

Green Activities Partial Renovation Vincennes, IN 47591 Project #: 71GA-22-01

ADDENDUM - 002

Addendum - 002 to the Drawings and Specifications dated, February 2023, for Vincennes University **Green Activities Partial Renovations**, located on the Main Campus, Vincennes, IN 47591, as prepared by Andrew Young, Campus Architect, Vincennes University.

All Contractors bidding on this project shall read all of the items covered below and shall comply with all of the requirements as set forth, including any necessary refinements or additions generated by this Addendum and required by the intent of the original Documents. All Contractors shall acknowledge on their bid form that they have received this Addendum and included the appropriate content of same within their bid proposal.

Miscellaneous:

- 1. Existing Roof Warranty
 - A. Refer to attached Roof Warranty, for information regarding roofing system and warranty.

Specifications:

1. 01 23 00 - Alternates

- A. To clarify, Alternate No. 5: Fire Sprinkler Main & System includes:
 - a. Installation of underground 8" fire sprinkler main & P.I.V.;
 - b. Installation of underground 6" fire sprinkler main & FDC;
 - c. Installation of underground electrical conduit & fire alarm wiring to FDC;
 - d. Installation of interior fire sprinkler system;
 - e. Installation of floor sink, underslab sanitary drain piping, & cleanouts; and
 - f. Water jetting & camera inspections both interior & exterior.

2. 14 42 16 - Vertical Wheelchair Lifts

- a. Provide standard size, 36" x54"
- b. Provide standard rocker switch platform control
- c. Provide automatic gate open/close option
- d. Provide upper landing gate electric strike interlock option



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- 3. 23 05 00 Common Work Results for HVAC
 - A. Add Section 3.3, F, to read as follows:
 - a. All compressors shall be variable-speed.

Drawings:

- Sheet #AD02.0
 A. Refer to attached Sheet #AD02.0.
- Sheet #M5 Roof Level MEP Plan
 A. Refer to attached Sheet #M5-REV.
- Sheet #M6 Mechanical Schedules
 A. Refer to attached Sheet #M6-REV.
- 4. Sheet #M7 Mechanical Details 1A. Refer to attached Sheet #M7-REV.
- Sheet #M8 Mechanical Details 2
 A. Refer to attached Sheet #M8-REV.
- 6. Sheet #E2 Electrical Lighting PlanA. Refer to attached Sheet #E2-REV.
- 7. Sheet #E4 Electrical Power/Systems PlanA. Refer to attached Sheet #E4-REV.
- Sheet #P2 Plumbing Plan
 A. Refer to attached Sheet #P2-REV.
- Sheet #FP2 Fire Protection Site Utility Plan
 A. Refer to attached Sheet #FP2-REV.



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Attachments:

- Existing Roof Warranty.
- 8.5" x 11" Sheet AD02.0.
- 30" x 42" Sheet M5.
- 30" x 42" Sheet M6.
- 30" x 42" Sheet M7.
- 30" x 42" Sheet M8.
- 30" x 42" Sheet E2.
- 30" x 42" Sheet E4.
- 30" x 42" Sheet P2.
- 30" x 42" Sheet FP2.

CARLISLE Golden Seal Total Roofing System Warranty

SERIAL NO. 10121937

930

DATE OF ISSUE: September 02, 2015

BUILDING OWNER: VINCENNES UNIVERSITY VINCENNES UNIVERSITY ROBERT E. GREEN ACTIVITIES CENTER NAME OF BUILDING: 1002 N. 1ST STREET, VINCENNES. IN BUILDING ADDRESS:

DATE OF COMPLETION OF THE CARLISLE TOTAL ROOFING SYSTEM: 08/31/2015

DATE OF ACCEPTANCE BY CARLISLE: 09/02/2015

(EB Warranty)

CMD1170523

Carlisle Roofing Systems, Inc., (Carlisle) warrants to the Building Owner (Owner) of the above described building, that; subject to the terms, conditions, and limitations stated in this warranty, Carlisle will repair any leak in the Carlisle Golden Seal[™]Total Roofing System (Carlisle Total Roofing System) installed by a Carlisle Authorized Roofing applicator for a period of 20 years commencing with the date of Carlisle's acceptance of the Carlisle Total Roofing System installation. However, in no event shall Carlisle's obligations extend beyond 20.5 years subsequent to the date of substantial completion of the Carlisle Total Roofing System. See below for exact date of warranty expiration.

The Carlisle Total Roofing System is defined as the following Carlisle brand materials: Membrane, Flashings, Adhesives and Sealants, Insulation, Cover Boards, Fasteners, Fastener Plates, Fastening Bars, Metal Work, Insulation Adhesives, and any other Carlisle brand products utilized in this installation.

TERMS, CONDITIONS, LIMITATIONS

- Owner shall provide Carlisle with written notice via letter, fax or email within thirty (30) days of the discovery of any leak in the Carlisle Total Roofing System. Owner should send 1. written notice of a leak to Carlisle's Warranty Services Department at the address set forth at the bottom of this warranty. By so notifying Carlisle, the Owner authorizes Carlisle or its designee to investigate the cause of the leak. Should the investigation reveal the cause of the leak to be outside the scope of this Warranty, investigation and repair costs for this service shall be paid by the Owner.
- If, upon inspection, Carlisle determines that the leak is caused by a defect in the Carlisle Total Roofing System's materials, or workmanship of the Carlisle Authorized Roofing 2 Applicator in installing the same, Owner's remedies and Carlisle's liability shall be limited to Carlisle's repair of the leak.
- This warranty shall not be applicable if, upon Carlisle's inspection, Carlisle determines that any of the following has occurred: 3.
 - The Carlisle Total Roofing System is damaged by natural disasters, including, but not limited to, lightning, fire, insect infestations, earthquake, tornado, hail, hurricanes, (a) and winds of (3 second) peak gust speeds of fifty-five mph or higher measured at 10 meters above ground; or
 - Loss of integrity of the building envelope and, or structure including, but not limited to partial or complete loss of roof decking, wall siding, windows, doors or other (b) envelope components or from roof damage by wind-blown objects, or: The Carlisle Total Roofing System is damaged by any intentional or negligent acts, accidents, misuse, abuse, vandalism, civil disobedience, or the like.
 - (c)
 - Deterioration or failure of building components, including, but not limited to, the roof substrate, walls, mortar, HVAC units, non-Carlisle brand metal work, etc., occurs and (d) causes a leak, or otherwise damages the Carlisle Total Roofing System; or
 - Acids, oils, harmful chemicals and the like come in contact with the Carlisle Total Roofing System and cause a leak, or otherwise damage the Carlisle Total Roofing (e) System
 - The Carlisle Total Roofing System encounters leaks or is otherwise damaged by condensation resulting from any condition within the building that may generate moisture.
 - This Warranty shall be null and void if any of the following shall occur:

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- If, after installation of the Carlisle Total Roofing System by a Carlisle Authorized Roofing Applicator there are any alterations or repairs made on or through the roof or (a) objects such as, but not limited to, structures, fixtures, solar panels, wind turbines, roof gardens or utilities are placed upon or attached to the roof without first obtaining written authorization from Carlisle: or
- Failure by the Owner to use reasonable care in maintaining the roof, said maintenance to include, but not be limited to, those items listed on Carlisle's Care & (b) Maintenance Information sheet which accompanies this Warranty.
- Only Carlisle brand insulation products are covered by this warranty. Carlisle specifically disclaims liability, under any theory of law, for damages sustained by or caused by non-5. Carlisle brand insulation products.
- During the term of this Warranty, Carlisle shall have free access to the roof during regular business hours. Carlisle shall have no obligation under this Warranty while any bills for installation, supplies, service, and warranty charges have not been paid in full to the Carlisle Authorized 7. Roofing Applicator, Carlisle, or material suppliers.
- Carlisle's failure at any time to enforce any of the terms or conditions stated herein shall not be construed to be a waiver of such provision.
- Carlisle shall not be responsible for the cleanliness or discoloration of the Carlisle Total Roofing System caused by environmental conditions including, but not limited to, dirt, 9. pollutants, or biological agents.
- Cartisle shall have no liability under any theory of law for any claims, repairs, restoration, or other damages including, but not limited to, consequential or incidental damages 10. relating, directly or indirectly, to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in the building or in the air, land, or water serving the building.
- This warranty shall be transferable upon a change in ownership of the building when the owner has completed certain procedures including a transfer fee and an inspection of 11. the Roofing System by a Carlisle representative

CARLISLE DOES NOT WARRANT PRODUCTS UTILIZED IN THIS INSTALLATION WHICH IT HAS NOT FURNISHED; AND SPECIFICALLY DISCLAIMS LIABILITY, UNDER ANY THEORY OF LAW, ARISING OUT OF THE INSTALLATION AND PERFORMANCE OF, OR DAMAGES SUSTAINED BY OR CAUSED BY, PRODUCTS NOT FURNISHED BY CARLISLE OR THE PRIOR EXISTING ROOFING MATERIAL OVER WHICH THE CARLISLE ROOFING SYSTEM HAS BEEN INSTALLED

THE REMEDIES STATED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES FOR FAILURE OF THE CARLISLE TOTAL ROOFING SYSTEM OR ITS COMPONENTS. THERE ARE NO WARRANTIES EITHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY, WHICH EXTEND BEYOND THE FACE HEREOF. CARLISLE SHALL NOT BE LIABLE FOR ANY INCIDENTAL. CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR DAMAGE TO THE BUILDING OR ITS CONTENTS UNDER ANY THEORY OF LAW.

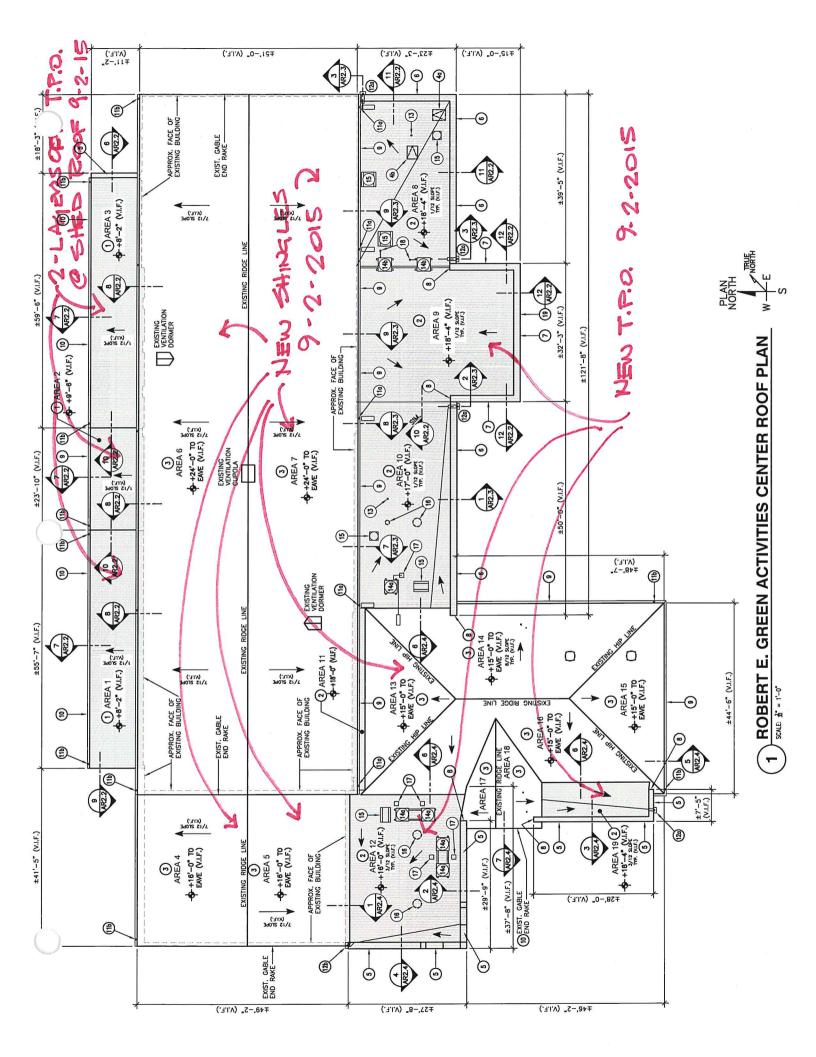
BY: Robert H. McNeill AUTHORIZED SIGNATURE

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TITLE: Director, Technical and Warranty Services

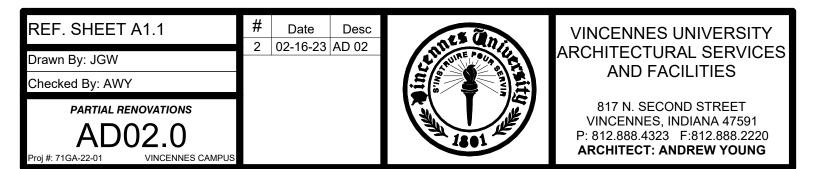
This Warranty Expires: September 01, 2035

