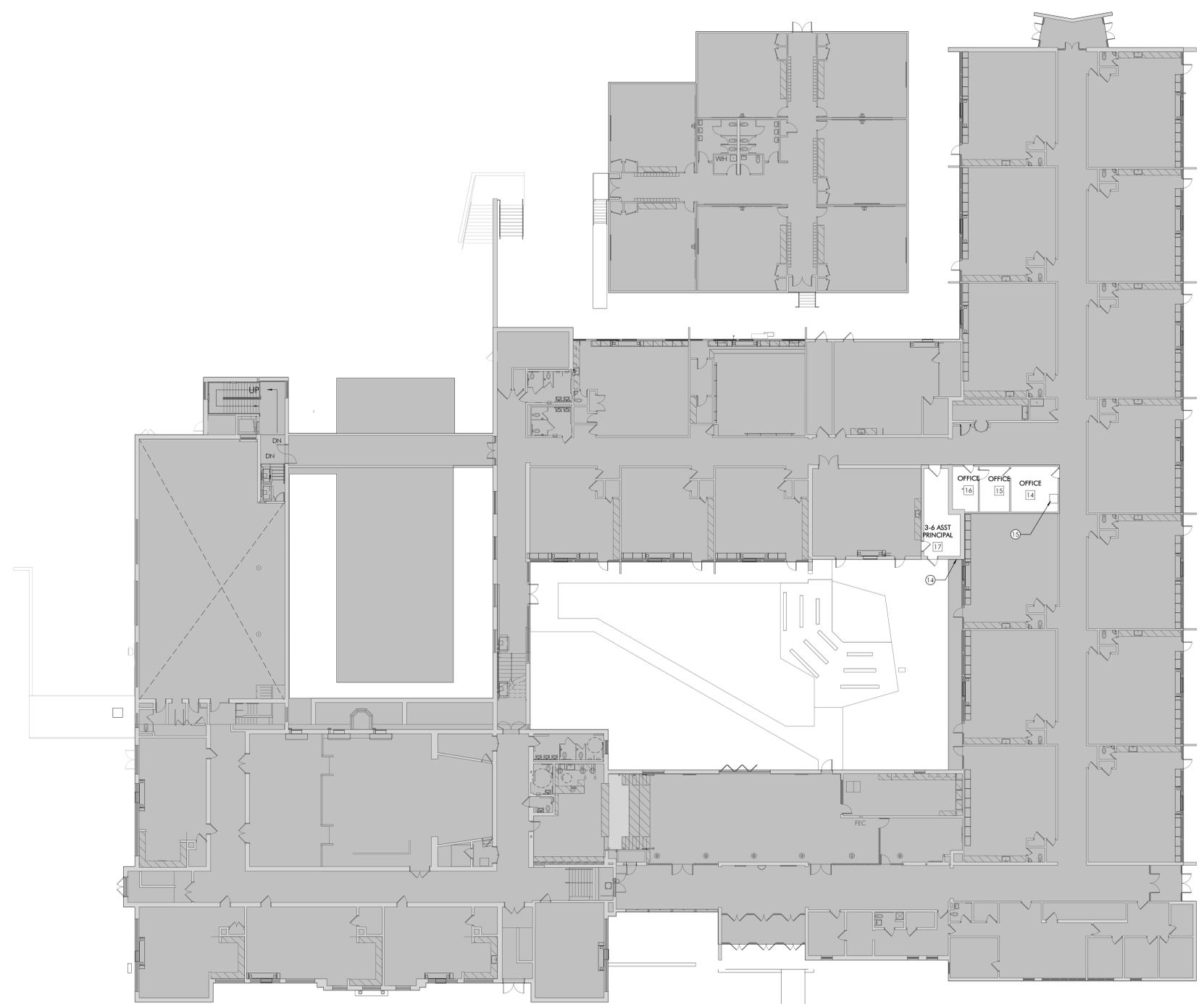
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SHEET NOTES

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3. REFER TO A001 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
4. REFER TO MEPPP DWGS FOR ADDL INFORMATION.
5. REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
6. ALL INTERIOR WALL PENETRATIONS TO BE MADE BY PRIME CONTRACTOR REQUIRING THE PENETRATION. UNO, EACH PRIME IS RESPONSIBLE FOR PROTECTION AND REPAIR IF NEEDED OF EXISTING CONDITIONS TO REMAIN (INCLUDING BY NOT LIMITED TO FLOORING, WALLS, FURNITURE).
7. IN ROOM AREAS IDENTIFIED FOR CEILING TILE AND/OR GRID REMOVAL AND REINSTALLATION, GC TO COMPLETE SCOPE OF WORK. GC, ME, AND EC MUST COORDINATE TOGETHER FOR APPROPRIATE EXTENTS OF CEILING TO BE REMOVED.
8. IN AREAS NOT SHOWN IN ARCHITECTURAL SCOPE OF WORK IN WHICH INFRASTRUCTURE NEEDS TO RUN ABOVE CEILING, PRIMES COMPLETING THE WORK ARE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF TILES. ANY DAMAGE TO TILES, GRIDS, OR FIXTURES WILL REQUIRE REPLACEMENT AND IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR COMPLETING THE WORK.
9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.

DEMOLITION KEYNOTES

1. REMOVE ACT CEILING
2. REMOVE LIGHT FIXTURES. REFER TO ELECTRICAL DWGS FOR ADDL INFO
3. REMOVE GWB CEILING AND FRAMING AS REQUIRED
4. REMOVE ACT CEILING TILE, ACT GRID TO REMAIN
5. REMOVE PORTION OF EXISTING ACT CEILING TILES AND GRID TO ACCOMMODATE NEW HOOD.
6. EXISTING HEATING EQUIPMENT TO REMAIN
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8. REMOVE EXISTING LIGHT FIXTURES
9. REMOVE AND STORE EXISTING LIGHT FIXTURES FOR RELOCATION
10. REMOVE EXISTING GLASS PANEL FROM FRAME. MODIFY FRAME AS REQUIRED FOR NEW INFILL PANEL. REFER TO S1AD110 FOR ADDL INFO.
11. REMOVE ACT TILE AND GRID AS NECESSARY FOR INSTALLATION OF STRUCTURAL REINFORCEMENT
12. EXISTING EIFS INFILL OF EXISTING MASONRY OPENING. REMOVE PORTION OF EIFS INFILL AND FRAMING AS REQUIRED FOR NEW MECHANICAL EXHAUST. REFER TO MECHANICAL DWGS AND A200 FOR ADDL INFO
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LEGEND
OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

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SHEET TITLE

EXISTING CONDITIONS & DEMO PLANS - FIRST FLOOR

DRAWING NUMBER

AD101

1 AD101 1/16" = 1'-0" EXISTING CONDITIONS & DEMOLITION PLAN - FIRST FLOOR

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9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.

DEMOLITION KEYNOTES

- 1 REMOVE ACT CEILING
- 2 REMOVE LIGHT FIXTURES. REFER TO ELECTRICAL DWGS FOR ADDL INFO
- 3 REMOVE GWB CEILING AND FRAMING AS REQUIRED
- 4 REMOVE ACT CEILING TILE, ACT GRID TO REMAIN
- 5 REMOVE PORTION OF EXISTING ACT CEILING TILES AND GRID TO ACCOMMODATE NEW HOOD
- 6 EXISTING HEATING EQUIPMENT TO REMAIN
- 7 REMOVE ACT CEILING TILES AS REQUIRED FOR NEW MECHANICAL EQUIPMENT INSTALLATION. STORE FOR REINSTALLATION. REFER TO MECH DWGS FOR ADDL INFO
- 8 REMOVE EXISTING LIGHT FIXTURES
- 9 REMOVE AND STORE EXISTING LIGHT FIXTURES FOR RELOCATION
- 10 REMOVE EXISTING GLASS PANEL FROM FRAME. MODIFY FRAME AS REQUIRED FOR NEW INFILL PANEL. REFER TO S/JAD110 FOR ADDL INFO.
- 11 REMOVE ACT TILE AND GRID AS NECESSARY FOR INSTALLATION OF STRUCTURAL REINFORCEMENT
- 12 EXISTING EIFS INFILL OF EXISTING MASHERY OPENING. REMOVE PORTION OF EIFS INFILL AND FRAMING AS REQUIRED FOR NEW MECHANICAL EXHAUST. REFER TO MECHANICAL DWGS AND A200 FOR ADDL INFO
- 13 EXISTING DISHWASHER TO REMAIN
- 14 PROVIDE OPENING IN EXTERIOR WALL FOR NEW CONDENSATE LINE. REFER TO MECH DWGS FOR ADDL INFO.
- 15 EXISTING SERVER. PROVIDE PROTECTION DURING CONSTRUCTION TO ENSURE EQUIPMENT IS PROTECTED.
- 16 COORDINATE ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT
- 17 REMOVE EXISTING MECHANICAL EQUIPMENT. REFER TO MECH DWGS FOR ADDL INFO.
- 18 SUPPORT AND PROTECT EXISTING CEILING FIXTURES TO REMAIN FOR REINSTALLATION.



LEGEND

OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

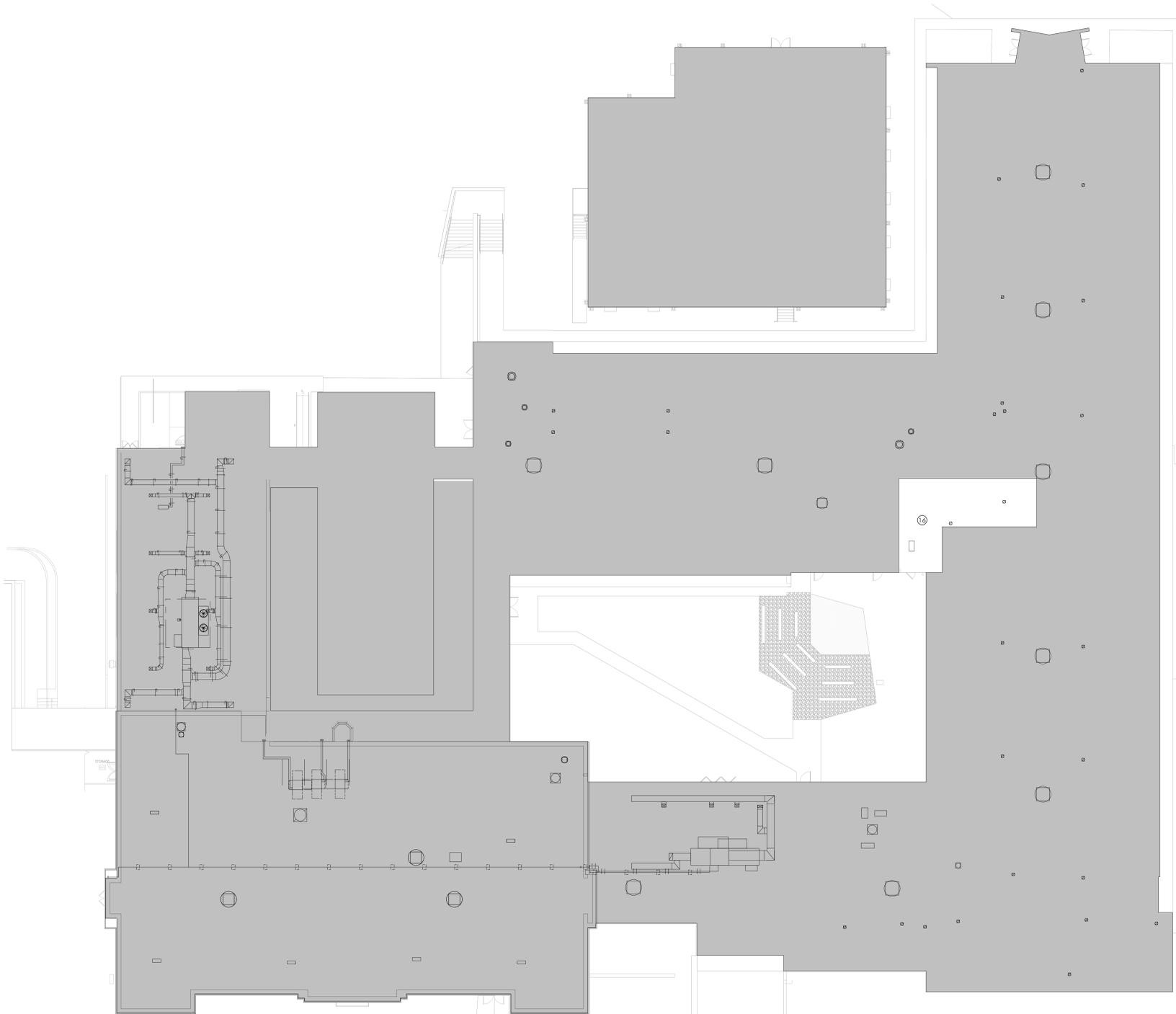
A	DATE	ISSUED FOR
	11/18/24	BID ISSUE

SHEET TITLE

EXISTING CONDITIONS & DEMO PLAN - ROOF PLAN

AWARD NUMBER

AD102



1 AD102/ 1/16" = 1'-0" **EXISTING CONDITIONS & DEMOLITION ROOF PLAN**

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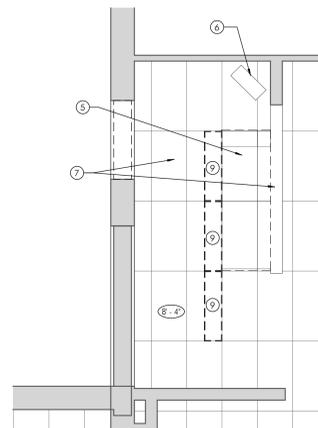
3 REFERENCE IMAGE - LOADING DOCK DOOR FRAME DEMO
AD110/ N.T.S.

SHEET NOTES

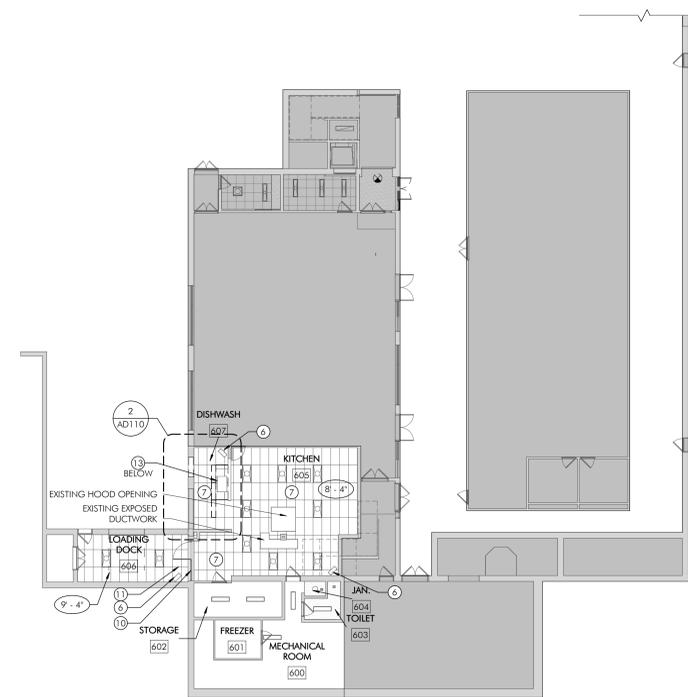
1. ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO
2. GC TO COORDINATE ALL ROOF PENETRATIONS WITH OTHER PRIMES AND PROVIDE ROOF REPAIRS/INSTALLATION AS REQUIRED.
3. REFER TO A001 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
4. REFER TO MEPPP DWGS FOR ADDL INFORMATION.
5. REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
6. ALL INTERIOR WALL PENETRATIONS TO BE MADE BY PRIME CONTRACTOR REQUIRING THE PENETRATION UNO. EACH PRIME IS RESPONSIBLE FOR PROTECTION (AND REPAIR IF NEEDED) OF EXISTING CONDITIONS TO REMAIN (INCLUDING BY NOT LIMITED TO FLOORING, WALLS, FURNITURE).
7. IN ROOM/AREAS IDENTIFIED FOR CEILING TILE AND/OR GRID REMOVAL AND REINSTALLATION, GC TO COMPLETE SCOPE OF WORK. GC, ME, AND EC MUST COORDINATE TOGETHER FOR APPROPRIATE EXTENTS OF CEILINGS TO BE REMOVED.
8. IN AREAS NOT SHOWN IN ARCHITECTURAL SCOPE OF WORK IN WHICH INFRASTRUCTURE NEEDS TO RUN ABOVE CEILINGS, PRIMES COMPLETING THE WORK ARE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF TILES. ANY DAMAGE TO TILES, GRIDS, OR FIXTURES WILL REQUIRE REPLACEMENT AND IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR COMPLETING THE WORK.
9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.

DEMOLITION KEYNOTES

- 1 REMOVE ACT CEILING
- 2 REMOVE LIGHT FIXTURES, REFER TO ELECTRICAL DWGS FOR ADDL INFO
- 3 REMOVE OVR CEILING AND FRAMING AS REQUIRED
- 4 REMOVE ACT CEILING TILE, ACT GRID TO REMAIN
- 5 REMOVE PORTION OF EXISTING ACT CEILING TILES AND GRID TO ACCOMMODATE NEW HOOD
- 6 EXISTING HEATING EQUIPMENT TO REMAIN
- 7 REMOVE ACT CEILING TILES AS REQUIRED FOR NEW MECHANICAL EQUIPMENT INSTALLATION. STORE FOR REINSTALLATION. REFER TO MECH DWGS FOR ADDL INFO
- 8 REMOVE EXISTING LIGHT FIXTURES
- 9 REMOVE AND STORE EXISTING LIGHT FIXTURES FOR RELOCATION
- 10 REMOVE EXISTING GLASS PANEL FROM FRAME. MODIFY FRAME AS REQUIRED FOR NEW INFILL PANEL. REFER TO 3/AD110 FOR ADDL INFO
- 11 REMOVE ACT TILE AND GRID AS NECESSARY FOR INSTALLATION OF STRUCTURAL REINFORCEMENT
- 12 EXISTING EPS INFILL OF EXISTING MASONRY OPENING. REMOVE PORTION OF EPS INFILL AND FRAMING AS REQUIRED FOR NEW MECHANICAL EXHAUST. REFER TO MECHANICAL DWGS AND A001 FOR ADDL INFO
- 13 EXISTING DISHWASHER TO REMAIN
- 14 PROVIDE OPENING IN EXTERIOR WALL FOR NEW CONDENSATE LINE. REFER TO MECH DWGS FOR ADDL INFO
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- 16 COORDINATE ROOF PENETRATIONS WITH MECHANICAL EQUIPMENT
- 17 REMOVE EXISTING MECHANICAL EQUIPMENT. REFER TO MECH DWGS FOR ADDL INFO
- 18 SUPPORT AND PROTECT EXISTING CEILING FIXTURES TO REMAIN FOR REINSTALLATION.



2 ENLARGED - EXISTING CONDITIONS & DEMOLITION RCP - CAFETERIA LEVEL
AD110/ 1/4" = 1'-0"



1 EXISTING CONDITIONS & DEMOLITION RCP - CAFETERIA LEVEL
AD110/ 1/16" = 1'-0"



LEGEND

OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

NO.	DATE	ISSUED FOR
1	11/18/24	BID ISSUE

SHEET TITLE

**EXISTING CONDITIONS
& DEMO RCP -
CAFETERIA LEVEL**

DRAWING NUMBER

AD110

PROJECT TEAM

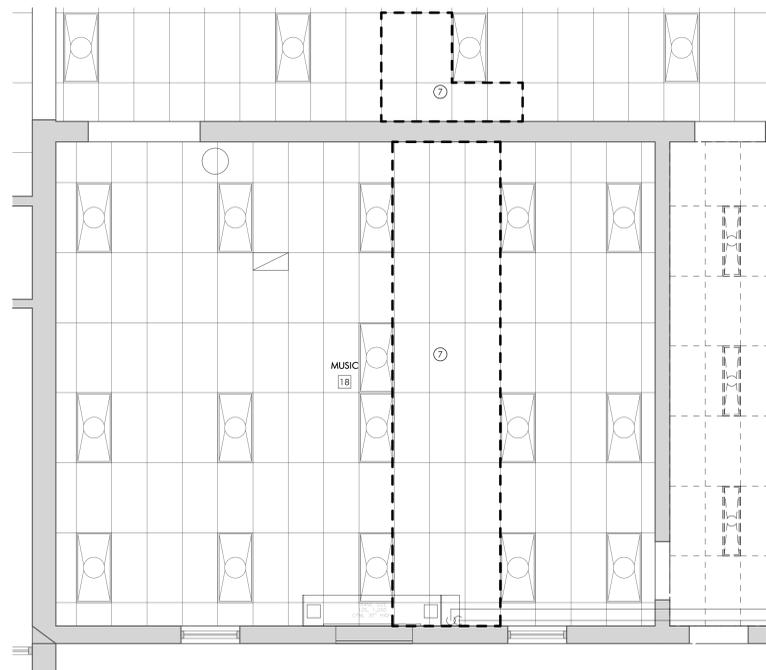
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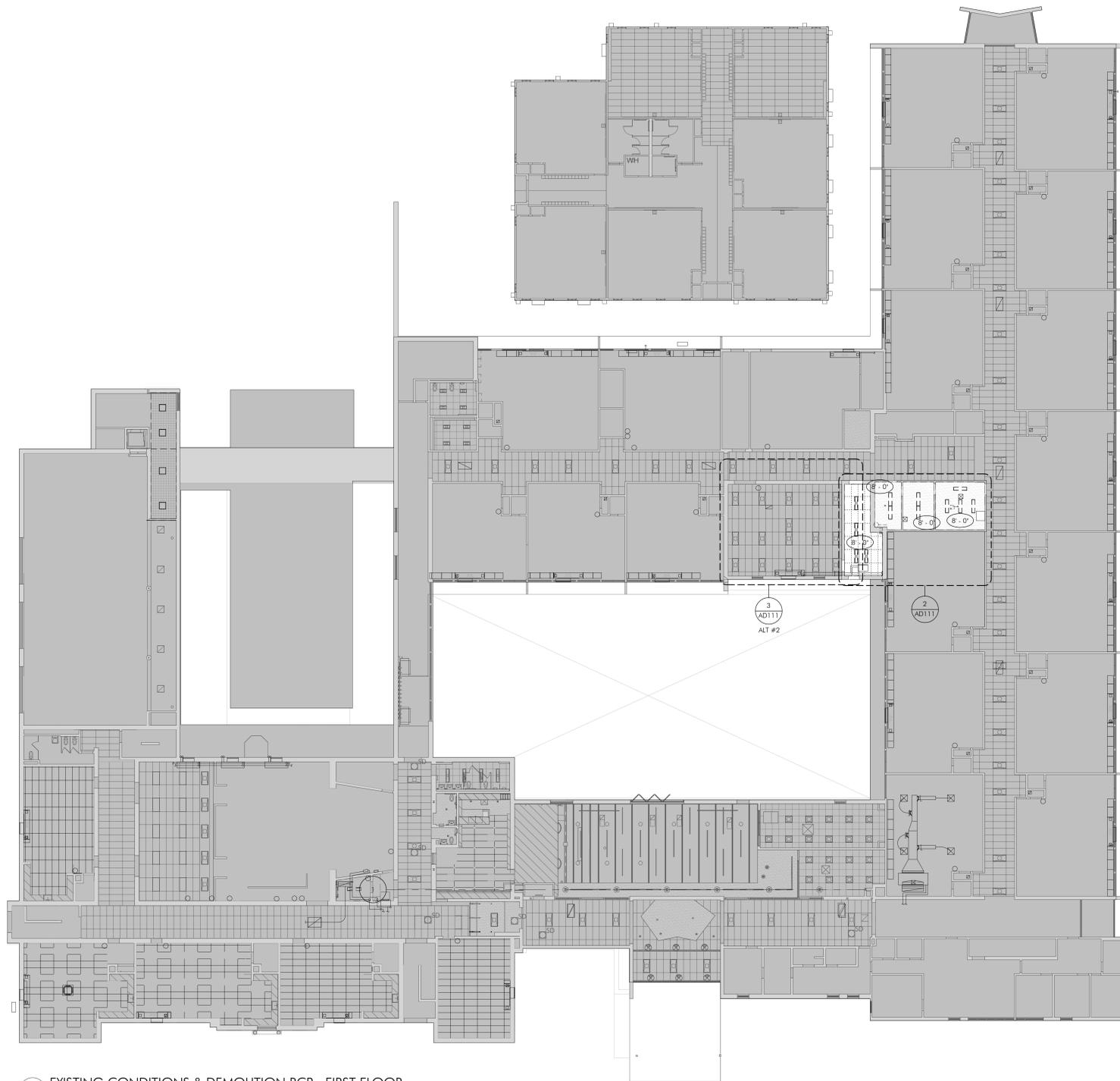
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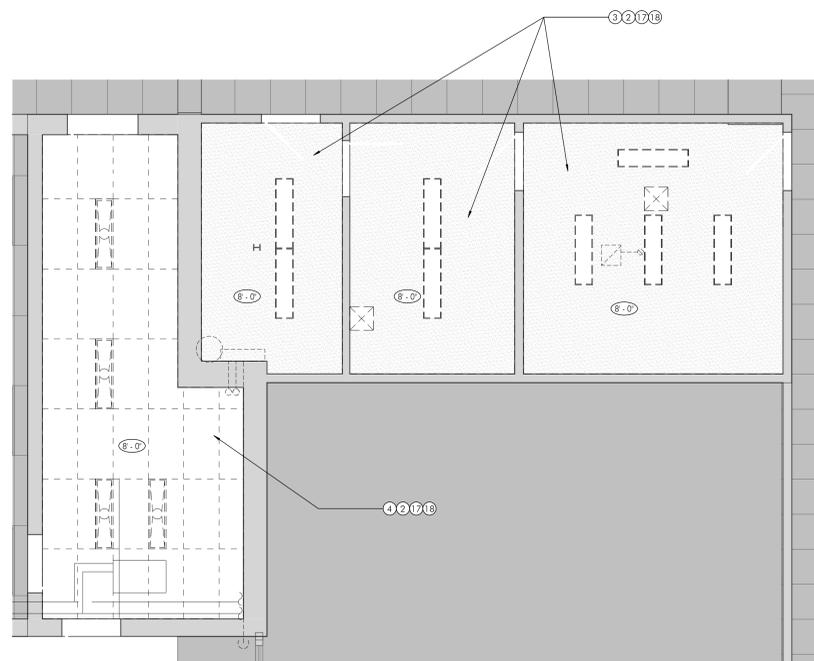
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CONSTRUCTION**



3
AD111 1/4" = 1'-0"
ALTERNATE 2 - EXISTING CONDITIONS & DEMOLITION RCP - MUSIC ROOM 18



1
AD111 1/16" = 1'-0"
EXISTING CONDITIONS & DEMOLITION RCP - FIRST FLOOR



2
AD111 1/4" = 1'-0"
ENLARGED DEMO RCP - OFFICES

SHEET NOTES

1. ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO.
2. GC TO COORDINATE ALL ROOF PENETRATIONS WITH OTHER PRIMES AND PROVIDE ROOF REPAIRS/INSTALLATION AS REQUIRED.
3. REFER TO A001 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
4. REFER TO MEPPP DWGS FOR ADDL INFORMATION.
5. REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
6. ALL INTERIOR WALL PENETRATIONS TO BE MADE BY PRIME CONTRACTOR REQUIRING THE PENETRATION. UNO. EACH PRIME IS RESPONSIBLE FOR PROTECTION (AND REPAIR IF NEEDED) OF EXISTING CONDITIONS TO REMAIN (INCLUDING BY NOT LIMITED TO FLOORING, WALLS, FURNITURE).
7. IN ROOM AREAS IDENTIFIED FOR CEILING TILE AND/OR GRID REMOVAL AND REINSTALLATION, GC TO COMPLETE SCOPE OF WORK. GC, MC, AND EC MUST COORDINATE TOGETHER FOR APPROPRIATE EXTENTS OF CEILING TO BE REMOVED.
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DEMOLITION KEYNOTES

- 1 REMOVE ACT CEILING
- 2 REMOVE LIGHT FIXTURES, REFER TO ELECTRICAL DWGS FOR ADDL INFO
- 3 REMOVE GWR CEILING AND FRAMING AS REQUIRED
- 4 REMOVE ACT CEILING TILE, ACT GRID TO REMAIN
- 5 REMOVE PORTION OF EXISTING ACT CEILING TILES AND GRID TO ACCOMMODATE NEW HOOD.
- 6 EXISTING HEATING EQUIPMENT TO REMAIN
- 7 REMOVE ACT CEILING TILES AS REQUIRED FOR NEW MECHANICAL EQUIPMENT INSTALLATION. STORE FOR REINSTALLATION. REFER TO MECH DWGS FOR ADDL INFO
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- 17 REMOVE EXISTING MECHANICAL EQUIPMENT. REFER TO MECH DWGS FOR ADDL INFO.
- 18 SUPPORT AND PROTECT EXISTING CEILING FIXTURES TO REMAIN FOR REINSTALLATION.



LEGEND

OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

A	DATE	ISSUED FOR
1	11/18/24	18D ISSUE

SHEET TITLE
EXISTING CONDITIONS & DEMO RCP - FIRST FLOOR

DRAWING NUMBER
AD111

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CONSTRUCTION**

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9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.
10. NEW CEILING HEIGHTS TO MATCH EXISTING, UNO.
11. GC TO REINSTALL CEILING FIXTURES INTO NEW CEILING, UNO.
12. CEILING FIXTURES TO BE CENTERED IN ACT TILE, UNO.
13. MECHANICAL EQUIPMENT AND PATHS SHOWN BELOW CEILING FOR REFERENCE AND COORDINATION PURPOSES. EQUIPMENT AND LINES ALL TO BE ABOVE CEILING UNLESS NOTED OTHERWISE.

CONSTRUCTION PLAN KEYNOTES

1. NEW METAL STUD PARTITION ON TOP OF EXISTING PARTIAL HEIGHT BLOCK WALL. CLAD NEW PARTITION ON ALL SIDES WITH [WP-1] CENTER PARTITION ON TOP OF EXISTING PARTIAL HEIGHT TILED PARTITION. PROVIDE IN WALL BLOCKING AS REQUIRED FOR EXHAUST HOOD IN NEW PARTITION.
2. COORDINATE NEW INFILL WITH MECHANICAL EXHAUST. PROVIDE NEW FRAMING, EXTERIOR SHEATHING, EIFS, BATT INSULATION AND INTERIOR GWB. NEW INFILL TO ALIGN WITH EXISTING EXTERIOR AND INTERIOR FINISH. REPAINT FULL INFILL OF EIFS.
3. MECHANICAL UNIT ON EQUIPMENT RAIL AND PIPE PORTAL BY MC. GC TO PROVIDE PENETRATIONS AS REQUIRED IN EXISTING ROOF MEMBRANE AND INSTALL ROOFING OVER RAILS AND PORTALS (REFER TO TYPICAL DETAILS ON A600). GC TO COORD. WITH MC AND EC. GC RESPONSIBLE FOR SEALING ALL PENETRATIONS. REFER TO MECH AND ELEC DWGS FOR ADDL INFORMATION.
4. EXISTING EIFS INFILLED MASONRY OPENING. EXISTING WINDOW MAY EXIST WITHIN INFILL. EXISTING CONDITIONS TO BE VERIFIED IN FIELD BY GC.
5. EXISTING DISHWASHER, COUNTER AND SINKS
6. COORDINATE EXTENTS OF NEW PARTITION WITH EXHAUST HOOD
7. PROVIDE OPENING FOR CONDENSATE LINE. SEAL EXTERIOR FACADE TO LINES.



LEGEND
OUT OF ARCHITECTURAL SCOPE

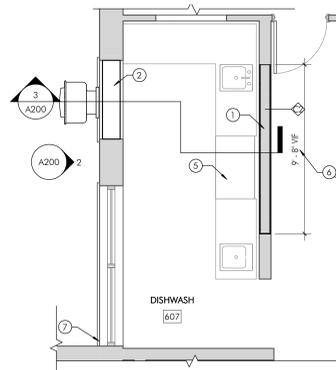
ISSUE HISTORY

A:	DATE	ISSUED FOR
1	11/18/24	BID ISSUE

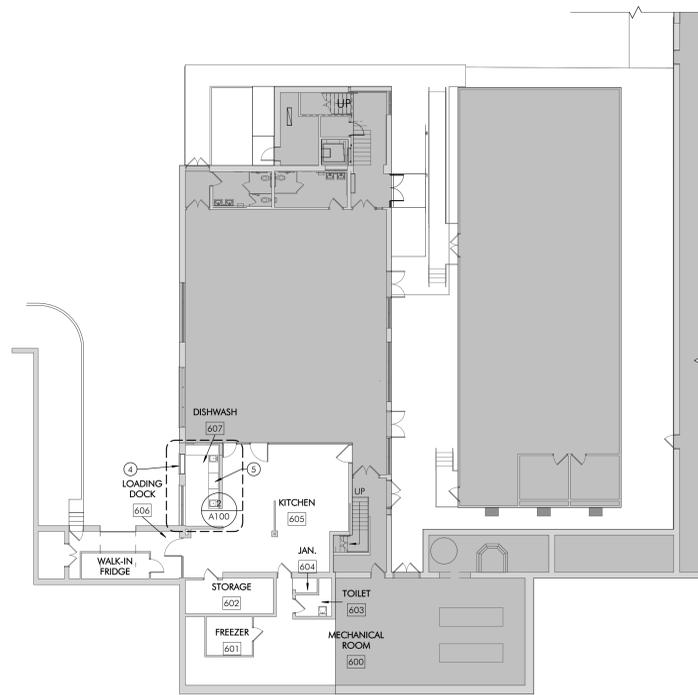
SHEET TITLE
**PROPOSED PLAN -
CAFETERIA LEVEL**

DRAWING NUMBER

A100



2 PROPOSED ENLARGED PLAN - CAFETERIA LEVEL AT DISHWASHING
A100 1/4" = 1'-0"



1 PROPOSED PLAN - CAFETERIA LEVEL
A100 1/16" = 1'-0"

PROJECT TEAM

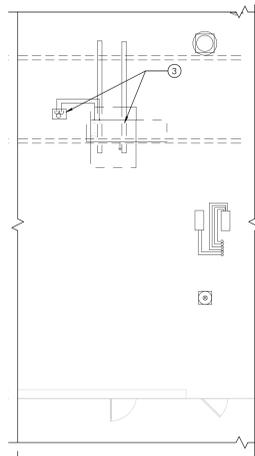
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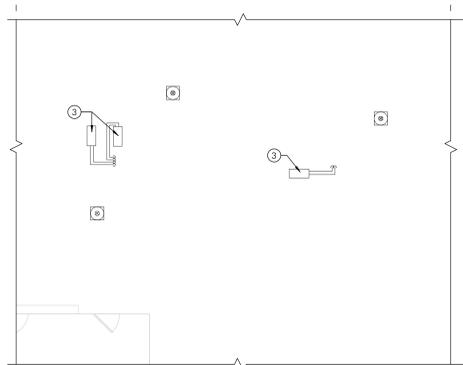
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Blue Bell, PA 19422
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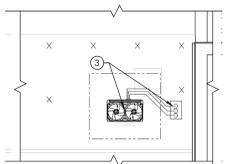
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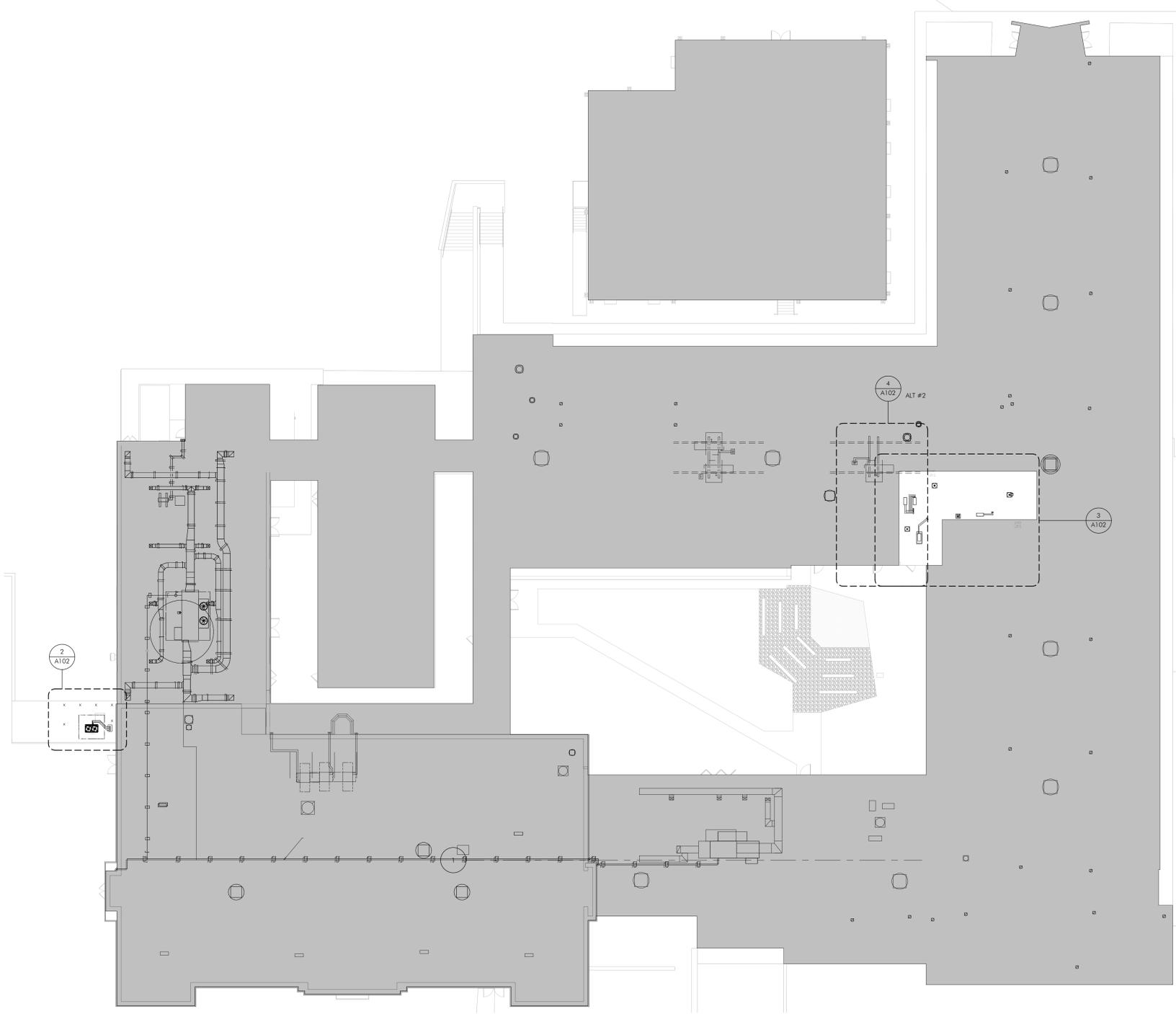
4 ENLARGED ROOF PLAN - ALTERNATE #2
A102 1/8" = 1'-0"



3 ENLARGED ROOF PLAN - OFFICES
A102 1/8" = 1'-0"



2 ENLARGED ROOF PLAN - LOADING DOCK
A102 1/8" = 1'-0"



1 PROPOSED ROOF PLAN
A102 1/16" = 1'-0"

SHEET NOTES

- ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO.
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- MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.
- NEW CEILING HEIGHTS TO MATCH EXISTING, UNO.
- GC TO REINSTALL CEILING FIXTURES INTO NEW CEILING, UNO.
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- MECHANICAL EQUIPMENT AND PATHS SHOWN BELOW CEILING FOR REFERENCE AND COORDINATION PURPOSES. EQUIPMENT AND LINES ALL TO BE ABOVE CEILING UNLESS NOTED OTHERWISE.

