K-5 ALE at Tillery

ROGERS, ARKANSAS

Issue Date: 12/16/2024

Revision Date: 01/13/2025

Project No.: 2422

STRUCTURAL ENGINEER:

TATUM-SMITH-WELCHER ENGINEERS 3100 S MARKET ST SUITE 202 ROGERS, AR 72758

MECHANICAL / ELECTRICAL ENGINEER:

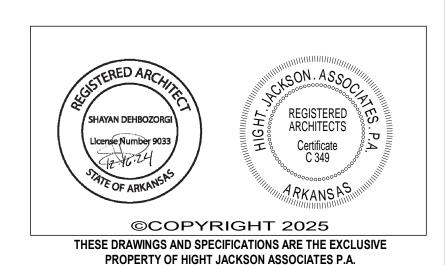
HSA ENGINEERING 7405 ELLIS ST FORT SMITH, AR 72916

HightJackson ASSOCIATES

SPECIFICATIONS AS SUBMITTED FOR REVIEW ARE, TO THE BEST OF HIS OR HER KNOWLEDGE AND ABILITY, COMPLETE AND

A QUALITY CONTROL CHECK, INCLUDING THE

APPROPRIATE COORDINATION AMONG



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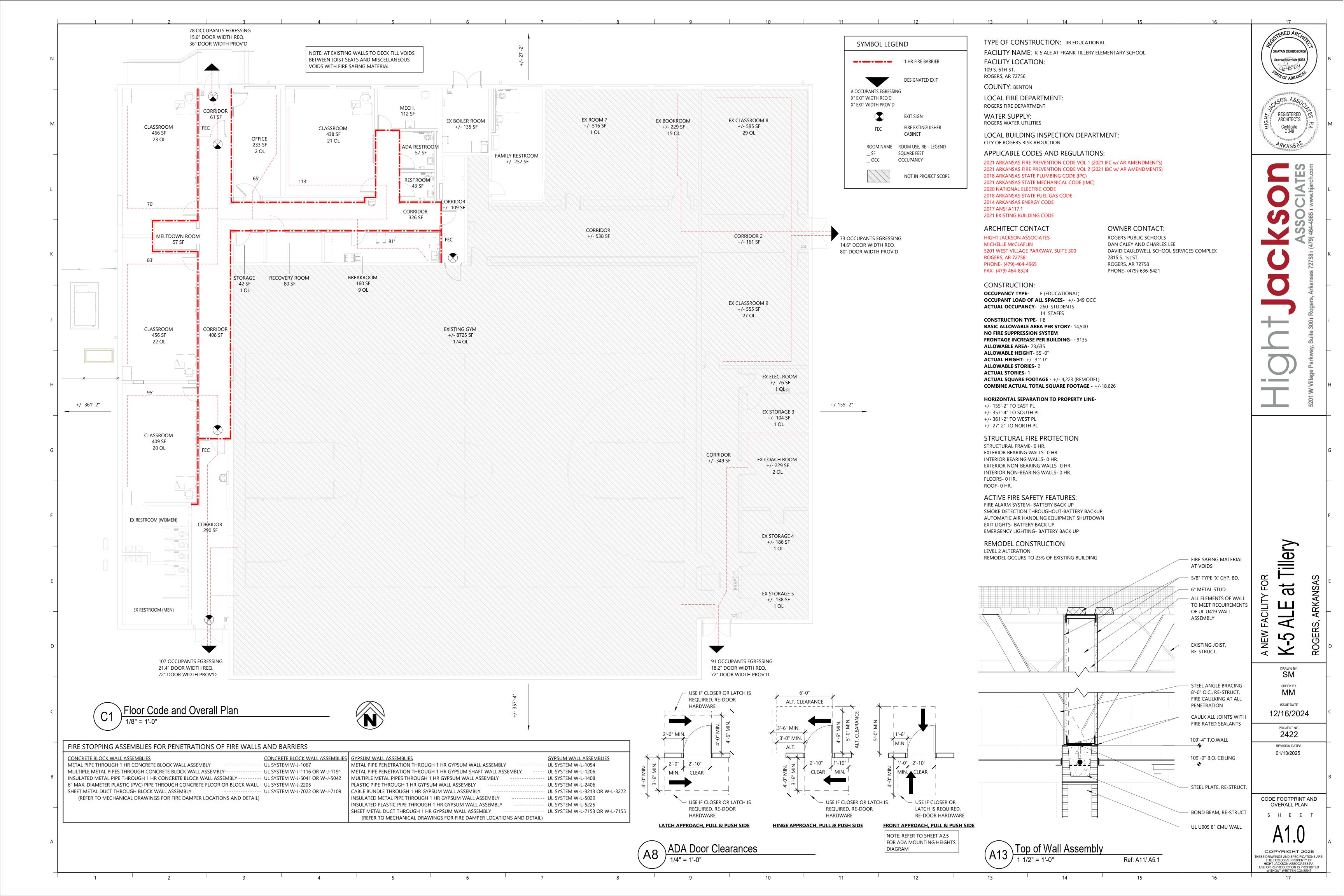
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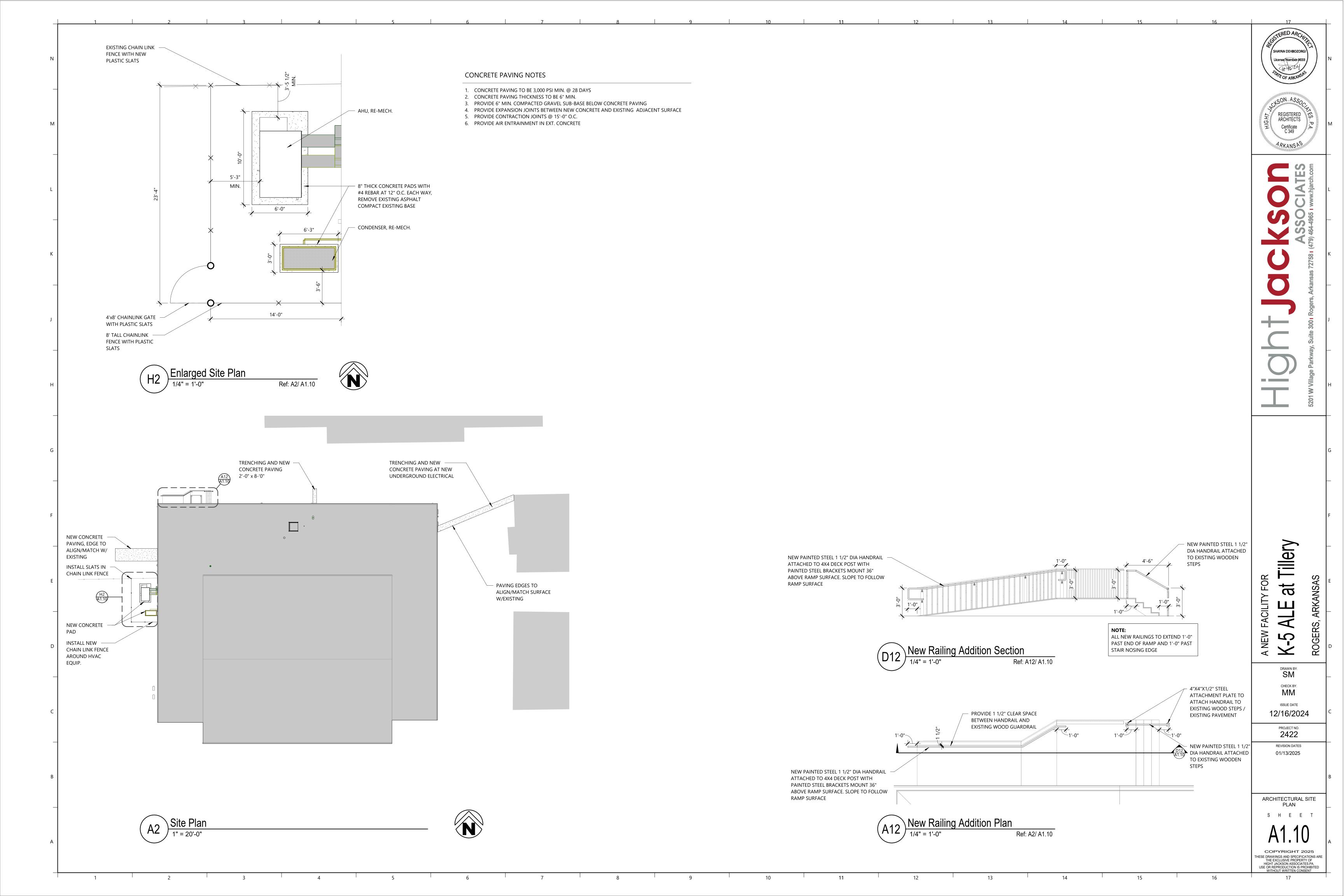
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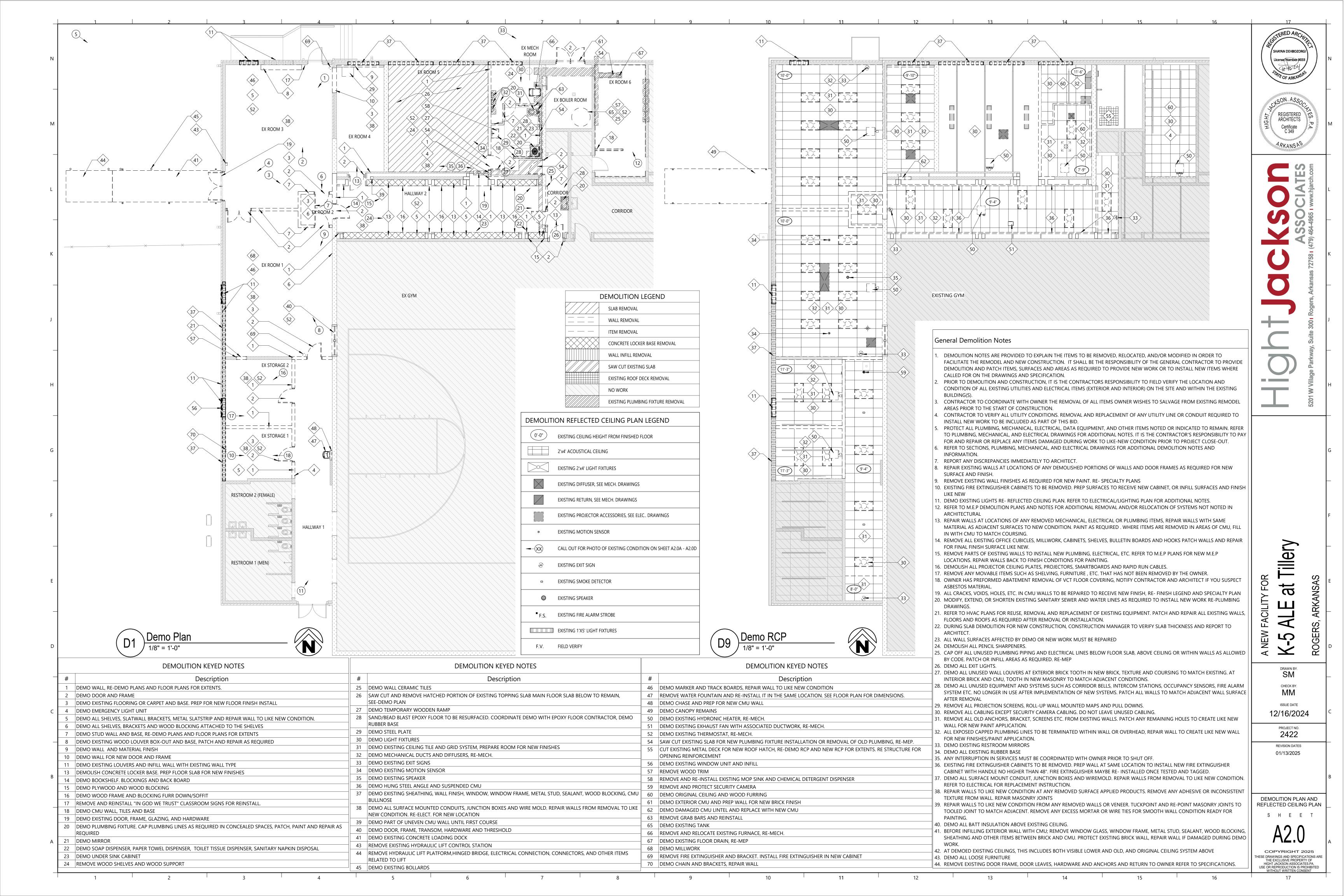
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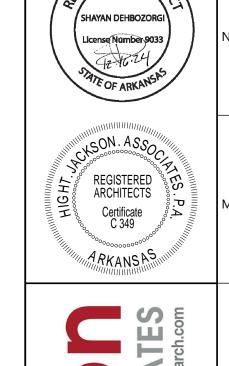