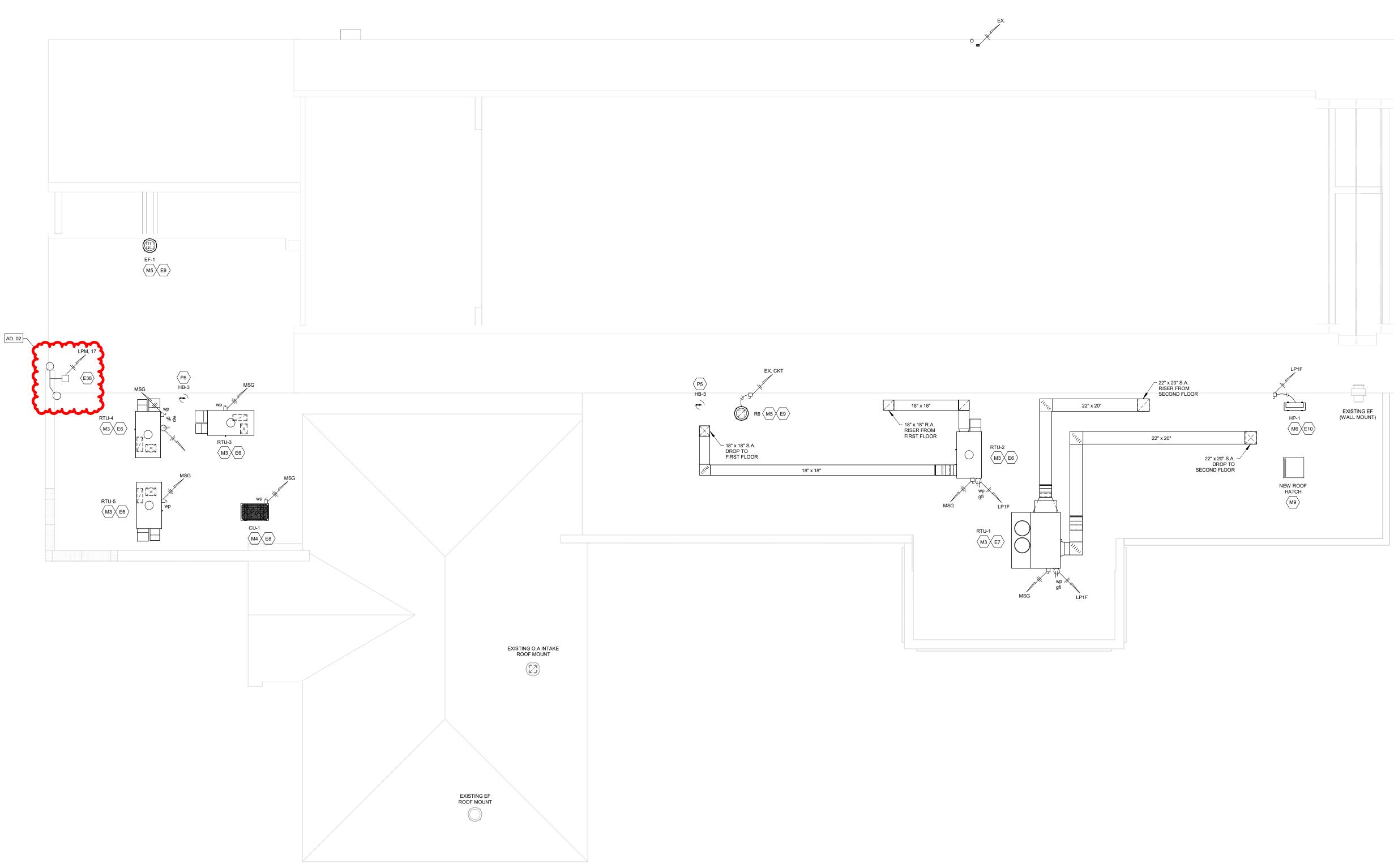
P.O. Box 7000 Carlisle, PA 17013 Phone: 800.233.0551 Fax: 717.245.7121 www.carlislesyntec.com



	ACCESSORIES SCHEDULE
1	SOAP DISPENSER, PROVIDED BY OWNER, INSTALLED BY GC
2	TOILET TISSUE DISPENSER, PROVIDED BY OWNER, INSTALLED BY GC
3	SANITARY NAPKIN DISPOSAL
4	42" ADA GRAB BAR
5	18" VERTICAL ADA GRAB BAR
6	36" ADA GRAB BAR
7	ELECTRIC HAND DRYER, PROVIDE 24"x36" STAINLESS STEEL WALL PROTECTION PLATE BELOW DRYER
8	50"x40" WALL MIRROR
P	24"x72" FULL LENGTH MIRROR
10	64"x40" WALL MIRROR

REVISED MIRROR SIZES IN NOTES #8 & #10

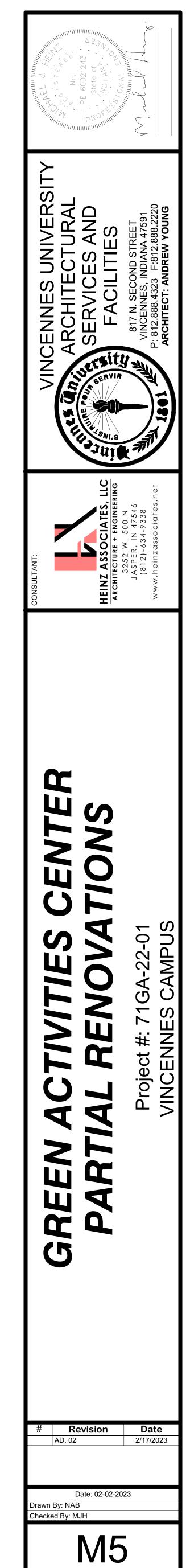




ROOF LEVEL MEP PLAN

GENERAL MECHANICAL NOTES

$\langle G1 \rangle$	MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS & ELEVATIONS PRIOR TO CONSTRUCTION.
	ALL DUCTWORK DIMENSIONS ARE CLEAR INSIDE DIMENSIONS. MECHANICAL CONTRACTOR SHALL OVERSIZE DUCTWORK AS NECESSARY, TO ACCOUNT FOR INSULATION/LINERS.
G3	MECHANICAL CONTRACTOR SHALL PROVIDE FOR TESTING & BALANCING OF ALL AIR & HYDRONIC WATER SYSTEMS, INCLUDING NEW KITCHEN EXHAUST HOODS.
$\langle G4 \rangle$	MECHANICAL CONTRACTOR SHALL CONFIRM ALL EQUIPMENT ELECTRICAL REQUIREMENTS, INCLUDING BREAKER/DISCONNECT CAPACITY, WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
$\left< G5 \right>$	ALL MECHANICAL EQUIPMENT SHALL BE BACNET COMPATIBLE, AND SHALL BE FURNISHED WITH A BACNET
$\langle G6 \rangle$	DIAGNOSTIC TOOL. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONCRETE FLOOR CUTTING & REMOVAL,
	WHICH PERTAINS TO THEIR RESPECTIVE WORK, AND ALSO RESPONSIBLE FOR NEW COMPACTED GRANULAR BACKFILL TO UNDERSIDE OF SLAB. ALL REMOVED SPOIL SHALL BE REMOVED & DISPOSED OFF-SITE - NO RE- USE ALLOWED. MECHANICAL CONTRACTOR RESPONSIBLE FOR CONCRETE FLOOR REPLACEMENT,
$\langle G7 \rangle$	INCLUDING FINAL FINISH. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL AFFECTED ROOF, CEILING, WALLS &
	FLOORS, AND FINISHING FLUSH TO SURFACE. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL SURFACE FINISH, I.E. PAINT, TILE, CARPET, ETC.
$\langle G8 \rangle$	THROUGH AND MEMBRANE PENETRATIONS IN FIRE-RESISTIVE WALLS SHALL BE FIRESTOPPED IN ACCORDANCE WITH THE INDIANA BUILDING CODE REGULATIONS. IN COMBUSTIBLE CONSTRUCTION,
	FIREBLOCKING SHALL BE INSTALLED TO CUT OFF CONCEALED DRAFT OPENINGS (BOTH VERTICAL & HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A ROOF OR ATTIC SPACE. FIREBLOCKING SHALL BE INSTALLED IN LOCATIONS IN ACCORDANCE WITH THE
$\langle G9 \rangle$	INDIANA BUILDING CODE REGULATIONS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE FILTER REPLACEMENT OF ALL UNITS, UPON
	DETERMINATION OF SUBSTANTIAL COMPLETION. MECHANICAL CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS TO ENSURE ALL FILTER, VALVES,
(G10)	ACTUATORS, & OTHER SUCH COMPONENTS ARE INSTALLED IN A FULLY-ACCESSIBLE LOCATION
	EYED MECHANICAL NOTES
(M1)	MAKE-UP AIR UNIT, WITH CONCRETE FOUNDATION, BY MECHANICAL CONTRACTOR, MECHANICAL
	CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR ALL ALUMINUM DUCT, 2" THICK RIGID INSULATION WITH FULL-PERIMETER EDPM MEMBRANE LINER, & DUCT VIBRATION ISOLATION.
	MECHANICAL CONTRACTOR SHALL PROVIDE FOR NEW CONCRETE EQUIPMENT FOUNDATION WITH SEISMIC ANCHORS, AND WALL PENETRATION WITH LINTEL, AS DETAILED. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M2)	AIR HANDLING UNIT, WITH SPRING ISOLATORS & STRUCTURAL STEEL FRAMING, BY MECHANICAL CONTRACTOR, MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER
	MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR SEISMICALLY-DESIGNED HANGERS WITH ANCHORS, AS DETAILED. MECHANICAL CONTRACTOR SHALL
	PROVIDE FOR REFRIGERANT LINE SETS, REFRIGERANT, HOT WATER COIL, & VALVING, AS DETAILED. TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE FOR ALL REQUIRED CONTROL CIRCUITING TO ROOFTOP CONDENSING UNIT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
МЗ	ROOFTOP AIR HANDLING UNIT, WITH SEISMIC INSULATED ROOF CURB & STRUCTURAL STEEL REINFORCING, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION.
	AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR HOT WATER COIL, & VALVING, AS DETAILED. MECHANICAL CONTRACTOR SHALL PROVIDE FOR STRUCTURAL
	STEEL REINFORCING, AS DETAILED. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PIPING PORTALS, ROOF PENETRATIONS, FLASHING & ROOF REPAIRS USING AN OWNER-APPROVED ROOFING SUBCONTRACTOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
$\langle M4 \rangle$	CONDENSING UNIT, WITH SEISMICALLY-DESIGNED RAILS & STRUCTURAL STEEL REINFORCING, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS
	PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR SEISMICALLY-DESIGNED HANGERS WITH ANCHORS, AS DETAILED. MECHANICAL CONTRACTOR SHALL PROVIDE FOR REFRIGERANT LINE SETS & REFRIGERANT, AS SHOWN. MECHANICAL CONTRACTOR SHALL
	PROVIDE FOR STRUCTURAL STEEL REINFORCING, AS DETAILED. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PIPING PORTALS, ROOF PENETRATIONS, FLASHING & ROOF REPAIRS USING AN OWNER- APPROVED ROOFING SUBCONTRACTOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M5)	EXHAUST FAN, WITH INSULATED ROOF CURB, M.O. DAMPER, & BIRDSCREEN, BY MECHANICAL CONTRACTOR.
	MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. EXHAUST FAN TO BE CONTROLLED VIA IN-RESTROOM OCCUPANCY SENSOR WITH TIME DELAY OFF. MECHANICAL CONTRACTOR SHALL CONFIRM EXISTING ROOF SLOPE. MECHANICAL
\frown	CONTRACTOR SHALL BE RESPONSIBLE FOR ROOF PENETRATIONS, FLASHING & ROOF REPAIRS USING AN OWNER-APPROVED ROOFING SUBCONTRACTOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
< <u>M6</u> >	HEAT PUMP UNIT, WITH SEISMICALLY-DESIGNED RAILS & STRUCTURAL STEEL REINFORCING, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR
	REFRIGERANT LINE SETS & REFRIGERANT, AS SHOWN. MECHANICAL CONTRACTOR SHALL PROVIDE FOR STRUCTURAL STEEL REINFORCING, AS DETAILED. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR
\frown	PIPE PORTALS, ROOF PENETRATIONS, FLASHING & ROOF REPAIRS USING AN OWNER-APPROVED ROOFING SUBCONTRACTOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
< <u>M7</u> >	FAN COIL UNIT, WITH SEISMICALLY-DESIGNED HANGERS, SPRING ISOLATORS & INTEGRAL CONDENSATE PUMP, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR
\frown	SHALL PROVIDE FOR REFRIGERANT LINE SETS & REFRIGERANT, AS SHOWN. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
<u><м</u> 8	REHEAT COILS, WITH SEISMICALLLY-DESIGNED HANGERS & SPRING ISOLATORS, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURED RECOMMENDATIONS & REFAILS - COODDINATE INSTALLATION WITH A TRADES &
	MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M9)	ROOF HATCH BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. ROOF HATCH TO MATCH EXISTING. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ROOF PENETRATIONS, FLASHING &
\frown	ROOF REPAIRS USING AN OWNER-APPROVED ROOFING SUBCONTRACTOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M10)	VAV BOX, WITH SEISMICALLY-DESIGNED HANGERS & SPRING ISOLATORS, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M11)	DUCT SILENCER, WITH SEISMICALLY-DESIGNED HANGERS & DUCT VIBRATION ISOLATION, BY MECHANICAL CONTRACTOR, MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER
	MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M12)	HYDRONIC PUMP, WITH CONCRETE HOUSEKEEPING PAD, GROUTING, & SEISMIC INERTIA RESTRAINT BASE, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION,
	AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. TEMPERATURE CONTROLS CONTRACTOR SHALL PROVIDE & INSTALL VFD, AND ELECTRICAL CONTRACTOR SHALL PROVIDE FOR CIRCUITING TO/FROM BOTH VFD & PUMP. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M13)	STEAM CONDENSATE PUMP, WITH CONCRETE HOUSEKEEPING PAD, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S
(M14)	RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
	MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR STRUCTURAL STEEL
	FRAME, AS DETAILED, COMPLETE WITH (1) COAT PRIMER & (2) COATS PAINT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M15)	TRANSFER & DOOR GRILLES BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M16)	MECHANICAL CONTRACTOR SHALL PROVIDE FOR REPLACEMENT OF EXISTING DIFFUSERS & GRILLES, COMPLETE WITH SUPPLY/RETURN PLENUM BOX, AS DETAILED. COORDINATE INSTALLATION WITH ALL
(M17)	TRADES & OWNER. STEAM PRV STATION BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR
·····/	COMPLETE INSTALLATION, AS DETAILED. MECHANICAL CONTRACTOR SHALL PROVIDE FOR EXISTING PRV STATION. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M18)	NEW MEZZANINE ACCESS LADDER BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS.
(M19)	COORDINATE INSTALLATION WITH ALL TRADES & OWNER. MECHANICAL CONTRACTOR SHALL PROVIDE FOR RELOCATION OF EXISTING WATER HEATER & PUMP, AS
	SHOWN, COMPLETE WITH ANY NECESSARY PIPING EXTENSIONS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR NEW 1-1/2" SUPPLY & RETURN TO NEW HEATING HOT WATER MAINS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR NEW 6" CONCRETE HOUSEKEEPING PAD AND SEISMIC WALL BRACING TO
(M20)	STRUCTURE. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. MECHANICAL CONTRACTOR SHALL SEISMICALLY BRACE ALL NEW DUCT TO STRUCTURE. COORDINATE
	INSTALLATION WITH ALL TRADES & OWNER.
(M21)	ELECTRIC CABINET HEATER BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M22)	AIR SEPARATOR TANK BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL
	CONTRACTOR SHALL PROVIDE FOR 1" MAKE-UP VALVE & PRV, FROM DOMESTIC WATER SYSTEM. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M23)	50 GAL EXPANSION TANK, WITH OVERHEAD STRUCTURAL FRAME SUPPORT, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M24)	CHEMICAL ONE-SHOT FEEDER, WITH CONCRETE HOUSEKEEPING PAD, WITH ASSOCIATED PIPING, BY
	MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M25)	GLYCOL FEEDER SYSTEM, WITH CONCRETE HOUSEKEEPING PAD, WITH ASSOCIATED PIPING, BY MECHANICAL CONTRACTOR. SYSTEM SHALL BE EDDINGTON #GL-50-E-AA-RC, WITH 1/2 HP PUMP, 50-GALLON
	TANK, & CONTROL PANEL. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M26)	NEW BOLLARD, BY MECHANICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE
	INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. MECHANICAL CONTRACTOR SHALL PROVIDE FOR A 24" DIA x 48" DEEP CONCRETE PIER. CONFIRM EXACT LOCATION WITH WITH ARCHITECT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M27)	NEW LAY-IN CEILING, BY GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. COORDINATE INSTALLATION WITH
(M28)	ALL TRADES & OWNER. NEW LAY-IN CEILING, BY GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE FOR COMPLETE
	INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. GENERAL CONTRACTOR SHALL DEMOLISH/REMOVE EXISTING CEILING, AS SHOWN. COORDINATE INSTALLATION WITH ALL TRADES &
(M29)	OWNER. EXISTING CEILING, BY GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE FOR COMPLETE
	INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. GENERAL CONTRACTOR SHALL REMOVE, SALVAGE, AND REINSTALL CEILING, AS SHOWN. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
(M30)	NEW LAY-IN CEILING, BY GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS. GENERAL CONTRACTOR SHALL
	DEMOLISH/REMOVE EXISTING CEILING, AS SHOWN. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.