CONSTRUCTION PLAN KEYNOTES

- NEW METAL STUD PARTITION ON TOP OF EXISTING PARTIAL HEIGHT BLOCK WALL. CLAD NEW PARTITION ON ALL SIDES WITH [WP-1] CENTER PARTITION ON TOP OF EXISTING PARTIAL HEIGHT TILED PARTITION. PROVIDE IN WALL BLOCKING AS REQUIRED FOR EXHAUST HOOD IN NEW PARTITION.
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- EXISTING DISHWASHER, COUNTER AND SINKS
- COORDINATE EXTENTS OF NEW PARTITION WITH EXHAUST HOOD
- PROVIDE OPENING FOR CONDENSATE LINE. SEAL EXTERIOR FACADE TO LINES.



LEGEND
OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

A:	DATE	ISSUED FOR
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SHEET TITLE
PROPOSED ROOF PLAN

DRAWING NUMBER
A102

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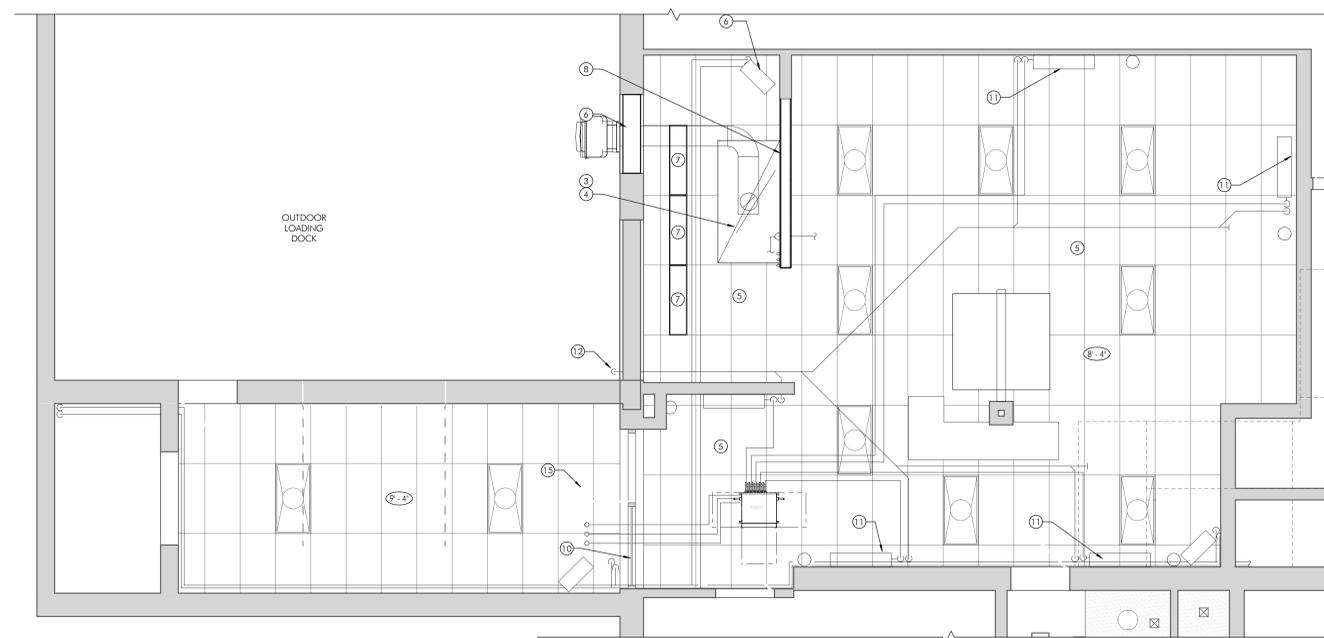
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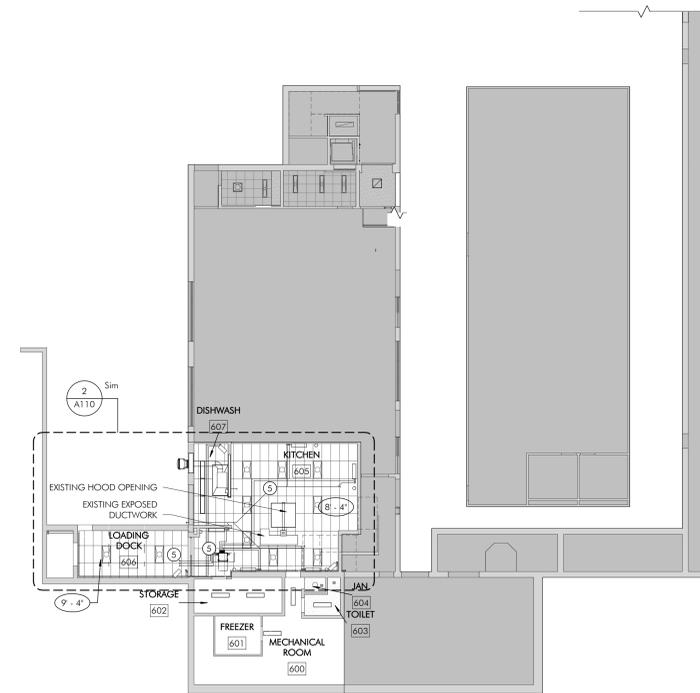
3 REFERENCE IMAGE - LOADING DOCK DOOR FRAME
A110 N.T.S.

- SHEET NOTES**
- ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO.
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 - REFER TO A001 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
 - REFER TO MEPPP DWGS FOR ADDL INFORMATION.
 - REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
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 - MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.
 - NEW CEILING HEIGHTS TO MATCH EXISTING, UNO.
 - GC TO REINSTALL CEILING FIXTURES INTO NEW CEILING, UNO.
 - CEILING FIXTURES TO BE CENTERED IN ACT TILE, UNO.
 - MECHANICAL EQUIPMENT AND PATHS SHOWN BELOW CEILING FOR REFERENCE AND COORDINATION PURPOSES. EQUIPMENT AND LINES ALL TO BE ABOVE CEILING UNLESS NOTED OTHERWISE.

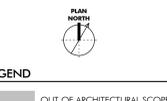
- RCP KEYNOTES**
- PROVIDE ACT CEILING TILES AND GRID. [ACT-1] CEILING HEIGHT TO ALIGN TO EXISTING. PROVIDE LIGHT FIXTURES, COORD INSTALLATION OF MECHANICAL EQUIPMENT. REINSTALL ALL CEILING FIXTURES. REFER TO MEP DWGS FOR ADDL INFO.
 - PROVIDE ACT CEILING TILES [ACT-1] IN EXISTING GRID. PROVIDE LIGHT FIXTURES. COORD INSTALLATION OF MECHANICAL EQUIPMENT. MODIFY CEILING GRID AS REQUIRED. REINSTALL CEILING FIXTURES. REFER TO MEP DWGS FOR ADDL INFO.
 - MODIFY ACT CEILING GRID AND TILES AROUND NEW HOOD. PROVIDE NEW PERIMETER TRIM AND MODIFY CEILING TILES AS REQUIRED.
 - EXHAUST HOOD, REFER TO MECHANICAL DWGS FOR ADDL INFO.
 - REINSTALL ACT TILES AS REQUIRED.
 - HOOD EXHAUST TO EXTERIOR. EXHAUST DUCT EXIT EXTERIOR THROUGH EXISTING WINDOW INFILL.
 - RELOCATED EXISTING LIGHT FIXTURES GC TO MODIFY EXISTING ACT CEILING AND GRID AS REQUIRED FOR COORDINATION OF INSTALLATION.
 - MODIFY EXISTING CEILING TILES AND GRID AT NEW PARTITION. PROVIDE NEW PERIMETER TRIM.
 - COORDINATE INSTALLATION OF CEILING CASSETTE. REFER TO MECH DWGS FOR ADDL INFO.
 - INSERT 3/4" EXTERIOR GRADE MOO PANEL TO ENCLOSE AND REPLACE GLASS IN FRAME. PAINT BOTH SIDES TO MATCH FRAME. GC TO COORDINATE INSTALLATION WITH EXISTING PIPEWORK AND NEW PENETRATIONS.
 - NEW WALL MOUNTED MECHANICAL EQUIPMENT BELOW CEILING. COORDINATE MOUNTING HEIGHTS WITH MECHANICAL DWGS.
 - PROVIDE OPENING IN EXTERIOR WALL FOR CONDENSATE LINE. SEAL EXTERIOR FACADE TO LINES.
 - REINSTALL ACT CEILING TILE IN GRID.
 - MODIFY ACT TILE AS NEEDED FOR MECHANICAL LINES/SET DROP.
 - REINSTALL ACT TILE AND GRID WHERE NECESSARY.



2 PROPOSED ENLARGED RCP - CAFETERIA LEVEL AT DISHWASHING
A110 1/4" = 1'-0"



1 PROPOSED RCP - CAFETERIA LEVEL
A110 1/16" = 1'-0"



ISSUE HISTORY

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SHEET TITLE
**PROPOSED RCP -
CAFETERIA LEVEL**

DRAWING NUMBER
A110

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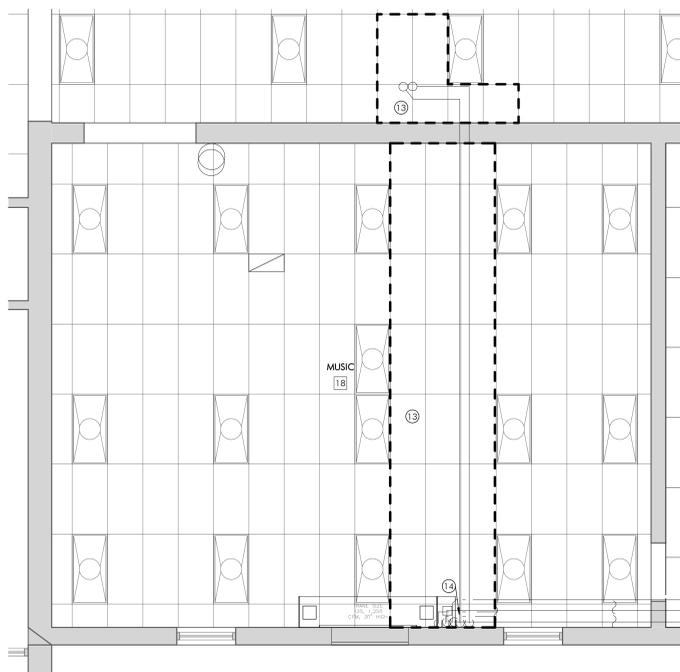
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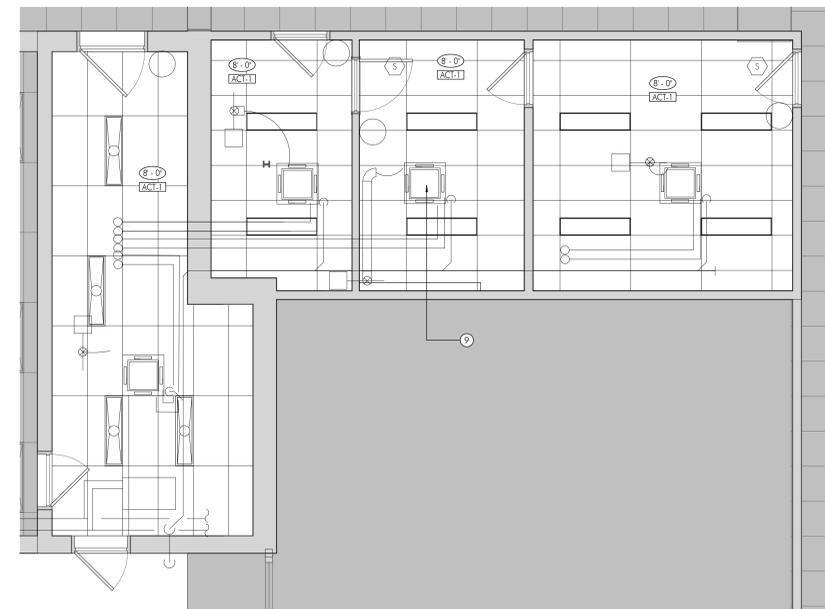
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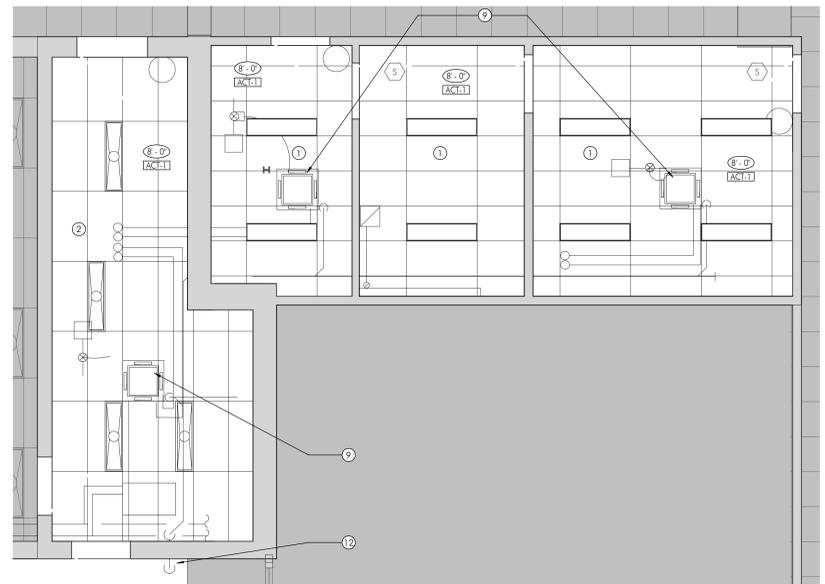
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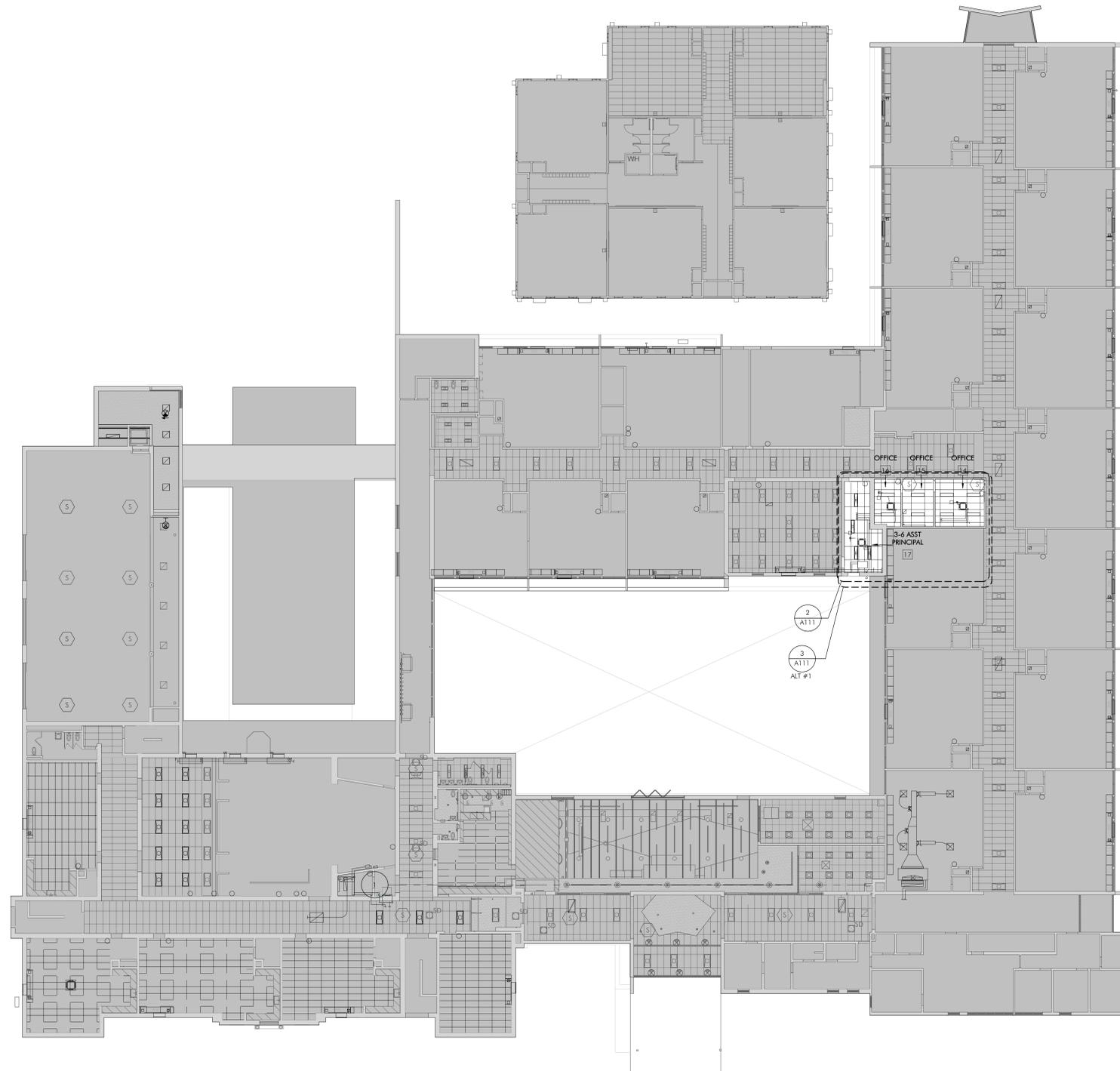
4 ALTERNATE 2 - PROPOSED MUSIC ROOM 18 REFLECTED CEILING PLAN
A111 1/4" = 1'-0"



3 ENLARGED RCP PLAN - ALTERNATE 1
A111 1/4" = 1'-0"



2 ENLARGED RCP PLAN
A111 1/4" = 1'-0"



1 PROPOSED RCP - FIRST FLOOR
A111 1/16" = 1'-0"

SHEET NOTES

1. ALL ROOF WORK TO MAINTAIN EXISTING SCHOOL WARRANTY. REFER TO SPECIFICATION FOR ADDL INFO
2. GC TO COORDINATE ALL ROOF PENETRATIONS WITH OTHER PRIMES AND PROVIDE ROOF REPAIRS/INSTALLATION AS REQUIRED.
3. REFER TO A021 FOR GENERAL DEMOLITION AND CONSTRUCTION NOTES AND LEGENDS.
4. REFER TO MEPPP DWGS FOR ADDL INFORMATION.
5. REFER TO STRUCTURAL DWGS FOR ADDL INFORMATION.
6. ALL INTERIOR WALL PENETRATIONS TO BE MADE BY PRIME CONTRACTOR REQUIRING THE PENETRATION, UNO. EACH PRIME IS RESPONSIBLE FOR PROTECTION (AND REPAIR IF NEEDED) OF EXISTING CONDITIONS TO REMAIN (INCLUDING BY NOT LIMITED TO FLOORING, WALLS, FURNITURE).
7. IN ROOM/AREAS IDENTIFIED FOR CEILING TILE AND/OR GRID REMOVAL AND REINSTALLATION, GC TO COMPLETE SCOPE OF WORK. GC, MC, AND EC MUST COORDINATE TOGETHER FOR APPROPRIATE EXTENTS OF CEILING TO BE REMOVED.
8. IN AREAS NOT SHOWN IN ARCHITECTURAL SCOPE OF WORK IN WHICH INFRASTRUCTURE NEEDS TO RUN ABOVE CEILING, PRIMES COMPLETING THE WORK ARE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF TILES. ANY DAMAGE TO TILES, GRIDS, OR FIXTURES WILL REQUIRE REPLACEMENT AND IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR COMPLETING THE WORK.
9. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE. REFER TO MECH DWGS FOR ADDL INFO.
10. NEW CEILING HEIGHTS TO MATCH EXISTING, UNO.
11. GC TO REINSTALL CEILING FIXTURES INTO NEW CEILING, UNO.
12. CEILING FIXTURES TO BE CENTERED IN ACT TILE, UNO.
13. MECHANICAL EQUIPMENT AND PATHS SHOWN BELOW CEILING FOR REFERENCE AND COORDINATION PURPOSES. EQUIPMENT AND LINES ALL TO BE ABOVE CEILING UNLESS NOTED OTHERWISE.

RCP KEYNOTES

- 1 PROVIDE ACT CEILING TILES AND GRID. [ACT-1] CEILING HEIGHT TO ALIGN TO EXISTING. PROVIDE LIGHT FIXTURES, COORD. INSTALLATION OF MECHANICAL EQUIPMENT. REINSTALL ALL CEILING FIXTURES. REFER TO MEP DWGS FOR ADDL INFO.
- 2 PROVIDE ACT CEILING TILES [ACT-1] IN EXISTING GRID. PROVIDE LIGHT FIXTURES, COORD. INSTALLATION OF MECHANICAL EQUIPMENT, MODIFY CEILING GRID AS REQUIRED. REINSTALL CEILING FIXTURES. REFER TO MEP DWGS FOR ADDL INFO.
- 3 MODIFY ACT CEILING GRID AND TILES AROUND NEW HOOD. PROVIDE NEW PERIMETER TRIM AND MODIFY CEILING TILES AS REQUIRED.
- 4 EXHAUST HOOD, REFER TO MECHANICAL DWGS FOR ADDL INFO.
- 5 REINSTALL ACT TILES AS REQUIRED.
- 6 HOOD EXHAUST TO EXTERIOR. EXHAUST DUCT EXIT EXTERIOR THROUGH EXISTING WINDOW INFILL.
- 7 RELOCATED EXISTING LIGHT FIXTURES GC TO MODIFY EXISTING ACT CEILING AND GRID AS REQUIRED FOR COORDINATION OF INSTALLATION.
- 8 MODIFY EXISTING CEILING TILES AND NEW PERIMETER TRIM. PROVIDE NEW PERIMETER TRIM.
- 9 COORDINATE INSTALLATION OF CEILING CASSETTE. REFER TO MECH DWGS FOR ADDL INFO.
- 10 INSERT 3/4" EXTERIOR-GRADE MDO PANEL TO ENCLOSE AND REPLACE GLASS IN FRAME. PAINT BOTH SIDES TO MATCH FRAME. GC TO COORDINATE INSTALLATION WITH EXISTING PIPEWORK AND NEW PENETRATIONS.
- 11 NEW WALL MOUNTED MECHANICAL EQUIPMENT BELOW CEILING. COORDINATE MOUNTING HEIGHTS WITH MECHANICAL DWGS.
- 12 PROVIDE OPENING IN EXTERIOR WALL FOR CONDENSATE LINE. SEAL EXTERIOR FACADE TO LINES.
- 13 REINSTALL ACT CEILING TILE IN GRID.
- 14 MODIFY ACT TILE AS NEEDED FOR MECHANICAL LINESSET DROP.
- 15 REINSTALL ACT TILE AND GRID WHERE NECESSARY.



LEGEND
OUT OF ARCHITECTURAL SCOPE

ISSUE HISTORY

A:	DATE	ISSUED FOR
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SHEET TITLE
PROPOSED RCP - FIRST FLOOR

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A111

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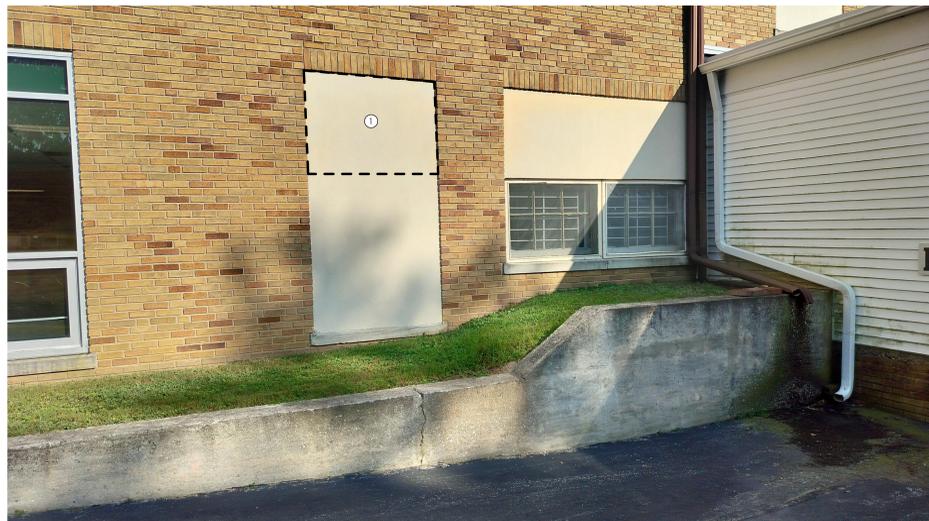
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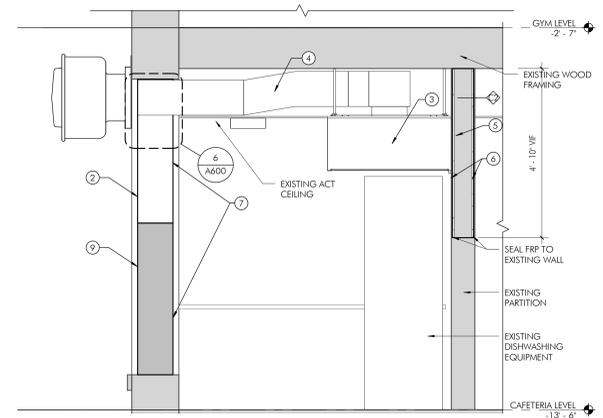
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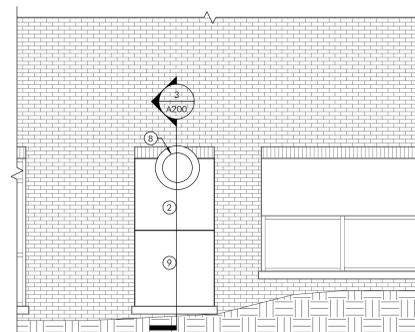
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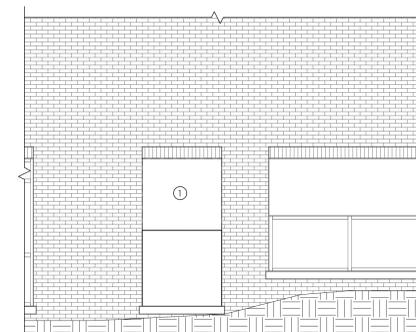
4
A200 REFERENCE IMAGE - EXTERIOR ELEVATION AT DISHWASHING
N.T.S.



3
A200 DISHWASHER HOOD TO EXTERIOR WALL SECTION
1/2" = 1'-0"



2
A200 PROPOSED EXTERIOR ELEVATION AT DISHWASHING
1/4" = 1'-0"



1
A200 DEMO EXTERIOR ELEVATION AT DISHWASHING
1/4" = 1'-0"

ELEVATION/SECTION KEYNOTES

- 1 REMOVE TOP PORTION OF EXISTING EIFS WALL IF EXISTING WINDOW IS PRESENT WITHIN EIFS PANEL. GC TO COORDINATE THE REMOVAL OF A PORTION OF THE WINDOW AS NECESSARY FOR MECHANICAL WORK AND REFRAMING FOR REINSTALLATION OF EIFS.
- 2 INFILL WITH NEW FRAMING, EXTERIOR AND INTERIOR SHEATHING, BATT INSULATION AND EIFS. FULL EXTENT OF EIFS (EXISTING AND NEW) TO BE PAINTED TO MATCH EXISTING. COORDINATE PENETRATION AND BLOCKING REQUIREMENTS WITH MECHANICAL DWGS.
- 3 NEW DISHWASHER HOOD. ENSURE INSTALLATION IS FLUSH TO PARTITION. REFER TO MECH DWGS FOR ADDL INFO.
- 4 COORDINATE DUCT PATH AS REQUIRED TO ACCOMMODATE EXISTING CEILING AND EXIT BUILDING THROUGH EXISTING EIFS INFILLED OPENING.
- 5 COORDINATE BLOCKING WITHIN PARTITION FOR HOOD AS NEEDED.
- 6 CLAD NEW PARTITION ON BOTH SIDES WITH [VIP-1].
- 7 PATCH/REPAIR INTERIOR WALL FACE AS REQUIRED. PAINT FULL EXTENTS OF OPENING INFILL ON INTERIOR TO MATCH EXISTING.
- 8 MECHANICAL EXHAUST. COORDINATE BLOCKING NEEDS AS REQUIRED. ANCHORED INTO BLOCKING AND EXISTING MASONRY.
- 9 PATCH EXISTING EIFS TO REMAIN AS REQUIRED. PAINT FULL EXTENTS OF EXISTING AND NEW EIFS WITHIN MASONRY OPENING TO MATCH EXISTING.

PLAN NORTH

LEGEND

OUT OF ARCHITECTURAL SCOPE

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SHEET TITLE

**CAFETERIA EXTERIOR
ELEVATIONS AT
DISHWASHING**

DRAWING NUMBER

A200

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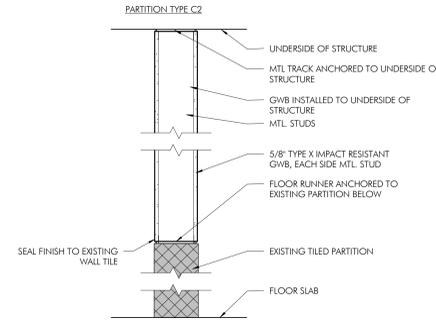
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PARTITION SCHEDULE												
WALL TYPE	LOAD BEARING	COMBUSTIBILITY	STUD CHANNEL	STUD SIZE	STUD THICKNESS / GAUGE	STUD SPACING	GWB THICKNESS	SAFB	PARTITION THICKNESS	FIRE RATING	UL#	REMARKS
C2	NO	NON COMBUSTIBLE	CHANNEL	6"	.035/20	16" O.C.	5/8"		7 1/4"			PARTITION TO BE CLAD IN WP-1 ON ALL SIDES

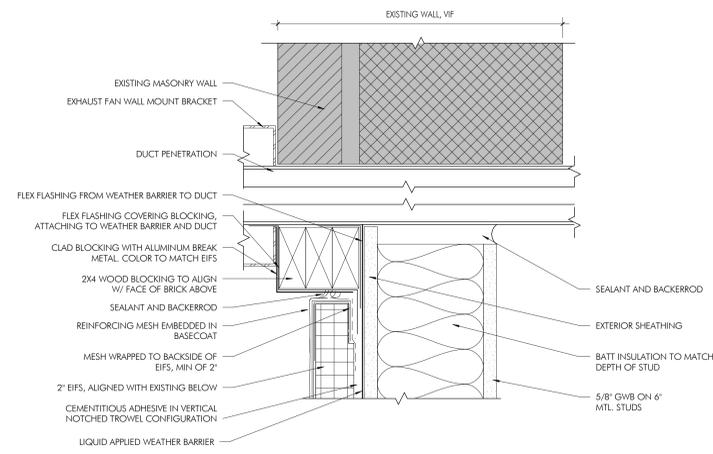
PARTITION TYPES



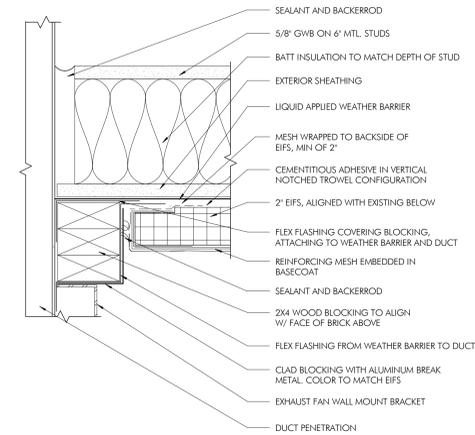
SCHEDULE NOTES

- REFER TO PARTITION TYPES FOR HEIGHT, # OF GWB LAYERS, AND BRACING NOTES
- PROVIDE GWB CONTROL JOINT EVERY 30' MIN. O.C. OR EVERY 3005F
- GWB TO BE IMPACT RESISTANT GWB UNO

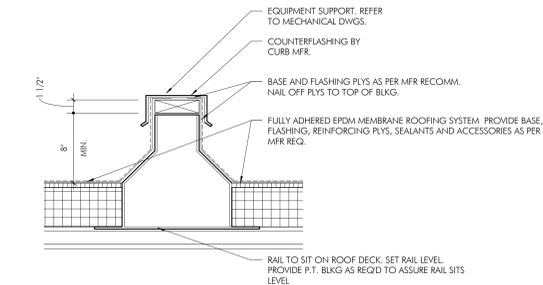
FINISH SCHEDULE				
TAG	MANUFACTURER	STYLE	COLOR	REMARKS
ACOUSTIC CEILING TILE				
ACT-1	ARMSTRONG	ULTIMA LAY-IN SQUARE #7300	WHITE	8'X24'X3/4", FINE FISSED ANGLED TEGULAR
WALL PROTECTION				
WP-1	MARLITE	FRP P100	WHITE	WALL PROTECTION ON NEW PARTITION



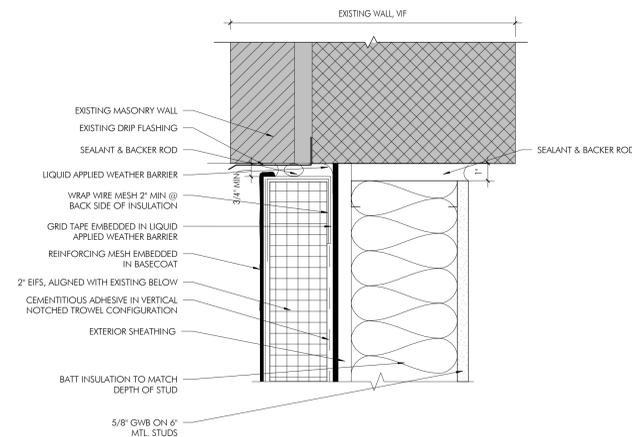
6
A600
3" = 1'-0"



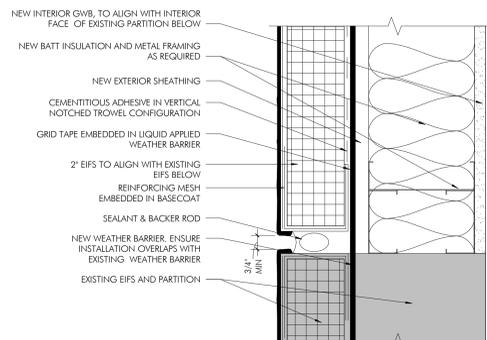
5
A600
3" = 1'-0"



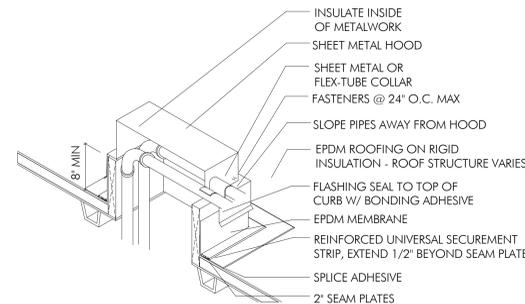
2
A600
1 1/2" = 1'-0"



4
A600
3" = 1'-0"



3
A600
3" = 1'-0"



1
A600
3/4" = 1'-0"

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**SHEET TITLE
SCHEDULES AND
DETAILS**