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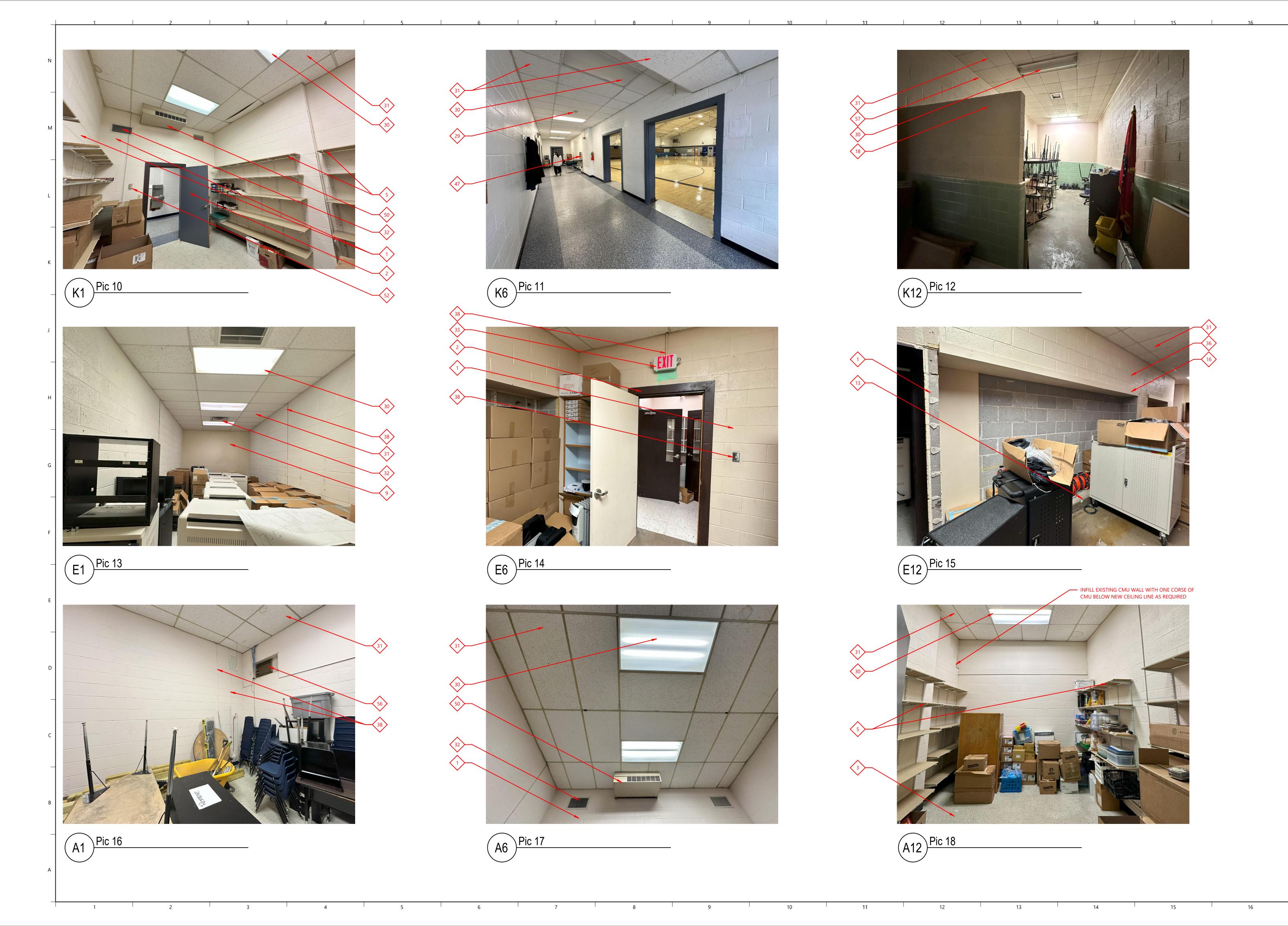
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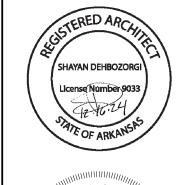
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PICTURES