ROOF LEVEL MEP PLAN

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				PLY SUPPLY	EXHAUST	EXHAUST E	HAUST RECIR.		ENTHALPY		SL	UMMER		ERV		W	/INTER		TOTAL	SENSIBLE	COOLING PE	RFORMANCE	RH TOTAL	RH LVG, AIR	HEATING		HE. PRESSURE	ATING PERFORMAN	CE LVG. WATER	ENTERING AIR	LEAVING AIR	ELECTRICA	L DATA	DEMADI/O
MARK MANUFACTURI		MODEL	(CFM) (H	P) (IN)	(CFM)	(HP)	(IN) (CFM)	IEER	RECOVERY IEER	OA	SA	RA	EA	CAPACITY REDUCTIO	Y OA	SA	RA	CAPACITY REDUCTION	CAPACITY (BTU/HR)	CAPACITY (BTU/HR)	TEMPERATURE (°F)	TEMPERATURE (°F)	CAPACITY (BTU/HR)	TEMPERATURE (°F)	CAPACITY (BTU/HR)	GPM	DROP (FT)	TEMPERATURE (°F)	TEMPERATURE (°F)	TEMPERATURE (°F)	TEMPERATURE (°F)	VOLTAGE	MCA (A)	REMARKS
MU-1 VALENT	LENT VXE-352-8	2-81D-501-2-J2	16,000 (3) (0 7.5 2.0	5,000	(2) @ 1	1.0 11,000	15.5	80.5 %	95/78	78/66	75/62	92/75	247,500	-10/-11	57/47	72/56	360,180	546,000	402,200	76/64	53/52	276,800	69.1	809,900	83 GPM	9.0	180.0	160.0	67	114	208V, 3-PH	282.4 123	045

NOTES: 1. DESIGNED FOR 95/78°F SUMMER, -10°F WINTER.
 2. ALL FANS TO BE EQUIPPED WITH VFD'S.
 3. MODULATING INVERTER SCROLL COMPRESSORS.
 4. TRANSITION CURBS FOR HORIZONTAL DISCHARGE NOT ACCEPTABLE.
 5. BACNET INTERFACE W/ LCD READOUT.

							COOL	ING 2						COIL ROWS/	REHE/	AT COIL			
	MANUFACTURER	MODEL	AIR FLOW (CFM)	E.S.P (IN)	HP	TOTAL CAPACITY (BTU/HR)	SENSIBLE CAPACITY (BTU/HR)	COMPRESSORS STAGING	SST	LIQUID TEMP	SUPERHEAT	COIL VELOCITY	COIL PRESSURE	FINS/ CIRCUITS	TOTAL CAPACITY (BTU/HR)	WATER FLOW (GPM)	MCA (A)	VOLTAGE	REMARKS
AHU-1	KRUEGER	BCU-20	2,000	1.0	1	88,700	59,600	(2)	43	110.0	10	411	0.35	6/8/4			16	120V, 1-PH	12 KITCHEN

			AIR	E.S.P		TOTAL	COO SENSIBLE	LING 2	LVG. AIR		MCA	HOT WATER				
MARK	MANUFACTURER	MODEL	FLOW (CFM)	(IN)	HP	CAPACITY (BTU/HR)	CAPACITY (BTU/HR)	COMPRESSORS STAGING	TEMPERATURE (F)	EER	(A)	HEATING INPUT (MBTU/HR)	VOLTAGE		REMARKS	
RTU-1	VALENT	VX-112-10I-0-J1	3,350	1.5	2.13	128,100	91,400	(1)	54.9/54.5	11.3	56.9		208V, 3-PH	12345		
TU-2	VALENT	VX-12-5I-0-J1	1,800	0.6	1	66,100	48,200	(1)	54.6/54.6		24.4		208V, 3-PH	02345		
TU-3	VALENT	VX-12-4I-O-G1	1,425	0.6	3/4	52,100	38,100	(1)	54.5/54.5		19.6		208V, 3-PH	12345		
TU-4	VALENT	VX-12-4I-O-G1	1,425	0.6	3/4	52,100	38,100	(1)	54.5/54.5		19.6		208V, 3-PH	12345		
TU-5	VALENT	VX-12-4I-O-G1	1,425	0.6	3/4	52,100	38,100	(1)	54.5/54.5		19.6		208V, 3-PH	02345		

		SCHEDL	ILE OF	OUIL	DOOR	HEAI	PUMP	UNH	S
			CAPACITY	Y (BTU/HR)		POWER	RINPUT		
MARK	MANUFACTURER	MODEL	COOLING	HEATING	COOLING (KW)	HEATING (KW)	VOLTAGE	MCA (A)	REMARKS
HP-1	LG	LUU240HHV	30,000	33,000	3	3.8	208V, 1-PH	22	12CONTROLS ROOM

NOTES: 1. PROVIDE HAIL GUARDS, ROOF MOUNT FRAME W/SEISMIC ANCHORS, REMOTE CONTROLLER, AHU COMMUNICATIONS KIT FOR RA. 2. PROVIDE FOR LOW AMBIENT COOLING OPERATION TO 0°F.

			COOLING		POWER INPUT				
MARK	MANUFACTURER	MODEL	CAPACITY TOTAL (BTU/HR)	COOLING (KW)	VOLTAGE	MCA (A)		REMARKS	
CU-1	LG	ARUM096BTE5	96,000	5.3	208V, 3-PH	28.5	①KITCHEN		

			CAPACITY	Y (BTU/HR)		POWER	R INPUT			
MARK	MANUFACTURER	MODEL	COOLING	HEATING	COOLING (KW)	HEATING (KW)	VOLTAGE	MCA (A)	EER	REMARKS
FC-1	LG	LCN249HV	30,000	33,000			208V, 1-PH			① CONTROLS ROOM

					SCH	EDUL	E OF V	AV BC	DXES				
								HEA	TING			WATER PRESS.	
MARK	MANUFACTURER	MODEL	SIZE	MAX CFM	MIN CFM	E.S.P (IN)	TOTAL CAPACITY (BTU/HR)	ENTR. AIR TEMPERATURE (°F)	ENTR. WATER TEMPERATURE (°F)	LVG. WATER TEMPERATURE (°F)	WATER FLOW (GPM)	DROP (FT)	REMARKS
VAV-1	KRUEGER	LMHS	12	1,800	206	0.4	26,000	55	160	127.9	1.7	0.28	1)2)ROW HW COIL
VAV-2	KRUEGER	LMHS	10	1,200	145	0.4	17,400	55	160	132	1.3	0.18	12 ROW HW COIL
VAV-3	KRUEGER	LMHS	06	400	52	0.4	7,100	55	160	139.7	0.7	0.1	①②ROW HW COIL

NOTES: 1. EQUIP W/BACNET INTERFACE TO BMS.

			S	CHEDU	LE Of	= HOT	WATE	R COI	LS		
MARK	MANUFACTURER	MODEL	WATER INLET TEMP. (°F)	WATER OUTLET TEMP. (°F)	GPM	AIR PRESSURE DROP	AIR FLOW (CFM)	ENTERING DRY BULB TEMP. (°F)	LEAVING DRY BULB TEMP. (°F)	TOTAL HEATING CAPACITY (MBH)	REMARK
HWC-1	AEROFIN	18.0 X 18.0	180.0	160.0	7.0	0.27	1,800	60.0	95.0	68,100	
HWC-2	AEROFIN	18.0 X 14.0	180.0	160.0	6.0	0.27	1,450	60.0	95.0	54,800	
HWC-3	AEROFIN	18.0 X 14.0	180.0	160.0	6.0	0.27	1,450	60.0	95.0	54,800	
HWC-4	AEROFIN	18.0 X 14.0	180.0	160.0	6.0	0.27	1,450	60.0	95.0	54,800	
HWC-5	AEROFIN	18.0 X 18.0	180.0	160.0	7.0	0.21	1,600	60.0	95.0	60,500	

MARK	MANUFACTURER	SERIES	MODEL	GPM	HEAD	HP	RPM	EFF	VOLTAGE	REMARKS
HWP-1 HWP-2	B&G B&G	1520 1520	2BC 2BC	175 175	(FT) 90 90	7.5 7.5	1750 1750	75% 75%	208V, 3-PH 208V, 3-PH	①② END SUCTION ①② END SUCTION
			<u>с</u> сц	EDULE						
			SCH					NGEN	3	
MARK	MANUFACTURER	MODEL	GPM				SHELL SIDE (STEAN PRESSURE (PSIG)		-	REMARKS

	_
IARKS	
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	1



							E
MARK M/	ANUFACTURER	MODEL	CV	INLET PRESSURE (PSIG)	OUTLET PRESSURE (PSIG)	LB/HR	REMARKS
PRV-1	ARMSTRONG	GP2000-1	10.9	75	15	1672	
PRV-2	ARMSTRONG	GP2000-1-1/2	18.8	75	15	2884	

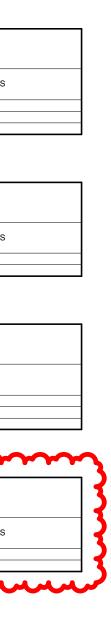
MARK	MANUFACTURER	MODEL	INLET SIZE (IN)	OUTLET SIZE (IN)	OUTLET PRESSURE (PSIG)	LB/HR	
STEAM RELIEF	ARMSTRONG	6010 JH	2"	2-1/2"	25	2730	
		STE	EAM T	RAP S	CHED	JLE	
Mark	MANUFACTURER	MODEL	CAPACITY (LB/HR)	OUTLET SIZE (IN)	OPERATING PRESSURE (PSIG)		REMAR
ST-1	ARMSTRONG	F&T B8	8,000	2"	15		
	ARMSTRONG	811	425	3/4"	15		
	ARMSTRONG ARMSTRONG	F&T B8 811	, , , , , , , , , , , , , , , , , , ,	. ,	· · · ·		
ST-2	STEA	мсо	NDEN		PUMP	SCHEE	
ST-2	STEA	M CO MODEL	NDEN				DULE

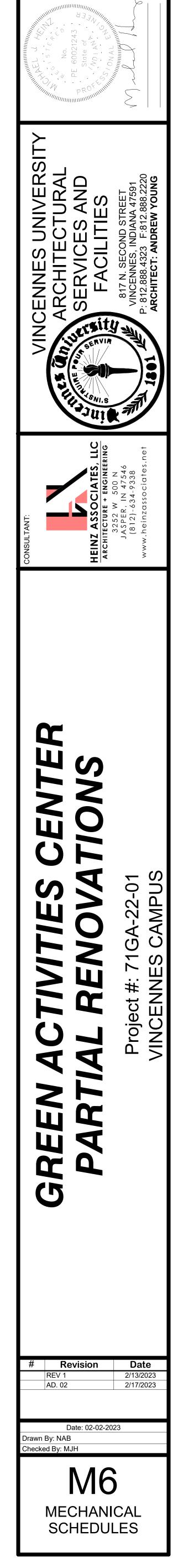
	SCHEDULE OF CABINET HEATERS								
MARK	MANUFACTURER	MODEL	SIZE	HEATING CAPACITY (BTU/HR)	POWER (WATTS)	VOLTAGE	FULL-LOAD AMPS	REMARKS	
CH-1	QMARK	CWH3150F		5,115	1,500	120V, 1-PH	12.5	SURFACE MOUNT	

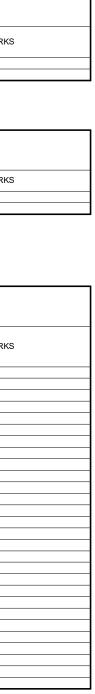
			S	CHED	ULE C)F FAN	S		
MARK	MANUFACTURER	MODEL	AIR FLOW (CFM)	RPM	BHP	SOUND (SONES)	E.S.P (IN)	VOLTAGE	REMA
EF-1	GREENHECK	BSQ 160-7	3,000	1260	.74	14.6	.25	208V, 3-PH	1 MECHANICAL ROOM