DRAWING NUMBER

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STRUCTURAL SHEET LIST	
SHEET NUMBER	SHEET TITLE
S-001	COVER SHEET
S-002	GENERAL NOTES
S-003	SCHEDULE OF SPECIAL INSPECTIONS
S-101	ROOF FRAMING PLAN
Sheet Total: 4	

DRAWING LEGEND			
MARK	DESCRIPTION	MARK	DESCRIPTION
F2.0	FOOTING SYMBOL (REFER TO SPREAD FOOTING SCHEDULE)	I	INDICATES WIDE FLANGE COLUMN
⊖	PILE CAP SYMBOL (REFER TO PILE CAP SCHEDULE)	□	INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR TUBE STEEL (TS) COLUMN
⊙	TILT-UP/PRECAST CONCRETE WALL CONNECTION SYMBOL (REFER TO CONNECTION DETAIL)	○	INDICATES HOLLOW STRUCTURAL SECTION (HSS) COLUMN OR STEEL PIPE COLUMN
?	SHEAR WALL SYMBOL (REFER TO SHEAR WALL SCHEDULE)	⊗	INDICATES WOOD POST
△	REVISION TRIANGLE	■	INDICATES BUNDLED STUDS
⌈	TILT-UP/PRECAST CONCRETE WALL PANEL NUMBER (REFER TO TILT-UP/PRECAST CONCRETE WALL ELEVATIONS)	■	INDICATES CONCRETE COLUMN
⌈	CMU WALL REINFORCING SYMBOL (REFER TO CMU WALL REINFORCING SCHEDULE)	■	INDICATES PRECAST CONCRETE COLUMN
⌈	CONTINUITY PLATE LENGTH (REFER TO TYPICAL DETAIL)	⌈	INDICATES MOMENT FRAME CONNECTION
DS	INDICATES DOUBLE SHEAR CONNECTION (REFER TO THE DOUBLE SHEAR PLATE CONNECTIONS DETAIL)	⌈	INDICATES CANTILEVER CONNECTION
⌈	INDICATES REINFORCING TYPE (REFER TO THE REINFORCING SCHEDULE)	⌈	INDICATES PARTIALLY RESTRAINED MOMENT CONNECTION
SR	INDICATES NUMBER OF STUD RAIL REQUIRED AT COLUMN (REFER TO STUD RAIL DETAILS)	⌈	INDICATES DRAG CONNECTION
⌈	ROOF/FLOOR DIAPHRAGM NAILING SYMBOL (REFER TO DIAPHRAGM NAILING SCHEDULE)	---	INDICATES A LEDGER
↔	INDICATES DIRECTION OF DECK SPAN	↔	INDICATES WOOD OR STEEL STUD BEARING WALL
T/FTG = X'-X"	ELEVATION SYMBOL (T REFERS TO COMPONENT THAT THE ELEVATION REFERENCES)	OR	INDICATES WOOD OR STEEL STUD SHEAR WALL LINE AND HOLD-DOWNS PER KEY ON SHEET
⊙	STUD BUBBLE INDICATES NUMBER OF STUDS REQUIRED IF EXCEEDS NUMBER SPECIFIED IN PLAN NOTE	▨	INDICATES MASONRY/CMU WALL
⊙	INDICATES STEP IN FOOTING (REFER TO TYPICAL STEP IN FOOTING DETAIL)	▨	INDICATES CONCRETE/TILT-UP/PRECAST CONCRETE WALL
SX	DETAILS OR SECTION CUT (DETAIL NUMBER/SHEET NUMBER)	---	INDICATES BEARING WALL ABOVE
SO	DETAILS OR SECTION CUT IN PLAN VIEW (DETAIL NUMBER/SHEET NUMBER)	---	INDICATES EXISTING WALL
⌈	INDICATES LOCATION OF CONCRETE WALLS, SHEAR WALLS OR BRACED FRAME ELEVATIONS	⌈	POST-TENSION DEAD END (PLAN)
⌈	STRUCTURAL EXTENT SYMBOL SINGLE ARROW - END OF EXTENT DOUBLE ARROW - CONTINUOUS EXTENT ALONG THE ELEMENT LINE UNTIL THE ELEMENT IS INTERRUPTED	⌈	POST-TENSION STRESSING END (PLAN)
⌈	INDICATES THE CRIPPLE POINT IN STEEL MEMBER, REFER TO TYPICAL DETAIL FOR ADD'L INFORMATION	⌈	POST-TENSION PROFILE (PLAN) (IN INCHES)
⌈	INDICATES BOTTOM CHORD EXTENSIONS TO BE PROVIDED AT OWS/S ON COLUMN CENTER LINES	⌈	INTERMEDIATE STRESSING (PLAN)
⌈		⌈	INDICATES APPROXIMATE LOCATION OF PENETRATION THROUGH FRAMING MEMBER

ABBREVIATIONS			
L	Angle	EXP JT	Expansion Joint
AE	Air Entrainment	EXT	Exterior
AB	Anchor Bolt	FB	Factory-Built
ADDL	Additional	FD	Floor Drain
ADH	Adhesive	FDN	Foundation
ALT	Alternate	FIN	Finish
ARCH	Architectural	FLR	Floor
B or BOT	Bottom	FRP	Fiberglass Reinforced Plastic
B	Bottom Of	FRT	Fire Retardant Treated
BLDG	Building	FTG	Footing
BLKG	Blocking	F/	Face of
BMU	Brick Masonry Unit	GA	Gauge
BP	Baseplate	GALV	Galvanized
BRBF	Buckling Restrained	GEOTECH	Geotechnical
BRG	Braced Frame	GL	Glue Laminated Timber
B	Bearing	GWB	Gypsum Wall Board
BTWN	Between	HDR	Header
C	Camber	HP	Ham-Fir
CANT	Cantilever	HGR	Hanger
CB	Castellated Beam	HD	Hold-down
C BORE	Counterbore	HEF	Horizontal Each Face
CFMP	Cold Formed Metal Framing	HORIZ	Horizontal
CL or Ⓢ	Centerline	HP	High Point
CLT	Cross-Laminated Timber	HSS = TS	(Hollow Structural Section)
CLT	Cast in Place	IBC	International Building Code
CIP	Construction or	ID	Inside Diameter
CJ	Control Joint	IE	Invert Elevation
CJP	Complete Joint Penetration	IF	Inside Face
CLR	Clear	INT	Interior
CLG	Ceiling	K	Kips
CMU	Concrete Masonry Unit	KSF	Kips Per Square Foot
COL	Column	LF	Lineal Foot
CONC	Concrete	LL	Live Load
CONN	Connection	LLB	Long Leg Back-to-Back
CONST	Construction	LLH	Long Leg Horizontal
CONT	Continuous	LLV	Long Leg Vertical
CSINK	Countersink	LP	Low Point
CTRD	Centered	LONGIT	Longitudinal
DB	Drop Beam	LVL	Laminated Veneer Lumber
DBA	Deformed Bar Anchor	LW	Light Weight
DBL	Double	MAS	Masonry
DEMO	Demolish	MAX	Maximum
DEV	Development	MECH	Mechanical
DF	Douglas Fir	MEP	Mechanical, Electrical, Plumbing
DIA	Diameter/Ø	MEZZ	Mezzanine
DIAG	Diagonal	MFR	Manufacturer
DIST	Distributed	MIN	Minimum
DL	Dead Load	MISC	Miscellaneous
DN	Down	NIC	Not In Contract
DO	Ditto	NLT	Not Laminated Timber
DP	Depth/Deep	NTS	Not To Scale
DWG	Drawing	NW	Normal Weight
EB	Existing	OC	On Center
EA	Each	OCBF	Ordinary Concentric Braced Frame
EF	Each Face	OD	Outside Diameter
EL	Elevation	OF	Outside Face
ELEC	Electrical	OPNG	Opening
ELEV	Elevator	OPP	Opposite
EMBED	Embedment	OWSJ	Open Web Steel Joist
ENGR	Engineer	OWWJ	Open Web Wood Joist
EQ	Equal	PL	Plate
EQUIP	Equipment	PL	Plate
EW	Each Way	PAF	Powder Actuated Fastener
EXP	Expansion	PC	Precast
		PERP	Perpendicular
		PLWD	Plywood
		PJP	Partial Joint Penetration
		PREFAB	Prefabricated
		PSF	Pounds per Square Foot
		PSI	Pounds Per Square Inch
		PSL	Parallel Strand Lumber
		P-T	Post-Tensioned
		PT	Pressure Treated
		R	Radius
		RD	Roof Drain
		REF	Refer/Reference
		REIN	Reinforcing
		REQD	Required
		RET	Retaining
		SB	Site-Built
		SCBF	Special Concentric
		SCHED	Broad Frame Schedule
		SER	Structural Engineer of Record
		SFRS	Seismic Force-Resisting System
		SHTHG	Sheathing
		SIM	Similar
		SL	Slope/ Sloped
		SLBB	Short Leg Back-to-Back
		SMF	Special Moment Frame
		SOG	Slab on Grade
		SP	Southern Pine
		SPEC	Specification
		SQ	Square
		SR	Studral
		SF	Square Foot
		SST	Stainless Steel
		STAGG	Stagger/Staggered
		STD	Standard
		STIFF	Stiffener
		STL	Steel
		STRUCT	Structural
		SWWJ	Solid Web Wood Joist
		SYM	Symmetrical
		T	Top
		T/	Top Of
		T&B	Top & Bottom
		TC AX LD	Top Chord Axial Load
		TCX	Top Chord Extension
		TDSE	Turned Down Slab Edge
		T&G	Tongue & Groove
		THKND	Thickened
		THRD	Threaded
		THRU	Through
		TRANSV	Transverse
		TS	Thickened Slab
		TYP	Typical
		UNO	Unless Noted Otherwise
		URM	Unreinforced Masonry Unit
		VEF	Vertical Each Face
		VERT	Vertical
		W	Wide
		W/	With
		W/O	Without
		WHS	Welded Headed Stud
		WP	Working Point
		WWF	Welded Wire Fabric

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LEGEND		
---	OUT OF ARCHITECTURAL SCOPE	
---	SECTOR DESIGNATION	
---	MISC ITEM AS NEEDED	
---	MISC ITEM AS NEEDED	

ISSUE HISTORY		
A.	DATE	ISSUED FOR
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SHEET TITLE
COVER SHEET

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CIVIL / STRUCTURAL
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**11/18/2024
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FOR BID (NOT FOR CONSTRUCTION)
These drawings have been prepared for the purpose of bidding. There are no other drawings or information intended for purposes of construction.

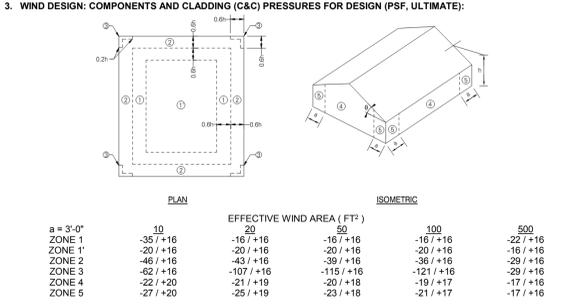
DCI PROJECT: 24191-0294
CONTACT: C. ULRICH

01.00.00 GENERAL REQUIREMENTS

- 1. GOVERNING CODE: THE DESIGN AND CONSTRUCTION OF THIS PROJECT IS GOVERNED BY THE 'INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION, HEREAFTER REFERRED TO AS THE IBC, AS ADOPTED AND MODIFIED BY THE CITY OF WEST GROVE, PA UNDERSTOOD TO BE THE AUTHORITY HAVING JURISDICTION (AHJ).
2. REFERENCE STANDARDS: REFER TO CHAPTER 35 OF THE 2021 IBC. WHERE OTHER STANDARDS ARE NOTED IN THE DRAWINGS, USE THE LATEST EDITION OF THE STANDARD UNLESS A SPECIFIC DATE IS INDICATED.
3. DEFINITIONS: THE FOLLOWING DEFINITIONS COVER THE MEANINGS OF CERTAIN TERMS USED IN THESE NOTES:
3.1. 'ARCHITECT/ENGINEER' - THE ARCHITECT OF RECORD AND THE STRUCTURAL ENGINEER OF RECORD.
3.2. 'STRUCTURAL ENGINEER OF RECORD' (SER) - THE STRUCTURAL ENGINEER WHO IS LICENSED TO STAMP AND SIGN THE STRUCTURAL DOCUMENTS FOR THE PROJECT.
3.3. 'SUBMIT FOR REVIEW' - SUBMIT TO THE ARCHITECT/SER FOR REVIEW PRIOR TO FABRICATION OR CONSTRUCTION.
3.4. 'PER PLAN' - INDICATES REFERENCES TO THE STRUCTURAL PLANS, ELEVATIONS, AND STRUCTURAL GENERAL NOTES.
3.5. 'SEISMIC FORCE RESISTING SYSTEM' (SFRS) - A RECOGNIZED STRUCTURAL SYSTEM OF COMPONENTS (BEAMS, BRACES, DRAGS, STRUTS, COLLECTORS, DIAPHRAGMS, COLUMNS, WALLS, ETC.) OF THE PRIMARY STRUCTURE THAT ARE SPECIALLY DESIGNED AND PROPORTIONED TO RESIST EARTHQUAKE-INDUCED MOTIONS AND MAINTAIN STABILITY OF THE STRUCTURE.
4. SPECIFICATIONS: REFER TO THE PROJECT SPECIFICATIONS ISSUED AS PART OF THE CONTRACT DOCUMENTS FOR INFORMATION SUPPLEMENTAL TO THESE DRAWINGS.
5. OTHER DRAWINGS: REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION INCLUDING, BUT NOT LIMITED TO, DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, STAIRS, FINISHES, DRAINS, WATERPROOFING, RAILINGS, MECHANICAL UNIT LOCATIONS, AND OTHER NON-STRUCTURAL ITEMS.
6. STRUCTURAL DETAILS: THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF THE WORK.
7. STRUCTURAL RESPONSIBILITIES: THE SER IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED FORM.
8. COORDINATION: THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING DETAILS AND ACCURACY OF THE WORK, CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, SELECTING FABRICATION PROCESSES, TECHNIQUES OF ASSEMBLY, AND PERFORMING WORK IN A SAFE AND SECURE MANNER.
9. EXISTING CONDITIONS: INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENT THE PRESENT KNOWLEDGE BUT WITHOUT GUARANTEE OF ACCURACY.
10. NEW CONSTRUCTION: THE CONTRACTOR SHALL REMOVE ALL INTERFERING ITEMS FOR NEW CONSTRUCTION AND SHALL REPAIR OR REPLACE ALL REMOVED ITEMS TO MATCH THE EXISTING CONDITIONS.
11. MEANS, METHODS, AND SAFETY REQUIREMENTS: THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB-RELATED SAFETY STANDARDS SUCH AS OSHA AND DOSH.
12. BRACING/SHORING DESIGN ENGINEER: THE CONTRACTOR SHALL, AT THEIR DISCRETION, EMPLOY AN SSE FOR THE DESIGN OF ANY TEMPORARY BRACING AND SHORING.
13. TEMPORARY SHORING, BRACING: THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE.
14. CONSTRUCTION LOADS: LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS AS NOTED IN DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL NOTES.
15. CHANGES IN LOADING: THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY THE SER OF ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR PLUMBING LOAD IMPOSED ONTO THE STRUCTURE THAT DIFFERS FROM, OR THAT IS NOT DOCUMENTED ON, THE ORIGINAL CONTRACT DOCUMENTS.
16. NOTE PRIORITIES: PLAN AND DETAIL NOTES AND SPECIFIC LOADING DATA PROVIDED ON INDIVIDUAL PLANS AND DETAIL DRAWINGS SUPPLEMENTS INFORMATION IN THESE GENERAL NOTES.
17. DISCREPANCIES: IN CASE OF DISCREPANCIES BETWEEN THE GENERAL NOTES, SPECIFICATIONS, PLANS/DETAILS, OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN.
18. SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE.
19. ALTERNATES: ALTERNATE PRODUCTS OF SIMILAR STRENGTH, NATURE, AND FORM FOR SPECIFIED ITEMS MAY BE SUBMITTED WITH ADEQUATE TECHNICAL DOCUMENTATION.
20. ADDITIONS/ALTERATIONS/REPAIRS:
20.1. ADDITIONS, ALTERATIONS AND/OR REPAIRS TO THE EXISTING STRUCTURE HAVE BEEN ANALYZED FOR ADDITIONAL LOADING AND/OR MODIFICATION DUE TO THE ADDITION, ALTERATION, OR REPAIR.
20.2. ALL AFFECTED EXISTING MEMBERS HAVE BEEN ANALYZED OR REINFORCED AS REQUIRED PER THE IBC.
20.3. ALL DEMOLITION OR REMOVAL OF ARCHITECTURAL, MECHANICAL, OR STRUCTURAL ELEMENTS SHALL NOT DAMAGE STRUCTURAL ITEMS TO REMAIN.

01.10.00 DESIGN CRITERIA AND LOADS

- 1. OCCUPANCY: RISK CATEGORY OF BUILDING PER IBC TABLE 1604.5 III
2. WIND DESIGN: MAIN WIND FORCE RESISTING SYSTEM: ULTIMATE DESIGN WIND SPEED, Vult 121 MPH
INTERNAL PRESSURE COEFFICIENT, Cpi +/-0.18
TOPOGRAPHIC FACTOR, Kzt 1.0
WIND ANALYSIS PROCEDURE USED DIRECTIONAL | ENVELOPE | WIND TUNNEL
3. WIND DESIGN: COMPONENTS AND CLADDING (C&C) PRESSURES FOR DESIGN (PSF, ULTIMATE):



- 3.1. COMPONENTS AND CLADDING WIND PRESSURES ARE BASED ON ASCE 7 CHAPTER 30 PART 1 'LOW-RISE BUILDINGS.'
3.2. COMPONENTS AND CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-2A FOR FLAT ROOFS.
3.3. FOR PARAPETS AROUND THE PERIMETER OF THE ROOF EQUAL TO OR TALLER THAN 3', PRESSURES FROM ZONE 3 ARE TREATED AS ZONE 2.
3.4. COMPONENTS AND CLADDING ZONE LOCATIONS ARE BASED ON ASCE 7 FIGURE 30.3-1 FOR WALLS.
3.5. ALL PARAPET COMPONENTS AND CLADDING WIND PRESSURES SHALL BE DETERMINED THROUGH ASCE 7 FIGURE 30.6.
4. SEISMIC DESIGN:
SEISMIC DESIGN CATEGORY, SDC B
SITE CLASS PER IBC SECTION 1613.3.2 AND ASCE 7 CHAPTER 20 D
SEISMIC IMPORTANCE FACTOR PER ASCE 7 TABLE 1.5-2, I 1.25
SPECTRAL RESPONSE ACCELERATION (SHORT PERIOD), Ss 0.119 g
SPECTRAL RESPONSE ACCELERATION (1-SECOND PERIOD), S1 0.048 g
DESIGN RESPONSE ACCELERATION (SHORT PERIOD), Sds 0.202 g
DESIGN RESPONSE ACCELERATION (LONG PERIOD), Sd1 0.078 g
BASE SHEAR GOVERNED BY WIND
5. SNOW LOAD:
FLAT ROOF SNOW LOAD, P 25 PSF (NOTE 5.1)
SNOW LOAD IMPORTANCE FACTOR, I 1.10 (NOTE 5.3)
GROUND SNOW LOAD, Pg 25 PSF
SNOW EXPOSURE FACTOR, Ce 0.9
THERMAL FACTOR, Ct 1.0
SEE ROOF PLAN FOR DRAFT LOADING
5.1. SNOW LOAD IS UN-REDUCIBLE AND INCLUDES 5 PSF RAIN-ON-SNOW SURCHARGE WHERE GROUND SNOW LOAD IS 20 PSF OR LESS, BUT NOT ZERO, PER ASCE 7 SECTION 7.10.
5.2. SNOW LOAD BASED ON ASCE FIGURE 7-1.
5.3. SNOW LOAD IMPORTANCE FACTOR PER ASCE 7 TABLE 1.5-2.
6. DESIGN LIVE LOADS: SEE STRUCTURAL LOADING PLANS FOR AREA LOADS AND LINE LOADS. LOADS LISTED BELOW ARE FOR MISCELLANEOUS ITEMS.
AREA LIVE LOADS
HANDRAILS AND PEDESTRIAN GUARDRAILS 50 PLF OR 200 LB (NOTE 6.1)
ROOFS 20 PSF (REDUCIBLE) OR 300 LB (NOTE 6.2) SEE SECTION 5 FOR SNOW LOAD

01.20.00 SUBMITTALS

- 1. SUBMIT FOR REVIEW: SUBMITTALS OF SHOP DRAWINGS AND PRODUCT DATA ARE REQUIRED FOR ITEMS NOTED IN THE INDIVIDUAL MATERIALS SECTIONS OF THESE GENERAL NOTES AND FOR BIDDER-DESIGNED ELEMENTS.
2. SUBMITTAL REVIEW PERIOD: SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS OR TEN WORKING DAYS FOR REVIEW BY THE ARCHITECT/ENGINEER PRIOR TO THE ONSET OF FABRICATION.
3. GENERAL CONTRACTOR'S PRIOR REVIEW: PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER, THE CONTRACTOR SHALL REVIEW THE SUBMITTAL FOR COMPLETENESS, DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE SER.
4. SHOP DRAWING REVIEW: ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND THE CONTRACT DOCUMENTS OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY.
5. SHOP DRAWING DEVIATIONS: WHEN SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) DIFFER FROM OR ADD TO THE REQUIREMENTS OF THE STRUCTURAL DRAWINGS, THEY SHALL BE DESIGNED AND STAMPED BY THE RESPONSIBLE SSE.
1. BIDDER-DESIGNED ELEMENTS: SUBMIT 'BIDDER-DESIGNED' DEFERRED SUBMITTALS TO THE ARCHITECT AND SER FOR REVIEW.
2. GENERAL CONTRACTOR'S PRIOR REVIEW:
2.1. ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW OF THE SSE COMPONENT DRAWINGS, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY.
2.2. REVIEW OF THE SSE'S SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN.
2.3. ALL NECESSARY BRACING, TIES, ANCHORAGE, AND PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND THE DESIGN DRAWINGS AND CALCULATIONS.
2.4. BIDDER-DESIGNED ELEMENTS INCLUDE BUT ARE NOT LIMITED TO:
2.4.1. ROOF TOP UNIT CURBS AND ATTACHMENTS
2.4.2. TEMPORARY SHORING SYSTEMS

01.30.00 DEFERRED SUBMITTALS

- 1. BIDDER-DESIGNED ELEMENTS: SUBMIT 'BIDDER-DESIGNED' DEFERRED SUBMITTALS TO THE ARCHITECT AND SER FOR REVIEW.
2. GENERAL CONTRACTOR'S PRIOR REVIEW:
2.1. ONCE THE CONTRACTOR HAS COMPLETED THEIR REVIEW OF THE SSE COMPONENT DRAWINGS, THE SER WILL REVIEW THE SUBMITTAL FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING AND WILL STAMP THE SUBMITTAL ACCORDINGLY.
2.2. REVIEW OF THE SSE'S SHOP DRAWINGS (COMPONENT DESIGN DRAWINGS) IS FOR COMPLIANCE WITH DESIGN CRITERIA AND COMPATIBILITY WITH THE DESIGN OF THE PRIMARY STRUCTURE AND DOES NOT RELIEVE THE SSE OF RESPONSIBILITY FOR THAT DESIGN.
2.3. ALL NECESSARY BRACING, TIES, ANCHORAGE, AND PROPRIETARY PRODUCTS SHALL BE FURNISHED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND THE DESIGN DRAWINGS AND CALCULATIONS.
2.4. BIDDER-DESIGNED ELEMENTS INCLUDE BUT ARE NOT LIMITED TO:
2.4.1. ROOF TOP UNIT CURBS AND ATTACHMENTS
2.4.2. TEMPORARY SHORING SYSTEMS

01.40.00 INSPECTIONS, QUALITY ASSURANCE, AND TEST REQUIREMENTS

- 1. SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTS: SPECIAL INSPECTIONS, VERIFICATIONS, AND TESTING SHALL BE DONE IN ACCORDANCE WITH IBC CHAPTER 17, THE STATEMENT AND SCHEDULES OF SPECIAL INSPECTIONS LISTED IN THESE DRAWINGS, AND THE AHJ STATEMENT OF SPECIAL INSPECTION AND/OR STATEMENT OF STRUCTURAL OBSERVATIONS.
2. CONTRACTOR RESPONSIBILITY: PRIOR TO ISSUANCE OF THE BUILDING PERMIT, THE CONTRACTOR IS REQUIRED TO PROVIDE THE AHJ A SIGNED, WRITTEN ACKNOWLEDGEMENT OF THE CONTRACTOR'S RESPONSIBILITIES ASSOCIATED WITH THE STATEMENT OF SPECIAL INSPECTIONS, PREVIOUSLY REFERENCED, ADDRESSING THE REQUIREMENTS LISTED IN IBC SECTION 1704.4.
3. FASTENER MANUFACTURER'S CERTIFICATION DOCUMENTING CONFORMANCE WITH THE SPECIFICATION.

05.12.00 STRUCTURAL STEEL

- 1. REFERENCE STANDARDS: CONFORM TO:
1.1. IBC CHAPTER 22 'STEEL'
1.2. ANSIAISC 303 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES'
1.3. AISC 'MANUAL OF STEEL CONSTRUCTION'
1.4. ANSIAISC 360 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS'
1.5. AWS D1.1 'STRUCTURAL WELDING CODE - STEEL'
1.6. RCSC 'SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS'
1.7. ANSIAISC 341 'SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS'
1.8. AWS D1.8 'STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT'
2. SUBMITTALS: SUBMIT THE FOLLOWING DOCUMENTS TO THE SER FOR REVIEW:
2.1. SHOP DRAWINGS COMPLYING WITH AISC 360 SECTIONS M1 AND N3 AND AISC 303 SECTION 4.
2.2. ERECTION DRAWINGS COMPLYING AISC 360 SECTIONS M1 AND N3 AND AISC 303 SECTION 4.
2.3. WELD PROCEDURE SPECIFICATIONS (WPS'S) FOR SHOP AND FIELD WELDING.
2.4. MANUFACTURER'S CERTIFICATES OF CONFORMANCE FOR ELECTRODES, FLUXES, AND GASES (WELDING CONSUMABLES).
2.5. CHARPY V-NOTCH (CVN) IMPACT TEST RESULTS PER ASTM A6 SUPPLEMENTARY REQUIREMENT S30 FOR HOT-ROLLED SHAPES WITH FLANGES EXCEEDING 2" AS REQUIRED PER AISC 360 SECTION A3.1C.
3. COPIES: MAKE COPIES OF THE FOLLOWING DOCUMENTS AVAILABLE UPON REQUEST TO THE SER OR OWNER'S INSPECTION AGENCY IN ELECTRONIC OR PRINTED FORM PRIOR TO FABRICATION PER AISC 360 SECTION N3.2 REQUIREMENTS:
3.1. FABRICATOR'S WRITTEN QUALITY CONTROL MANUAL THAT INCLUDES, AS A MINIMUM:
3.1.1. MATERIAL CONTROL PROCEDURES
3.1.2. INSPECTION PROCEDURES
3.1.3. NON-CONFORMANCE PROCEDURES
3.2. STEEL AND ANCHOR ROD SUPPLIERS' MATERIAL TEST REPORTS (MTRS) INDICATING COMPLIANCE WITH SPECIFICATIONS.
3.3. FASTENER MANUFACTURER'S CERTIFICATION DOCUMENTING CONFORMANCE WITH THE SPECIFICATION.

- 4. FILLER METAL MANUFACTURER'S PRODUCT DATA FOR SMAW, FCWV, AND GMAW INDICATING:
3.4.1. PRODUCT SPECIFICATION COMPLIANCE
3.4.2. RECOMMENDED WELDING PARAMETERS
3.4.3. RECOMMENDED STORAGE AND EXPOSURE REQUIREMENTS INCLUDING BAKING
3.4.4. LIMITATIONS OF USE
3.5. WELDED HEADED (SHEAR) STUD ANCHORS MANUFACTURER'S CERTIFICATION INDICATING THEY MEET SPECIFICATIONS.
3.6. WPS'S FOR SHOP AND FIELD WELDING.
3.7. MANUFACTURER'S CERTIFICATES OF CONFORMANCE FOR ELECTRODES, FLUXES, AND GASES (WELDING CONSUMABLES).
3.8. PROCEDURE QUALIFICATION RECORDS (PQRS) FOR WPS'S THAT ARE NOT PREQUALIFIED IN ACCORDANCE WITH AWS.
3.9. WELDING PERSONNEL PERFORMANCE QUALIFICATION RECORDS (WPQRS) AND CONTINUITY RECORDS CONFORMING TO AWS STANDARDS
4. MATERIALS: STRUCTURAL STEEL MATERIALS SHALL CONFORM TO MATERIALS AND REQUIREMENTS LISTED IN AISC 360 SECTION A3 INCLUDING, BUT NOT LIMITED TO:
SHAPE TYPE
WIDE FLANGE (W) AND TEE (WT) SHAPES ASTM A992, Fy = 50 KSI
(S), (M), AND (HP) SHAPES ASTM A36, Fy = 36 KSI
CHANNEL (C) AND ANGLE (L) SHAPES ASTM A36, Fy = 36 KSI
PLATE (PL) ASTM A36, Fy = 36 KSI
SQUARE/RECT HSS ASTM A503, GRADE C, Fy = 50 KSI
PIPE, (PIPE) 12" DIA. AND LESS ASTM A53, GRADE B, Fy = 36 KSI
ROUND HSS ASTM A500, GRADE C, Fy = 46 KSI
HIGH-STRENGTH, HEAVY HEX BOLTS ASTM F3125 GRADE A490/F2280, TYPE 1 OR 3, PLAIN
HIGH-STRENGTH, HEAVY HEX BOLTS ASTM F3125 GRADE A325/F1852, TYPE 1, GALVANIZED/MECHANICALLY GALV
HIGH-STRENGTH, HEAVY HEX BOLTS ASTM F3125 GRADE A325/F1852, TYPE 3, PLAIN (WEATHERING)
HEAVY HEX NUTS ASTM A563, GRADE AND FINISH PER RCSC TABLE 2.1
WASHERS (HARDENED FLAT OR BEVELED) ASTM F436, GRADE AND FINISH PER RCSC TABLE 2.1
COMPRESSIBLE WASHER DTI ASTM F959-09 DIRECT TENSION INDICATORS
MILD THREADED RODS ASTM A36, Fy = 36 KSI

- 5. STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS:
5.1. ASTM F3125 GRADE A325-N BOLTS - 'THREADS NOT EXCLUDED IN THE SHEAR PLANE.'
5.2. HIGH-STRENGTH BOLTED JOINTS HAVE BEEN DESIGNED AS 'BEARING' CONNECTIONS.
5.3. PROVIDE ASTM BOLT GRADE AND TYPE AS SPECIFIED IN THE MATERIALS SECTION OF THESE GENERAL NOTES.
5.4. PROVIDE WASHERS OVER OUTER PLY OF SLOTTED HOLES AND OVERSIZE HOLES PER RCSC TABLE 6.1.
5.5. PROVIDE NUT AND WASHER GRADES, TYPES, AND FINISHES CONFORMING TO RCSC TABLE 2.1.
5.6. PROVIDE FASTENER ASSEMBLIES FROM A SINGLE SUPPLIER.
5.7. JOINT TYPES SHALL BE:
5.7.1. ST - 'SNUG TIGHT,' FOR TYPICAL BEAM END 'SHEAR' CONNECTIONS UNLESS NOTED OTHERWISE.
5.7.2. SC - 'SLIP CRITICAL,' WHERE SPECIFICALLY INDICATED. PROVIDE WITH CLASS A | B FAYING SURFACE.
5.8. INSTALL BOLTS IN JOINTS IN ACCORDANCE WITH RCSC SECTION 8 AND TABLE 4.1.
5.9. INSPECTION IS PER RCSC SECTION 9.
6. FABRICATION:
6.1. CONFORM TO AISC 360 SECTION M2 AND AISC 303 SECTION 6.
6.2. QUALITY CONTROL (QC) SHALL CONFORM TO:
6.2.1. AISC 360 CHAPTER N
6.2.2. AISC 303 SECTION 8
6.2.3. FABRICATOR AND ERECTOR SHALL ESTABLISH AND MAINTAIN WRITTEN QC PROCEDURES PER AISC 360 SECTION N3.
6.2.4. FABRICATOR SHALL PERFORM SELF-INSPECTIONS PER AISC 360 SECTION N5 TO ENSURE THAT THEIR WORK IS PERFORMED IN ACCORDANCE WITH CODE OF STANDARD PRACTICE, THE AISC SPECIFICATION, CONTRACT DOCUMENTS, AND THE APPLICABLE BUILDING CODE.
6.2.5. QC INSPECTIONS MAY BE COORDINATED WITH QUALITY ASSURANCE (QA) INSPECTIONS PER AISC 360 SECTION N3 WHERE FABRICATORS QA PROCEDURES PROVIDE THE NECESSARY BASIS FOR MATERIAL CONTROL, INSPECTION, AND CONTROL OF THE WORKMANSHIP EXPECTED BY THE SPECIAL INSPECTOR.
7. WELDING:
7.1. WELDING SHALL CONFORM TO AWS D1.1 WITH PREQUALIFIED WELDING PROCESSES EXCEPT AS MODIFIED BY AISC 360 SECTION J2 AND AISC 341 AS APPLICABLE. WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 REQUIREMENTS.
7.2. USE 70 KSI STRENGTH, LOW-HYDROGEN TYPE ELECTRODES (E7018) OR E71T AS APPROPRIATE FOR THE PROCESS SELECTED.
7.3. WELDING OF HIGH-STRENGTH ANCHOR RODS IS PROHIBITED UNLESS APPROVED BY ENGINEER.
8. ERECTION:
8.1. CONFORM TO AISC 360 SECTION M4 AND AISC 303 SECTION 7.
8.2. CONFORM TO AISC 360 CHAPTER N AND AISC 303 SECTION 8.
8.2.1. THE ERECTOR SHALL MAINTAIN DETAILED ERECTION QC PROCEDURES THAT ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS AND THE CONTRACT DOCUMENTS.
8.3. STEEL WORK SHALL BE CARRIED UP TRUE AND PLUMB WITHIN THE LIMITS DEFINED IN AISC 303 SECTION 7.13.
8.4. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AND SAFETY PROTECTION REQUIRED BY AISC 360 SECTION M4.2 AND AISC 303 SECTIONS 7.10 AND 7.11.
9. PROTECTIVE COATING REQUIREMENTS:
9.1. SHOP PAINTING: CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS OTHERWISE SPECIFIED BY THE PROJECT SPECIFICATIONS.
9.2. INTERIOR STEEL:
9.2.1. UNLESS NOTED OTHERWISE, DO NOT PAINT ANY OF THE STEEL SURFACES MEETING THE FOLLOWING CONDITIONS:
9.2.1.1. CONCEALED BY THE INTERIOR BUILDING FINISHES
9.2.1.2. FIREPROOFED
9.2.1.3. WELDED, IF AREA REQUIRES PAINTING, DO NOT PAINT UNTIL AFTER WELD INSPECTIONS AND NON-DESTRUCTIVE TESTING REQUIREMENT, IF ANY, ARE SATISFIED.
9.2.2. INTERIOR STEEL EXPOSED TO VIEW SHALL BE PAINTED WITH ONE COAT OF SHOP PRIMER UNLESS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS. FIELD TOUCH-UPS TO MATCH THE FINISH COAT OR AS OTHERWISE INDICATED IN THE PROJECT SPECIFICATIONS.
9.3. EXTERIOR STEEL: EXPOSED EXTERIOR STEEL SHALL BE PROTECTED BY EITHER:
9.3.1. PAINT WITH AN EXTERIOR MULTI-COAT SYSTEM AS PER THE PROJECT SPECIFICATIONS. FIELD TOUCH-UP PAINTING SHALL BE TO MATCH TOPCOAT. BE AS PER THE PROJECT SPECIFICATIONS.
9.3.2. GALVANIZING: UNLESS PROTECTED WITH A PAINT SYSTEM, EXPOSED STEEL (OUTSIDE THE BUILDING ENVELOPE) SHALL BE HOT-DIPPED GALVANIZED WHERE NOTED ON THE PLANS OR OTHERWISE INDICATED BY THE FINISHES SPECIFIED BY THE ARCHITECT. APPLY FIELD TOUCH-UPS PER PROJECT SPECIFICATIONS.
9.4. STEEL NEED NOT BE PRIMED OR PAINTED UNLESS NOTED OTHERWISE ON PLAN OR IN THE PROJECT SPECIFICATIONS. CONFORM TO AISC 360 SECTION M3 AND AISC 303 SECTION 6.5 UNLESS A MULTI-COAT SYSTEM IS REQUIRED PER THE PROJECT SPECIFICATIONS.