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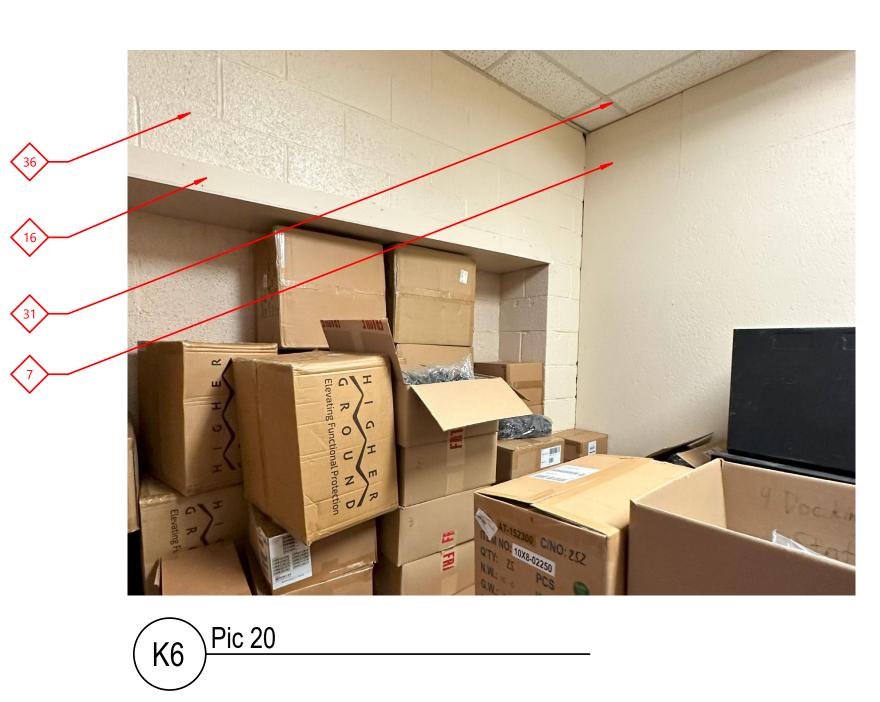
PICTURES