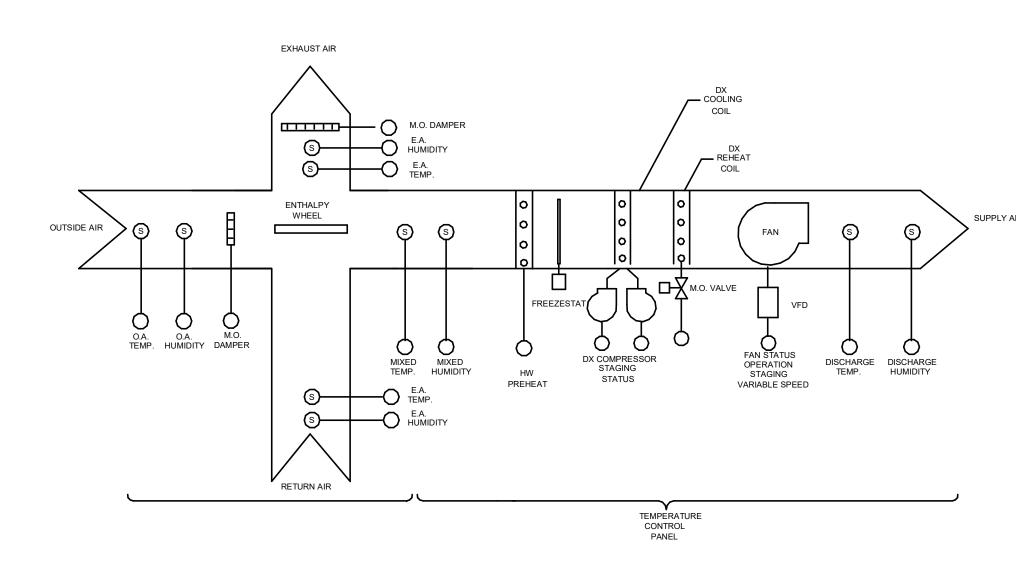
			1	T	1	T	AIR				
Mark	MANUFACTURER	MODEL	INLET DIM. SIZE	NOMINAL SIZE	AIR FLOW (CFM)	AIR THROW (FT)	AIR PRESSURE DROP (IN W.C.)	SOUND (NC)	MOUNTING		R
S1	PRICE	SMD	18" x 18"	24" x 24"	667	12-24	0.036	<15	LAY-IN	10	
S2	PRICE	SMD	18" x 18"	24" x 24"	667	12-24	0.036	<15	DUCT	-	
S3	PRICE	SMD	15" x 15"	24" x 24"	600	10-21	0.036	<15	LAY-IN	0	
S4	PRICE	SMD	15" x 15"	24" x 24"	475	10-21	0.036	<15	LAY-IN	1	
S5	PRICE	520D	32" x 8"	32" x 8"	466	13-40	0.014	<15	WALL	Ō	
S6	PRICE	SMD	15" x 15"	24" x 24"	450	10-21	0.036	<15	LAY-IN	1	
S7	PRICE	SMD	12" x 12"	18" x 18"	300	8-19	0.036	<15	LAY-IN	0	
S8	PRICE	520D	22" x 6"	22" x 6"	250	8-28	0.014	<15	DUCT	0	
S9	PRICE	SMD	9" x 9"	15" x 5"	200	8-18	0.065	<15	LAY-IN	1	
S10	PRICE	SMD	9" x 9"	15" x 5"	180	8-18	0.065	<15	LAY-IN	0	
S11	PRICE	520D	12" x 8"	12" x 8"	180	7-24	0.006	<15	WALL		-
S13	PRICE	SMD	9" x 9"	15" x 15"	150	6-16	0.036	<15	SURFACE	0	
S14	PRICE	SMD	6" x 6"	12" x 12"	80	4-12	0.036	<15	LAY-IN		
S15	PRICE	SMD	6" x 6"	12" x 12"	75	4-12	0.036	<15	LAY-IN		
R1	PRICE	95	60" x 56"	60" x 56"	8000			<15	WALL	2	
R2	PRICE	80	24" x 48"	24" x 48"	3000			<15	LAY-IN		
R3	PRICE	90	32" x 24"	32" x 24"	1800			<15	WALL		
R4	PRICE	90	28" x 24"	28" x 24"	1600			<15	WALL		
R5	PRICE	80	24" x 24"	24" x 24"	1425			<15	LAY-IN		
R6	PRICE	80	12" x 12"	12" x 12"	150			<15	LAY-IN		
R7	PRICE	80	12" x 12"	12" x 12"	125			<15	LAY-IN		
R8	PRICE	80	24" x 24"	24" x 24"	75			<15	SURFACE		
R9	PRICE	80	24" x 24"	24" x 24"	75			<15	LAY-IN		
DG	PRICE	ATGH	24" x 24"	24" x 24"	900		0.024	24	DOOR		
TG-1	PRICE	90			0		0.021	<15	WALL		

NOTES: 1. PROVIDE OPPOSED-BLADE VOLUME DAMPER AT EACH SUPPLY DIFFUSER. 2. PROVIDE FOR BLACK GRILLE IN COLOR. DUCTWORK INSIDE GRILLE SHALL BE PAINTED BLACK TO REDUCE REFLECTIONS.

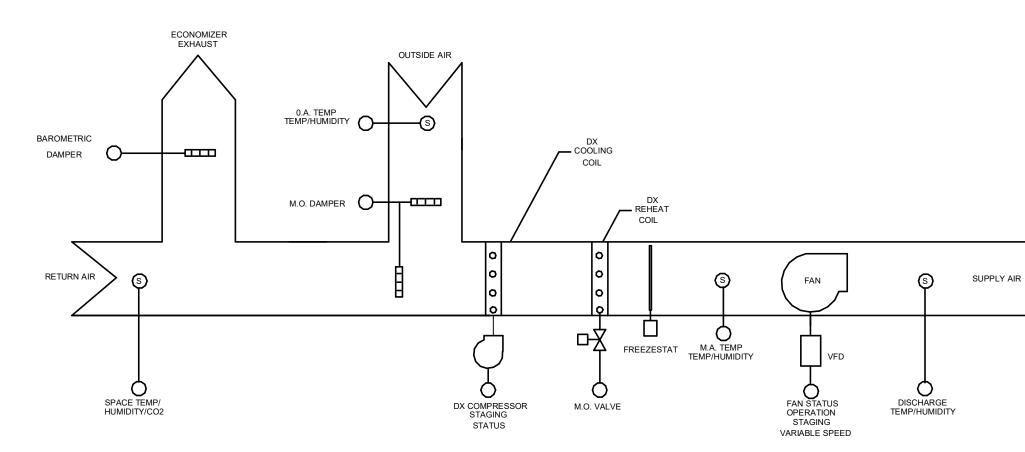




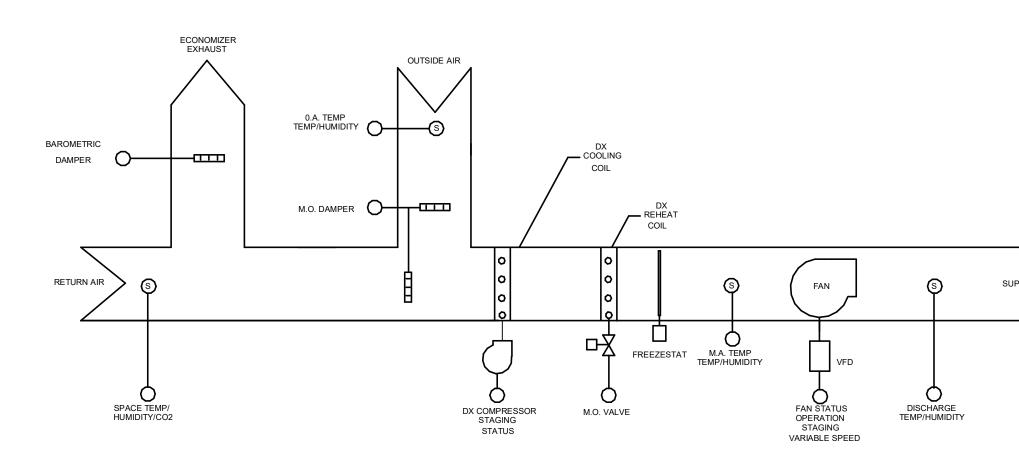




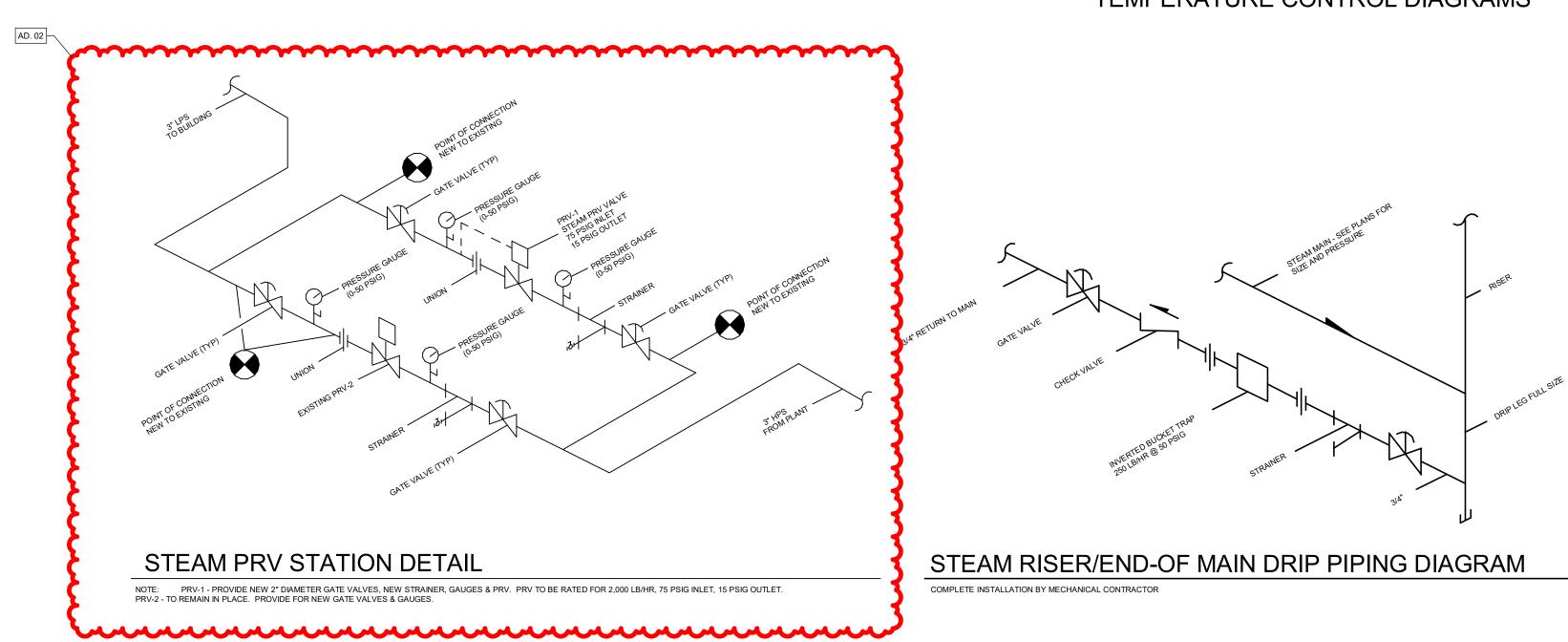
MU CONTROL DIAGRAM (VARIABLE SPEED)