AGCS STATE ROAD KITCHEN AND OFFICE HVAC

101 East State Road West Grove, PA 19390

HSA PROJECT # 21-029



PROJECT TEAM

CLIENT
Avon Grove Charter School
110 East State Road
West Grove, PA 19390
484-667-5000

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Wayne, PA 19087
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STRUCTURAL
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MEPPP
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636 Skippack Pike, Suite 200
Blue Bell, PA 19422
215-886-8947

NOT FOR CONSTRUCTION

REVISION NOTE: THESE DOCUMENTS REPRESENT THE CURRENT STATE OF A DEVELOPING DESIGN AND AS SUCH NOT ALL CONDITIONS ARE CURRENT. I, SHOWN ALL STRUCTURAL DETAILS AND CONNECTIONS SHOULD BE ACCOUNTED FOR IN THE GENERAL CONTRACTOR'S PRICE AND SCOPE OF SERVICES. WHETHER THE SPECIFICS OF THESE CONDITIONS ARE SHOWN OR NOT SHOWN, THESE DOCUMENTS REMAINING A PART OF THE CONTRACT.

ISSUE HISTORY table with columns: A, DATE, ISSUED FOR

SHEET TITLE
GENERAL NOTES

DRAWING NUMBER
S-002



11/18/2024 7:17:41 AM

DCI PROJECT: 24191-0294 CONTACT: C. ULRICH

50.00.00 SPECIAL INSPECTIONS

- THE FOLLOWING STATEMENT AND SCHEDULES OF INSPECTIONS ARE THOSE SPECIAL INSPECTIONS AND TESTS THAT SHALL BE PERFORMED FOR THIS PROJECT. SPECIAL INSPECTORS SHALL REFERENCE THESE PLANS AND IBC CHAPTER 17 FOR ALL SPECIAL INSPECTION REQUIREMENTS. THE OWNER SHALL RETAIN AN "APPROVED AGENCY" PER IBC SECTION 1703 TO PROVIDE SPECIAL INSPECTIONS FOR THIS PROJECT. SPECIAL INSPECTORS SHALL BE QUALIFIED PERSONS PER IBC SECTION 1704.2.4. SPECIAL INSPECTION REPORTS SHALL BE PROVIDED ON A WEEKLY BASIS. SUBMIT COPIES OF ALL INSPECTION REPORTS TO THE ARCHITECT/ENGINEER AND THE AUTHORITY HAVING JURISDICTION FOR REVIEW. IN ADDITION TO SPECIAL INSPECTION REPORTS AND TESTS, SUBMIT REPORTS AND CERTIFICATES NOTED IN IBC SECTION 1704.5 TO THE AUTHORITY HAVING JURISDICTION. FINAL SPECIAL INSPECTION REPORTS WILL BE REQUIRED BY EACH SPECIAL INSPECTION FIRM PER IBC SECTION 1704.2.4.
- STATEMENT OF SPECIAL INSPECTIONS:**
 - THIS STATEMENT OF SPECIAL INSPECTIONS HAS BEEN WRITTEN WITH THE UNDERSTANDING THAT THE BUILDING OFFICIAL WILL:
 - REVIEW AND APPROVE THE QUALIFICATIONS OF THE SPECIAL INSPECTOR.
 - MONITOR THE SPECIAL INSPECTION ACTIVITY ON THE PROJECT SITE TO ENSURE THAT SPECIAL INSPECTORS ARE QUALIFIED AND PERFORMING THEIR DUTY AS STATED WITHIN THIS STATEMENT.
 - REVIEW ALL SPECIAL INSPECTION REPORTS SUBMITTED TO THEM BY THE SPECIAL INSPECTOR.
 - PERFORM INSPECTIONS AS REQUIRED BY IBC SECTION 110.3.
 - THE FOLLOWING SPECIAL INSPECTIONS ARE APPLICABLE TO THIS PROJECT:

SPECIAL INSPECTIONS FOR STANDARD BUILDINGS (PER IBC SECTION 1705.1)	REQUIRED
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- STRUCTURAL STEEL:** PER IBC SECTION 1705.2.1
 - A QUALIFIED SPECIAL INSPECTOR OF AN "APPROVED AGENCY" PROVIDING QUALITY ASSURANCE (QA) SPECIAL INSPECTIONS FOR THE PROJECT SHALL REVIEW AND CONFIRM THE FABRICATOR AND ERECTOR'S QUALITY CONTROL (QC) PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO AISC 360 CHAPTER N, AISC 303, AWS D1.1, AND 2021 IBC CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.
 - REQUIREMENTS:
 - QA AGENCY PROVIDING SPECIAL INSPECTIONS SHALL PROVIDE PERSONNEL MEETING THE MINIMUM QUALIFICATION REQUIREMENTS FOR INSPECTION AND NONDESTRUCTIVE TESTING (NDT) PER AISC 360 SECTION N4.
 - NDT PERSONNEL SHALL BE QUALIFIED PER AISC 341 SECTION J4.
 - PROVIDE QC AND QA INSPECTIONS PER AISC 341 SECTION J5 THROUGH J10 AS APPLICABLE.
 - INSPECTION OF WELDS AND BOLTS BY BOTH QC AND QA PERSONNEL SHALL BE PER THE SCHEDULE OF SPECIAL INSPECTIONS IN THESE DRAWINGS. ALL PROVISIONS OF AWS D1.1 FOR STATICALLY LOADED STRUCTURES SHALL APPLY.
 - NONDESTRUCTIVE TESTING (NDT) OF WELDS:
 - NDT OF WELDED JOINTS PER AISC 360 SECTION N5
 - RISK CATEGORY FOR DETERMINATION OF EXTENT OF NDT PER AISC 360 N5.5B IS NOTED IN THE DESIGN CRITERIA AND LOADS SECTION OF THESE GENERAL REQUIREMENTS.
 - NDT PERFORMED SHALL BE DOCUMENTED AND REPORTS SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION OF THE PIECE.
 - FOR FIELD WORK, THE NDT REPORT SHALL IDENTIFY THE TESTED WELD BY LOCATION IN THE STRUCTURE, PIECE MARK AND LOCATION OF THE PIECE.
 - ADDITIONAL INSPECTION TASKS PER AISC 360 SECTION N5.
 - INSPECTION FOR COMPOSITE CONSTRUCTION SHALL BE DONE PER AISC 360 SECTION N6.

2	FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O	AISC 360 TABLE N5.6-1
3	CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	O	AISC 360 TABLE N5.6-1
4	CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O	AISC 360 TABLE N5.6-1
5	CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O	AISC 360 TABLE N5.6-1
6	PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	P	O	AISC 360 TABLE N5.6-1
7	PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENERS COMPONENTS	O	O	AISC 360 TABLE N5.6-1
INSPECTION TASKS DURING BOLTING				
1	FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS ARE POSITIONED AS REQUIRED	O	O	AISC 360 TABLE N5.6-2
2	JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRE-TENSIONING OPERATION	O	O	AISC 360 TABLE N5.6-2
3	FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O	AISC 360 TABLE N5.6-2
4	FASTENERS ARE PRE-TENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O	AISC 360 TABLE N5.6-2
INSPECTION TASKS AFTER BOLTING				
1	NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	P	P	AISC 360 TABLE N5.6-3

- (O) - OBSERVE THESE ITEMS ON A RANDOM BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS
- (P) - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER, EACH BOLTED CONNECTION, OR EACH STEEL ELEMENT

4. SCHEDULES OF SPECIAL INSPECTIONS:

4.1. MINIMUM REQUIREMENTS FOR INSPECTIONS OF STRUCTURAL STEEL CONSTRUCTION

NO.	SPECIAL INSPECTION	QC	QA	REFERENCE STANDARD
INSPECTION TASKS PRIOR TO WELDING				
1	WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	P	O	AISC 360 TABLE N5.4-1
2	WELDING PROCEDURE SPECIFICATIONS (WPS'S) AVAILABLE	P	P	AISC 360 TABLE N5.4-1
3	MANUFACTURER'S CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P	AISC 360 TABLE N5.4-1
4	MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O	AISC 360 TABLE N5.4-1
5	WELDER IDENTIFICATION SYSTEM	O	O	AISC 360 TABLE N5.4-1
6	FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION) BACKING TYPE AND FIT (IF APPLICABLE)	O	O	AISC 360 TABLE N5.4-1
7	FIT-UP OF CJP GROOVE WELDS OF HSS T, Y, AND K JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY) JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION)	P	O	AISC 360 TABLE N5.4-1
8	CONFIGURATION AND FINISH OF ACCESS HOLES	O	O	AISC 360 TABLE N5.4-1
9	FIT-UP OF FILLET WELDS DIMENSIONS (ALIGNMENT, GAPS AT ROOT) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELDING QUALITY AND LOCATION)	O	O	AISC 360 TABLE N5.4-1
10	CHECK WELDING EQUIPMENT	O	-	AISC 360 TABLE N5.4-1
INSPECTION TASKS DURING WELDING				
1	USE OF QUALIFIED WELDERS	O	O	AISC 360 TABLE N5.4-2
2	CONTROL AND HANDLING OF WELDING CONSUMABLES PACKAGING EXPOSURE CONTROL	O	O	AISC 360 TABLE N5.4-2
3	NO WELDING OVER CRACKED TACK WELDS	O	O	AISC 360 TABLE N5.4-2
4	ENVIRONMENTAL CONDITIONS WIND SPEED WITHIN LIMITS PRECIPITATION AND TEMPERATURE	O	O	AISC 360 TABLE N5.4-2
5	WPS FOLLOWED SETTINGS ON WELDING EQUIPMENT TRAVEL SPEED SELECTED WELDING MATERIALS SHIELDING GAS TYPE/ FLOWRATE PREHEAT APPLIED INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) PROPER POSITION (F, V, H, OH)	O	O	AISC 360 TABLE N5.4-2
6	WELDING TECHNIQUES INTERPASS AND FINAL CLEANING EACH PASS WITHIN PROFILE EACH PASS MEETS QUALITY REQUIREMENTS	O	O	AISC 360 TABLE N5.4-2
INSPECTION TASKS AFTER WELDING				
1	WELDS CLEANED	O	O	AISC 360 TABLE N5.4-3
2	SIZE, LENGTH, AND LOCATIONS OF WELDS	P	P	AISC 360 TABLE N5.4-3
3	WELDS MEET VISUAL ACCEPTANCE CRITERIA CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES WELD SIZE UNDERCUT POROSITY	P	P	AISC 360 TABLE N5.4-3
4	ARC STRIKES	P	P	AISC 360 TABLE N5.4-3
5	K-AREA	P	P	AISC 360 TABLE N5.4-3
6	WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES	P	P	AISC 360 TABLE N5.4-3
7	BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	P	P	AISC 360 TABLE N5.4-3
8	REPAIR ACTIVITIES	P	P	AISC 360 TABLE N5.4-3
9	DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	P	AISC 360 TABLE N5.4-3
10	NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	P	P	AISC 360 TABLE N5.4-3
INSPECTION TASKS PRIOR TO BOLTING				
1	MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P	AISC 360 TABLE N5.6-1

**AGCS STATE ROAD
KITCHEN AND
OFFICE HVAC**

101 East State Road
West Grove, PA 19390

HSA PROJECT # :21-029



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**NOT FOR
CONSTRUCTION**

PRICING NOTE: THESE DOCUMENTS REPRESENT THE CURRENT STATE OF A DEVELOPING DESIGN AND AS SUCH NOT ALL CONDITIONS ARE CURRENTLY SHOWN. ALL STRUCTURAL DETAILS AND CONNECTIONS SHOULD BE ACCOUNTED FOR IN THE GENERAL CONTRACTOR PRICE AND SCOPE OF SERVICES. WHETHER THE SPECIFICS OF THESE CONDITIONS ARE SHOWN OR NOT SHOWN, THESE DOCUMENTS

FOR BID (NOT FOR CONSTRUCTION)
These drawings have been prepared at the request of the client for the purpose of bidding. These drawings are not intended for purposes of obtaining a permit or construction.

ISSUE HISTORY

A	DATE	ISSUED FOR
1	11/18/24	BID ISSUE

**SHEET TITLE
SCHEDULE OF SPECIAL
INSPECTIONS**

DRAWING NUMBER

S-003



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**11/18/2024
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ABBREVIATIONS

(A)	ABANDON	DTR	DUAL TEMPERATURE WATER RETURN	IN	INCHES	RHS	REHEAT WATER SUPPLY
AAV	AUTOMATIC AIR VENT	DTS	DUAL TEMPERATURE WATER SUPPLY	INCL	INCLUD(E), (ING)	RL	REFRIGERANT LIQUID
AC	AIR CONDITIONER	DWG	DRAWING	INSL	INSULAT(E), (ED), (ION)	RP	RADIANT PANEL
ABS	ABSOLUTE	(E)	EXISTING	INT	INTERIOR	RFM	REVOLUTIONS PER MINUTE
ABV	ABOVE	EA	EXHAUST AIR	I/O	INPUT/OUTPUT	RS	REFRIGERANT SUCTION
AD	ACCESS DOOR	EAT	ENTERING AIR TEMPERATURE	IPS	INTERNATIONAL PIPE STANDARD	RTU	ROOFTOP UNIT
AFF	ABOVE FINISHED FLOOR	EBH	ELECTRIC BASEBOARD HEATER	KW	KILOWATT	RV	RELIEF VALVE
AFS	AIR FLOW STATION	EC	ELECTRICAL CONTRACTOR	L	LOUVER OR LENGTH	SA	SUPPLY AIR
AHU	AIR HANDLING UNIT	EER	ENERGY EFFICIENCY RATIO	LAT	LEAVING AIR TEMP	SD	SUPPLY DIFFUSER
AI	ANALOG INPUT	EF	EXHAUST FAN	LB	POUND	SEC	SECONDS
AO	ANALOG OUTPUT	EG	EXHAUST AIR GRILLE	LD	LINEAR DIFFUSER	SF	SUPPLY FAN
AP	ACCESS PANEL	EHC	ELECTRIC HEATING COIL	LF	LINEAR FEET	SG	SUPPLY GRILLE
APD	AIR PRESSURE DROP	ELEC	ELECTRICAL	LPG	LIQUEFIED PETROLEUM GAS	SP	STATIC PRESSURE
ATC	AUTOMATIC TEMPERATURE CONTROL	ELEV	ELEVATION	LPR	LOW PRESSURE STEAM CONDENSATE RETURN	SQ	SQUARE
ATM	ATMOSPHERE	ENT	ENTERING	LPS	LOW PRESSURE STEAM	SR	SUPPLY REGISTER
AS	AIR SEPARATOR	EQUIP	EQUIPMENT	LVG	LEAVING	ST	SOUND TRAP
AVG	AVERAGE	ER	EXHAUST REGISTER	LVR	LOUVER	STC	STEAM CONDENSATE
AWT	AVERAGE WATER TEMPERATURE	ERU	ENERGY RECOVERY UNIT	LWT	LEAVING WATER TEMP	STM	STEAM
BCU	BLOWER COIL UNIT	ESP	EXTERNAL STATIC PRESSURE	MAU	MAKEUP AIR UNIT	TDH	TOTAL DYNAMIC HEAD
BDD	BACK DRAFT DAMPER	ET	EXPANSION TANK	MAV	MANUAL AIR VENT	TDV	TRIPLE DUTY VALVE
BFP	BACKFLOW PREVENTER	EWH	ELECTRIC WALL HEATER	MAX	MAXIMUM	TG	TRANSFER GRILLE
BFW	BOILER FEEDWATER	EW	ENTERING WATER TEMPERATURE	MBH	1,000 BTUH	TSP	TOTAL STATIC PRESSURE
BFWP	BOILER FEEDWATER PUMP	EXP	EXPANSION	MC	MECHANICAL CONTRACTOR	TYP	TYPICAL
BI	BINARY INPUT	F	FAHRENHEIT	MECH	MECHANICAL	UC	UNDER CUT
BLR	BOILER	FA	FACE AREA	MIN	MINIMUM	UH	UNIT HEATER
BLW	BELOW	FBD	FACE & BYPASS DAMPER	MISC	MISCELLANEOUS	UNO	UNLESS NOTED OTHERWISE
BNR	BURNER	F&T	FLOAT & THERMOSTATIC	(N)	NEW	UV	UNIT VENTILATOR
BO	BINARY OUTPUT	FC	FLEXIBLE CONNECTION	NC	NOISE CRITERIA	VA	VOLT AMPERE
BOD	BOTTOM OF DUCT	FCU	FAN COIL UNIT	NK	NECK	VAV	VARIABLE AIR VOLUME
BOP	BOTTOM OF PIPE	FD	FIRE DAMPER	NTS	NOT TO SCALE	VB	VACUUM BREAKER
BTU	BRITISH THERMAL UNIT	FF	FINAL FILTER	OA	OUTSIDE AIR	VD	VOLUME DAMPER
BTUH	BTU PER HOUR	FIN	FINISH	OAD	OUTSIDE AIR DAMPER	VEL	VELOCITY
BYP	BYPASS	FLR	FLOOR	OAI	OUTSIDE AIR INTAKE	VFD	VARIABLE FREQUENCY DRIVE
C	CONNECTOR	FO	FUEL OIL	OAT	OUTSIDE AIR TEMPERATURE	VP	VELOCITY PRESSURE
CAP	CAPACITY	FOP	FUEL OIL PUMP	OD	OUTSIDE DIMENSIONS OR OUTSIDE DIAMETER	W	WIDTH
CAV	CONSTANT AIR VOLUME	FOR	FUEL OIL RETURN	OED	OPEN END DUCT	W/	WITHOUT
CC	COOLING COIL OR CEILING CASSETTE	FOS	FUEL OIL SUPPLY	OS&Y	OUTSIDE SCREW & YOKE	WB	WET BULB
CD	CONDENSATE DRAIN	FOV	FUEL OIL VENT	P	PUMP	W/O	WITHOUT
CFM	CUBIC FEET PER MINUTE	FTR	FINNED TUBE RADIATION	PD	PRESSURE DROP	WC	WATER COLUMN
CH	CHILLER	G	NATURAL GAS	PF	PRE FILTER	WH	WATER HEATER
CHWP	CHILLED WATER PUMP	GAL	GALLON	PH	PHASE	WMS	WIRE MESH SCREEN
CHWR	CHILLED WATER RETURN	GC	GENERAL CONTRACTOR	PHC	PREHEAT COIL	WT	WEIGHT
CHWS	CHILLED WATER SUPPLY	GPH	GALLONS PER HOUR	PHR	PREHEAT WATER RETURN		
CKT	CIRCUIT	GPM	GALLONS PER MINUTE	PHS	PREHEAT WATER SUPPLY		
CLG	CEILING	GRV	GRAVITY RELIEF VENTILATOR	PLMB	PLUMBING		
CONT	CONTINUATION	H	HUMIDIFIER	PPM	PARTS PER MILLION		
COP	COEFFICIENT OF PERFORMANCE	HC	HEATING COIL	PRV	PRESSURE REDUCING VALVE		
CP	CONDENSATE PUMP	HOA	HAND OFF AUTO	PSI	POUNDS PER SQUARE INCH		
CRP	CONDENSATE RETURN PUMP	HORIZ	HORIZONTAL	PSIA	POUNDS PER SQUARE INCH ABSOLUTE		
CT	COOLING TOWER	HP	HEAT PUMP OR HORSEPOWER	PSIG	POUNDS PER SQUARE INCH GAUGE		
CU	CONDENSING UNIT	HPLR	HEAT PUMP WATER LOOP RETURN	PTAC	PACKAGED TERMINAL AIR CONDITIONER		
CUH	CABINET UNIT HEATER	HPLS	HEAT PUMP WATER LOOP SUPPLY	PUH	PROPPELLER UNIT HEATER		
CW	COLD WATER (DOMESTIC)	HPR	HIGH PRESSURE STEAM CONDENSATE RETURN	PVC	POLYVINYL CHLORIDE		
CWP	CONDENSER WATER PUMP	HPS	HIGH PRESSURE STEAM	QTY	QUANTITY		
CWR	CONDENSER WATER RETURN	HR	HOUR	(R)	REMOVE		
CWS	CONDENSER WATER SUPPLY	HT	HEIGHT	RA	RETURN AIR		
DB	DRY BULB TEMPERATURE	HW	HOT WATER	RAG	RELIEF AIR GRILLE		
DDC	DIRECT DIGITAL CONTROL	HWP	HOT WATER PUMP	RAV	RELIEF AIR VENT		
DEG	DEGREE	HWR	HEATING HOT WATER RETURN	(REL)	RELOCATE		
DIA	DIAMETER	HWS	HEATING HOT WATER SUPPLY	RF	RETURN FAN		
DN	DOWN	HZ	HERTZ	RG	RETURN GRILLE		
DOAS	DEDICATED OUTSIDE AIR SYSTEM	ID	INSIDE DIMENSIONS OR INSIDE DIAMETER	RH	RELATIVE HUMIDITY		
DS	DUCT SILENCER	IL	INTERNALLY LINED	RHR	REHEAT WATER RETURN		

GENERAL NOTES

- THE FOLLOWING NOTES APPLY TO ALL MECHANICAL DRAWINGS.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE 2018 AND ALL OTHER APPLICABLE CODES AND STANDARDS.
- MECHANICAL CONTRACTOR SHALL ENSURE 36" MIN. CLEARANCE IN FRONT OF ALL ACCESS PANELS.
- ALL DRAWINGS ARE DIAGRAMMATIC. MECHANICAL CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK.
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, SIZES, CLEARANCES AND LOCATIONS PRIOR TO THE START OF CONSTRUCTION. WHEN CONFLICTS ARISE, MAKE ANY NECESSARY CHANGES TO ROUTING OF DUCTWORK AND PIPING AT NO ADDITIONAL COST.
- ALL FLOOR MOUNTED HVAC EQUIPMENT SHALL BE INSTALLED ON 4" HIGH CONCRETE HOUSEKEEPING PADS PROVIDED BY THE MECHANICAL CONTRACTOR.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING COORDINATION DRAWINGS SHOWING ALL TRADES, NO EQUIPMENT, PIPING, DUCTWORK, ETC. IS TO BE INSTALLED WITHOUT APPROVAL BY THE ENGINEER.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- SCHEDULES DO NOT REPRESENT EQUIPMENT QUANTITIES. REFER TO THE PLANS FOR ACTUAL QUANTITIES.
- DUCT SIZES SHOWN ON DRAWINGS REFER TO INSIDE CLEAR DIMENSIONS UNLESS OTHERWISE NOTED.
- ALL BRANCH DUCTS TO SUPPLY/RETURN/EXHAUST REGISTERS AND DIFFUSERS SHALL BE 2" LARGER (WIDER) THAN REGISTER/DIFFUSER NECK SIZE, UNLESS NOTED OTHERWISE.
- MECHANICAL CONTRACTOR SHALL PROVIDE FLEXIBLE CONNECTIONS AT ALL DUCTWORK TO EQUIPMENT CONNECTIONS.
- PROVIDE SUPPLY, RETURN AND EXHAUST DUCTWORK TRANSITIONS AS REQUIRED BY THE PLANS, SPECIFICATIONS, AND ACTUAL JOB CONDITIONS.
- COORDINATE ALL THERMOSTAT/TEMPERATURE SENSOR LOCATIONS WITH THE ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE ALL HUMIDISTAT/HUMIDITY SENSOR LOCATIONS WITH THE ARCHITECT PRIOR TO INSTALLATION.
- MECHANICAL CONTRACTOR SHALL PROVIDE "UL" LISTED FIRE DAMPERS FOR ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED SURFACES AND "UL" LISTED FIRE/SMOKE DAMPERS FOR ALL DUCTWORK PENETRATIONS THROUGH FIRE/SMOKE RATED SURFACES.
- MECHANICAL CONTRACTOR SHALL PROVIDE "UL" LISTED THROUGH PENETRATION FIRESTOP SYSTEMS WITH FIREPROOF SLEEVES AT ALL NEW PIPING PENETRATIONS THRU FIRE RATED WALLS AND FLOORS.
- INDICATED DUCT AND PIPING ARE DIAGRAMMATIC. MECHANICAL CONTRACTOR SHALL DETERMINE ALL REQUIRED OFFSETS AND DIRECTION CHANGES BEFORE FABRICATION AND INSTALLATION TO AVOID INTERFERENCE WITH OTHER TRADES.
- UNLESS OTHERWISE NOTED, ALL DUCTWORK AND PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF SLAB/STEEL, WITH SPACE FOR INSULATION.
- MANUFACTURERS AND MODEL NUMBERS INDICATED ON THE PLANS, SCHEDULES AND SKETCHES ARE PROVIDED AS A BASIS OF DESIGN ONLY. BIDDERS SHALL REFER TO THE SPECIFICATIONS FOR A LISTING OF MULTIPLE ACCEPTABLE MANUFACTURERS FOR EACH OF THESE ITEMS. SIMILAR PRODUCTS FROM ANY OF THESE MANUFACTURERS MAY BE FURNISHED PROVIDED THEY MEET THE INTENT OF THE SPECIFICATIONS. ANY CHANGES TO THE DESIGN REQUIRED AS A RESULT OF A SUBSTITUTION ARE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
- PROVIDE P-TRAP OF SUFFICIENT SEAL DEPTH TO OVERCOME UNIT STATIC PRESSURE ON ALL AIR HANDLING UNITS.
- REFER TO ELECTRICAL DRAWINGS FOR SMOKE DETECTOR LOCATIONS.

GENERAL DEMOLITION NOTES

- ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO DEMOLITION.
- PRIOR TO DEMOLITION CONTRACTOR SHALL REVIEW WITH OWNER ALL MATERIALS TO BE REMOVED. SHOULD THE OWNER OPT TO KEEP ANY MATERIALS, THE CONTRACTOR SHALL REMOVE AND DELIVER THE PARTS TO THE OWNER ON THE SITE WHERE SO DIRECTED. OTHERWISE, ALL DEMOLISHED OR REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, SHALL BE REMOVED FROM THE SITE, AND BE DISPOSED OF IN A LEGAL MANNER.
- DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. WHERE CONDITIONS PROHIBIT TOTAL REMOVAL OF THE WORK, THE REMAINING PORTION SHALL BE CUT FLUSH WITH THE SURROUNDING SURFACE SHALL BE REFINISHED IN AN APPROVED MANNER.
- PROTECT ALL UTILITIES AGAINST DAMAGE DURING DEMOLITION UNLESS SCHEDULED TO BE REMOVED OR REROUTED. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN SCHEDULED WITH THE OWNER.
- DO NOT REMOVE EXISTING STRUCTURAL WORK. DO NOT REMOVE OPERATIONAL ELEMENTS AND SAFETY-RELATED COMPONENTS IN A MANNER RESULTING IN A REDUCTION OF CAPACITIES TO PERFORM IN THE MANNER INTENDED OR RESULTING IN DECREASED OPERATIONAL LIFE, INCREASED MAINTENANCE, OR DECREASED SAFETY.
- REMOVALS, DISCONNECTIONS, AND RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND SHALL BE EMPLOYED BY A CONTRACTOR LICENSED IN THE TRADE INVOLVED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ACCEPTED TRADE PRACTICES.
- PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK TO REMAIN TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK.
- PROTECTION: PROVIDE ADEQUATE PROTECTION WHERE REQUIRED FOR THE PRESENT BUILDING AND ITS CONTENTS. TEMPORARY DUSTPROOF BARRIERS AND BARRICADES SHALL BE PROVIDED AND ERECTED WHERE REQUIRED FOR PROTECTION OF PERSONNEL, PROTECTION FROM DUST AND DIRT, FOR SECURITY, FIRE AND WEATHER PROTECTIVE REASONS. CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST FIRE BY EMPLOYING FIRE DEPARTMENT TYPE HOSES AND PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY OSHA AND/OR THE OWNER'S INSURANCE UNDERWRITER.
- EXTREME CARE SHALL BE EXERCISED FOR ALL EXISTING ITEMS THAT ARE TO REMAIN IN SERVICE UNTIL NEW ITEMS ARE INSTALLED FOR THE SAME SERVICE. ALL SHUTDOWNS OF ANY SYSTEM SHALL BE COORDINATED WITH THE OWNER.
- ALL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK

LIST OF DRAWINGS

MECHANICAL DRAWINGS

M001	MECHANICAL COVER SHEET
M101	MECHANICAL-KITCHEN PLANS
M102	MECHANICAL-KITCHEN SCHEDULES & DETAILS
M201	MECHANICAL OFFICE PLANS-BASE BID
M202	MECHANICAL OFFICE SCHEDULES & CONTROLS-BASE BID
M301	MECHANICAL OFFICE PLANS-ALTERNATE BID #1
M302	MECHANICAL OFFICE SCHEDULES & CONTROLS-ALTERNATE BID #1
M401	MECHANICAL MUSIC ROOM PLANS-ALTERNATE BID #2
M402	MECHANICAL MUSIC ROOM CONTROLS-ALTERNATE BID #2
M501	MECHANICAL DETAILS
M502	MECHANICAL DETAILS

SYMBOL LEGEND

	EQUIPMENT MARKER (TYPE SF, NUMBER 1)		OGEE OFFSET		BALL VALVE		PIPE REDUCER		DUAL TEMPERATURE SUPPLY PIPE		DENOTES CONNECT TO EXISTING
	SECTION INDICATOR (SECTION 1 ON DWG M301)		MITRE OFFSET		LOCKSHIELD BALL VALVE		PIPE FLANGE		DUAL TEMPERATURE RETURN PIPE		DENOTES LIMIT OF DEMOLITION
	DETAIL INDICATOR (DETAIL 1 ON DWG M501)		FLEXIBLE DUCT CONNECTION		BUTTERFLY VALVE		PIPE UNION		HEAT PUMP LOOP SUPPLY PIPE		EXISTING WORK TO REMAIN
	KEY NOTE INDICATOR (REFERS TO NOTES ON SAME SHEET)		BELLMOUTH TAKE-OFF		GATE VALVE		Y-TYPE STRAINER		HEAT PUMP LOOP RETURN PIPE		WORK TO BE REMOVED
	INSIDE DUCT DIMENSIONS (IN INCHES, FIRST DIM AS VIEWED) DASHED LINED INDICATES INTERNAL LINING		DUCT TO OFFSET UP IN DIRECTION OF ARROW TO AVOID OBSTRUCTION		OS&Y GATE VALVE		FUNNEL DRAIN		HIGH PRESSURE STEAM SUPPLY PIPE		NEW WORK
	RECTANGULAR SUPPLY DUCT TURNED UP		FIRE DAMPER		GLOBE VALVE		RELIEF VALVE		HIGH PRESSURE STEAM RETURN PIPE		
	RECTANGULAR SUPPLY DUCT TURNED DOWN		SMOKE DAMPER		PLUG VALVE		AIR VENT		HOT WATER SUPPLY PIPE		
	ROUND DUCT TURNED UP		BACKDRAFT DAMPER		3-WAY CONTROL VALVE		THERMOMETER IN THERMOWELL		HOT WATER RETURN PIPE		
	ROUND DUCT TURNED DOWN		MOTORIZED ATC DAMPER		2-WAY CONTROL VALVE		PRESSURE GAUGE W/SHUTOFF COCK		FUEL OIL SUPPLY PIPE		
	RECTANGULAR RETURN/EXHAUST DUCT TURNED UP		COMBINATION FIRE/SMOKE DAMPER		GAS PRESSURE REGULATOR		PRESSURE GAUGE W/SNUBBER AND SHUTOFF COCK		FUEL OIL RETURN PIPE		
	RECTANGULAR RETURN/EXHAUST DUCT TURNED DOWN		MANUAL VOLUME DAMPER		CHECK VALVE		PRESSURE GAUGE W/SYPHON AND SHUTOFF COCK		LOW PRESSURE STEAM SUPPLY PIPE		
	SQUARE ELBOW WITH TURNING VANE		GRILLE, REGISTER, DIFFUSER (GRD) MARKER (TAG A, 8" NECK, 200 CFM) S=SUPPLY R=RETURN E=EXHAUST T=TRANSFER		CALIBRATED BALANCING VALVE		PIPE CAP		LOW PRESSURE STEAM RETURN PIPE		
	ROUND ELBOW OR RADIUS ELBOW		SUPPLY AIR DIFFUSER (BLACK TRIANGLE INDICATES BLANK-OFF)		AUTOMATIC FLOW CONTROL VALVE		PIPE TURNED DOWN		PUMPED STEAM CONDENSATE		
			SUPPLY AIR DIFFUSER W/RIGID ELBOW AT NECK		TRIPLE DUTY VALVE (COMBINATION CHECK, BALANCING, SHUTOFF)		PIPE TURNED UP		COOLING COIL CONDENSATE DRAIN		
			RETURN/EXHAUST GRILLE OR REGISTER		PIPE ANCHOR		TEE TURNED DOWN		PREHEAT SUPPLY PIPE		
					PIPE GUIDE		TEE TURNED UP		PREHEAT RETURN PIPE		
					PIPE EXPANSION JOINT/EXPANSION COMPENSATOR		CHILLED WATER SUPPLY PIPE		REHEAT SUPPLY PIPE		
					FLOW SWITCH		CHILLED WATER RETURN PIPE		REHEAT RETURN PIPE		
					PRESSURE SWITCH		CONDENSER WATER SUPPLY PIPE		PUMP		
					VENTURI FLOW MEASURING DEVICE		THERMOSTAT/TEMPERATURE SENSOR		HUMIDITY SENSOR		
					PITOT DEVICE		STATIC PRESSURE SENSOR		CARBON DIOXIDE SENSOR		
							DOOR TO BE UNDERCUT 3/4"				

AGCS STATE ROAD KITCHEN AND OFFICE HVAC

110 E State Rd, West Grove, PA 19390
HSA PROJECT #: 24-018

HSA
Heckendorn Shiles Architects

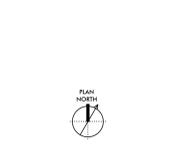
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KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE MECHANICAL COVER SHEET

DRAWING NUMBER

M001

PROJECT TEAM

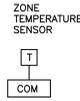
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SPLIT SYSTEM POINTS LIST												
POINT TAG	POINT DESCRIPTION	INPUTS				OUTPUTS				FUNCTION	REMARKS	
		DIGITAL	ANALOG	DIGITAL	ANALOG	DIGITAL	ANALOG	DIGITAL	ANALOG			
AI-1	ZONE TEMPERATURE											
DI-1	COMPRESSOR STATUS	X										
DO-1	DAMPER COMMAND					X						



WC AND OHRU SEQUENCE OF OPERATION:

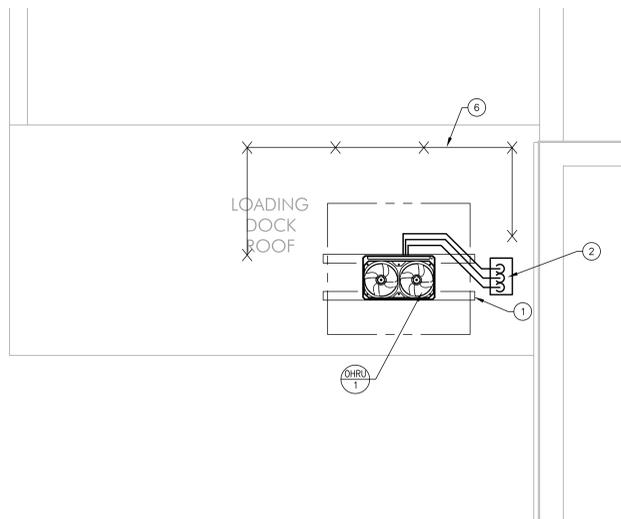
A. VRF SYSTEM AIR CONDITIONERS OPERATED BY MANUFACTURER CONTROLS. ALL NEW OHRUs/WCs SHALL BE INTEGRATED INTO THE OPERATOR'S WORKSTATION UTILIZING THE BAGNET INTERFACE PROVIDED BY THE UNIT MANUFACTURER. THE BUILDING'S EXISTING BMS IS SCHNEIDER ELECTRIC BY LIMA COMPANY/BUILDING CONTROLS SOLUTIONS. CONTACT: KARLO RADOLOVIC, 215-333-2220.

B. THE INTEGRAL CONDENSATE PUMP SAFETY SWITCH ON SPLIT SYSTEM HP UNITS SHALL BE WIRED TO ASSOCIATED UNIT. UPON CONDENSATE PUMP FAILURE VIA PUMP SAFETY SWITCH, UNIT SHALL BE DISABLED.

C. DISPLAY THE FOLLOWING INFORMATION:

- ROOM #
- ZONE TEMPERATURE & SETPOINT
- UNIT ON/OFF
- FAN SPEED
- FULL GRAPHICAL REPRESENTATION OF UNIT AND ALL ASSOCIATED POINTS.

4 MECHANICAL CONTROLS
M101 NO SCALE



**MECHANICAL NEW WORK
ROOF PLAN - KITCHEN**
M101 1/4" = 1'-0"

HEAT PUMP UNIT SCHEDULE																						
UNIT TAG	TONS	COOLING CAPACITY BTUH	HEATING CAPACITY BTUH TO °F AMBIENT	HEAT RECOVERY CAPACITY BTUH	COMPRESSOR			CONDENSER FAN MOTOR			ELECTRICAL CHARACTERISTICS			MAX. AMBIENT TEMP. °F	SEER (EER)	HSPF (COP)	MAXIMUM DIMENSIONS, IN. LxWxH	MAXIMUM SOUND PRESSURE LEVEL dBA	OPERATING WEIGHT LBS	BASIS OF DESIGN MANUFACTURER AND MODEL NO.		
					QTY.	H.P. EA.	RLA, COMP # 1/2	QTY.	KW EA.	FLA EA.	VOLTS	PHASE	CYCLE								MCA	MOCP
OHRU-1	8	90,000	100,000	108,000	2	-	13.7/13.7	2	0.8	-	208	3	60	38	45	95	(11.9)	(3.6)	43x29x67	61	725	DAIKEN REY96TJU

- ALL UNITS TO BE PROVIDED WITH NON-FUSED, UNIT MOUNTED DISCONNECT SWITCH BY THE EC.
- PROVIDE OHRU-1 WITH HEAT RECOVERY FOR SIMULTANEOUS HEATING & COOLING.
- PROVIDE COMPLETE WITH HERO SIMPLE EDGE CLOUD COMMUNICATION ADAPTOR.
- PROVIDE UNIT COMPLETE WITH OVER/UNDER VOLTAGE AND PHASE LOSS PROTECTION KIT.
- PROVIDE UNIT COMPLETE WITH LOW AMBIENT OPERATION DOWN TO 0°F.