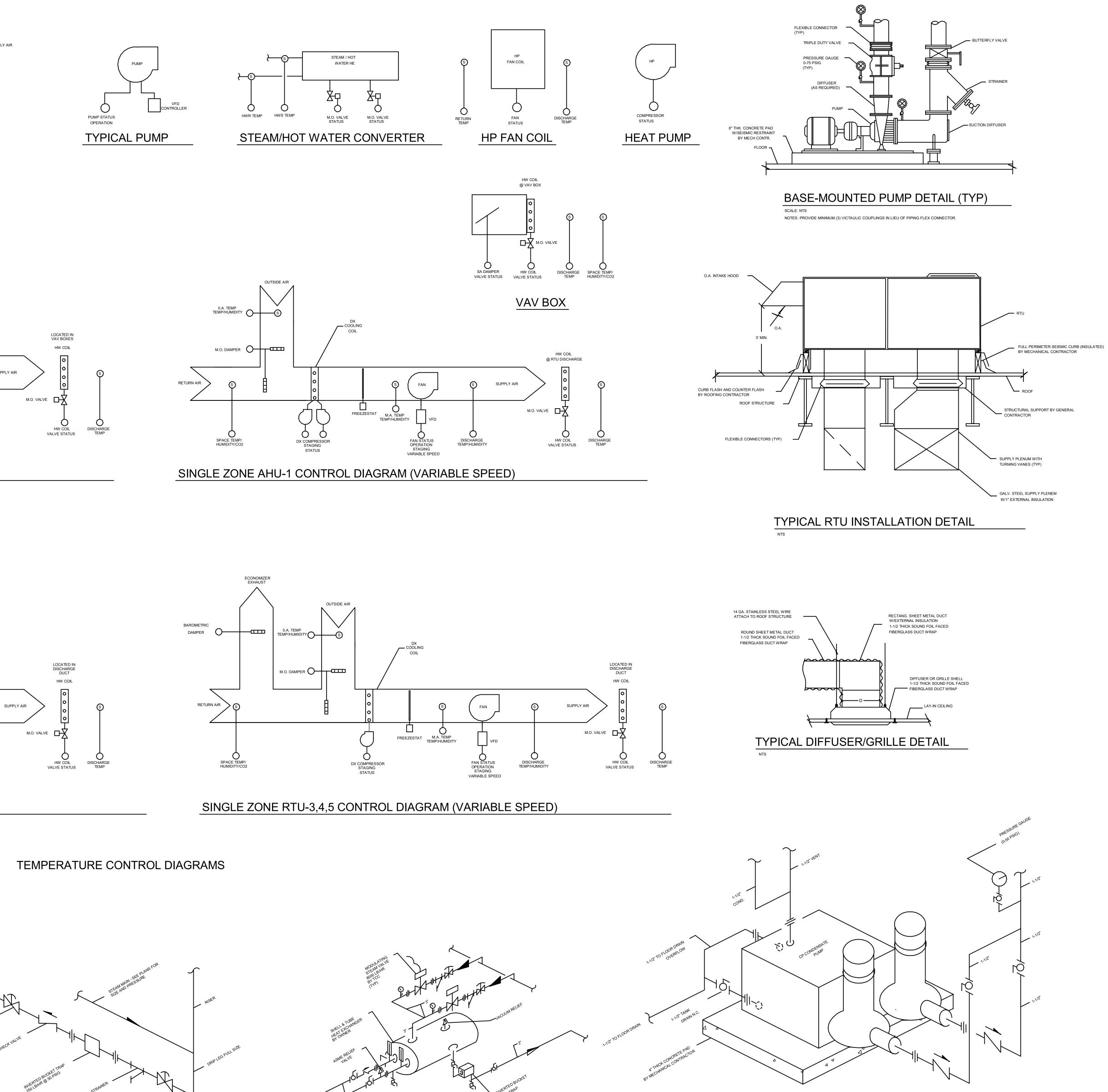


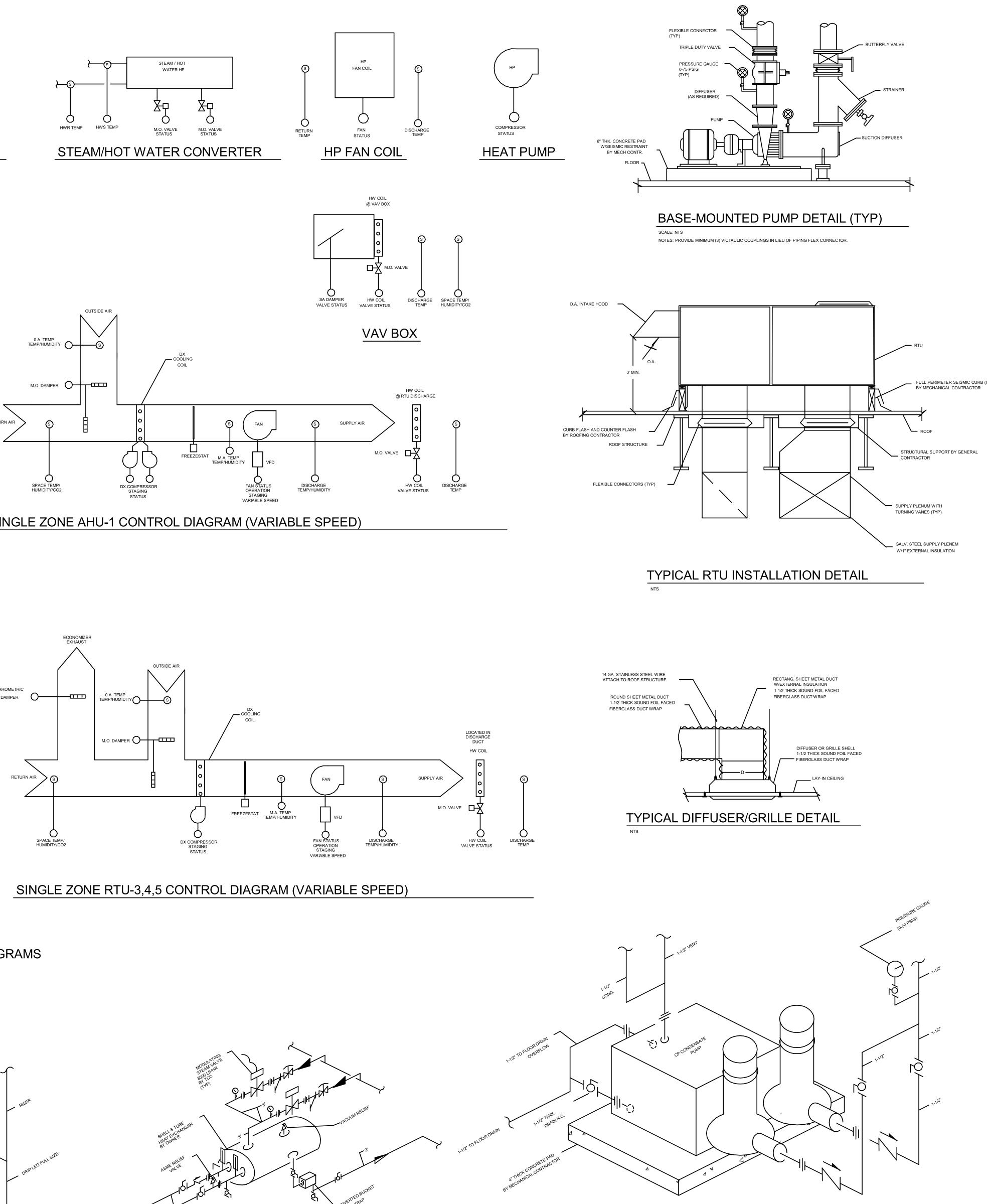
SINGLE ZONE RTU-1 CONTROL DIAGRAM (VARIABLE SPEED)

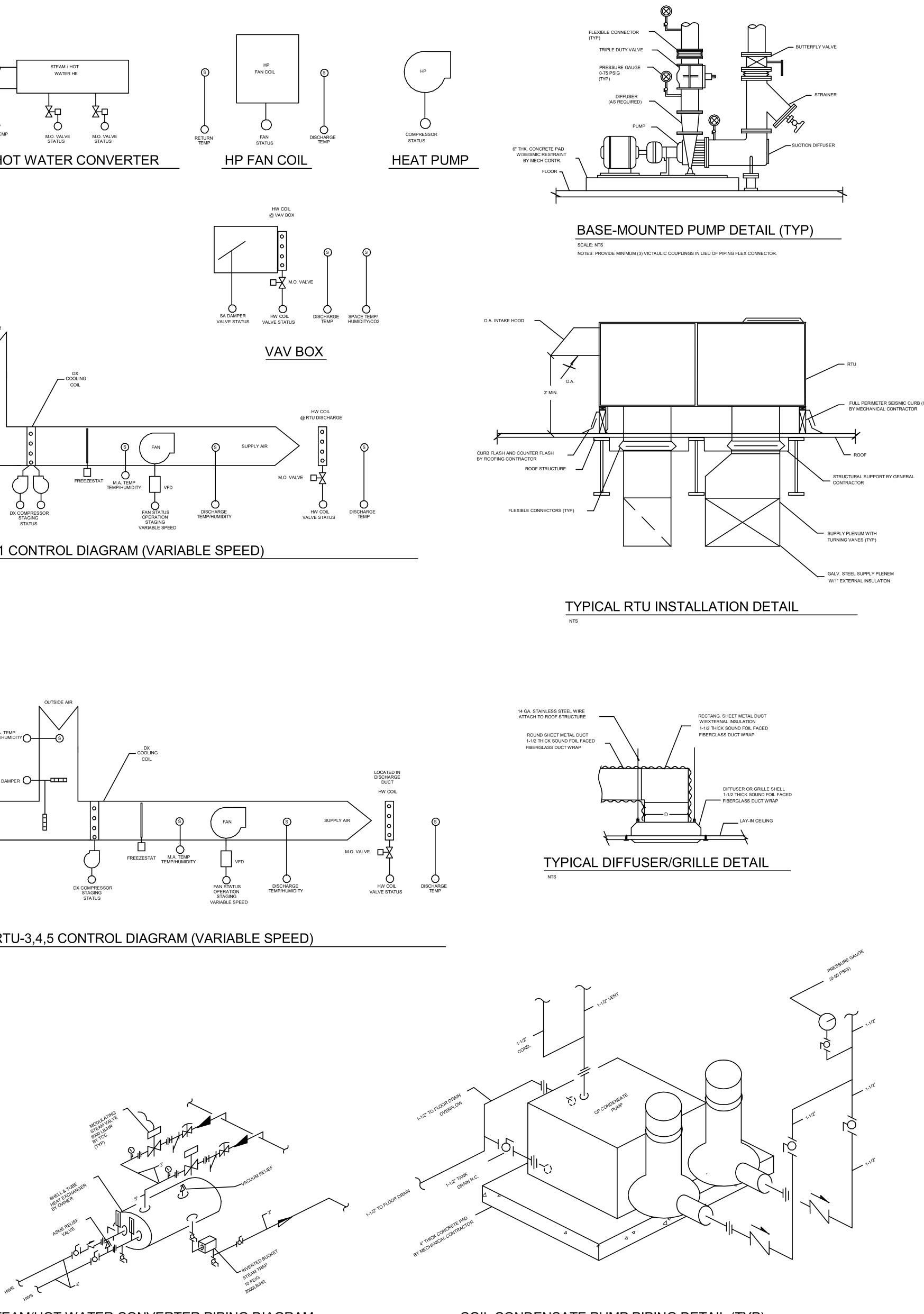


SINGLE ZONE RTU-2 CONTROL DIAGRAM (VARIABLE SPEED)





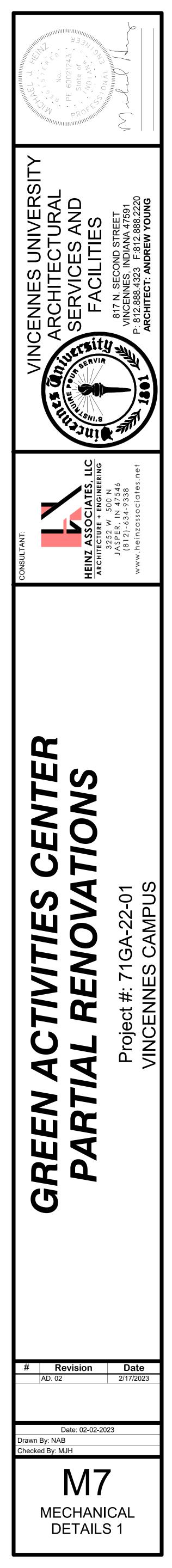


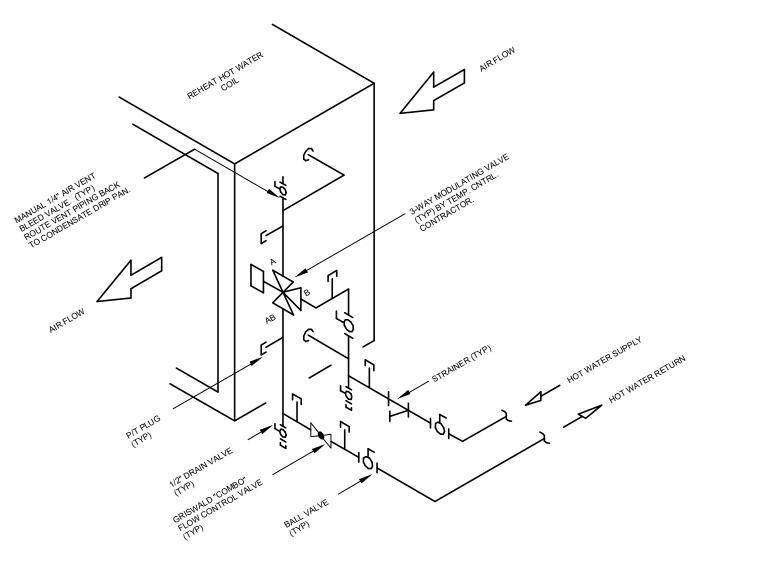


STEAM/HOT WATER CONVERTER PIPING DIAGRAM COMPLETE INSTALLATION BY MECHANICAL CONTRACTOR ALL WELDED SUPPORT FRAMING BY MECHANICAL CONTRACTOR

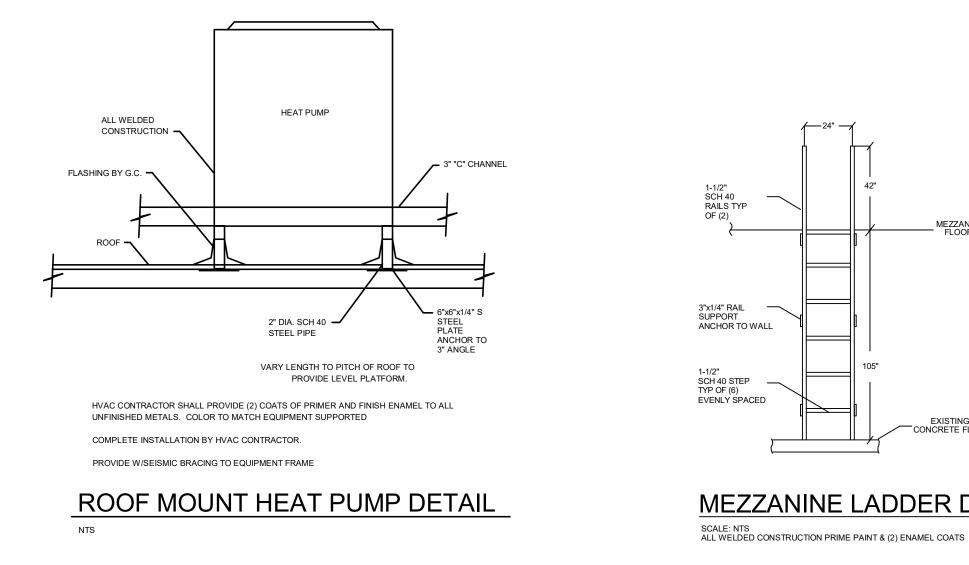
COIL CONDENSATE PUMP PIPING DETAIL (TYP)

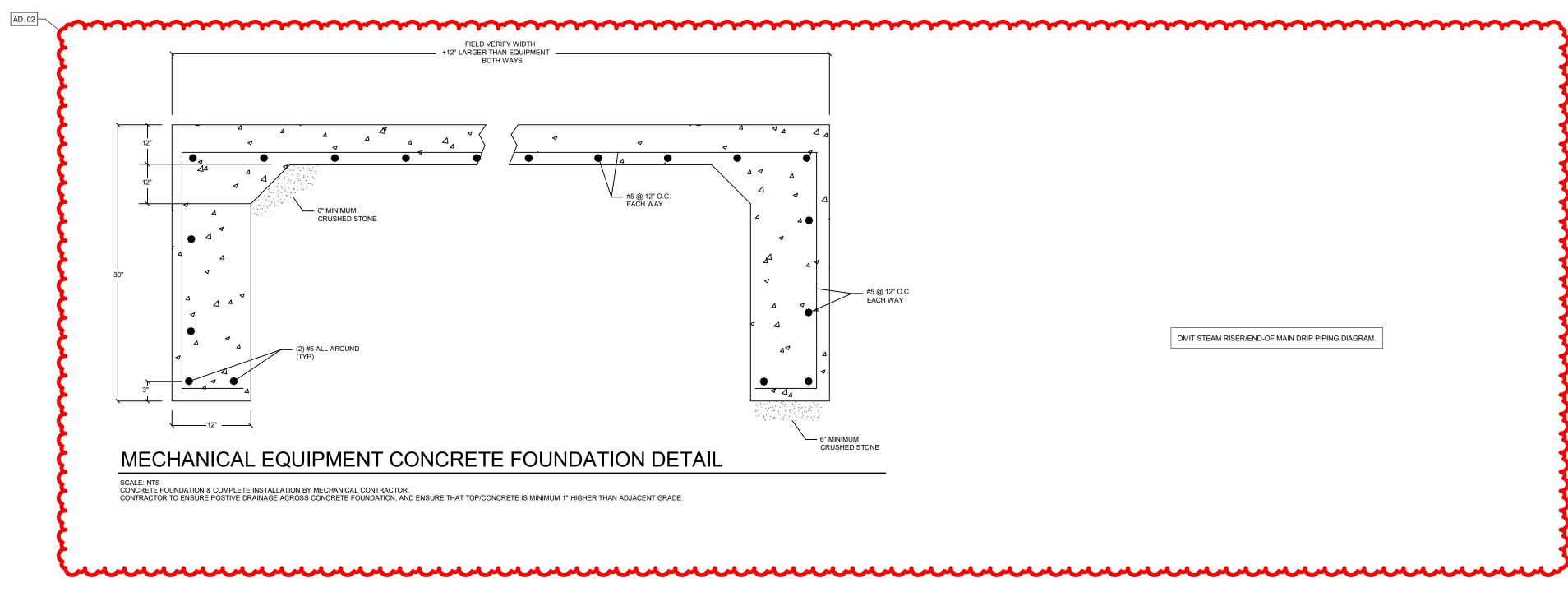
NTS DUPLEX PUMP INSTALLATION

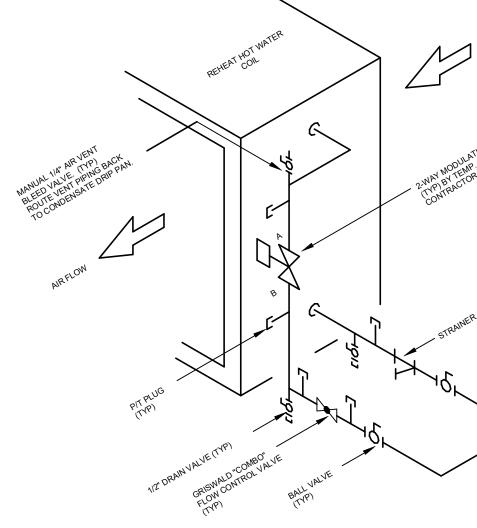




RTU COIL PIPING DIAGRAM (TYP) NOTE: MODULATING CONTROL VALVE BY TEMPERATURE CONTROL CONTRACTOR. FAN COIL, ALL PIPING, VALVES, ETC. & COMPLETE INSTALLATION BY MECHANICAL CONTRACTOR.

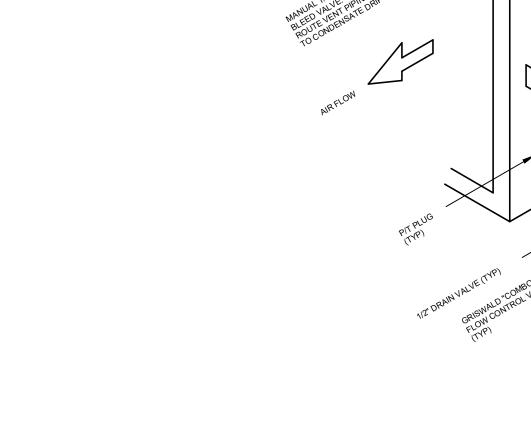


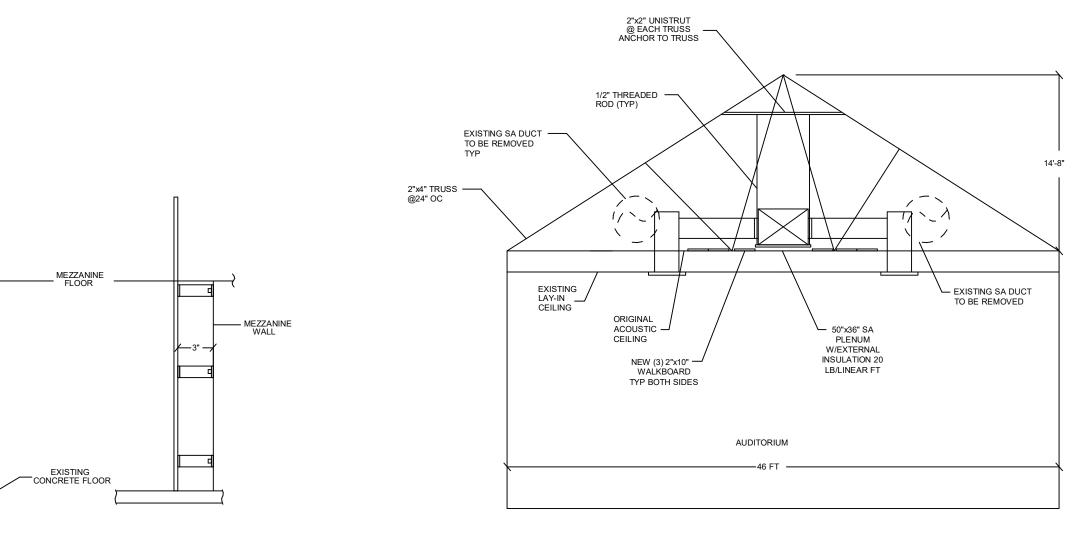




VAV COIL PIPING DIAGRAM (TYP)

NOTE: MODULATING CONTROL VALVE BY TEMPERATURE CONTROL CONTRACTOR. FAN COIL, ALL PIPING, VALVES, ETC. & COMPLETE INSTALLATION BY MECHANICAL CONTRACTOR.

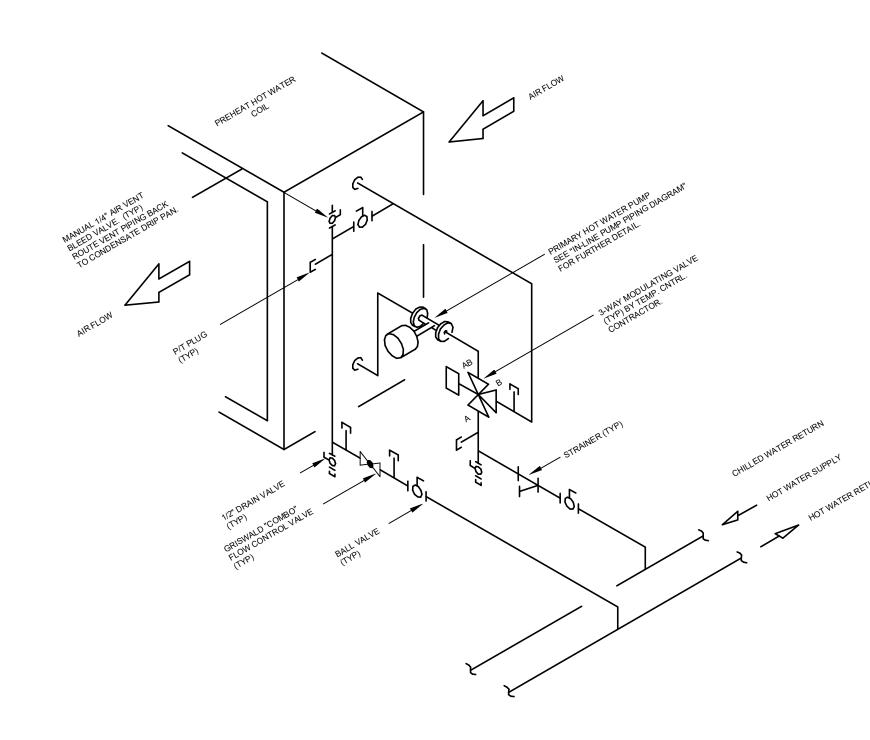




MEZZANINE LADDER DETAIL

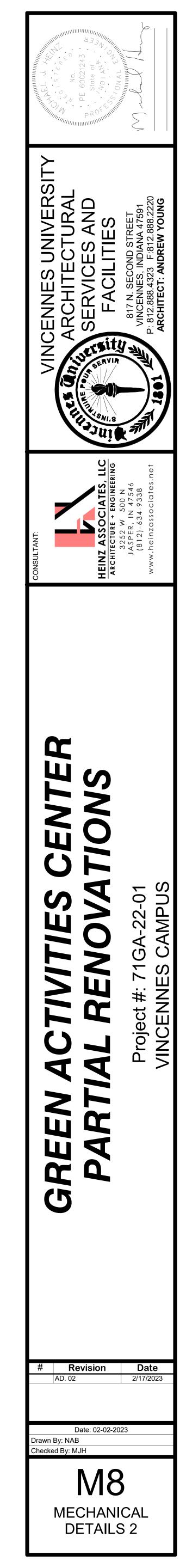
AUDITORIUM DUCTWORK DETAIL

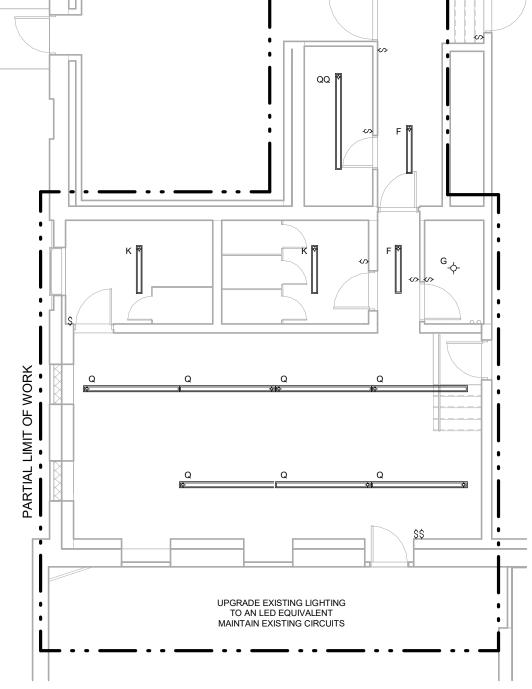
SCALE : 1/8" = 1'-0" NOTE: PROVIDE FOR SEISMIC RESTRAINT FOR ALL DUCT TO STRUCTURE



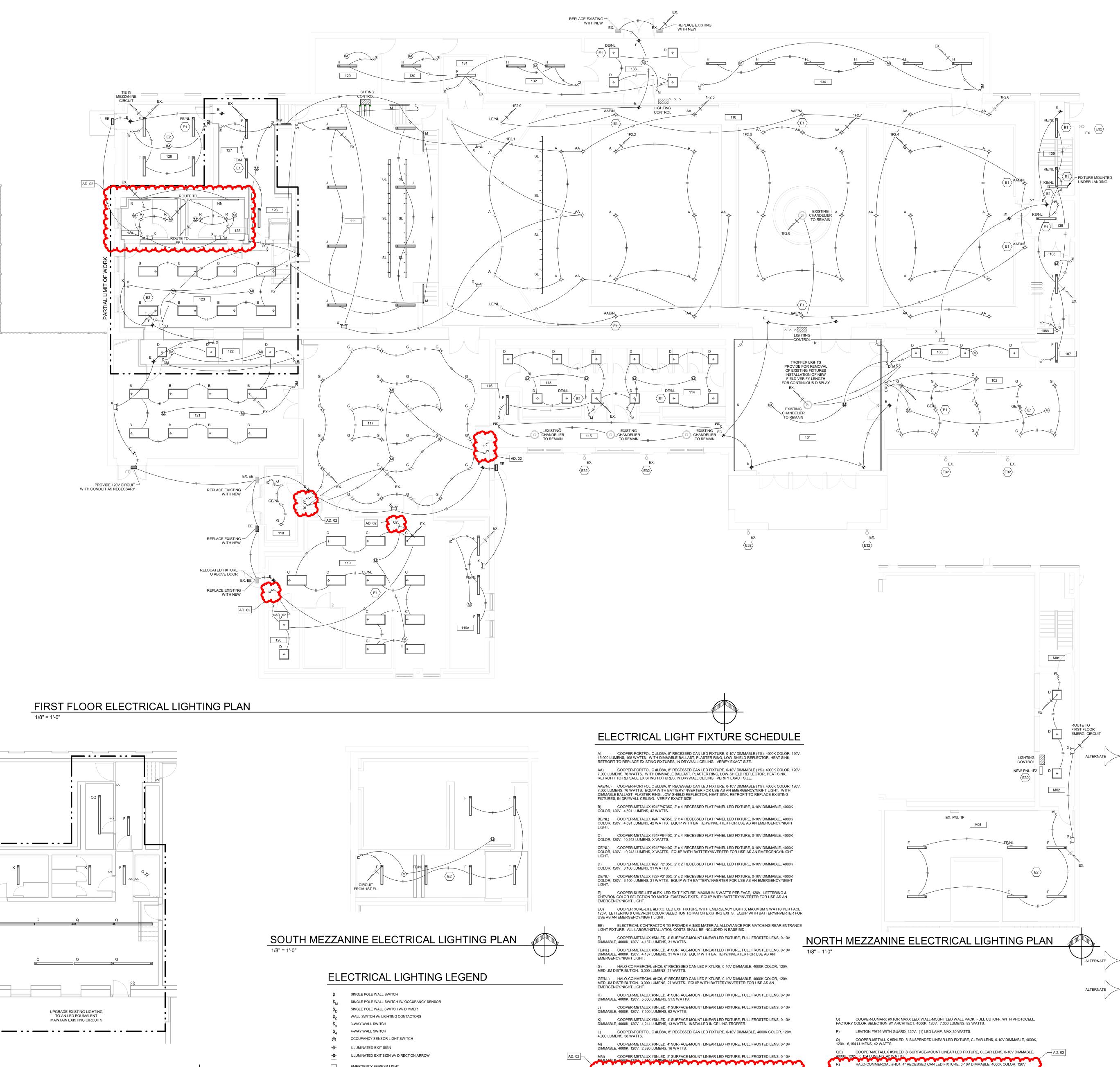
MU COIL PIPING DIAGRAM

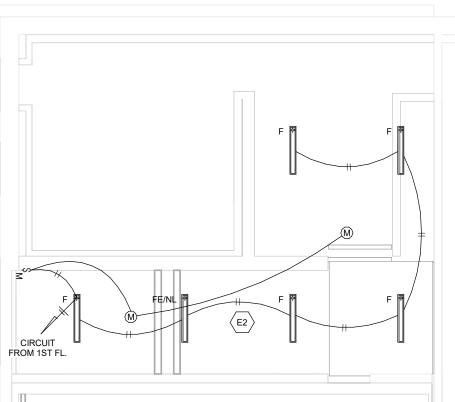
NOTE: NTS PROVIDE FOR FLEX PIPE CONNECTIONS ON ALL COILS











- EMERGENCY EGRESS LIGHT
- CEILING MOUNT LIGHT FIXTURE
- WALL MOUNT LIGHT FIXTURE

2X2 LIGHT FIXTURE

- 2X4 LIGHT FIXTURE
- STRIP LIGHT FIXTURE

N) CELESTIAL-AQUARIUS #R SERIES, SURFACE-MOUNT VANITY LED FIXTURE, 4000K, 120V. 2,700 LUMENS, 9 WATT PER LAMP. FACTORY COLOR SELECTION BY ARCHITECT. EQUIP WITH ROUND LAMP GUARD. PROVIDE FOR (1) SWITCH AND (2) DUPLEX RECEPTACLES ON VERTICAL SECTIONS AT BOTTOM. SIZING SHALL BE 43"H x 57"W x 43"H IN AN UPSIDE DOWN U CONFIGURATION. DIMENSIONS ARE OUTSIDE DIMENSIONS. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. NN) CELESTIAL-AQUARIUS #R SERIES, SURFACE-MOUNT VANITY LED FIXTURE, 4000K, 120V. 2,700 LUMENS, 9 WATT PER LAMP. FACTORY COLOR SELECTION BY ARCHITECT. EQUIP WITH ROUND LAMP GUARD. PROVIDE FOR 1) SWITCH AND (2) DUPLEX RECEPTACLES ON VERTICAL SECTIONS AT BOTTOM. SIZING SHALL BE 43"H x 72"W x 43"H IN AN UPSIDE DOWN U CONFIGURATION. DIMENSIONS ARE OUTSIDE DIMENSIONS. COORDINATE

NSTALLATION WITH GENERAL CONTRACTOR.