VRF INDOOR HEAT RECOVERY UNIT SCHEDULE												
UNIT TAG	UNITS SERVED	NO. OF PORTS	MAX PORT CAPACITY BTUH	MAX UNIT CAPACITY BTUH	ELECTRICAL CHARACTERISTICS					MAXIMUM DIMENSIONS, IN. LxWxH	OPERATING WEIGHT LBS	BASIS OF DESIGN MANUFACTURER AND MODEL NO.
					VOLTS	PHASE	CYCLE	AMPS	MOCP			
IHRU-1	WC-1 - WC-5	6	54,000	216,000	208	1	60	0.6	15	24x24x10	73	DAIKEN BSF6Q54TVJ

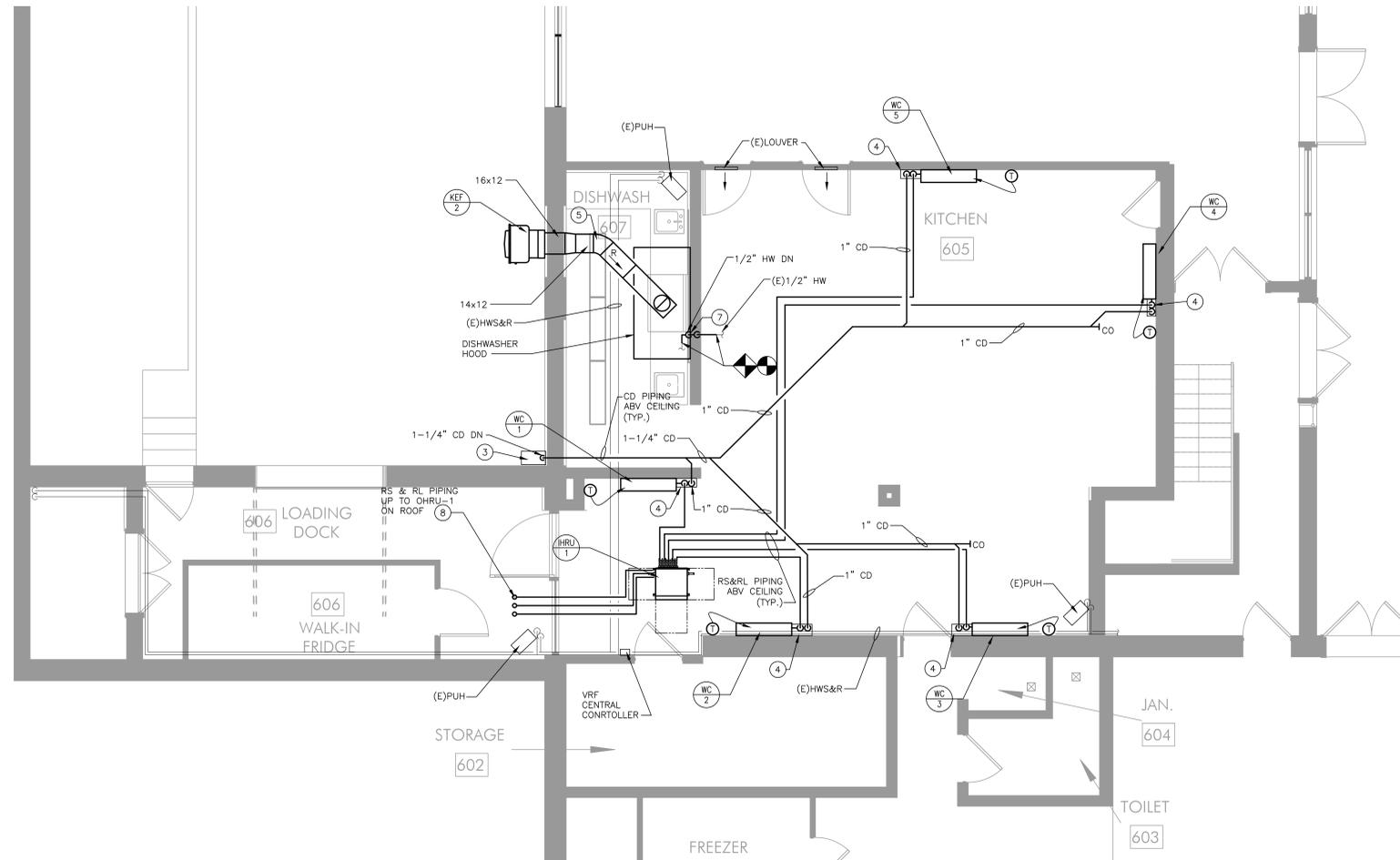
WALL CASSETTE UNIT SCHEDULE													
UNIT TAG	AREA SERVED	TOTAL SUPPLY CFM MEDIUM SPEED	TOTAL COOLING BTU/HR	TOTAL HEATING 47 °F AMBIENT BTUH	ELECTRICAL CHARACTERISTICS					MAXIMUM DIMENSIONS, IN. LxWxH	MAXIMUM WEIGHT LBS.	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVED BY
					VOLTS	PHASE	CYCLE	MCA	MOP				
WC-1	KITCHEN	635	24,000	26,500	208	1	60	0.6	15	42x10x12	31	DAIKEN FXAQ24PVJU	OHRU-1
WC-2	KITCHEN	635	24,000	26,500	208	1	60	0.6	15	42x10x12	31	DAIKEN FXAQ24PVJU	OHRU-1
WC-3	KITCHEN	635	24,000	26,500	208	1	60	0.6	15	42x10x12	31	DAIKEN FXAQ24PVJU	OHRU-1
WC-4	KITCHEN	635	24,000	26,500	208	1	60	0.6	15	42x10x12	31	DAIKEN FXAQ24PVJU	OHRU-1
WC-5	KITCHEN	635	24,000	26,500	208	1	60	0.6	15	42x10x12	31	DAIKEN FXAQ24PVJU	OHRU-1

- PROVIDE ALL UNITS COMPLETE W/ WALL MOUNTED HARD-WIRED THERMOSTAT DAIKEN MODEL BRC1E73.
- PROVIDE ALL UNITS COMPLETE W/ CONDENSATE PUMP DAIKEN MODEL DACA-CP3-1.
- PROVIDE ALL UNITS COMPLETE W/ DAIKEN DMS502B71 BAGNET INTERFACE.

NEEDLEPOINT BIPOLAR IONIZATION											
UNIT SERVED	AIRFLOW CAPACITY RANGE (CFM)	TOTAL ION OUTPUT (MILLION IONS/CC/SEC)	QTY. PER HVAC UNIT	ELECTRICAL CHARACTERISTICS (PER UNIT)					MAXIMUM DIMENSIONS L x W x H	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	REMARKS
				VOLTS	PHASE	CYCLE	WATTS	AMPS			
WC-1 - WC-5	0-2400	>160	1	208	1	60	7	0.5	4.2 x 1.1 x 2.6	GLOBAL PLASMA SOLUTIONS CI-2	1

- CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO ORDERING. UNIT SHALL BE PROVIDED WITH PS-2 POWER SUPPLY AND WIRED DIRECTLY TO AHU 208V POWER CIRCUIT.

3 MECHANICAL SCHEDULES
M101 NO SCALE



**MECHANICAL NEW WORK
FLOOR PLAN - KITCHEN**
M101 1/4" = 1'-0"

GENERAL NOTES:

- REFER TO MD-1 FOR FURTHER GENERAL DEMOLITION NOTES.
- TEMPORARILY REMOVE AND REINSTALL CEILING TILES AND GRID AS REQUIRED FOR WORK ABOVE CEILING.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF PATCHING & FLASHING.

NEW WORK KEY NOTES:

- PROVIDE AND INSTALL EQUIPMENT SUPPORT RAILS SIMILAR TO PATE MODEL ES AND ANCHOR UNIT TO RAILS. EQUIPMENT SUPPORT TO EXTEND FAST UNIT BY MIN 1'-0" FOR MOUNTING OF RECEPTABLE & DISCONNECT BY EC. GC SHALL REMOVE AND PROTECT EXISTING ADJACENT ROOFING AS REQUIRED TO SET EQUIPMENT RAIL ON TREATED WOOD BLOCKING THAT IS THE THICKNESS OF THE EXISTING ROOF INSULATION AND THE SIZE OF THE BASE FLANGE OF THE EQUIPMENT RAIL. GC SHALL PROVIDE THE NEW BLOCKING, ROOFING, AND FLASHING TO RETURN EXISTING ROOF ASSEMBLIES TO AN APPROVED AND WARRANTED ROOF.
- REFRIGERANT PIPING DN TO INDOOR UNIT. PROVIDE AND INSTALL NEW PIPE CURB SIMILAR TO ROOF PENETRATION HOUSING AW SERIES WITH WITH ALL EXIT SEALS AS REQUIRED FOR NEW REFRIGERANT PIPING AND ELECTRICAL CONDUITS. COORDINATE WITH EC FOR LOCATIONS AND QUANTITY OF CONDUITS. CUT OPENINGS AS REQUIRED. ANCHOR CURB TO STRUCTURE.
- RUN CONDENSATE TO EXTERIOR, W/ ELBOW AND SPILL 4" ABOVE GRADE ONTO CONCRETE SPLASH BLOCK. MAKE PENETRATION THROUGH WALL WEATHER-TIGHT. CONNECT CONDENSATE PIPING TO UNIT.
- PROVIDE ALL EXPOSED PIPING IN VERTICAL 3-SIDED 16 GAUGE STEEL PIPE ENCLOSURE FOR FULL LENGTH FROM UNIT UP TO CEILING INCLUDING ALL ELBOWS AND ENDCAPS. PIPE ENCLOSURE SHALL BE IG INNOVATIONS, INC. SOFFI-STEEL SYSTEM IN CUSTOM POWDER-COATED COLOR CHOSEN BY THE ARCHITECT. FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING.
- PROVIDE ALL NEW RECTANGULAR KITCHEN EXHAUST DUCT AS WELDED MINIMUM 18 GAUGE 316 STAINLESS STEEL DUCTWORK. PROVIDE SMOOTH RADIUS ELBOWS AND CONTINUOUSLY SLOPE TOWARDS HOOD OR EXHAUST FAN. REFER TO DWG A200 FOR DUCT AND FAN ELEVATIONS.
- PROVIDE PRE-FABRICATED PIPE GUARD RAILING ALONG ROOF EDGE, IN FRONT OF NEW ROOF MOUNTED UNITS, AND IN COMPLIANCE WITH THE MECHANICAL CODE AND OSHA. RAIL EQUAL TO "RAILGUARD 200 SYSTEM NON-PENETRATING SAFETY GUARDRAIL SYSTEM" AS MANUFACTURED BY GARLOCK SAFETY SYSTEMS. REFER TO SPECIFICATION 230500 FOR ADDITIONAL REQUIREMENTS.
- REMOVE EXISTING 1/2" HW PIPING FROM ABOVE CEILING DOWN TO DISHWASHER BOOSTER HEATER. REPLACE PIPING WITH NEW 1/2" HW PIPE FROM ABOVE CEILING DOWN IN NEW WALL AND OFFSET DOWN ADJACENT TO EXISTING HALF WALL. PROVIDE NEW SHUTOFF VALVE PRIOR TO CONNECTION TO BOOSTER HEATER.
- PROVIDE ALL EXPOSED REFRIGERANT PIPING IN LOADING DOCK AREA IN PVC JACKET PER SPECIFICATION 230700.

KEYPLAN



ISSUE HISTORY

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	2024-11-18	BID SUBMISSION

SHEET TITLE

**MECHANICAL -
KITCHEN
PLANS**

DRAWING NUMBER

M101

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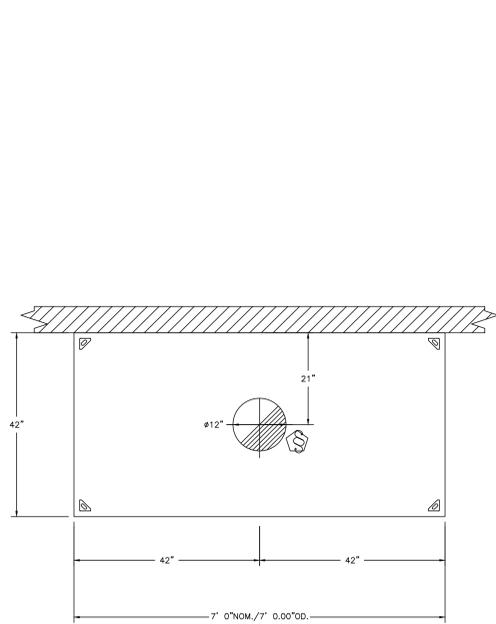
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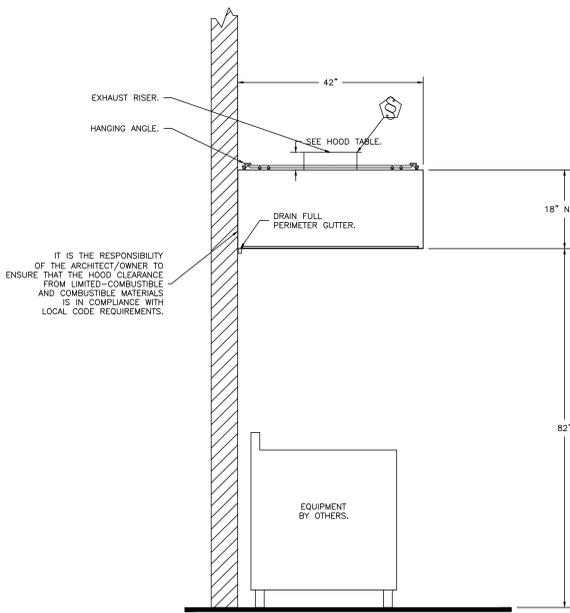
HOOD INFORMATION - JOB#7111144

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH. CFM	EXHAUST PLENUM RISER(S)				HOOD CONSTRUCTION	HOOD CONFIG		HOOD HANGING WEIGHT	
										WIDTH	LENG	HEIGHT	DIA		CFM	VEL		SP
1	Dish Hood	4218 VHB-G	CAPTIVEAIRE	7' 0"	700 DEG	II	N/A	150	1050		4"	12"	1050	1337	-0.129"	430 SS 100%	ALONE ALONE	159 LBS

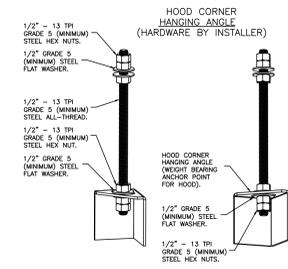
FOR QUESTIONS, CALL THE
Eastern PA Mechanical
REGION 108
PHONE: (267) 504 - 4126
EMAIL: reg108@captiveaire.com



PLAN VIEW - HOOD #1 (Dish Hood)
7' 0.00" LONG 4218VHB-G

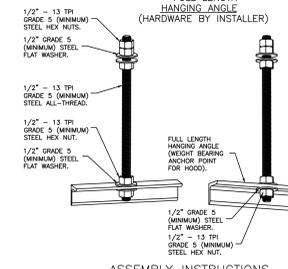


SECTION VIEW - MODEL 4218VHB-G
HOOD - #1 (Dish Hood)



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

EXHAUST FAN INFORMATION - JOB#7111144

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1	KEF-2	1	DU50HFA	CAPTIVEAIRE	1050	0.500	1469	TEAO-ECM	0.500	0.3220	1	115	6.3	399 FPM	86	14.8

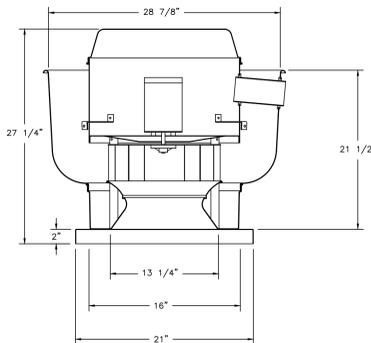
FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	KEF-2	1	FAN BASE CERAMIC SEAL - DU/DR50HFA - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -MSC- (TELCO), CCW ROTATION
		1	WALLMOUNT 20.5" SQ. X 5"
		1	WALL MOUNT CONSTRUCTION FOR FAN
		1	SHIP LOOSE DISCONNECT FOR REMOTE MOUNT
		1	1 15-BDD DAMPER
		1	SCR-13 BIRD SCREEN
1	2 YEAR PARTS WARRANTY		

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	KEF-2		YES	YES				

FAN #1 DU50HFA - EXHAUST FAN (KEF-2)



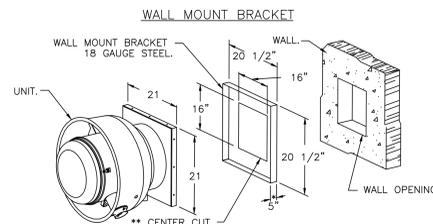
TOP VIEW

FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- UL705.
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- NEMA 3R SAFETY DISCONNECT SWITCH.

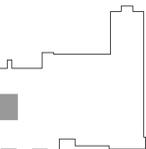
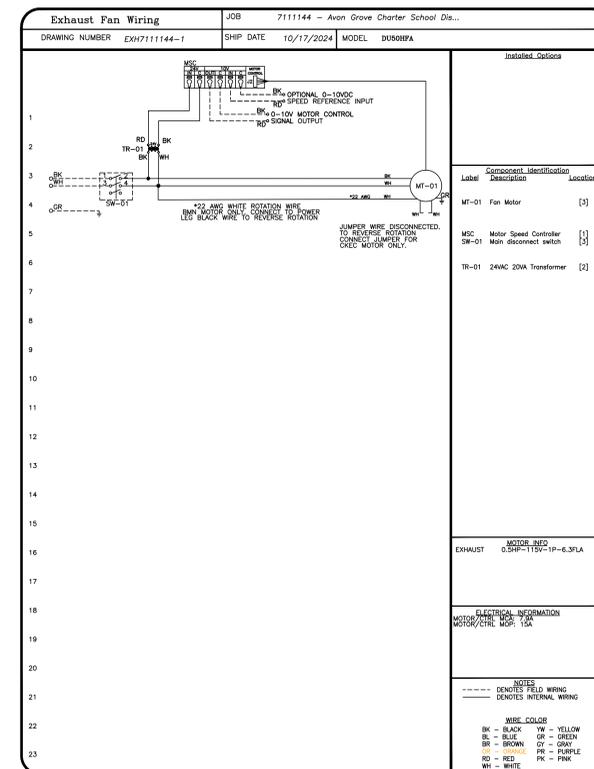
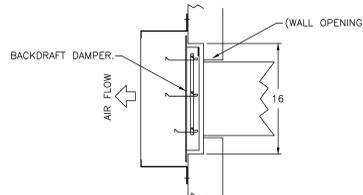
OPTIONS

- FAN BASE CERAMIC SEAL - DU/DR50HFA - INSTALLED AT PLANT - FOR GREASE DUCTS.
- ECM WIRING PACKAGE - EXHAUST - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -MSC- (TELCO), CCW ROTATION.
- WALLMOUNT 20.5" SQ. X 5".
- WALL MOUNT CONSTRUCTION FOR FAN.
- SHIP LOOSE DISCONNECT FOR REMOTE MOUNT.
- 1 15-BDD DAMPER
- SCR-13 BIRD SCREEN.
- 2 YEAR PARTS WARRANTY.



- WALL BRACKET FITS INTO BASE OF FAN.
- SELF DRILLING SCREWS SHOULD BE USED FOR UNIT ATTACHMENT TO WALL MOUNT BRACKET.
- * DIMENSION = 5" WHEN USED WITH DAMPER.
- ** CENTERED IN WALL MOUNT.

BACKDRAFT DAMPER INSTALLATION



KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

**MECHANICAL -
KITCHEN SCHEDULES
& DETAILS**

DRAWING NUMBER

M102

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DEMOLITION GENERAL NOTES:

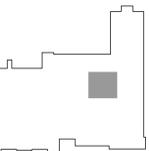
- REFER TO M0.1 FOR FURTHER GENERAL DEMOLITION NOTES.
- TEMPORARILY REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR WORK ABOVE CEILINGS.
- PROVIDE ALL ASSOCIATED HOT WATER SYSTEM ISOLATION, DRAINAGE AND RE-FILLING AS REQUIRED FOR WORK ON DRAWINGS AND SPECIFICATIONS. DO NOT ASSUME THAT THE ISOLATION VALVES SHOWN WILL HOLD.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF PATCHING & FLASHING.

NEW WORK KEY NOTES:

- PROVIDE AND INSTALL EQUIPMENT SUPPORT RAILS SIMILAR TO PATE MODEL ES AND ANCHOR UNIT TO RAILS. EQUIPMENT SUPPORT TO EXTEND PAST UNIT BY MIN 1'-0" FOR MOUNTING OF RECEPTACLE & DISCONNECT BY EC. GC SHALL REMOVE AND PROTECT EXISTING ADJACENT ROOFING AS REQUIRED TO SET EQUIPMENT RAIL ON TREATED WOOD BLOCKING THAT IS THE THICKNESS OF THE EXISTING ROOF INSULATION AND THE SIZE OF THE BASE FLANGE OF THE EQUIPMENT RAIL. GC SHALL PROVIDE THE NEW BLOCKING, ROOFING, AND FLASHING TO RETURN EXISTING ROOF ASSEMBLES TO AN APPROVED AND WARRANTED ROOF.
- REFRIGERANT PIPING DN TO INDOOR UNIT. PROVIDE AND INSTALL NEW PIPE CURB SIMILAR TO ROOF PENETRATION HOUSING AW SERIES WITH ALL EXIT SEALS AS REQUIRED FOR NEW REFRIGERANT PIPING AND ELECTRICAL CONDUITS. COORDINATE WITH EC FOR LOCATIONS AND QUANTITY OF CONDUITS. CUT OPENINGS AS REQUIRED. ANCHOR CURB TO STRUCTURE.
- RUN CONDENSATE TO EXTERIOR, W/ ELBOW AND SPILL 4" ABOVE GRADE ONTO CONCRETE SPLASH BLOCK. MAKE PENETRATION THROUGH WALL WEATHER-TIGHT. CONNECT CONDENSATE PIPING TO UNIT.
- PROVIDE ALL EXPOSED PIPING IN VERTICAL 3-SIDED 16 GAUGE STEEL PIPE ENCLOSURE FOR FULL LENGTH OF SPACE. PIPE ENCLOSURE SHALL BE JO INNOVATIONS, INC. SOFFI-STEEL SYSTEM IN CUSTOM POWDER-COATED COLOR CHOSEN BY THE ARCHITECT. FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING.
- PROVIDE PIPE SUPPORTS SIMILAR TO MIRO INDUSTRIES MODEL 8-BASE STRUT-12 FOR PIPING ON ROOF. PROVIDE AND PLACE ROOF PIPING SUPPORTS ON SUPPORT PADS THAT ARE MANUFACTURED BY THE EPDM ROOF MANUFACTURER. SPACE SUPPORTS PER MANUFACTURER'S RECOMMENDATIONS.
- REPLACE EXISTING THERMAL EXPANSION VALVE WITH NEW THERMAL EXPANSION VALVE FOR REFRIGERANT R-454B.

DEMOLITION KEY NOTES:

- REMOVE SPLIT SYSTEM DX AIR HANDLER UNIT IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO, ASSOCIATED REFRIGERANT PIPING, CONDENSATE PUMP & PIPING AND CONTROLS. REFER TO ARCHITECTURAL DWGS FOR PATCHING OF WALL TO MATCH EXISTING.
- REMOVE SPLIT SYSTEM CONDENSING UNIT IN ITS ENTIRETY, INCLUDING REFRIGERANT PIPING, PIPE PORTAL, ROOF SUPPORTS AND CONTROLS. REFER TO ARCHITECTURAL DRAWINGS FOR PATCHING OF ROOF.
- REMOVE RELIEF AIR VENT IN ITS ENTIRETY, INCLUDING ASSOCIATED DAMPER AND ROOF CURB. REUTILIZE EXISTING OPENING FOR NEW OUTSIDE AIR INTAKE. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING OF ROOF.
- REMOVE CEILING MOUNTED EXHAUST FAN IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO, ASSOCIATED DUCTWORK HANGERS, SUPPORTS AND CONTROLS.



KEYPLAN



ISSUE HISTORY

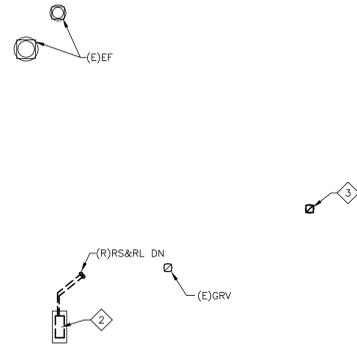
Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

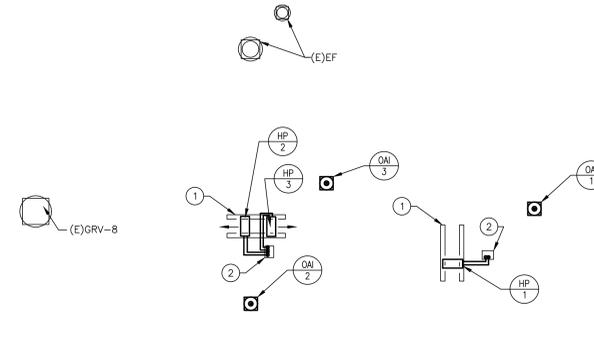
**MECHANICAL
OFFICE PLANS -
BASE BID**

DRAWING NUMBER

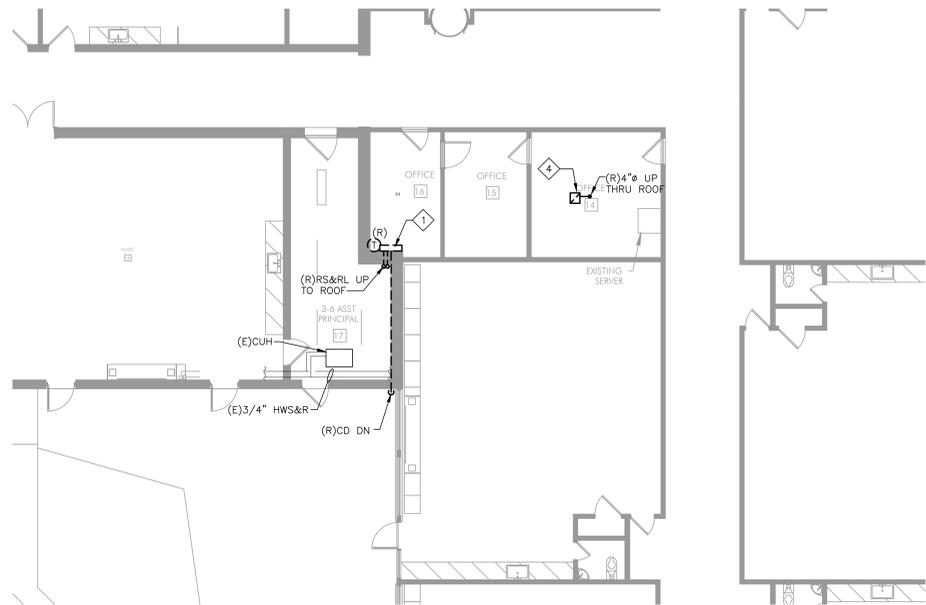
M201



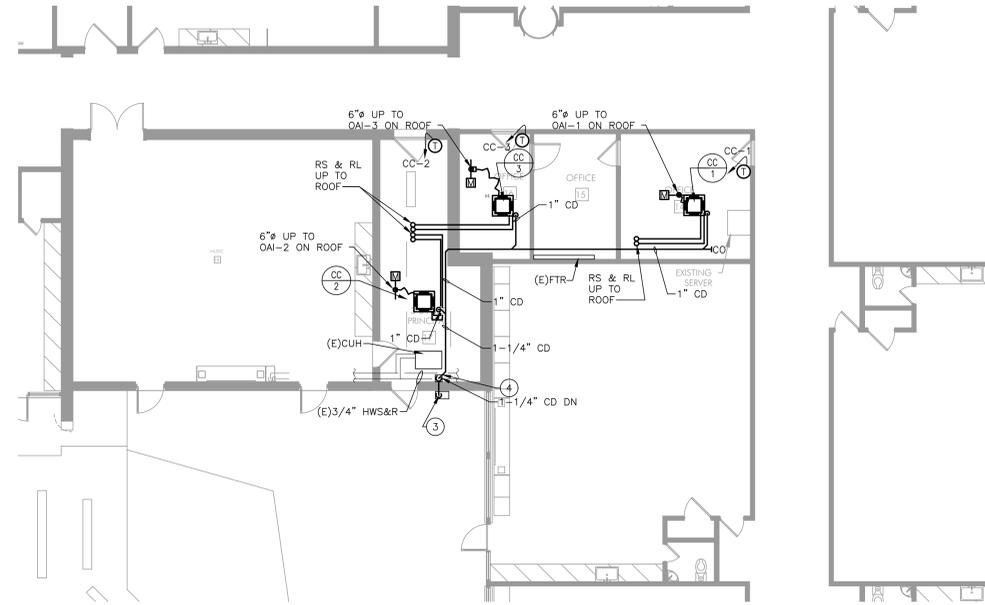
**MECHANICAL DEMO WORK -
2 ROOF**
M201 1/8" = 1'-0"



**MECHANICAL NEW WORK -
4 ROOF**
M201 1/8" = 1'-0"



**MECHANICAL DEMO WORK -
1 1ST FLOOR**
M201 1/8" = 1'-0"



**MECHANICAL NEW WORK -
3 1ST FLOOR**
M201 1/8" = 1'-0"

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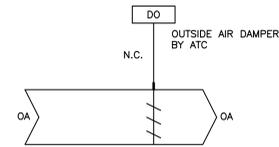
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CC AND HP SEQUENCE OF OPERATION:

- A. DUCTLESS SPLIT SYSTEM AIR CONDITIONERS OPERATED BY MANUFACTURER CONTROLS. THE CONTROLLER SHALL INDEX THE INDOOR UNIT SUPPLY FAN TO RUN CONTINUOUSLY WHILE IN OCCUPIED MODE. ALL NEW CCs/HPs SHALL BE INTEGRATED INTO THE OPERATOR'S WORKSTATION UTILIZING THE BACNET INTERFACE PROVIDED BY THE UNIT MANUFACTURER. THE BUILDING'S EXISTING BMS IS SCHNEIDER ELECTRIC BY LIMA COMPANY/BUILDING CONTROLS SOLUTIONS. CONTACT: KARLO RADOLVIC, 215-333-2220.
- B. THE INTEGRAL CONDENSATE PUMP SAFETY SWITCH ON SPLIT SYSTEM HP UNITS SHALL BE WIRED TO ASSOCIATED UNIT. UPON CONDENSATE PUMP FAILURE VIA PUMP SAFETY SWITCH, UNIT SHALL BE DISABLED.
- C. OA DAMPER CONTROLLER INTEGRATION REQUIREMENTS: PROVIDE UNIT SCHEDULING FUNCTION THROUGH THE OPERATOR'S WORKSTATION FOR CONTROL OF OA DAMPER. PROVIDE ALL ASSOCIATED DAMPER TRANSFORMER AND RELAYS.
1. OCCUPIED MODE: WHEN THE AHU ZONE IS IN OCCUPIED MODE AND THE AHU FAN IS RUNNING, THE OUTSIDE AIR DAMPER SHALL OPEN.
2. UNOCCUPIED MODE: THE OUTSIDE AIR DAMPER SHALL CLOSE.
- D. DISPLAY THE FOLLOWING INFORMATION:
- ROOM #
 - ZONE TEMPERATURE & SETPOINT
 - UNIT ON/OFF
 - FAN SPEED
 - DAMPER POSITION
 - FULL GRAPHICAL REPRESENTATION OF UNIT AND ALL ASSOCIATED POINTS.

POINT TAG	POINT DESCRIPTION	SPLIT SYSTEM POINTS LIST										REMARKS						
		INPUTS					OUTPUTS						FUNCTION					
		SAFETY SHUT DOWN	DIGITAL	ANALOG	DIGITAL	ANALOG	STATUS	ON/OFF	MODULATE	SPEED	ALARM							
AI-1	ZONE TEMPERATURE																	
DI-1	COMPRESSOR STATUS		X															
DO-1	DAMPER COMMAND									X								

2 MECHANICAL CONTROLS
M202 NO SCALE

UNIT TAG	AREA SERVED	TOTAL SUPPLY CFM	MINIMUM OA CFM	TOTAL COOLING BTU/HR	TOTAL HEATING BTU/HR	CORRECTED HEATING BTU/HR (14' F)	ELECTRICAL CHARACTERISTICS				MAXIMUM DIMENSIONS, IN. LxWxH	OPERATING WEIGHT LBS.	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVED BY
							VOLTS	PHASE	CYCLE	FLA				
CC-1	OFFICE 14	498	30	17,400	21,600	12,300	208	1	60	0.28	24x24x12	39	DAIKIN FFQ18W2VJU9	HP-1
CC-2	ASST PRINCIPAL 17	441	30	14,400	16,200	9,250	208	1	60	0.28	24x24x12	36	DAIKIN FFQ15W2VJU9	HP-2
CC-3	OFFICE 16	427	20	10,800	13,500	7,700	208	1	60	0.28	24x24x12	36	DAIKIN FFQ12W2VJU9	HP-3

- PROVIDE UNIT WITH WALL MOUNTED HARD-WIRED THERMOSTAT.
- PROVIDE ALL UNITS COMPLETE WITH INTEGRAL CONDENSATE PUMP.
- PROVIDE ALL UNITS WITH VENTILATION KIT.
- UNIT WIRED FROM OUTDOOR UNIT. REFER TO AIR COOLED HEAT PUMP UNIT SCHEDULE.

UNIT TAG	TONS	COMPRESSOR		CONDENSER FAN MOTOR			ELECTRICAL CHARACTERISTICS					MAX. AMBIENT TEMP. °F	SEER2	COP2	OPERATING WEIGHT, LBS	MAXIMUM DIMENSIONS, IN. LxWxH	INDOOR UNIT SERVED	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	
		QTY.	H.P. EA.	RLA EA.	QTY.	H.P. EA.	FLA EA.	VOLTS	PHASE	CYCLE	MCA								MOCP
HP-1	1.5	1	-	10.8	1	-	0.6	208	1	60	11.0	15	115	18.2	3.0	100	35x13x29	CC-1	DAIKIN RX18RMVJU9A
HP-2	1.25	1	-	8.0	1	-	0.5	208	1	60	8.3	15	115	19.6	3.5	100	35x13x29	CC-2	DAIKIN RX15RMVJU9A
HP-3	1.0	1	-	7.5	1	-	0.2	208	1	60	8.1	15	115	19.5	3.7	63	35x13x29	CC-3	DAIKIN RX12RMVJU9A

- EC TO PROVIDE NON-FUSED UNISTRUT MOUNTED DISCONNECT SWITCH.
- PROVIDE HP-1 COMPLETE WITH LOW AMBIENT OPERATION DOWN TO 0°F.

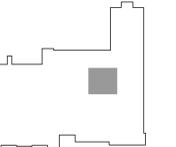
OAI NO.	LOCATION	AREA SERVED	CFM	S.P. °WC	THROAT OPENING SIZE (IN)	TYPE	REMARKS	MAX DIM.	WEIGHT (LBS)	BASIS OF DESIGN MANUFACTURER AND MODEL NO.
OAI-1	ROOF	OFFICE	30	0.01	8"φ	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8
OAI-2	ROOF	OFFICE	30	0.01	8"φ	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8
OAI-3	ROOF	OFFICE	20	0.01	8"φ	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8

PROVIDE UNIT COMPLETE WITH DAMPER TRAY AND 18" ROOF CURB.

UNIT SERVED	AIRFLOW CAPACITY RANGE (CFM)	TOTAL ION OUTPUT (MILLION IONS/CC/SEC)	QTY. PER HVAC UNIT	ELECTRICAL CHARACTERISTICS (PER UNIT)					MAXIMUM DIMENSIONS L x W x H	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	REMARKS
				VOLTS	PHASE	CYCLE	WATTS	AMPS			
CC-1 - CC-3	0-2400	>160	1	208	1	60	7	0.5	4.2 x 1.1 x 2.6	GLOBAL PLASMA SOLUTIONS CI-2	1

- CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO ORDERING. UNIT SHALL BE PROVIDED WITH PS-2 POWER SUPPLY AND WIRED DIRECTLY TO AHU 208V POWER CIRCUIT.

1 MECHANICAL SCHEDULES
M202 NO SCALE



KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

**MECHANICAL OFFICE
SCHEDULES &
CONTROLS-BASE BID**

DRAWING NUMBER

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215-886-8947

DEMOLITION GENERAL NOTES:

1. REFER TO M0.1 FOR FURTHER GENERAL DEMOLITION NOTES.
2. TEMPORARILY REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR WORK ABOVE CEILINGS.
3. PROVIDE ALL ASSOCIATED HOT WATER SYSTEM ISOLATION, DRAINAGE AND RE-FILLING AS REQUIRED FOR WORK ON DRAWINGS AND SPECIFICATIONS. DO NOT ASSUME THAT THE ISOLATION VALVES SHOWN WILL HOLD.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF PATCHING & FLASHING.
5. WORK ON THIS DRAWING INCLUDES ALTERNATE BID #1 WORK AND ALSO SHOWS BASE BID WORK FOR REFERENCE.