MEDIUM DISTRIBUTION. 2,000 LUMENS, 20.9 WATTS. SL) EXISTING STAGE LIGHTING NOT IN CONTRACT. SURF-LITES #APEL LED EMERGENCY FIXTURE. AC ONLY. TEST SWITCH WITH INDICATOR, 277V. LED COLOR SELECTION BY ARCHITECH. EQUIP WITH EMERGENCY BATTERY/INVERTER FOR USE AS AN EMERGENCY/NIGHT LIGHT.

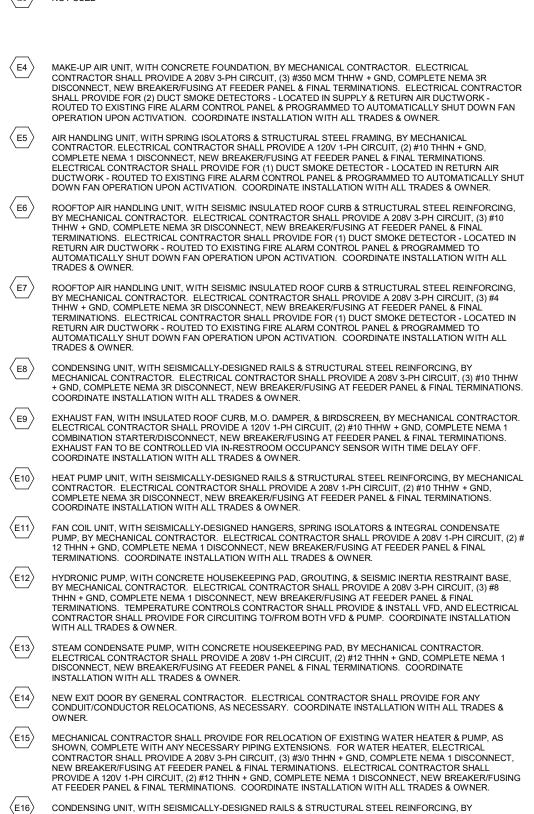
AUDITORIUM LIGHTING CONTROL - PROVIDE FOR (4) STATIONS AS SHOWN. EACH STATION SHALL BE CAPABLE OF UP TO (6) DIMMABLE SCENEDS FOR ENTIRE AUDITORIUM LESS THE STAGE FIXTURES. PROVIDE SEPARATE DIMMERS FOR THE CHANDLIER.

GENERAL ELECTRICAL NOTES

- ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS & ELEVATIONS PRIOR TO CONSTRUCTION. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR TEMPORARY LIGHTING, AS NEEDED, FOR DURATION OF
- ELECTRICAL CONTRACTOR SHALL CONFIRM ALL EQUIPMENT ELECTRICAL REQUIREMENTS, INCLUDING BREAKER/DISCONNECT CAPACITY, WITH OTHER TRADES PRIOR TO ORDERING.
- ELECTRICAL CONTRACTOR SHALL PROVIDE FOR ALL FINAL TERMINATIONS & CONNECTIONS TO EQUIPMENT & POWER FEED COMPONEN
- ELECTRICAL CONTRACTOR SHALL VERIFY ALL CIRCUITS IN EXISTING PANELS, AND PROVIDE FOR NEW, TYPED PANEL LEGENDS UPON COMPLETION OF PROJECT. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR ALL ADDITIONAL PANEL CIRCUIT BREAKERS AS REQUIRED FOR INSTALLATION OF ALL CIRCUITS AS SHOWN. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONCRETE FLOOR CUTTING & REMOVAL,
- WHICH PERTAINS TO THEIR RESPECTIVE WORK, AND ALSO RESPONSIBLE FOR NEW COMPACTED GRANULAR BACKFILL TO UNDERSIDE OF SLAB. ALL REMOVED SPOIL SHALL BE REMOVED & DISPOSED OFF-SITE NO RE-USE ALLOWED. ELECTRICAL CONTRACTOR RESPONSIBLE FOR CONCRETE FLOOR REPLACEMENT, NCLUDING FINAL FINISH.
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ALL AFFECTED ROOF, CEILING, WALLS & FLOORS, AND FINISHING FLUSH TO SURFACE. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL SURFACE FINISH, I.E. PAINT, TILE, CARPET, ETC.
- THROUGH AND MEMBRANE PENETRATIONS IN FIRE-RESISTIVE WALLS SHALL BE FIRESTOPPED IN ACCORDANCE WITH THE INDIANA BUILDING CODE REGULATIONS. IN COMBUSTIBLE CONSTRUCTION, FIREBLOCKING SHALL BE INSTALLED TO CUT OFF CONCEALED DRAFT OPENINGS (BOTH VERTICAL & HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A
- ROOF OR ATTIC SPACE. FIREBLOCKING SHALL BE INSTALLED IN LOCATIONS IN ACCORDANCE WITH THE INDIANA BUILDING CODE REGULATIONS.

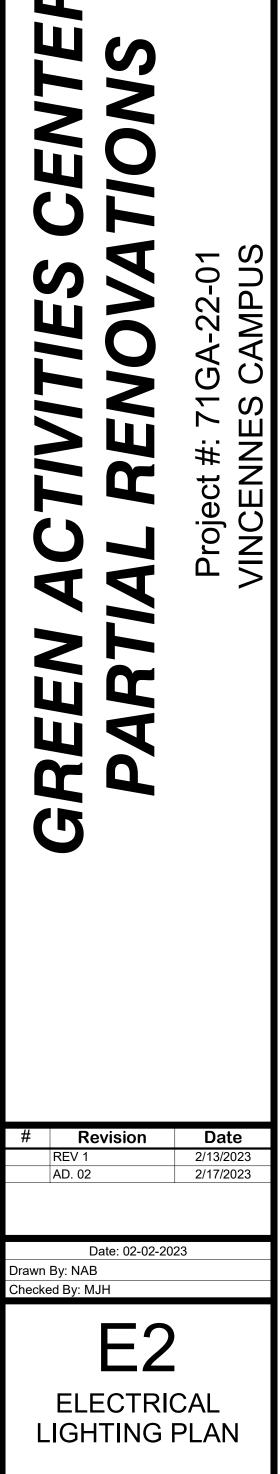
KEYED ELECTRICAL NOTES

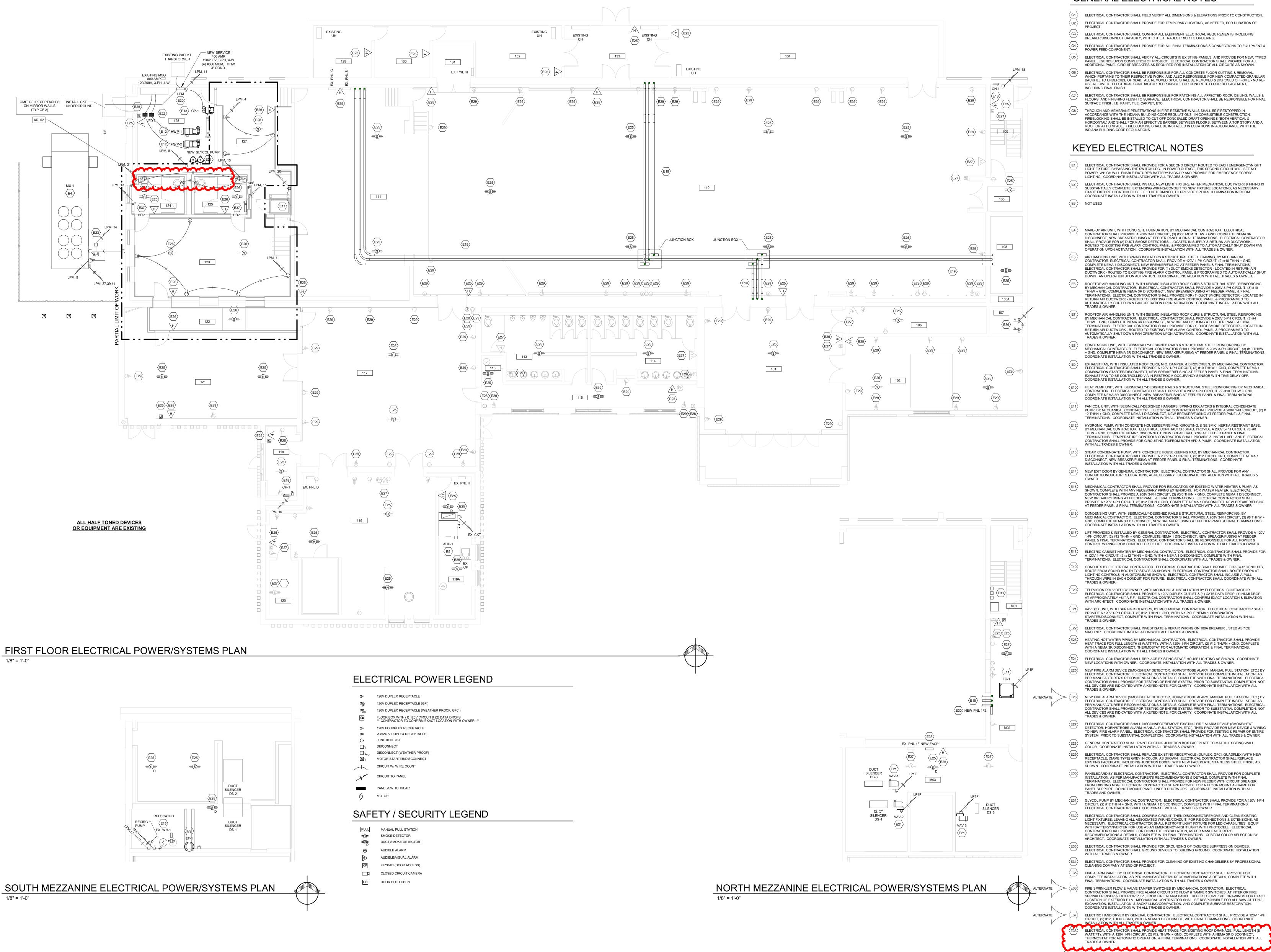
- (E1) ELECTRICAL CONTRACTOR SHALL PROVIDE FOR A SECOND CIRCUIT ROUTED TO EACH EMERGENCY/NIGHT LIGHT FIXTURE, BYPASSING THE SWITCH LEG. IN POWER OUTAGE, THIS SECOND CIRCUIT WILL SEE NO POWER, WHICH WILL ENABLE FIXTURE'S BATTERY BACK-UP AND PROVIDE FOR EMERGENCY EGRESS LIGHTING. COORDINATE INSTALLATION WITH ALL TRADES & OWNER \langle E2 \rangle ELECTRICAL CONTRACTOR SHALL INSTALL NEW LIGHT FIXTURE AFTER MECHANICAL DUCTWORK & PIPING IS SUBSTANTIALLY COMPLETE, EXTENDING WIRING/CONDUIT TO NEW FIXTURE LOCATIONS, AS NECESSARY EXACT FIXTURE LOCATION TO BE FIELD DETERMINED, TO PROVIDE OPTIMAL ILLUMINATION IN ROOM. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
- $\langle E3 \rangle$ NOT USED