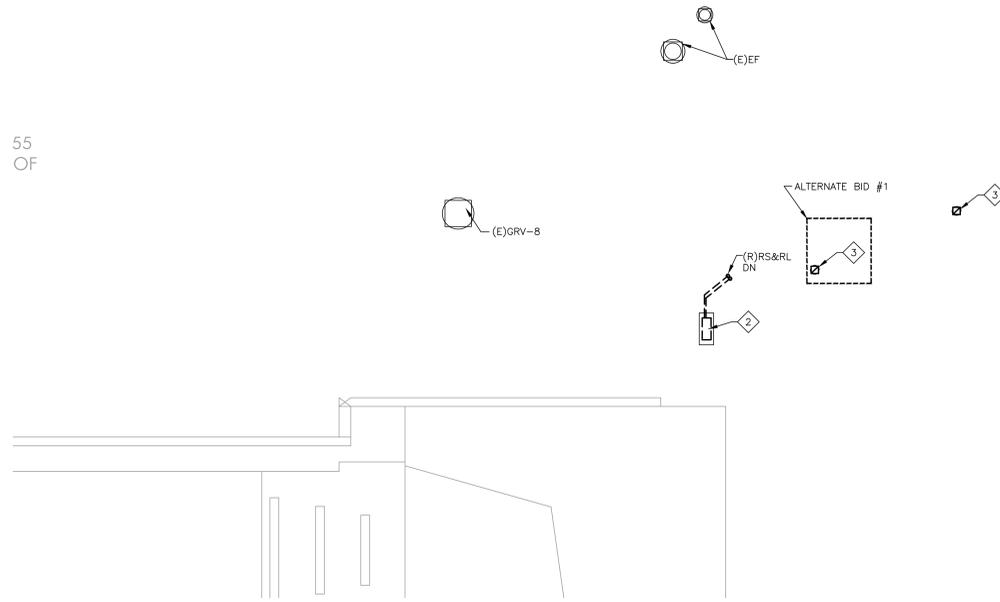
NEW WORK KEY NOTES:

1. PROVIDE AND INSTALL EQUIPMENT SUPPORT RAILS SIMILAR TO PATE MODEL ES AND ANCHOR UNIT TO RAILS. EQUIPMENT SUPPORT TO EXTEND PAST UNIT BY MIN 1'-0" FOR MOUNTING OF RECEPTACLE & DISCONNECT BY EC. GC SHALL REMOVE AND PROTECT EXISTING ADJACENT ROOFING AS REQUIRED TO SET EQUIPMENT RAIL ON TREATED WOOD BLOCKING THAT IS THE THICKNESS OF THE EXISTING ROOF INSULATION AND THE SIZE OF THE BASE FLANGE OF THE EQUIPMENT RAIL. GC SHALL PROVIDE THE NEW BLOCKING, ROOFING, AND FLASHING TO RETURN EXISTING ROOF ASSEMBLES TO AN APPROVED AND WARRANTED ROOF.
2. REFRIGERANT PIPING DN TO INDOOR UNIT. PROVIDE AND INSTALL NEW PIPE CURB SIMILAR TO ROOF PENETRATION HOUSING AW SERIES WITH ALL EXIT SEALS AS REQUIRED FOR NEW REFRIGERANT PIPING AND ELECTRICAL CONDUITS. COORDINATE WITH EC FOR LOCATIONS AND QUANTITY OF CONDUITS. CUT OPENINGS AS REQUIRED. ANCHOR CURB TO STRUCTURE.
3. RUN CONDENSATE TO EXTERIOR, W/ ELBOW AND SPILL 4" ABOVE GRADE ONTO CONCRETE SPLASH BLOCK. MAKE PENETRATION THROUGH WALL WEATHER-TIGHT. CONNECT CONDENSATE PIPING TO UNIT.
4. PROVIDE ALL EXPOSED PIPING IN VERTICAL 3-SIDED 16 GAUGE STEEL PIPE ENCLOSURE FOR FULL LENGTH OF SPACE. PIPE ENCLOSURE SHALL BE JO INNOVATIONS, INC. SOFFI-STEEL SYSTEM IN CUSTOM POWDER-COATED COLOR CHOSEN BY THE ARCHITECT. FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING.
5. PROVIDE PIPE SUPPORTS SIMILAR TO MIRO INDUSTRIES MODEL 8-BASE STRUT-12 FOR PIPING ON ROOF. PROVIDE AND PLACE ROOF PIPING SUPPORTS ON SUPPORT PADS THAT ARE MANUFACTURED BY THE EPDM ROOF MANUFACTURER. SPACE SUPPORTS PER MANUFACTURER'S RECOMMENDATIONS.
6. REPLACE EXISTING THERMAL EXPANSION VALVE WITH NEW THERMAL EXPANSION VALVE FOR REFRIGERANT R-454B.

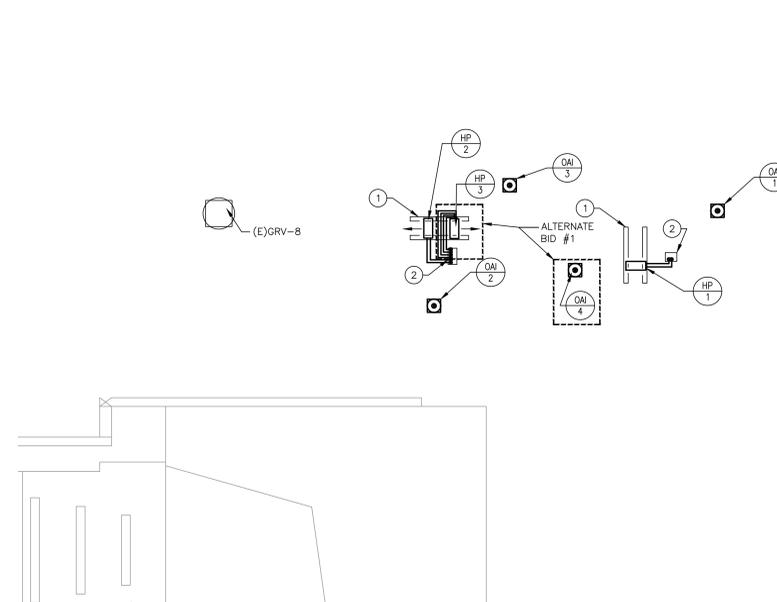
DEMOLITION KEY NOTES:

1. REMOVE SPLIT SYSTEM DX AIR HANDLER UNIT IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO, ASSOCIATED REFRIGERANT PIPING, CONDENSATE PUMPS & PIPING AND CONTROLS. REFER TO ARCHITECTURAL DWGS FOR PATCHING OF WALL TO MATCH EXISTING.
2. REMOVE SPLIT SYSTEM CONDENSING UNIT IN ITS ENTIRETY, INCLUDING REFRIGERANT PIPING, PIPE PORTAL, ROOF SUPPORTS AND CONTROLS. REFER TO ARCHITECTURAL DRAWINGS FOR PATCHING OF ROOF.
3. REMOVE RELIEF AIR VENT IN ITS ENTIRETY, INCLUDING ASSOCIATED DAMPER AND ROOF CURB. REUTILIZE EXISTING OPENING FOR NEW OUTSIDE AIR INTAKE. REFER TO ARCHITECTURAL DRAWINGS FOR FLASHING OF ROOF.
4. REMOVE CEILING MOUNTED EXHAUST FAN IN ITS ENTIRETY, INCLUDING BUT NOT LIMITED TO, ASSOCIATED DUCTWORK HANGERS, SUPPORTS AND CONTROLS.

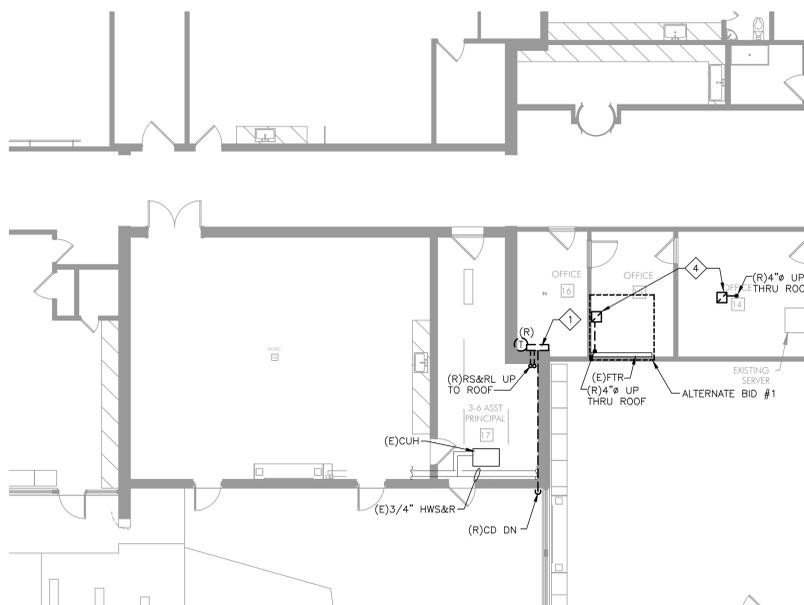
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OF



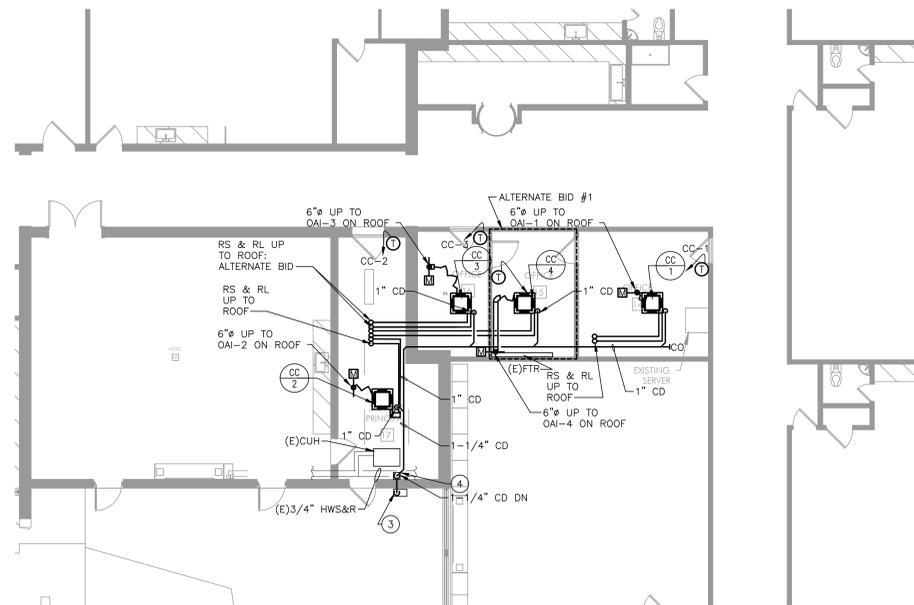
**MECHANICAL DEMO WORK -
ROOF**
2
M301 1/8" = 1'-0"



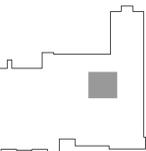
**MECHANICAL NEW WORK -
ROOF**
4
M301 1/8" = 1'-0"



**MECHANICAL DEMO WORK -
1ST FLOOR**
1
M301 1/8" = 1'-0"



**MECHANICAL NEW WORK -
1ST FLOOR**
3
M301 1/8" = 1'-0"



KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

**MECHANICAL
OFFICE PLANS -
ALTERNATE BID #1**

DRAWING NUMBER

M301

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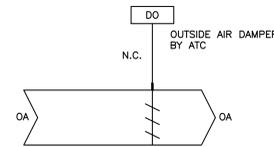
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CC AND HP SEQUENCE OF OPERATION:

- A. DUCTLESS SPLIT SYSTEM AIR CONDITIONERS OPERATED BY MANUFACTURER CONTROLS. THE CONTROLLER SHALL INDEX THE INDOOR UNIT SUPPLY FAN TO RUN CONTINUOUSLY WHILE IN OCCUPIED MODE. ALL NEW CCs/HPs SHALL BE INTEGRATED INTO THE OPERATOR'S WORKSTATION UTILIZING THE BACNET INTERFACE PROVIDED BY THE UNIT MANUFACTURER. THE BUILDING'S EXISTING BMS IS SCHNEIDER ELECTRIC BY LIMA COMPANY/BUILDING CONTROLS SOLUTIONS. CONTACT: KARLO RADOLOVIC, 215-333-2220.
- B. THE INTEGRAL CONDENSATE PUMP SAFETY SWITCH ON SPLIT SYSTEM HP UNITS SHALL BE WIRED TO ASSOCIATED UNIT. UPON CONDENSATE PUMP FAILURE VIA PUMP SAFETY SWITCH, UNIT SHALL BE DISABLED.
- C. OA DAMPER CONTROLLER INTEGRATION REQUIREMENTS: PROVIDE UNIT SCHEDULING FUNCTION THROUGH THE OPERATOR'S WORKSTATION FOR CONTROL OF OA DAMPER. PROVIDE ALL ASSOCIATED DAMPER TRANSFORMER AND RELAYS.
- OCCUPIED MODE: WHEN THE AHU ZONE IS IN OCCUPIED MODE AND THE AHU FAN IS RUNNING, THE OUTSIDE AIR DAMPER SHALL OPEN.
 - UNOCCUPIED MODE: THE OUTSIDE AIR DAMPER SHALL CLOSE.
- D. DISPLAY THE FOLLOWING INFORMATION:
- ROOM #
 - ZONE TEMPERATURE & SETPOINT
 - UNIT ON/OFF
 - FAN SPEED
 - DAMPER POSITION
 - FULL GRAPHICAL REPRESENTATION OF UNIT AND ALL ASSOCIATED POINTS.

POINT TAG	POINT DESCRIPTION	SPLIT SYSTEM POINTS LIST										REMARKS	
		INPUTS					OUTPUTS						
		SAFETY SHUT DOWN	DIGITAL	ANALOG	DIGITAL	ANALOG	FUNCTION						
AI-1	ZONE TEMPERATURE			X							X		
DI-1	COMPRESSOR STATUS	X											
DO-1	DAMPER COMMAND						X						

2 MECHANICAL CONTROLS
NO SCALE

UNIT TAG	AREA SERVED	TOTAL SUPPLY CFM	MINIMUM OA CFM	TOTAL COOLING BTU/HR	TOTAL HEATING BTU/HR	CORRECTED HEATING BTU/HR (14° F)	ELECTRICAL CHARACTERISTICS				MAXIMUM DIMENSIONS, IN. LxWxH	OPERATING WEIGHT, LBS.	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVED BY	BID
							VOLTS	PHASE	CYCLE	FLA					
							CC-1	OFFICE 14	498	30					
CC-2	ASST PRINCIPAL 17	441	30	14,400	16,200	9,250	208	1	60	0.28	24x24x12	36	DAIKIN FFQ15W2JU9	HP-2	BASE
CC-3	OFFICE 16	378	20	9,000	9,450	7,700	208	1	60	0.23	24x24x12	36	DAIKIN FFQ09Q2VJU9	HP-3	ALTERNATE #1
CC-4	OFFICE 15	378	20	9,000	9,450	7,700	208	1	60	0.23	24x24x12	36	DAIKIN FFQ09Q2VJU9	HP-3	ALTERNATE #1

- PROVIDE UNIT WITH WALL MOUNTED HARD-WIRED THERMOSTAT.
- PROVIDE ALL UNITS COMPLETE WITH INTEGRAL CONDENSATE PUMP.
- PROVIDE ALL UNITS WITH VENTILATION KIT.
- UNIT WIRED FROM OUTDOOR UNIT. REFER TO AIR COOLED HEAT PUMP UNIT SCHEDULE.

UNIT TAG	TONS	COMPRESSOR		CONDENSER FAN MOTOR			ELECTRICAL CHARACTERISTICS					MAX. AMBIENT TEMP. °F	SEER2	COP2	OPERATING WEIGHT, LBS.	MAXIMUM DIMENSIONS, IN. LxWxH	INDOOR UNIT SERVED	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	BID	
		QTY.	H.P. EA.	RLA EA.	QTY.	H.P. EA.	FLA EA.	VOLTS	PHASE	CYCLE	MCA									MOCP
		HP-1	1.5	1	-	10.8	1	-	0.6	208	1									60
HP-2	1.25	1	-	8.0	1	-	0.5	208	1	60	8.3	15	115	19.6	3.5	100	35x13x29	CC-2	DAIKIN RX15RMVJU9A	BASE
HP-3	1.5	1	-	14.0	1	-	0.4	208	1	60	15.8	20	115	18.9	4.3	123	35x15x29	CC-3 & 4	DAIKIN 2MXS18NMVJUA	ALTERNATE #1

- EC TO PROVIDE NON-FUSED UNISTRUT MOUNTED DISCONNECT SWITCH.
- PROVIDE HP-1 COMPLETE WITH LOW AMBIENT OPERATION DOWN TO °F.

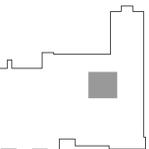
OAI NO.	LOCATION	AREA SERVED	CFM	S.P. °WC	THROAT OPENING SIZE (IN)	TYPE	REMARKS	MAX DIM.	WEIGHT (LBS)	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	REMARKS
OAI-1	ROOF	OFFICE	30	0.01	8"ø	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8	BASE
OAI-2	ROOF	OFFICE	30	0.01	8"ø	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8	BASE
OAI-3	ROOF	OFFICE	20	0.01	8"ø	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8	BASE
OAI-4	ROOF	OFFICE	20	0.01	8"ø	GRAVITY ROOF	W/ ATC DAMPER	21x21x10	10	COOK PR-8	ALTERNATE #1

PROVIDE UNIT COMPLETE WITH DAMPER TRAY AND 18" ROOF CURB.

UNIT SERVED	AIRFLOW CAPACITY RANGE (CFM)	TOTAL ION OUTPUT (MILLION IONS/CC/SEC)	QTY. PER HVAC UNIT	ELECTRICAL CHARACTERISTICS (PER UNIT)					MAXIMUM DIMENSIONS L x W x H	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	REMARKS
				VOLTS	PHASE	CYCLE	WATTS	AMPS			
				CC-1 - CC-4	0-2400	>160	1	208			

- CONTRACTOR TO VERIFY ALL QUANTITIES PRIOR TO ORDERING. UNIT SHALL BE PROVIDED WITH PS-2 POWER SUPPLY AND WIRED DIRECTLY TO AHU 208V POWER CIRCUIT.

1 MECHANICAL SCHEDULES
NO SCALE



KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE
MECHANICAL OFFICE
SCHEDULES &
CONTROLS-
ALTERNATE BID #1
DRAWING NUMBER

M302

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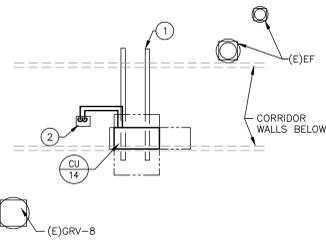
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DEMOLITION GENERAL NOTES:

- REFER TO M0.1 FOR FURTHER GENERAL DEMOLITION NOTES.
- TEMPORARILY REMOVE AND REINSTALL CEILING TILES AS REQUIRED FOR WORK ABOVE CEILINGS.
- PROVIDE ALL ASSOCIATED HOT WATER SYSTEM ISOLATION, DRAINAGE AND RE-FILLING AS REQUIRED FOR WORK ON DRAWINGS AND SPECIFICATIONS. DO NOT ASSUME THAT THE ISOLATION VALVES SHOWN WILL HOLD.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL ROOF PATCHING & FLASHING.

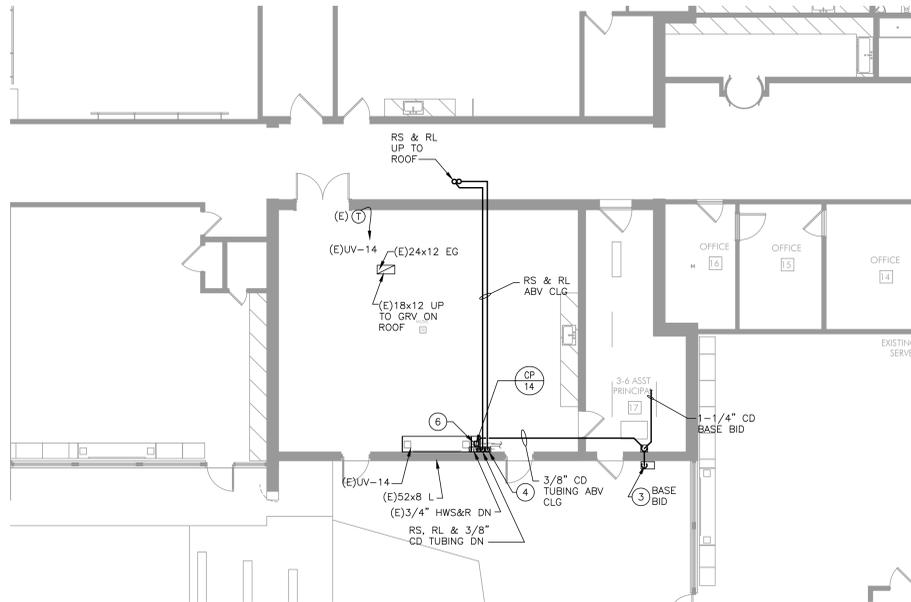
NEW WORK KEY NOTES:

- PROVIDE AND INSTALL EQUIPMENT SUPPORT RAILS SIMILAR TO PATE MODEL ES AND ANCHOR UNIT TO RAILS. EQUIPMENT SUPPORT TO EXTEND PAST UNIT BY MIN 1'-0" FOR MOUNTING OF RECEPTACLE & DISCONNECT BY EC. GC SHALL REMOVE AND PROTECT EXISTING ADJACENT ROOFING AS REQUIRED TO SET EQUIPMENT RAIL ON TREATED WOOD BLOCKING THAT IS THE THICKNESS OF THE EXISTING ROOF INSULATION AND THE SIZE OF THE BASE FLANGE OF THE EQUIPMENT RAIL. GC SHALL PROVIDE THE NEW BLOCKING, ROOFING, AND FLASHING TO RETURN EXISTING ROOF ASSEMBLES TO AN APPROVED AND WARRANTED ROOF.
- REFRIGERANT PIPING DN TO INDOOR UNIT. PROVIDE AND INSTALL NEW PIPE CURB SIMILAR TO ROOF PENETRATION HOUSING AW SERIES WITH WITH ALL EXIT SEALS AS REQUIRED FOR NEW REFRIGERANT PIPING AND ELECTRICAL CONDUITS. COORDINATE WITH EC FOR LOCATIONS AND QUANTITY OF CONDUITS. CUT OPENINGS AS REQUIRED. ANCHOR CURB TO STRUCTURE.
- RUN CONDENSATE TO EXTERIOR, W/ ELBOW AND SPILL 4" ABOVE GRADE ONTO CONCRETE SPLASH BLOCK. MAKE PENETRATION THROUGH WALL WEATHER-TIGHT. CONNECT CONDENSATE PIPING TO UNIT.
- PROVIDE ALL EXPOSED PIPING IN VERTICAL 3-SIDED 16 GAUGE STEEL PIPE ENCLOSURE FOR FULL LENGTH OF SPACE. PIPE ENCLOSURE SHALL BE JO INNOVATIONS, INC. SOFFI-STEEL SYSTEM IN CUSTOM POWDER-COATED COLOR CHOSEN BY THE ARCHITECT. FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING.
- PROVIDE PIPE SUPPORTS SIMILAR TO MIRO INDUSTRIES MODEL 8-BASE STRUT-12 FOR PIPING ON ROOF. PROVIDE AND PLACE ROOF PIPING SUPPORTS ON SUPPORT PADS THAT ARE MANUFACTURED BY THE EPDM ROOF MANUFACTURER. SPACE SUPPORTS PER MANUFACTURER'S RECOMMENDATIONS.
- REPLACE EXISTING THERMAL EXPANSION VALVE WITH NEW THERMAL EXPANSION VALVE FOR REFRIGERANT R-454B.



MECHANICAL NEW WORK -

2
M401
1/8" = 1'-0"



MECHANICAL NEW WORK -

2
M401
1/8" = 1'-0"

UNIT TAG	LOCATION	TONS	COMPRESSOR		CONDENSER FAN MOTOR		ELECTRICAL CHARACTERISTICS					MAX AMBIENT TEMP. °F	EER	MAXIMUM DIMENSIONS, IN. LxWxH	OPERATING WEIGHT LBS.	UNIT SERVING	BASIS OF DESIGN MANUFACTURER AND MODEL NO.		
			QTY.	H.P. EA.	RLA EA.	QTY.	H.P. EA.	FLA EA.	VOLTS	PHASE	CYCLE							MCA	MOCPP
*CU-14	ROOF	3.0	1	-	14.6	1	0.33	2.8	208	1	60	21	35	95	16.5	62x30x57	400	UV-14	AAON CFA-003

UNIT TO BE PROVIDED WITH UNIT MOUNTED NON-FUSED DISCONNECT AND FACTORY WIRED GFI OUTLET.
UNIT TO BE PROVIDED WITH 75VA TRANSFORMER WITH RESETTABLE FUSE.
UNIT TO BE PROVIDED WITH VARIABLE SPEED FAN WITH HEAD PRESSURE CONTROL.
UNIT TO BE PROVIDED WITH 2-STAGE COMPRESSOR.

UNIT TAG	AREA SERVED	UNIT VENTILATOR SCHEDULE																	SERVED BY											
		SUPPLY FAN						HEATING COIL				DX COOLING COIL				ELECTRICAL CHARACTERISTICS				MAXIMUM DIMENSIONS LxWxH, IN.	BASIS OF DESIGN MANUFACTURER AND MODEL NO.									
		TOTAL CFM	ESP IN. WC	MIN OA CFM	MOTOR QUANTITY	MOTOR POWER, W	MOTOR SPEED	MOTOR TYPE	AIR		HOT WATER		AIR		SENSIBLE CAPACITY MBH		TOTAL CAPACITY MBH	VOLTS				PHASE	HZ	MCA	MOCPP					
(E)UV-14	MUSIC 18	1,250	0	375	2	276	HIGH	ECM & LOW ACOUSTIC	ENT DB °F	LVG DB °F	CAPACITY MBH	ROWS	GPM	ENT °F	LVG °F	PD FT H2O	EAT DB °F	EAT WB °F	LAT DB °F	LAT WB °F	25.8	36.8	120	1	60	9.0	15	93x22x30	TRANE VUVE	CU-14

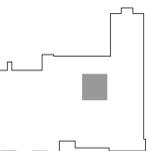
EXISTING UV PERFORMANCE IS SHOWN FOR DOCUMENTATION PURPOSES.

UNIT TAG	SERVICE	GPH	HEAD PRESSURE FT H2O	WATTS	ELECTRICAL CHARACTERISTICS		MAXIMUM DIMENSIONS LxWxH, IN.	BASIS OF DESIGN MANUFACTURER AND MODEL NO.	NOTES	
					VOLTS	PHASE CYCLE				
CP-14	UV-14	38	12	-	120	1	60	11x5x5	HARTELL KL1DG	1, 2

- PROVIDE UNIT COMPLETE WITH HARD-WIRED CONNECTION, SAFETY OVERFLOW SWITCH AND A CHECK VALVE.
- CONDENSATE PUMP TO BE INSTALLED IN UV END PANEL UTILITY CABINET

MECHANICAL SCHEDULES

3
M401
NO SCALE



KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE
**MECHANICAL MUSIC
ROOM PLANS-
ALTERNATE BID #2**

DRAWING NUMBER

M401

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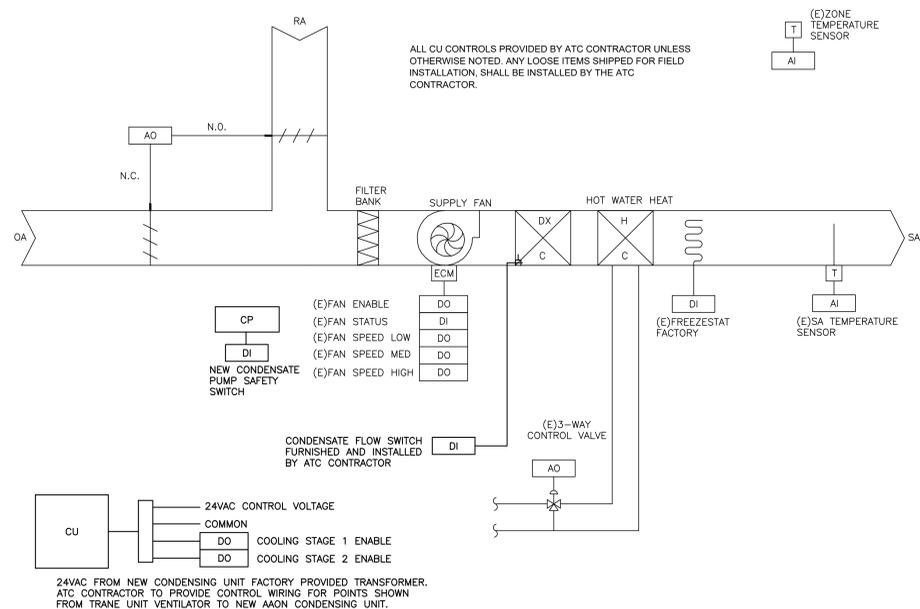
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CONTROL DIAGRAMS SYMBOL LEGEND	
C	CONTACTOR
DA	DAMPER ACTUATOR
MS	MOTOR STARTER
P	PRESSURE SENSOR
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
ECM	ELECTRONICALLY COMMUTATED MOTOR

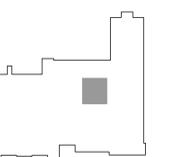
(E)UV WITH NEW DX COOLING SEQUENCE OF OPERATION:

THE EXISTING TRANE UNIT VENTILATORS ARE EQUIPPED WITH A DX/HYDRONIC COIL AND 3-SPEED FAN. CONTRACT REQUIREMENTS INCLUDE THE PROVISION AND INSTALLATION OF A NEW 2-STAGE CONDENSING UNIT AND DX COOLING CONTROLS. PROVISION OF ALL POWER REQUIREMENTS AND ATC TRANSFORMERS SHALL BE A MECHANICAL CONTRACT REQUIREMENT. (E)UV SEQUENCE OF OPERATION SHOWN FOR DOCUMENTATION PURPOSES ONLY.

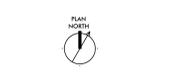
PROVIDE NEW CU INTEGRATION AND CONDENSATE OVERFLOW SAFETIES FOR SUPERVISORY CONTROL INTO THE BUILDINGS EXISTING SCHNEIDER ELECTRIC BMS BY LIMA COMPANY/BUILDING CONTROLS SOLUTIONS. CONTACT: KARLO RADOLJVIC, 215-333-2220.

- A. OCCUPIED MODE: THE UNIT VENTILATOR FAN WILL RUN CONTINUOUSLY IN THE OCCUPIED MODE UNLESS THE OPERATOR SELECTS FAN CYCLE MODE FROM THE GRAPHIC PANEL. IN THE FAN CYCLE MODE THE FAN WILL SHUT DOWN IF THE SPACE TEMPERATURE IS ABOVE THE HEATING TARGET AND THE SYSTEM IS IN THE HEATING MODE. ALSO IF THE SPACE TEMPERATURE DROPS TWO DEGREES BELOW SETPOINT (ADJUSTABLE), THEN THE FAN WILL COME BACK ON. ASSOCIATED CORRIDOR MOTORIZED RELIEF DAMPER TO OPEN DURING OCCUPIED MODE. OCCUPIED MODE SHALL BE SET BY TIMECLOCK UNDER BASE BID OR FROM BAS SYSTEM UNDER ALTERNATE BID #1.
- B. OCCUPANCY OVERRIDE: THE SPACE TEMPERATURE SENSOR WILL HAVE A PUSHBUTTON THE WHEN PRESSED DURING THE UNOCCUPIED MODE, WILL INDEX THE EQUIPMENT TO AN OCCUPIED MODE FOR A PERIOD OF 2-HOURS (ADJUSTABLE).
- C. UNOCCUPIED MODE: WHEN THE UNIT IS SHUT DOWN BY EITHER A STOP COMMAND OR SYSTEM SAFETY THE UNIT WILL BE SET AS FOLLOWS: SUPPLY FAN WILL BE OFF, OUTDOOR AIR DAMPER CLOSED, RETURN AIR DAMPER OPEN, AND HEATING COIL VALVE CLOSED UNLESS OUTDOOR AIR TEMPERATURE FALLS BELOW 45 DEGREES F (ADJ.), THEN THE VALVE WILL BE FULLY OPEN TO THE COIL. UNIT SHALL CYCLE IF SPACE TEMPERATURE FALLS BELOW THE UNOCCUPIED SETPOINT (ADJ.) WITH OUTSIDE AIR DAMPER CLOSED. THE UNIT WILL DE-ENERGIZE WHEN THE SPACE TEMPERATURE IS AT LEAST 4 DEGREE F ABOVE THE UNOCCUPIED HEATING SETPOINT. CORRIDOR MOTORIZED RELIEF DAMPER TO REMAIN CLOSED.
- D. SPACE TEMPERATURE ADJUSTMENT: THE SPACE TEMPERATURE SENSOR WILL HAVE AN ADJUSTMENT CAPABILITY THAT WILL ALLOW THE SPACE TEMPERATURE SETPOINT TO BE ADJUSTED +/- 2 DEGREE F.
- E. HEATING COIL CONTROL VALVE: ON A FALL IN DISCHARGE AIR TEMPERATURE BELOW THE HEATING SETPOINT (ADJ.), THE UNIT MOUNTED HEATING COIL CONTROL VALVE SHALL MODULATE TO MAINTAIN THE DISCHARGE TARGET. THE DISCHARGE TARGET SHALL BE RESET BASED ON SPACE TEMPERATURE. ON A RISE IN SPACE TEMPERATURE, THE HEATING COIL CONTROL VALVE WILL MODULATE CLOSED. FOR UNIT VENTILATORS WITH OUTSIDE AIR LOUVERS ONLY: ON A FURTHER RISE IN SPACE TEMPERATURE, THE OUTSIDE AIR DAMPER WILL MODULATE OPEN AND THE RETURN AIR DAMPER WILL MODULATE CLOSED TO PROVIDE FREE COOLING (WHEN THE OAT IS LESS THAN 70 DEG. ADJ.) AND OUTDOOR ENTHALPY IS WITHIN A USER DEFINABLE RANGE. THE OUTDOOR AIR DAMPER WILL REMAIN CLOSED AND THE RETURN AIR DAMPER WILL BE FULL OPEN WHENEVER THE OUTDOOR AIR TEMPERATURE IS BELOW 45 DEGREES (ADJ.).
- F. MORNING WARM-UP: ON OCCUPIED DAYS THE SYSTEM WILL INITIATE MORNING WARM-UP CYCLE ½ HOUR BEFORE SCHEDULED OCCUPANCY. THE PROCESS WILL INITIATE SUPPLY FAN AND HEATING COIL VALVE (OPEN TO COIL) TO REACH OCCUPIED SETPOINT WITHOUT OUTDOOR AIR DAMPER OPEN. FREEZE PROTECTION WILL BE ACTIVE DURING THIS OPERATION.
- H. D/X COOLING: THE CONTROLLER SHALL MEASURE ZONE TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT ONE STAGE AT A TIME. COMPRESSOR OUTPUT 2 SHALL BE DISABLED UNTIL COMPRESSOR OUTPUT 1 IS ENABLED. TO PREVENT SHORT CYCLING, THERE SHALL BE A 30 SECOND DELAY AFTER STAGE 1 ENGAGES UNTIL STAGE 2 CAN BE OPERATED AND COMPRESSOR OUTPUT 1 OPERATION IS SUBJECT TO AN INTEGRATED MINIMUM CYCLE TIMER THAT REQUIRES A MINIMUM RUN-TIME OF 2 MINUTES AND A MINIMUM OFF-TIME OF 3 MINUTES PER CYCLE. THE COOLING SHALL BE ENABLED WHENEVER THE OUTSIDE AIR TEMPERATURE IS ABOVE 60°F (ADJ.) AND THE ZONE TEMPERATURE IS ABOVE COOLING SETPOINT AND THE FAN IS ON. WHEN THE SPACE TEMPERATURE EXCEEDS COOLING SETPOINT + 1°F, COMPRESSOR OUTPUT 2 AND THE 30 SECOND INTERSTAGE DELAY IS SATISFIED, COMPRESSOR OUTPUT 2 SHALL BE ENABLED. COMPRESSOR OUTPUT 2 SHALL DISENGAGE WHEN THE SPACE TEMPERATURE FALLS BELOW COOLING SETPOINT + 0.5°F AND THE STAGE HAS BEEN ENGAGED FOR ONE MINUTE. COMPRESSOR OUTPUT 1 SHALL DISENGAGE WHEN THE SPACE TEMPERATURE FALLS 0.5°F BELOW THE COOLING SETPOINT, THE MINIMUM RUN TIMER IS SATISFIED, AND STAGE 2 HAS BEEN DISENGAGED FOR AT LEAST 5 SECONDS. COMPRESSOR OPERATION SHALL BE IMMEDIATELY DISABLED WHEN THE REFRIGERANT LOW LIMIT SWITCH CLOSURES. COMPRESSOR OPERATION SHALL NOT RESUME UNTIL THE REFRIGERANT LOW LIMIT SWITCH OPENS AND THE 3-MINUTES TIME GUARD HAS EXPIRED. COMPRESSOR OPERATION SHALL BE IMMEDIATELY DISABLED WHEN THE WATER COIL LOW LIMIT SWITCH CLOSURES. COMPRESSOR OPERATION SHALL NOT RESUME UNTIL THIS LIMIT SWITCH OPENS AND THE 3-MINUTE TIME GUARD HAS EXPIRED. COMPRESSOR OPERATION SHALL BE IMMEDIATELY DISABLED WHEN THE DISCHARGE AIR TEMPERATURE RISES MORE THAN 4°F BELOW THE DISCHARGE AIR LOW LIMIT SETPOINT 55° (ADJ.). COMPRESSOR OPERATION SHALL NOT RESUME UNTIL THE DISCHARGE AIR TEMPERATURE RISES MORE THAN 2°F ABOVE THE SETPOINT AND THE 3-MINUTE TIME GUARD HAS EXPIRED. SUPPLY FAN SHALL RUN AT HIGH SPEED WHENEVER COOLING IS ENABLED.
- G. SAFETIES:
 1. MANUAL RESET DUAL POLE HARD WIRED FREEZE PROTECTION THERMOSTAT (38 DEGREE F ADJ.) LOCATED ON THE DISCHARGE AIR SIDE OF THE HEATING COIL SHALL OPEN THE HEATING COIL VALVE, DE-ENERGIZE THE SUPPLY FAN, CLOSE THE OUTDOOR AIR DAMPER AND GENERATE AN ALARM TO THE OPERATOR WORKSTATION. THE BMS WILL MONITOR THE DISCHARGE AIR TEMPERATURE AND SHUT DOWN THE UNIT AND GENERATE AN ALARM IF IT FALLS BELOW 40 DEGREES F (ADJ.). THE SHUTDOWN WILL REQUIRE A MANUAL RESET AT THE OPERATOR WORKSTATION.
 2. CONDENSATE OVERFLOW SENSOR. A CONDENSATE OVERFLOW SENSOR PROVIDED BY THE ATC CONTRACTOR DE-ENERGIZES THE SUPPLY FAN WHEN LIQUID IS SENSED. ALL DAMPERS (OA DAMPER CLOSED/RA DAMPER OPEN).
- H. SUPERVISORY GRAPHICAL DISPLAY/INTERFACE REQUIREMENTS:

1. GLOBAL OUTSIDE AIR TEMPERATURE/HUMIDITY.	11. LOW TEMPERATURE ALARM.
2. DISCHARGE AIR TEMPERATURE-UNIT.	12. OCCUPIED/UNOCCUPIED STATUS.
3. DISCHARGE AIR TEMPERATURE SET POINT HEATING MODE.	13. O/A DAMPER POSITION
4. DISCHARGE AIR TEMPERATURE SET-POINT COOLING MODE.	14. RELIEF AIR DAMPER POSITION
5. SPACE TEMPERATURE STATUS AND SETPOINT.	15. ZONE SETBACK TEMPERATURE SET-POINT(S).
6. DIGITAL DX COOLING STAGES COMMAND AND STATUS.	16. UNIT ALARM STATUS
7. HOT WATER COIL VALVE COMMAND	17. FULL GRAPHICAL REPRESENTATION OF UNIT AND ALL ASSOCIATED POINTS.
8. DIRTY FILTER ALARM.	18. CO2 SETPOINT AND STATUS (AUDITORIUM UNITS ONLY)
9. SUPPLY FAN START/STOP AND STATUS.	
10. SUPPLY FAN SPEED - LOW, MEDIUM, HIGH	



KEYPLAN



ISSUE HISTORY

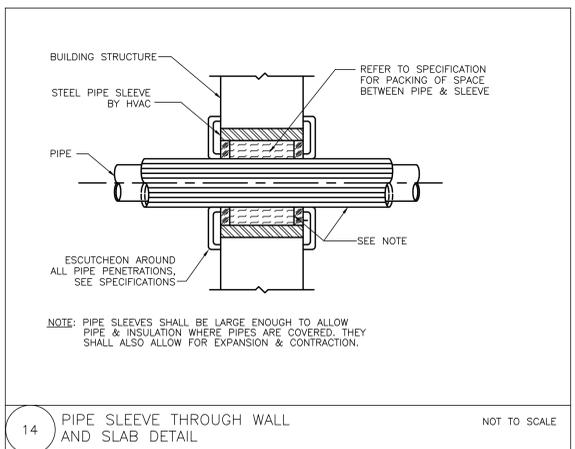
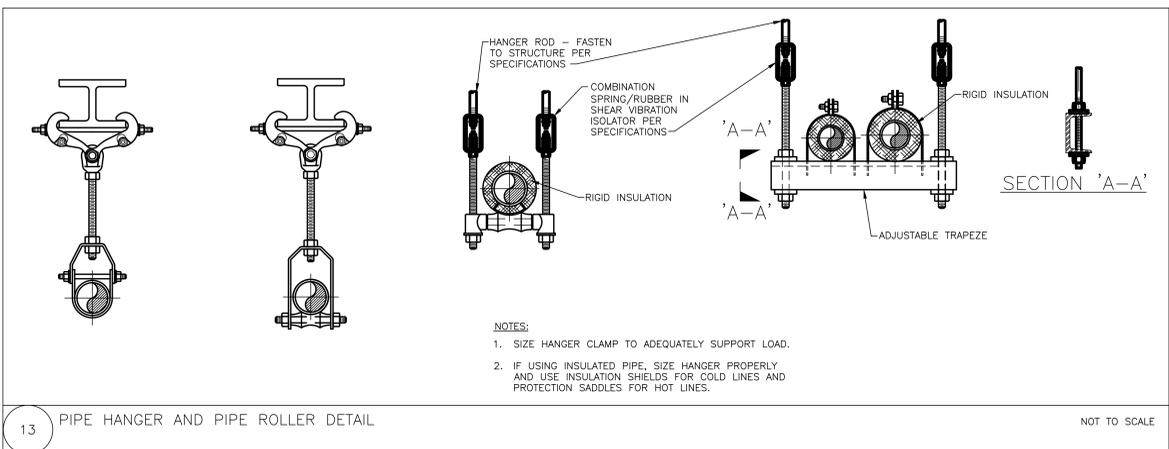
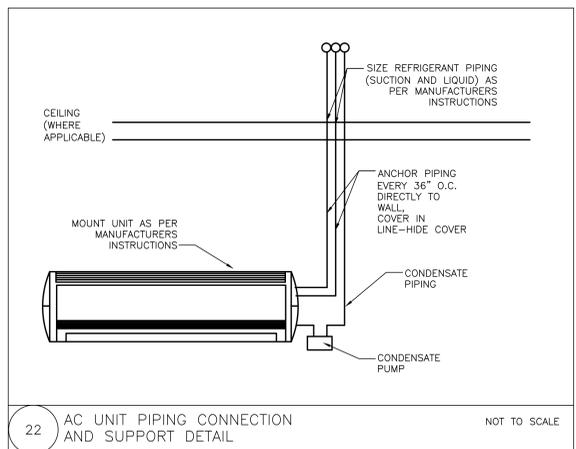
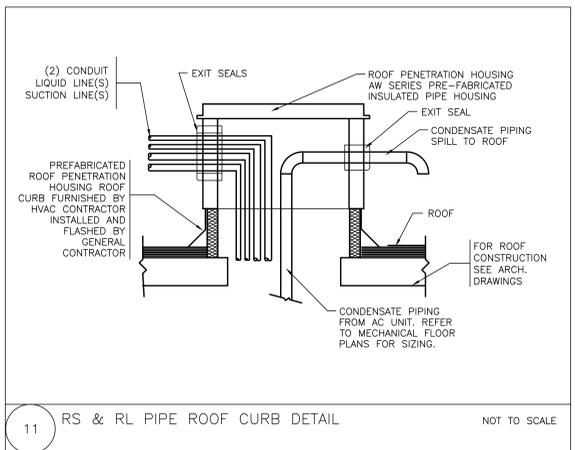
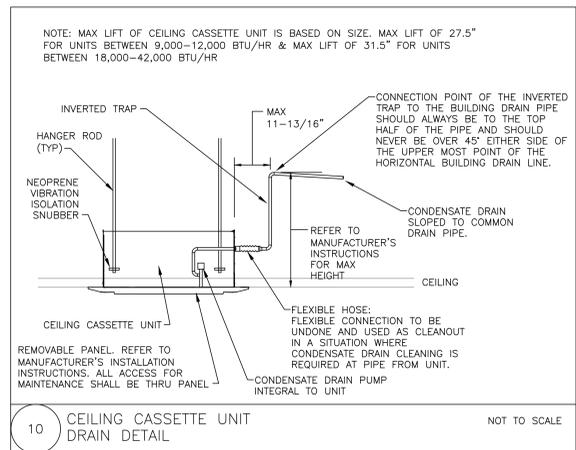
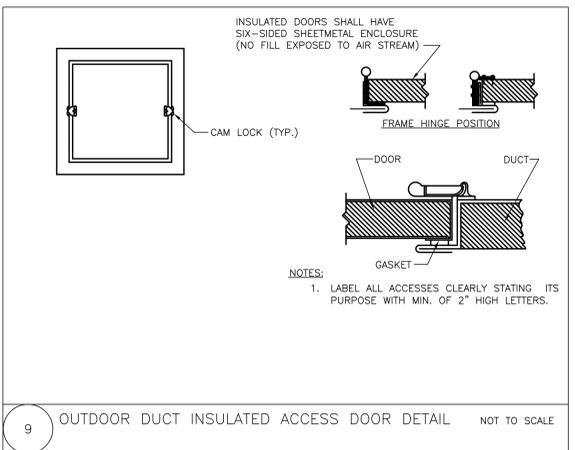
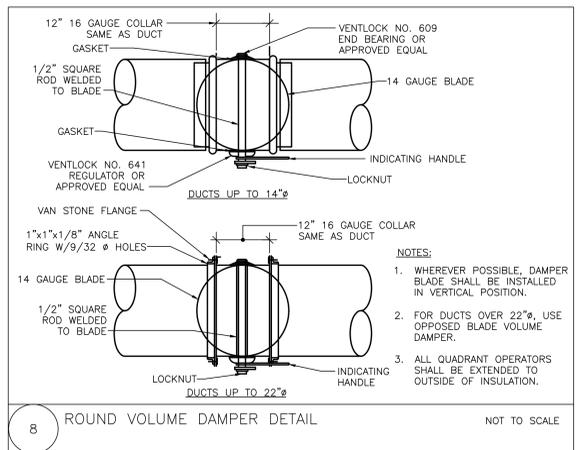
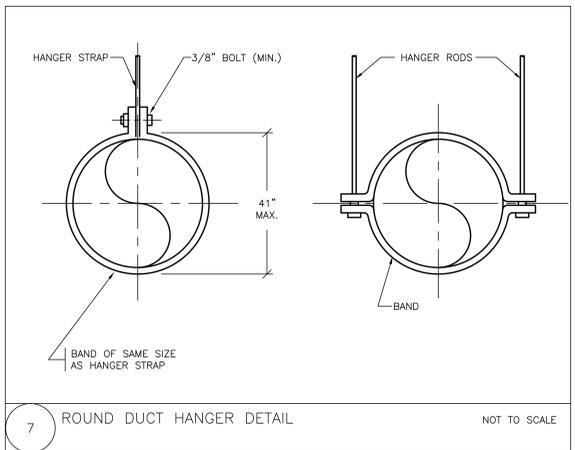
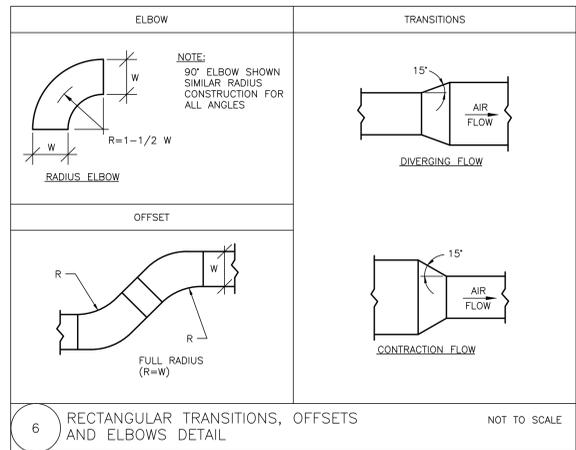
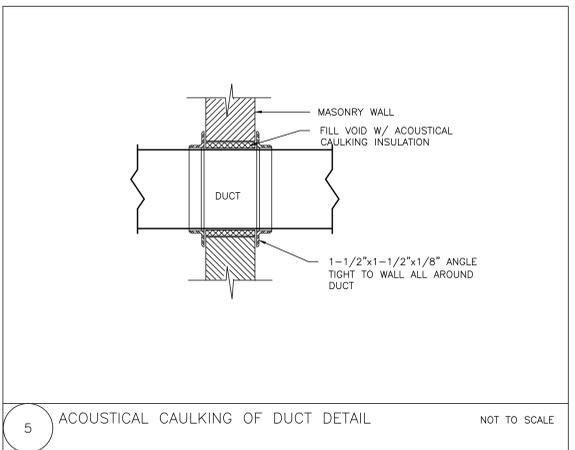
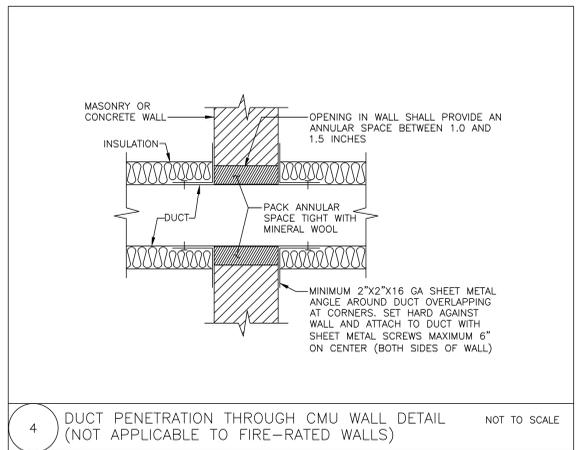
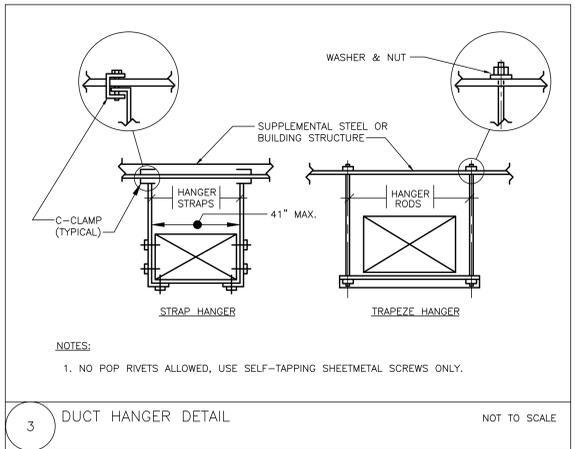
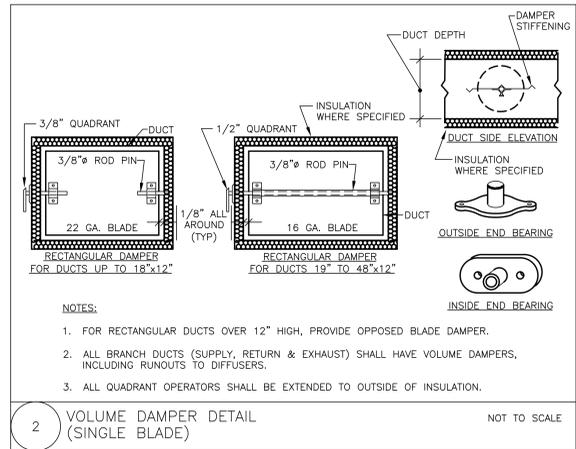
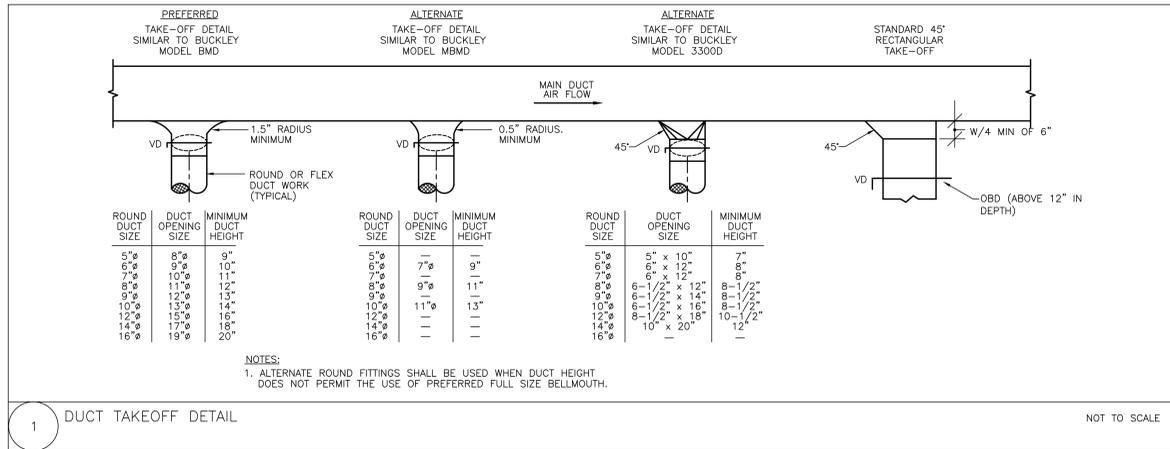
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SHEET TITLE
**MECHANICAL MUSIC-
ROOM CONTROLS-
ALTERNATE BID #2**

DRAWING NUMBER

M402

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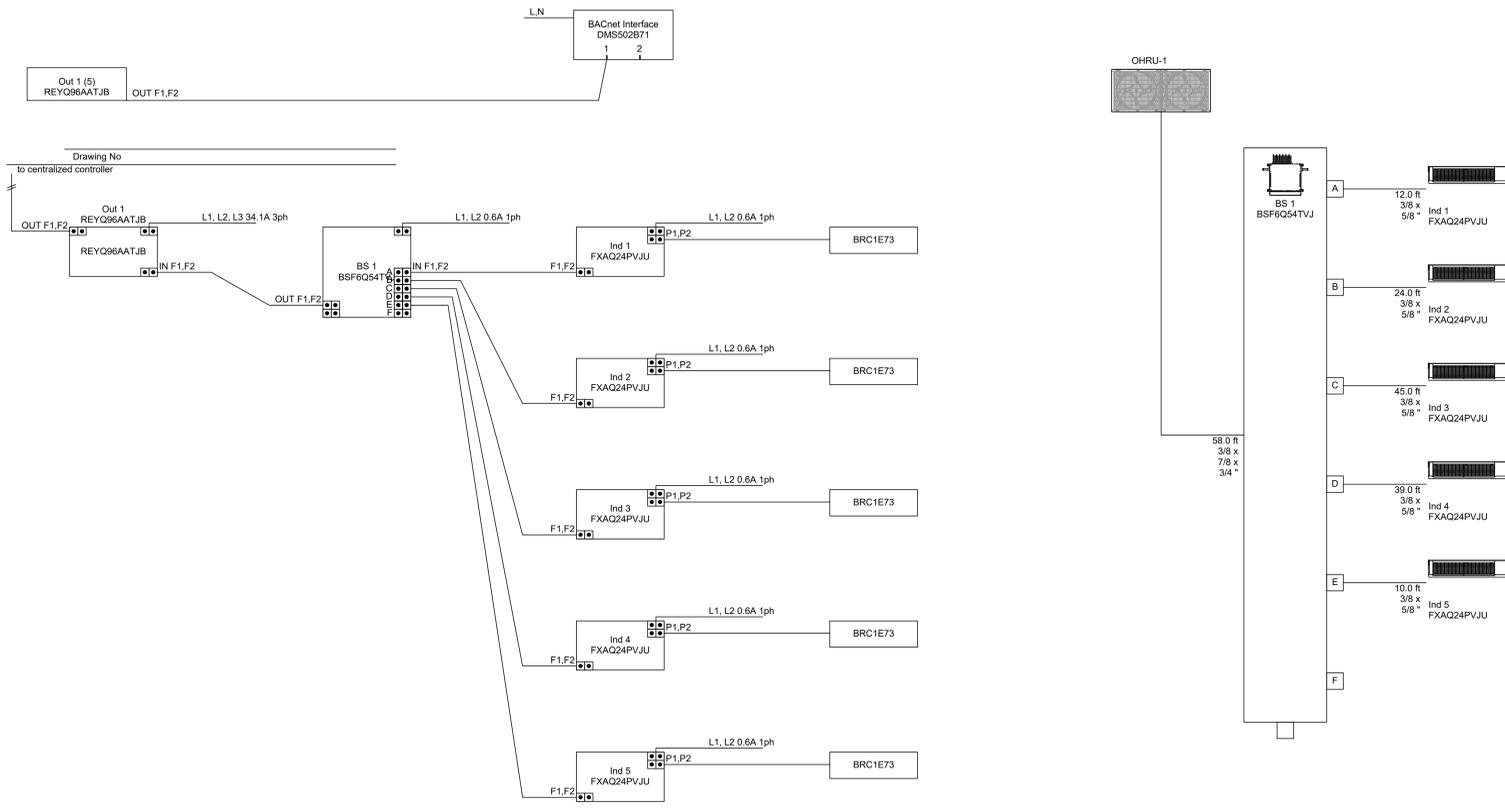
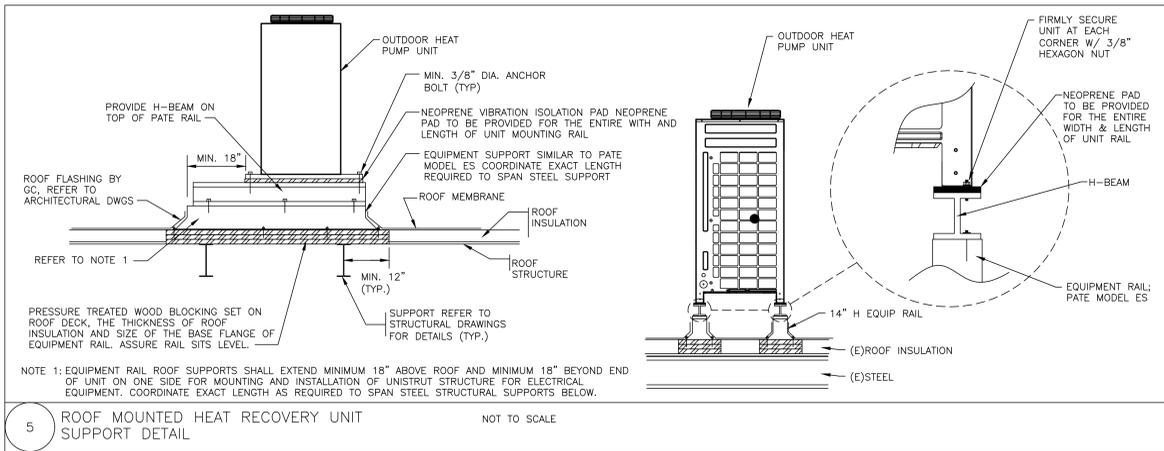
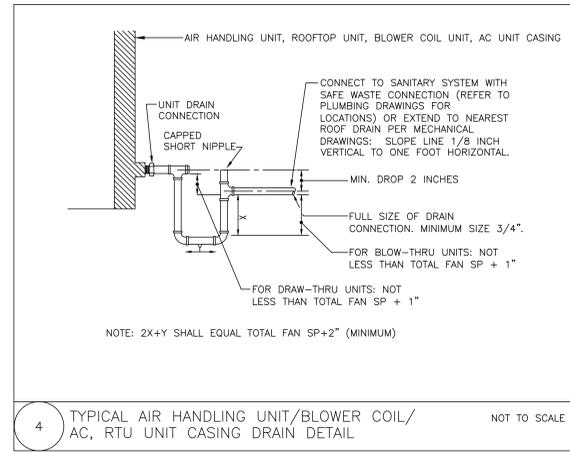
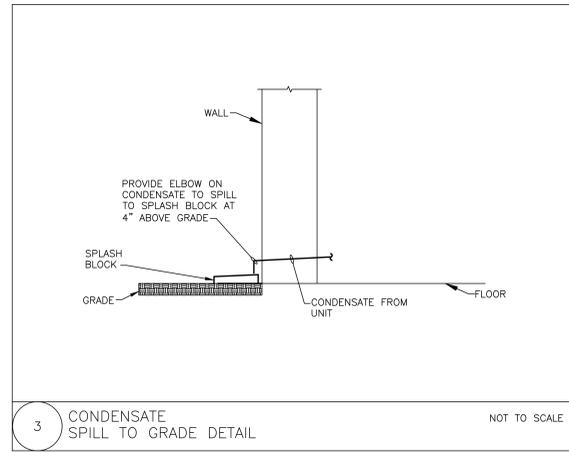
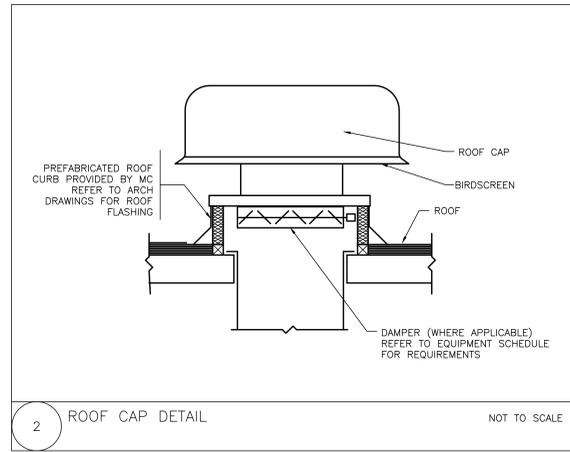
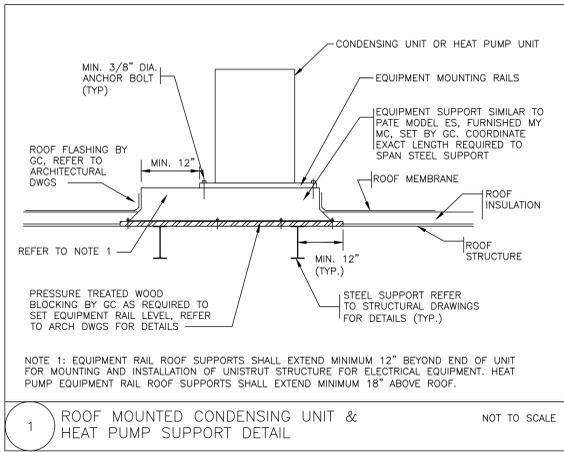
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KEYPLAN



ISSUE HISTORY

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**SHEET TITLE
MECHANICAL
DETAILS**

DRAWING NUMBER

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ABBREVIATIONS LIST

1P	ONE POLE	BFF	BELOW FINISHED FLOOR	F/A	FIRE ALARM	KVA	KILOVOLT AMPERE	OOF	OUT OF FLOOR
2P	TWO POLE	BTC	BRANCH TO CIRCUIT	FACP	FIRE ALARM CONTROL PANEL	KW	KILOWATT	OOW	OUT OF WALL
3P	THREE POLE	C	CONDUIT	FLA	FULL LOAD AMPS	LLC	WIRE TO LOCAL LIGHTING CIRCUIT	PA	PUBLIC ADDRESS
ø	PHASE	C/B	CIRCUIT BREAKER	FPC	FIRE PROTECTION CONTRACTOR	MC	MECHANICAL CONTRACTOR	PC	PLUMBING CONTRACTOR
A	AMPERE	CCTV	CLOSED CIRCUIT TELEVISION	FU	FUSE	MCA	MINIMUM CIRCUIT AMPACITY	(RAR)	REMOVE AND REPLACE
A/V	AUDIO/VISUAL	CKT	CIRCUIT	GC	GENERAL CONTRACTOR	MCB	MAIN CIRCUIT BREAKER	(REL)	RELOCATE/RELOCATED
A/C	AIR CONDITIONING	CM	CONSTRUCTION MANAGER	GFCI	GROUND FAULT CIRCUIT INTERRUPTER	MDF	MAIN DISTRIBUTION FRAME	S	SINGLE POLE SWITCH
ACT	ARCHITECTURAL CEILING TILE	CR	CONVENIENCE RECEPTACLE	GFI	GROUND FAULT INTERRUPTER	MDP	MAIN DISTRIBUTION PANEL	SR	SIMPLEX RECEPTACLE
AF	AMP FRAME	CT	CURRENT TRANSFORMER	GND	GROUND	MH	MAN-HOLE	S ₃	THREE WAY SWITCH
AFC	ABOVE FINISHED CEILING	DFA	DOWN FROM ABOVE	GP	GENERAL PURPOSE	MIN	MINIMUM	S _K	KEY OPERATED SWITCH
AFF	ABOVE FINISHED FLOOR	DR	DUPLEX RECEPTACLE	HP	HORSEPOWER	MLO	MAIN LUGS ONLY	TYP	TYPICAL
AFG	ABOVE FINISHED GRADE	DWG	DRAWING	IDF	INTERMEDIATE DISTRIBUTION FRAME	MP	MEGA PIXEL	UC	UNDER COUNTER
AIC	AMPERE INTERRUPTING CAPACITY	(E)	EXISTING	IG	ISOLATED GROUND	(N)	NEW	V	VOLT
AL	ALUMINUM	EC	ELECTRICAL CONTRACTOR	IR	INFRARED	NE	WIRED ON NORMAL EMERGENCY CIRCUIT	W	WATT
AT	AMP TRIP	EMH	ELECTRICAL MAN-HOLE	JB	JUNCTION BOX	NIC	NOT IN CONTRACT	WP	WEATHERPROOF
ATC	AUTOMATIC TEMPERATURE CONTROL	EOF	ELECTRICAL OUT OF FLOOR	KEC	KITCHEN EQUIPMENT CONTRACTOR	OC	OCCUPANCY		
BFC	BELOW FINISHED CEILING	EOW	ELECTRICAL OUT OF WALL						

SYMBOL LIST

	LIGHTING CIRCUITING INFORMATION. IN THIS EXAMPLE, EC SHALL WIRE FIXTURE TO CIRCUIT #2, AND FIXTURE SHALL BE CONTROLLED BY SWITCH LEG "e".		EXISTING ELECTRICAL PANEL
	CEILING MOUNTED VACANCY/OCCUPANCY SENSOR AND ASSOCIATED DIGITAL ROOM CONTROLLER. IN THIS EXAMPLE, SENSOR SHALL CONTROL FIXTURES ON CONTROL LEG "o".		NEW ELECTRICAL PANEL
	DIMMER SWITCH WITH INTEGRAL OCCUPANCY SENSOR AND MANUAL ON/RAISE, OFF/LOWER CONTROL. IN THIS EXAMPLE DIMMER IS CONTROLLING SWITCH LEG "o". REFER TO E500 FOR FURTHER DETAILS.		ELECTRICAL CIRCUITING INFORMATION. IN THIS EXAMPLE, EC SHALL WIRE DEVICE TO CIRCUIT #12 IN PANEL "DD1".
	FOUR BUTTON DIGITAL DIMMER SWITCH, CONTROLLING SWITCH LEG "o" WITH ON/OFF/RAISE/LOWER FUNCTIONS. REFER TO DWG E500 FOR FURTHER DETAILS.		WIRING & CONDUIT
	JUNCTION BOX		

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	MANUFACTURER	CATALOG NUMBER	ALTERNATE MANUFACTURERS	VOLTS	LIGHT ENGINE				DRIVER	MOUNTING	WARRANTY	REMARKS	
					lumens	WATTS	COLOR	HOURS@L80					
A1	WILLIAMS INDOOR	PT-14L45-840-RA-DM-LNV	OR APPROVED EQUAL **	120/277V	4,525	33.7	4000K	60,000@L80	LED	0-10V DIMMING	RECESSED	5 YEARS	17W LED FIXTURE WITH DIFFUSE CENTER ROUND LENS. FIXTURE DEPTH SHALL BE MAXIMUM OF 2-3/8". FIXTURE SHALL BE CONSTRUCTED OF 22-GAUGE DIE-FORMED STEEL, PAINTED MATTE WHITE AND RIBBED ACRYLIC DIFFUSER. FIXTURE SHALL BE MADE IN USA.

MECHANICAL EQUIPMENT - ELECTRICAL DATA SCHEDULE

EQUIPMENT NAME	V-ø-Hz	HP/VA	WIRE AND CONDUIT	CIRCUIT BREAKER	PANEL/CKT # (S)	STARTER/ DISCONNECT FURNISHED BY EC	STARTER/ DISCONNECT FURNISHED BY EC	SUPPLY SMOKE DETECTOR QUANTITY	RETURN SMOKE DETECTOR QUANTITY	REMARKS
CC-1	208-140	1 MCA	3/4"C-3#12+1#12GND	-	-	-	-	-	-	REFER TO DETAL 3/E300.
CC-2	208-140	1 MCA	3/4"C-3#12+1#12GND	-	-	-	-	-	-	REFER TO DETAL 3/E300.
CC-3	208-140	1 MCA	3/4"C-3#12+1#12GND	-	-	-	-	-	-	REFER TO DETAL 3/E300.
CC-4 (ALT 1)	208-140	1 MCA	3/4"C-3#12+1#12GND	-	-	-	-	-	-	ALTERNATE BID 1, REFER TO DETAL 3/E300.
CP-14 (ALT 2)	120-140	2 MCA	3/4"C-2#12+1#12GND	-	-	-	-	-	-	ALTERNATE BID 2, WIRE TO LOAD SIDE OF (E)JLV-14 DISCONNECT.
CU-14 (ALT 2)	208-140	21 MCA	3/4"C-2#8+1#10GND	2P-35A	N1:26,28	UNIT MOUNT	-	-	-	ALTERNATE BID 2, SERVES (E)JLV-14, REFER TO DETAILS 3#4/E300.
HP-1	208-140	11 MCA	3/4"C-2#12+1#12GND	2P-15A	N1:21,23	-	UNISTRUT MOUNT	-	-	SERVES CC-1, PROVIDE WP GFI RECEPTACLE AND WIRE TO PANEL "N1", CKT #54. REFER TO DETAILS 3#4/E300.
HP-2	208-140	8.3 MCA	3/4"C-2#10+1#10GND	2P-15A	N1:25,27	-	UNISTRUT MOUNT	-	-	SERVES CC-2, PROVIDE WP GFI RECEPTACLE AND WIRE TO PANEL "N1", CKT #54. REFER TO DETAILS 3#4/E300.
HP-3	208-140	8.1 MCA	3/4"C-2#12+1#12GND	2P-15A	N1:20,31	-	UNISTRUT MOUNT	-	-	SERVES CC-3, REFER TO DETAILS 3#4/E300.
HP-3 (ALT 1)	208-140	15.8 MCA	3/4"C-2#12+1#12GND	2P-20A	N1:33,35	-	UNISTRUT MOUNT	-	-	ALTERNATE BID 1, SERVES CC-3 & CC-4. REFER TO DETAILS 3#4/E300.
HRU-1	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	CEILING MOUNT	-	-	
KEF-1	120-140	8 MCA	3/4"C-2#12+1#12GND	1P-20A	K1:11	UNIT MOUNT	-	-	-	WIRE VIA WALL MOUNTED SWITCH IN WEATHERTITE SOL GANG BACKBOX WITH COVER EQUAL TO CARLON MFG # E88TSCN-CA
OHRU-1	208-340	38 MCA	3/4"C-2#12+1#12GND	3P-45A	K1:1,3,5	-	UNISTRUT MOUNT	-	-	SERVES WC-1 THRU WC-5, PROVIDE WP GFI RECEPTACLE AND WIRE TO PANEL "KE1", CKT #7. REFER TO DETAL 5/E300.
WC-1	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	WALL MOUNT ADJACENT	-	-	SERVES KITCHEN
WC-2	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	WALL MOUNT ADJACENT	-	-	SERVES KITCHEN
WC-3	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	WALL MOUNT ADJACENT	-	-	SERVES KITCHEN
WC-4	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	WALL MOUNT ADJACENT	-	-	SERVES KITCHEN
WC-5	208-140	1 MCA	3/4"C-2#12+1#12GND	2P-15A	K1:7,9	-	WALL MOUNT ADJACENT	-	-	SERVES KITCHEN

GENERAL NOTES

1. FOR LOCATIONS OF ALL MECHANICAL EQUIPMENT REFER TO THE RESPECTIVE MECHANICAL DRAWINGS. REFER TO MOTOR WIRING SCHEDULE FOR MECHANICAL EQUIPMENT.
2. ALL DEVICE LOCATIONS SUCH AS RECEPTACLE, DATA JACK, TV JACK, AND FLOOR OUTLETS, ETC., ARE APPROXIMATE. FINAL LOCATIONS AND MOUNTING HEIGHTS SHALL BE FIELD LOCATED BY THE ARCHITECT. THE CONTRACTOR SHALL INSTALL ALL DEVICES AT LOCATIONS AS DIRECTED BY THE ARCHITECT WITHOUT ADDITIONAL COMPENSATION.
3. ALL BRANCH WIRING SHALL BE MINIMUM 3/4"C-2#12+1#12GND.
4. ALL LIGHTING WIRING FOR LED DIMMABLE LIGHTING BRANCH CIRCUITS SHALL BE 2#12+1#12GND +2#16 0-10V IN 3/4"C (ALL 600V RATED WIRING) OR MC-PCS CABLE WHERE ALLOWABLE IN THE SPECIFICATION.
5. COORDINATE OCCUPANCY SENSOR DEVICE AND CEILING SPEAKER LOCATIONS WITH LIGHTING FIXTURES, SPRINKLERS, AIR DIFFUSERS, AND OTHER CEILING MOUNTED EQUIPMENT. COORDINATE WITH THE REFLECTED CEILING PLAN.
6. FOLLOW DIMENSIONS, DO NOT SCALE DRAWINGS.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2017 NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES AND STANDARDS.
8. ALL CONDUCTORS SHALL BE COPPER.
9. FIRE STOPPING: WHERE CONDUITS PENETRATE FIRE AND SMOKE BARRIERS INCLUDING WALLS, PARTITIONS, FLOORS, AND CEILINGS, INSTALL FIRE-STOPPING AT PENETRATIONS AFTER CABLES ARE INSTALLED.
10. MATERIALS FOR FIRE STOPPING SHALL BE UL LISTED AND LABELED AND FM APPROVED FOR FIRE RATINGS CONSISTENT WITH PENETRATED BARRIERS. SLEEVES SHALL BE SCHEDULE 40, WELDED, BLACK STEEL PIPE SLEEVES. SIZES AS REQUIRED FOR EQUIVALENT AREA AS THE WIREWAYS. SEALING FITTINGS SHALL BE SUITABLE FOR SEALING CABLES IN SLEEVES OR CORE DRILLED HOLES. TWO-PART SEALANT: FORMED-IN-PLACE SEALANT FIRE-RESISTANT JOINT SEALERS.
11. UNLESS OTHERWISE NOTED ALL INDOOR ELECTRICAL EQUIPMENT SHALL BE PROVIDED WITH, AND HOUSED IN, A NEMA 1 ENCLOSURE. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN NEMA 3R ENCLOSURE.
12. COMMON NEUTRALS ARE NOT ACCEPTABLE.
13. ELECTRICAL CONTRACTOR SHALL EXAMINE THE DRAWINGS OF ALL TRADES AND COORDINATE THEIR WORK TO AVOID INTERFERENCE WITH STRUCTURE, AND ALL EQUIPMENT ABOVE AND BELOW THE CEILING.
14. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE BEFORE PROCEEDING WITH THE WORK.
15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE MOUNTINGS AND NUMBER OF FACES FOR THE EXIT SIGNS. THE LIGHTING FIXTURE SHOP DRAWING SUBMISSION SHALL REFLECT THIS COORDINATION.
16. CONTRACTOR MUST COORDINATE ROOMS NAMES ON THE PANEL SCHEDULES WITH THE FINAL ROOM NAMES, IN THE FIELD. ALL PANELS SHALL BE PROVIDED WITH TYPED PANEL SCHEDULE.
17. PROVIDE FIBER BUSHINGS ON THE ENDS OF ALL CONDUIT STUBS.
18. ALL OF THE NOTES UNDER THE "GENERAL NOTES" SHALL APPLY TO ALL OF THE ELECTRICAL DRAWINGS.
19. ALL SWITCHES, RECEPTACLES, PANELBOARDS, FIRE ALARM PANELS, POWER SUPPLIES AND DISCONNECTS SHALL BE LABELED WITH SOURCE PANEL AND CIRCUIT.
20. ALL WIRING IN THE EXPOSED AREAS MUST BE FISHED THROUGH THE WALL WITH MC CABLE. WHERE EXISTING DEVICES WERE REMOVED, FILL IN MASONRY HOLES TO MATCH EXISTING WALL FINISH. WHERE CABLE IS NOT ABLE TO BE FISHED THRU THE WALLS, USE OF WIREMOLD, COLOR TO MATCH WALLS, IS ACCEPTABLE WITH APPROVAL OF ARCHITECT OR OWNER. WIRING IN NEW WALLS SHALL BE CONCEALED IN CONDUIT.
21. THESE DRAWINGS SHOW EXISTING CONDITIONS AT THE TIME OF DESIGN. ACTUAL FIELD CONDITIONS MAY CHANGE PRIOR TO CONSTRUCTION. ALL DISCREPANCIES AFFECTING THE COMPLETION OF WORK SHALL BE REPORTED TO ENGINEER FOR RESOLUTION.

DEMOLITION NOTES

1. ELECTRICAL CONTRACTOR SHALL REVIEW ALL MECHANICAL DEMOLITION PLANS FOR MECHANICAL EQUIPMENT TO BE DEMOLISHED. THE EC SHALL REMOVE ALL WIRING AND CONDUIT FOR DEMOLISHED MECHANICAL EQUIPMENT BACK TO SOURCE.
2. ALL WORK UNDER THIS SECTION SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
3. ALL DEVICES SHOWN TO BE DEMOLISHED SHALL HAVE ASSOCIATED WIRING REMOVED BACK TO SOURCE PANEL, UNLESS CONNECTED TO EXISTING-TO-REMAIN DEVICES/EQUIPMENT (NOT ALL DEVICES ARE SHOWN). AS NEEDED, MAINTAIN CIRCUIT INTEGRITY BY RE-WIRING OR MAINTAINING EXISTING WIRING TO KEEP EXISTING DEVICE(S) ACTIVE.
4. EXISTING CONDUITS MAY BE REUSED ABOVE THE CEILING AND IN THE EXISTING WALLS. HOWEVER, ALL WIRING MUST BE NEW. EXISTING CONDUITS MAY BE ABANDONED IN PLACE IN NON-ACCESSIBLE AREAS, BUT ALL WIRING MUST BE REMOVED. EXISTING EXPOSED CONDUITS, DESIGNATED TO BE REMOVED WITH WIRING, IN OCCUPIED SPACES MUST BE REMOVED IF NOT REUSED.
5. DEMOLITION/RELOCATIONS: EACH TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND RELOCATIONS OF SERVICES, EQUIPMENT, AND MATERIAL RELATING TO THEIR RESPECTIVE TRADE.
6. PRIOR TO DEMOLITION CONTRACTOR SHALL REVIEW WITH OWNER ALL MATERIALS TO BE REMOVED. SHOULD THE OWNER OPT TO KEEP ANY MATERIALS, THE CONTRACTOR SHALL REMOVE AND DELIVER THE PARTS TO THE OWNER ON THE SITE WHERE SO DIRECTED. OTHERWISE, ALL DEMOLISHED OR REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, SHALL BE REMOVED FROM THE SITE, AND BE DISPOSED OF IN A LEGAL MANNER.
7. DEMOLITION SHALL INCLUDE REMOVAL OF ALL PARTS AND PIECES IN THEIR ENTIRETY BACK TO THE POINTS INDICATED OR IF NOT INDICATED BACK TO THEIR POINT OF SOURCE. WHERE CONDITIONS PROHIBIT TOTAL REMOVAL OF THE WORK, THE REMAINING PORTION SHALL BE CUT FLUSH WITH THE SURROUNDING SURFACE SHALL BE REFINISHED IN AN APPROVED MANNER.
8. MAINTAIN EXISTING UTILITIES INDICATED OR WHERE REQUIRED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN SCHEDULED WITH THE OWNER.
9. DO NOT REMOVE EXISTING STRUCTURAL WORK. DO NOT REMOVE OPERATIONAL ELEMENTS AND SAFETY-RELATED COMPONENTS IN A MANNER RESULTING IN A REDUCTION OF CAPACITIES TO PERFORM IN THE MANNER INTENDED OR RESULTING IN DECREASED OPERATIONAL LIFE, INCREASED MAINTENANCE, OR DECREASED SAFETY.
10. REMOVALS, DISCONNECTIONS, AND RELOCATIONS SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND SHALL BE EMPLOYED BY A CONTRACTOR LICENSED IN THE TRADE INVOLVED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ACCEPTED TRADE PRACTICES.
11. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK TO REMAIN TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK.
12. PROTECTION: PROVIDE ADEQUATE PROTECTION WHERE REQUIRED FOR THE PRESENT BUILDING AND ITS CONTENTS. TEMPORARY DUSTPROOF BARRIERS AND BARRICADES SHALL BE ERECTED WHERE REQUIRED FOR PROTECTION OF PERSONNEL, PROTECTION FROM DUST AND DIRT, FOR SECURITY, FIRE AND WEATHER PROTECTIVE REASONS. CONTRACTOR SHALL TAKE EVERY PRECAUTION AGAINST FIRE BY EMPLOYING FIRE DEPARTMENT TYPE HOSES AND PORTABLE FIRE EXTINGUISHERS AS REQUIRED BY OSHA AND/OR THE OWNER'S INSURANCE UNDERWRITER.
13. ALL EXISTING EQUIPMENT REQUIRED TO BE REUSED SHALL BE CLEANED, RECONDITIONED, CALIBRATED AND ADJUSTED BY OTHERS. IN ALL INSTANCES WHERE CONTRACTOR FINDS THAT EXISTING EQUIPMENT IS DEFECTIVE TO THE POINT WHERE IT CANNOT BE PROPERLY RESTORED AND WILL NOT OPERATE PROPERLY, THEY SHALL REPORT THE SPECIFIC INSTRUMENTS OR EQUIPMENT TO THE ENGINEER FOR DIRECTIONS.
14. EXTREME CARE SHALL BE EXERCISED FOR ALL EXISTING ITEMS THAT ARE TO REMAIN IN SERVICE UNTIL NEW ITEMS ARE INSTALLED FOR THE SAME SERVICE. ALL SHUTDOWNS OF ANY SYSTEM SHALL BE COORDINATED WITH THE OWNER.
15. ALL DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL CAREFULLY EXAMINE EXISTING CONDITIONS PRIOR TO STARTING WORK.
16. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ALL EQUIPMENT TO BE DEMOLISHED. EC SHALL DEMOLISH ALL ELECTRICAL WIRING, FIRE ALARM, AND DISCONNECTS/STARTERS FOR ALL EQUIPMENT TO BE DEMOLISHED ON THE MECHANICAL DRAWINGS. ALL EQUIPMENT SHALL HAVE NEW WIRING, FIRE ALARM WIRING, AND DISCONNECTS/STARTERS.

LIST OF DRAWINGS

E001	ELECTRICAL COVER SHEET
E101	ELECTRICAL KITCHEN PLAN
E201	ELECTRICAL DEMO OFFICE PLAN - BASE BID
E202	ELECTRICAL NEW WORK OFFICE PLANS - BASE BID
E301	ELECTRICAL OFFICE PLANS - ALTERNATE BID 1
E401	ELECTRICAL MUSIC ROOM PLANS - ALTERNATE BID 2
E500	ELECTRICAL DETAILS

AGCS STATE ROAD KITCHEN AND OFFICE HVAC

110 E State Rd, West Grove, PA 19390

HSA PROJECT # :24-018



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KEYPLAN

ISSUE HISTORY

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SHEET TITLE

ELECTRICAL COVER SHEET

DRAWING NUMBER

E001

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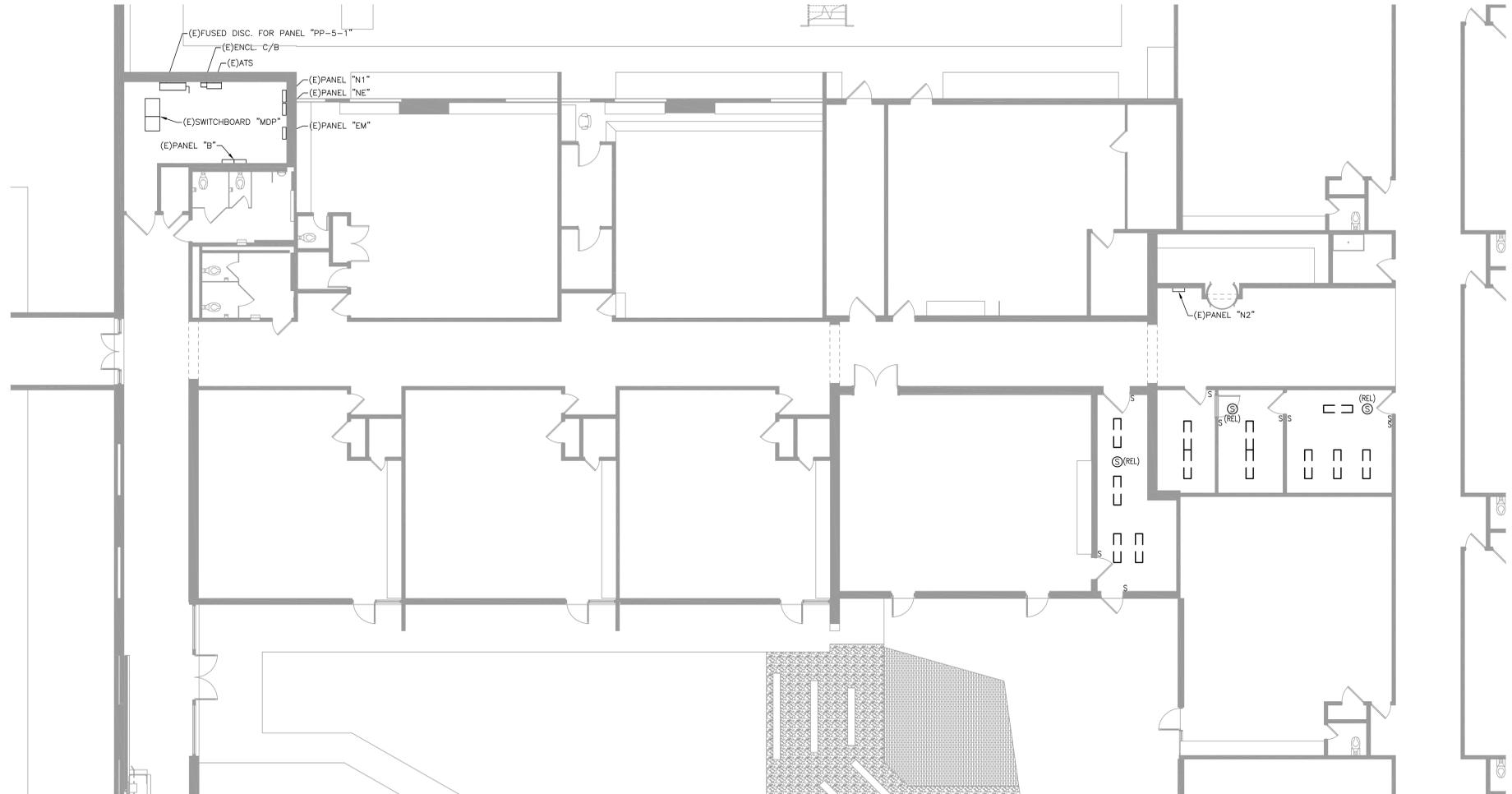
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- NOTES:**
- REFER TO DRAWING E001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
 - ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING (E) OR RELOCATED (REL).
 - ALL WORK SHOWN IS BASE BID, UNLESS OTHERWISE NOTED.

LOCATION: ELECTRICAL ROOM		PANEL SCHEDULE FOR EXISTING PANEL "N1" 200/120V, 3PH, 4W, 225A BUS, 225A M.C.B., 65,000A RMS BRANCH CIRCUIT BREAKERS TO BE SERIES RATED WITH MCB										SURFACE MOUNTED			
CKT NO	CIRCUIT POLE AMP	REMARKS	A			B			C			REMARKS	CIRCUIT AMP	CKT NO	
			1	2	3	1	2	3	1	2	3				
1	1	(E) MUSIC 24 RECEPTACLE	180			180						(E) DANCE 21 RECEPTACLE	20	1	2
3	1	(E) MUSIC 22 RECEPTACLE		180			180					(E) ART 19 RECEPTACLE	20	1	4
5	1	(E) ART 20 RECEPTACLE			180			180				(E) CLASSROOM 8 RECEPTACLE	20	1	6
7	1	(E) MUSIC 18 RECEPTACLE	180			180						(E) CLASSROOM 10 RECEPTACLE	20	1	8
9	1	(E) SPARE		0			180					(E) CLASSROOM 12 RECEPTACLE	20	1	10
11	1	(E) SPARE				1320			0			(E) SPARE	20	1	12
13	1	(E) SPARE	1320				0					(E) SPARE	20	1	14
15	1	(E) SPARE		996				0				(E) SPARE	20	1	16
17	1	(E) SPARE			996			0				(E) SPARE	20	1	18
19	1	RECEPTACLES, ROOF TOP AT HP-1 & HP-2	360				0					(E) SPARE	20	1	20
21	2	*15 HEAT PUMP, HP-1		1320				0				(E) CONDENSING UNIT, CU-17	35	2	22
23					1320										24
25	2	*15 HEAT PUMP, HP-2	996			2520						CONDENSING UNIT, CU-14 (ALTERNATE BID 2)	*35	2	26
27				996			2520								28
29	2	*15 HEAT PUMP, HP-3		972				0				(E) SPACE	-	1	30
31				972				0				(E) SPACE	-	1	32
33	2	*20 HEAT PUMP, HP-3 (ALTERNATE BID 1)		1896				0				(E) SPACE	-	1	34
35				1896				1080				(E) UNIT VENTILATOR, UV-15	15	1	36
37	1	- SPACE	0					1080				(E) UNIT VENTILATOR, UV-16	15	1	38
39	1	- SPACE	0	0				1080				(E) UNIT VENTILATOR, UV-17	15	1	40
41	1	- SPACE	0					1080				(E) UNIT VENTILATOR, UV-18	15	1	42
43	1	- SPACE	0					1080				(E) UNIT VENTILATOR, UV-19	15	1	44
45	1	(E) UNIT VENTILATOR, UV-14		1080				1080				(E) UNIT VENTILATOR, UV-20	15	1	46
47	1	- (E) SPACE			0			3480				(E) SPACE	-	1	48
49	1	- (E) SPACE	0					3480				(E) SPACE	-	1	50
51	1	- (E) SPACE	0					3480				(E) SPACE	-	1	52
53	1	- (E) SPACE	0					360				(E) SPACE	-	2	54
55	1	- (E) SPACE	0					0				(E) SPACE	-	1	56
57	1	- (E) SPACE	0					0				(E) SPACE	-	1	58
59	1	- (E) SPACE	0					0				(E) SPACE	-	1	60
61	1	- (E) SPACE	0					0				(E) SPACE	-	1	62
63	1	- (E) SPACE	0					0				(E) SPACE	-	1	64
65	1	- (E) SPACE	0					0				(E) SPACE	-	1	66
67	1	- (E) SPACE	0					0				(E) SPACE	-	1	68
69	1	- (E) SPACE	0					0				(E) SPACE	-	1	70
71	1	- (E) SPACE	0					0				(E) SPACE	-	1	72
			4008	6468	6684	8520	8520	6180							
											PHASE A: 12.53 KVA				
											PHASE B: 14.99 KVA				
											PHASE C: 12.86 KVA				
											TOTAL: 40.38 KVA				
											*ASTERISK INDICATES NEW CIRCUIT BREAKER SHALL BE PROVIDED TO MATCH EXISTING CIRCUIT BREAKER TYPE AND RATING				
											*BOLD INDICATES NEW CIRCUIT SHALL BE PROVIDED.				



ELECTRICAL DEMOLITION PLAN - FIRST FLOOR
E101 / 1/8" = 1'-0"

KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

**ELECTRICAL
DEMO OFFICE
PLAN - BASE BID**

DRAWING NUMBER

E201

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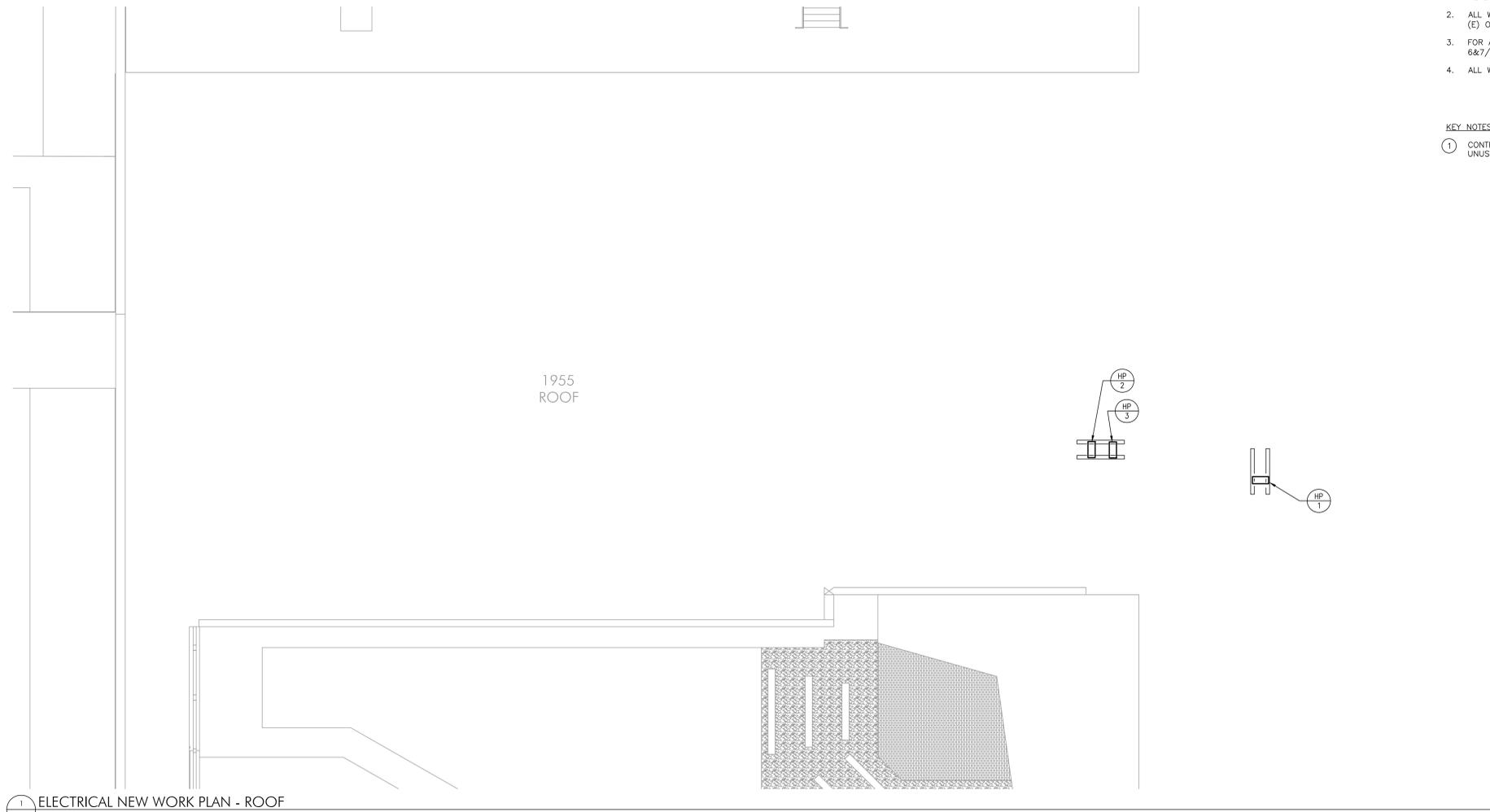
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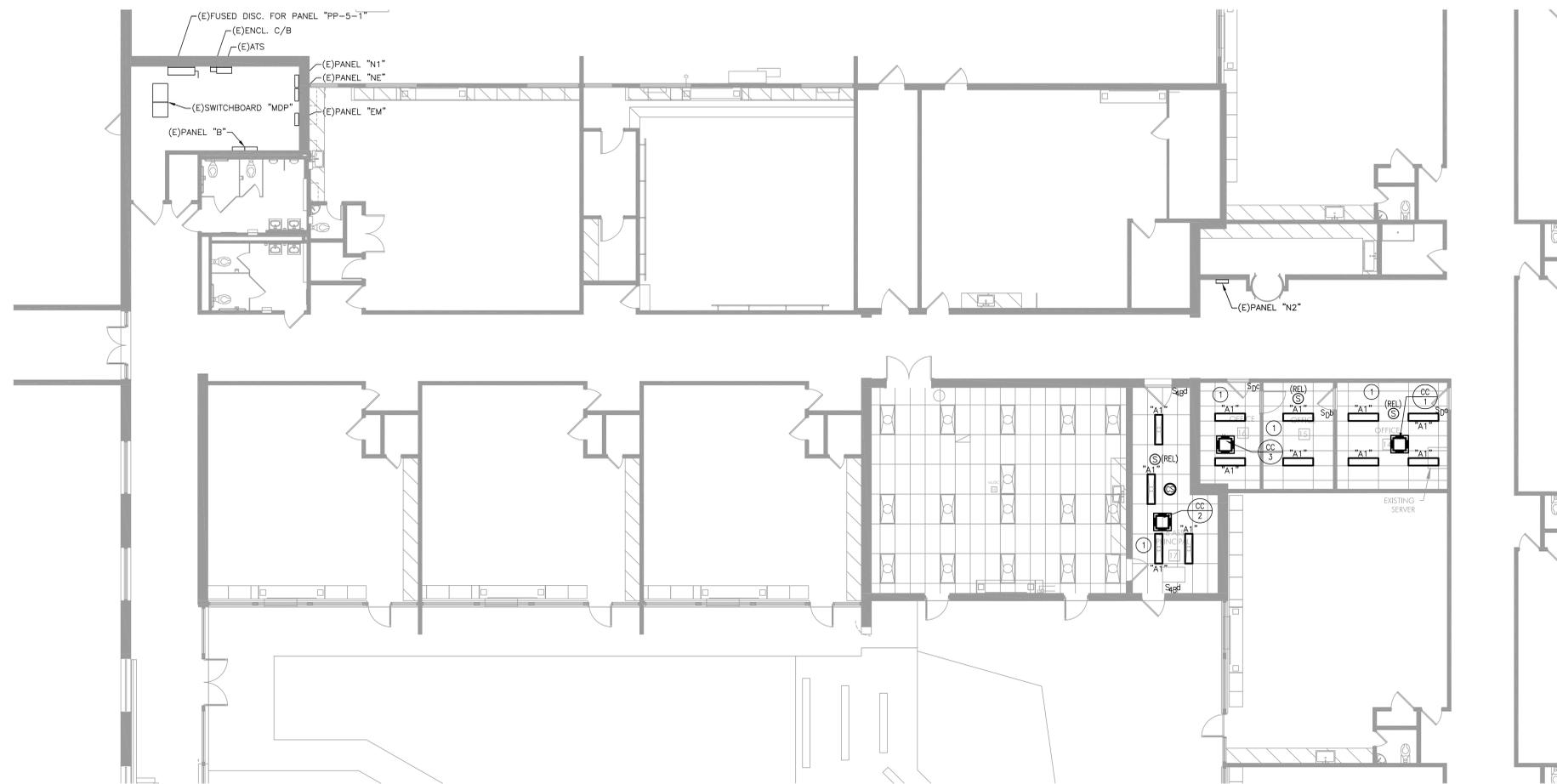
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- NOTES:**
1. REFER TO DRAWING E001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
 2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING (E) OR RELOCATED (REL).
 3. FOR ADDITIONAL LIGHTING CONTROLS INFORMATION REFER TO DETAILS 6&7/E300 AND DWG E100.
 4. ALL WORK SHOWN IS BASE BID, UNLESS OTHERWISE NOTED.

- KEY NOTES:**
- 1 CONTRACTOR TO PROVIDE VARIOUS SWITCH PLATE CONFIGURATIONS TO BLANK UNUSED SWITCH OPENINGS, AND TO ACCOMMODATE NEW LIGHTING CONTROLS.



1 ELECTRICAL NEW WORK PLAN - ROOF
E102 / 1/8" = 1'-0"



1 ELECTRICAL NEW WORK PLAN - FIRST FLOOR
E102 / 1/8" = 1'-0"

KEYPLAN



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**ELECTRICAL
NEW WORK OFFICE
PLANS - BASE BID**

DRAWING NUMBER

E202

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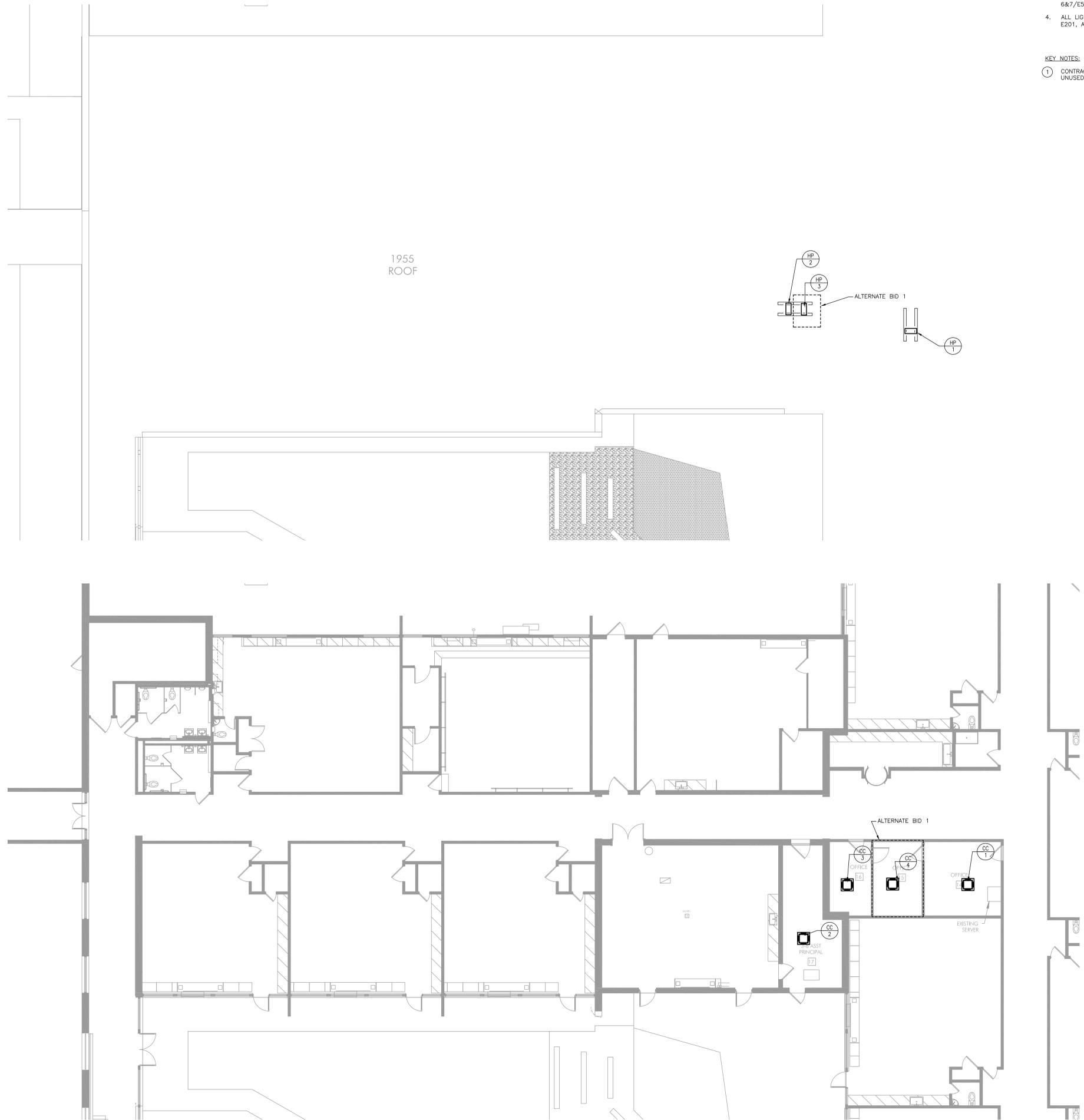
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- NOTES:**
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 2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING (E) OR RELOCATED (REL).
 3. FOR ADDITIONAL LIGHTING CONTROLS INFORMATION REFER TO DETAILS 6&7/E500 AND DWG E100.
 4. ALL LIGHTING AND LIGHTING CONTROL WORK SHOWN AS BASE BID ON DWGS E201, AND E202 ARE TO BE INCLUDED IF ALTERNATE #1 IS ACCEPTED.

- KEY NOTES:**
- 1 CONTRACTOR TO PROVIDE VARIOUS SWITCH PLATE CONFIGURATIONS TO BLANK UNUSED SWITCH OPENINGS, AND TO ACCOMMODATE NEW LIGHTING CONTROLS.



KEYPLAN



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**ELECTRICAL
OFFICE PLANS -
ALTERNATE BID 1**

DRAWING NUMBER

E301

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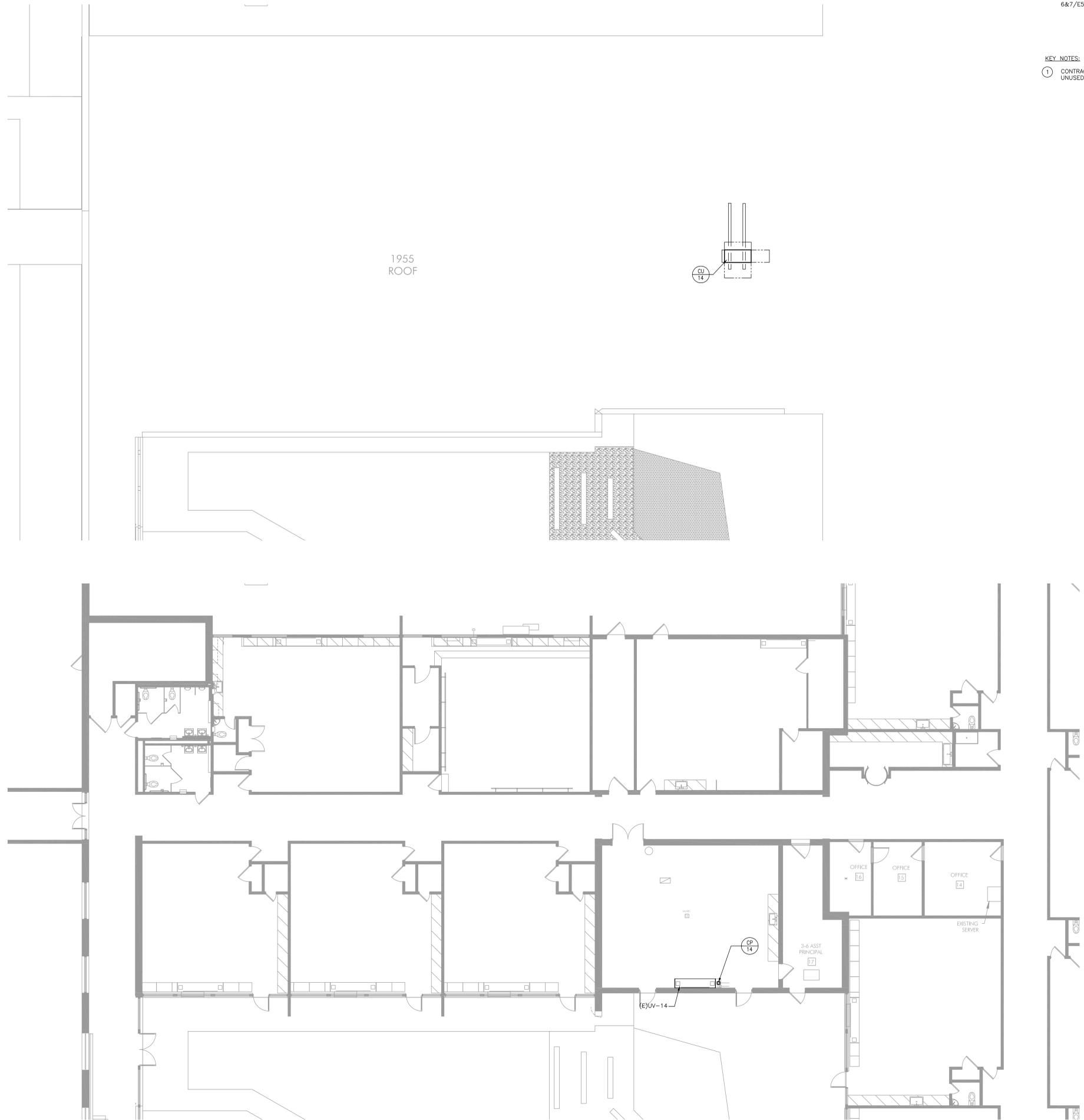
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- NOTES:**
1. REFER TO DRAWING E001 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
 2. ALL WORK SHOWN SHALL BE NEW UNLESS OTHERWISE NOTED AS EXISTING (E) OR RELOCATED (REL).
 3. FOR ADDITIONAL LIGHTING CONTROLS INFORMATION REFER TO DETAILS 6&7/E500 AND DWG E100.

- KEY NOTES:**
- 1 CONTRACTOR TO PROVIDE VARIOUS SWITCH PLATE CONFIGURATIONS TO BLANK UNUSED SWITCH OPENINGS, AND TO ACCOMMODATE NEW LIGHTING CONTROLS.



1 ELECTRICAL NEW WORK PLAN - FIRST FLOOR
E102 / 1/8" = 1'-0"

KEYPLAN



ISSUE HISTORY

Δ	DATE	ISSUED FOR
	2024-11-18	BID SUBMISSION

SHEET TITLE

**ELECTRICAL MUSIC
ROOM PLANS -
ALTERNATE BID 2**

DRAWING NUMBER

E401

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