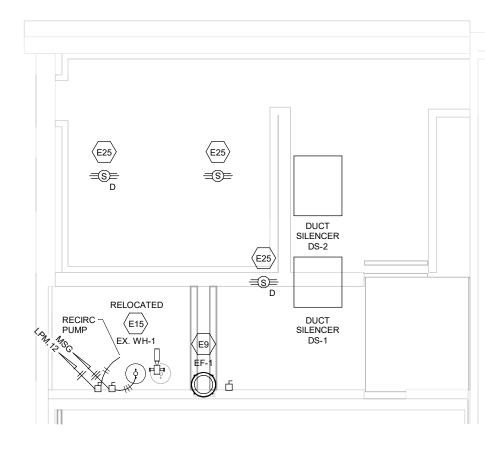


- AT FEEDER PANEL & FINAL TERMÍNATIONS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. CONDENSING UNIT, WITH SEISMICALLY-DESIGNED RAILS & STRUCTURAL STEEL REINFORCING, BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE A 208V 3-PH CIRCUIT, (3) #8 THHW + GND, COMPLETE NEMA 3R DISCONNECT, NEW BREAKER/FUSING AT FEEDER PANEL & FINAL TERMINATIONS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. (E17) LIFT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE A 120V 1-PH CIRCUIT, (2) #12 THHN + GND, COMPLETE NEMA 1 DISCONNECT, NEW BREAKER/FUSING AT FEEDER PANEL & FINAL TERMINATIONS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER & CONTROL WIRING FROM CONTROLLER TO LIFT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. (E18) ELECTRIC CABINET HEATER BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR A 120V 1-PH CIRCUIT, (2) #12 THHN + GND, WITH A NEMA 1 DISCONNECT, COMPLETE WITH FINAL FERMINATIONS. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES & OWNER. CONDUITS BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR (3) 4" CONDUITS, ROUTE FROM SOUND BOOTH TO STAGE AS SHOWN. ELECTRICAL CONTRACTOR SHALL ROUTE DROPS AT IGHTING CONTROLS IN AUDITORIUM AS SHOWN. ELECTRICAL CONTRACTOR SHALL INCLUDE A PULL FHROUGH WIRE IN EACH CONDUIT FOR FUTURE. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES & OWNER. (E20) TELEVISION PROVIDED BY OWNER, WITH MOUNTING & INSTALLATION BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE A 120V DUPLEX OUTLET & (1) CAT6 DATA DROP, (1) HDMI DROP, AT APPROXIMATELY +84" A.F.F. ELECTRICAL CONTRACTOR SHALL CONFIRM EXACT LOCATION & ELEVATION WITH ARCHITECT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
- VAV BOX UNIT, WITH SPRING ISOLATORS, BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE A 120V 1-PH CIRCUIT, (2) #12, THHN + GND, WITH A 1-POLE NEMA 1 COMBINATION STARTER/DISCONNECT, COMPLETE WITH FINAL TERMINATIONS. COORDINATE INSTALLATION WITH ALL RADES & OWNER ELECTRICAL CONTRACTOR SHALL INVESTIGATE & REPAIR WIRING ON 100A BREAKER LISTED AS "ICE MACHINE". COORDINATE INSTALLATION WITH ALL TRADES & OWNER. (E23) HEATING HOT WATER PIPING BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE HEAT TRACE FOR FULL LENGTH (8 WATT/FT), WITH A 120V 1-PH CIRCUIT, (2) #12, THWN + GND, COMPLETE WITH A NEMA 3R DISCONNECT, THERMOSTAT FOR AUTOMATIC OPERATION, & FINAL TERMINATIONS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. \langle E24 \rangle ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING STAGE HOUSE LIGHTING AS SHOWN. COORDINATE NEW LOCATIONS WITH OWNER. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. NEW FIRE ALARM DEVICE (SMOKE/HEAT DETECTOR, HORN/STROBE ALARM, MANUAL PULL STATION, ETC.) BY
- ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS, COMPLETE WITH FINAL TERMINATIONS. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR TESTING OF ENTIRE SYSTEM, PRIOR TO SUBSTANTIAL COMPLETION. NOT ALL DEVICES ARE INDICATED WITH A KEYED NOTE, FOR CLARITY. COORDINATE INSTALLATION WITH ALL FRADES & OWNER. NEW FIRE ALARM DEVICE (SMOKE/HEAT DETECTOR, HORN/STROBE ALARM, MANUAL PULL STATION, ETC.) BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS, COMPLETE WITH FINAL TERMINATIONS. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR TESTING OF ENTIRE SYSTEM. PRIOR TO SUBSTANTIAL COMPLETION. NOT LL DEVICES ARE INDICATED WITH A KEYED NOTE, FOR CLARITY. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. ELECTRICAL CONTRACTOR SHALL DISCONNECT/REMOVE EXISTING FIRE ALARM DEVICE (SMOKE/HEAT DETECTOR, HORN/STROBE ALARM, MANUAL PULL STATION, ETC.), THEN PROVIDE FOR NEW DEVICE & WIRING TO NEW FIRE ALARM PANEL. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR TESTING & REPAIR OF ENTIRE SYSTEM, PRIOR TO SUBSTANTIAL COMPLETION. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
- $\langle E28 \rangle$ GENERAL CONTRACTOR SHALL PAINT EXISTING JUNCTION BOX FACEPLATE TO MATCH EXISTING WALL COLOR. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING RECEPTACLE (DUPLEX, GFCI, QUADPLEX) WITH NEW RECEPTACLE, (SAME TYPE) GREY IN COLOR, AS SHOWN. ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING FACEPLATE, INCLUDING JUNCTION BOXES, WITH NEW FACEPLATE, STAINLESS STEEL FINISH, AS SHOWN. COORDINATE INSTALLATION WITH ALL TRADES AND OWNER. <E30> PANELBOARD BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS, COMPLETE WITH FINAL TERMINATIONS. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR NEW FEEDER WITH CIRCUIT BREAKER FROM EXISTING MSG. ELECTRICAL CONTRACTOR SHAPP PROVIDE FOR A FLOOR MOUNT A-FRAME FOR
- PANEL SUPPORT. DO NOT MOUNT PANEL UNDER DUCTWORK. COORDINATE INSTALLATION WITH ALL TRADES AND OWNER. GLYCOL PUMP BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR A 120V 1-PH CIRCUIT, (2) #12 THIN + GND, WITH A NEMA 1 DISCONNECT, COMPLETE WITH FINAL TERMINATIONS. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES & OWNER. ELECTRICAL CONTRACTOR SHALL CONFIRM CIRCUIT, THEN DISCONNECT/REMOVE AND CLEAN EXISTING LIGHT FIXTURES, LEAVING ALL ASSOCIATED WIRING/CONDUIT, FOR RE-CONNECTIONS & EXTENSIONS, AS NECESSARY. ELECTRICAL CONTRACTOR SHALL RETROFIT LIGHT FIXTURE FOR LED CAPABILITIES. EQUIP WITH BATTERY/INVERTER FOR USE AS AN EMERGENCY/NIGHT LIGHT WITH PHOTOCELL. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR COMPLETE INSTALLATION, AS PER MANUFACTURER'S
- RECOMMENDATIONS & DETAILS, COMPLETE WITH FINAL TERMINATIONS. CUSTOM COLOR SELECTION BY ARCHITECT. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR GROUNDING OF (3)SURGE SUPPRESSION DEVICES. **E33** ELECTRICAL CONTRACTOR SHALL GROUND DEVICES TO BUILDING GROUND. COORDINATE INSTALLATION WITH ALL TRADES & OW NER. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR CLEANING OF EXISTING CHANDELIERS BY PROFESSIONAL CLEANING COMPANY AT END OF PROJECT. FIRE ALARM PANEL BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FOR FINAL TERMINATIONS. COORDINATE INSTALLATION WITH ALL TRADES & OWNER.
- COMPLETE INSTALLATION. AS PER MANUFACTURER'S RECOMMENDATIONS & DETAILS, COMPLETE WITH > (E36) FIRE SPRINKLER FLOW & VALVE TAMPER SWITCHES BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE FIRE ALARM CIRCUITS TO FLOW & TAMPER SWITCHES, AT INTERIOR FIRE SPRINKLER RISER & EXTERIOR P.I.V., FROM FIRE ALARM PANEL. REFER TO CIVIL/SITE DRAWINGS FOR EXACT LOCATION OF EXTERIOR P.I.V. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAW-CUTTING. EXCAVATION, INSTALLATION, & BACKFILLING/COMPACTION, AND COMPLETE SURFACE RESTORATION. COORDINATE INSTALLATION WITH ALL TRADES & OWNER. ELECTRIC HAND DRYER BY GENERAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE A 120V 1-PH CIRCUIT, (2) #12, THHN + GND, WITH A NEMA 1 DISCONNECT, WITH FINAL TERMINATIONS. COORDINATE
- INSTALLATION WITH ALL TRADES & OWNER (E38) ELECTRICAL CONTRACTOR SHALL PROVIDE HEAT TRACE FOR EXISTING ROOF DRAINAGE, FULL LENGTH (8 WATT/FT), WITH A 120V 1-PH CIRCUIT, (2) #12, THWN + GND, COMPLETE WITH A NEMA 3R DISCONNEC THERMOSTAT FOR AUTOMATIC OPERATION, & FINAL TERMINATIONS. COORDINATE INSTALLATION WITH ALL FRADES & OWNER.





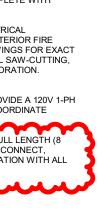




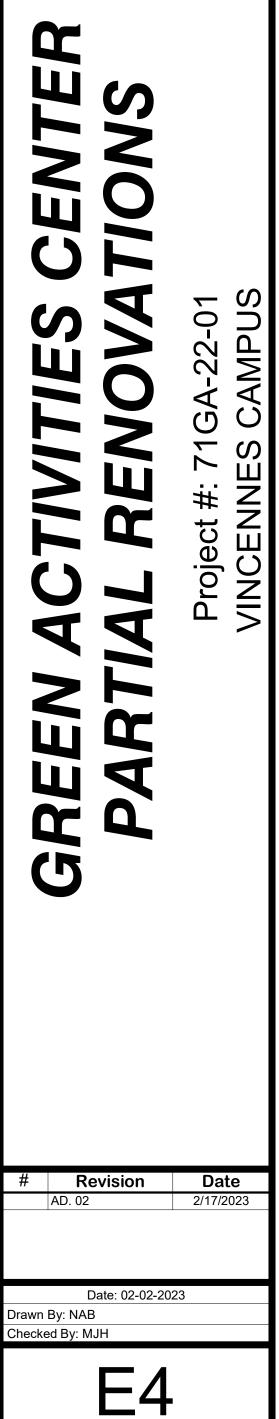


GENERAL ELECTRICAL NOTES

AD. 02







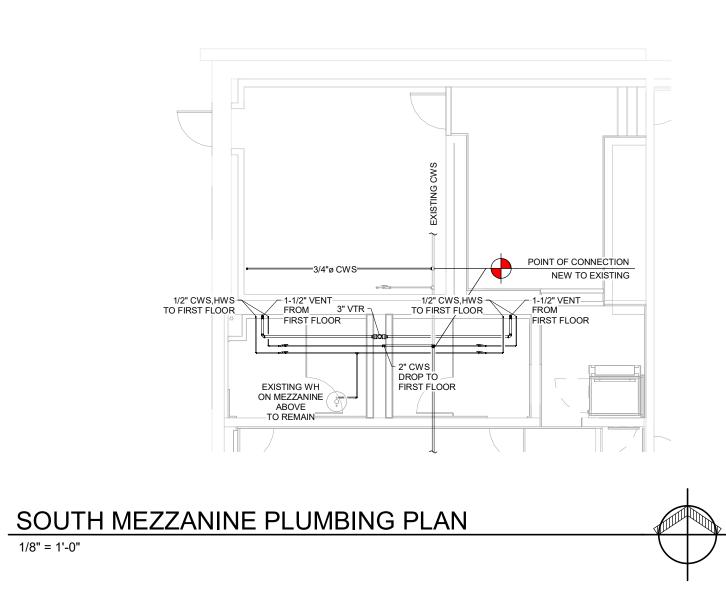
ELECTRICAL

POWER/SYSTEMS

PLAN

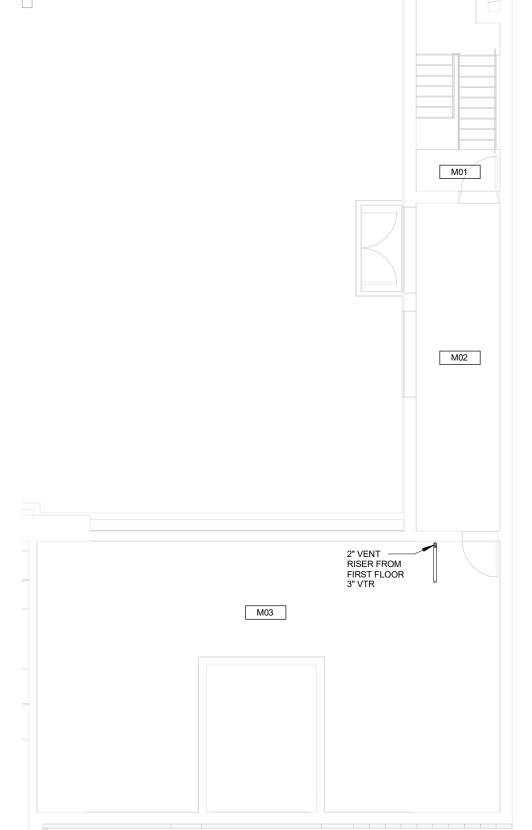


FIRST FLOOR PLUMBING PLAN 1/8" = 1'-0"

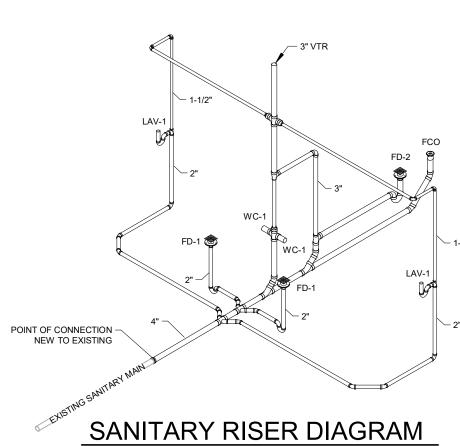


PLUMBING LEGEND

	SANITARY WASTE PIPING
	SANITARY VENT PIPING
	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER RECIRCULATING PIPING
o	PIPE ELBOW UP
	PIPE TEE UP
<u>ю</u> Т	PIPE TEE UP W/ TAP
с—	PIPE ELBOW DOWN
—	PIPE TEE DOWN
—	PIPE TEE DOWN W/ TAP
б	BALL VALVE OR BUTTERFLY VALVE
E	CAP END FOR FUTURE EXTENSION
	DIRECTION OF FLOW
	CHECK VALVE
	GATE VALVE
$- \diamondsuit -$	FLOW CONTROL VALVE
— —	UNION
<u> </u>	ASME APPROVED P&T RELIEF VALVE
Ŷ	PRESSURE GUAGE
	FLOW CONTROL VALVE



NORTH MEZZANINE PLUMBING PLAN 1/8" = 1'-0"



SIT CENNES UNIVERS ARCHITECTURAL SERVICES AND FACILITIES \mathbf{C} ע ע **HEIN** ARCH

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 #
 Revision
 Date

 AD. 02
 2/17/2023
 Date: 02-02-2023 rawn By: NAB

Checked By: MJH

P2

PLUMBING PLAN