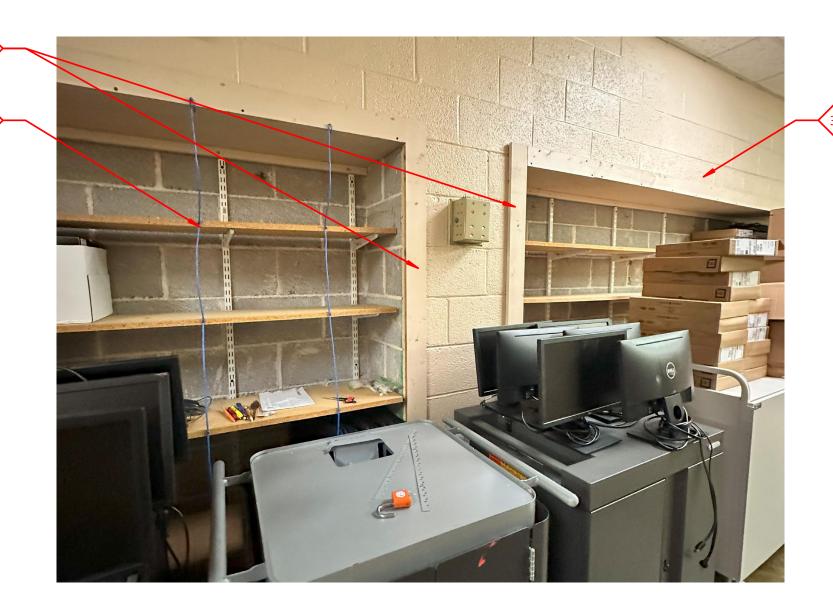
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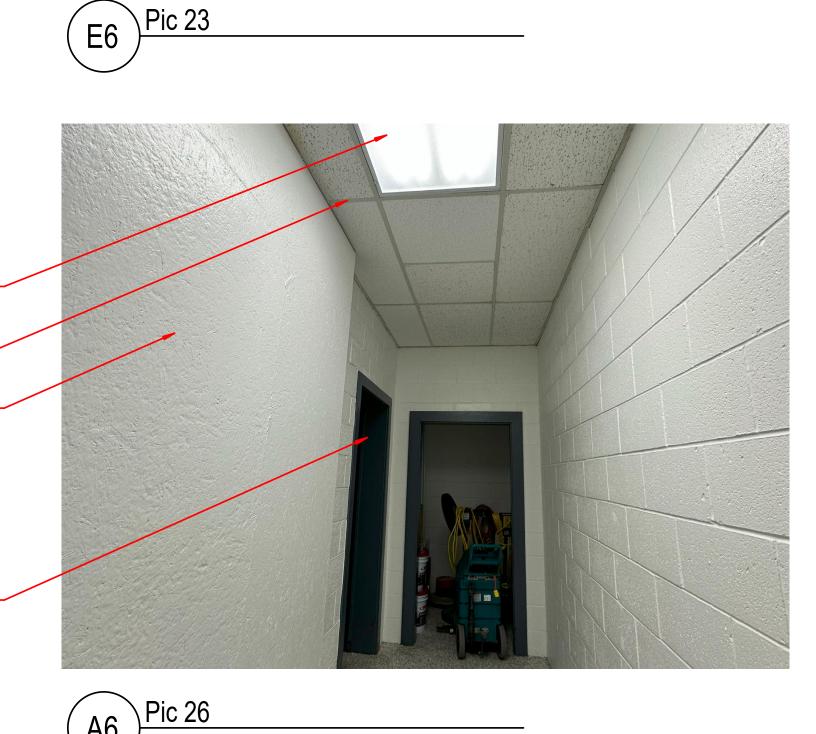
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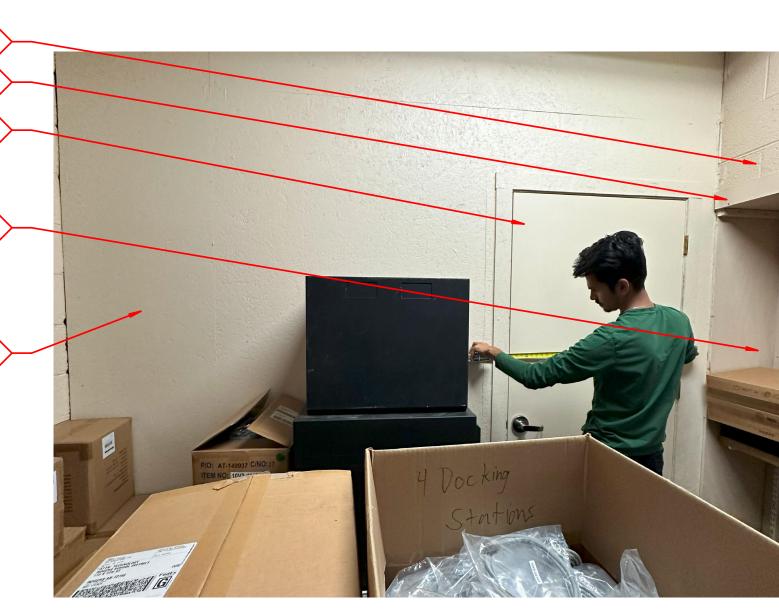






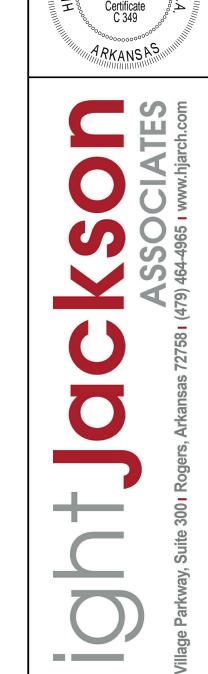












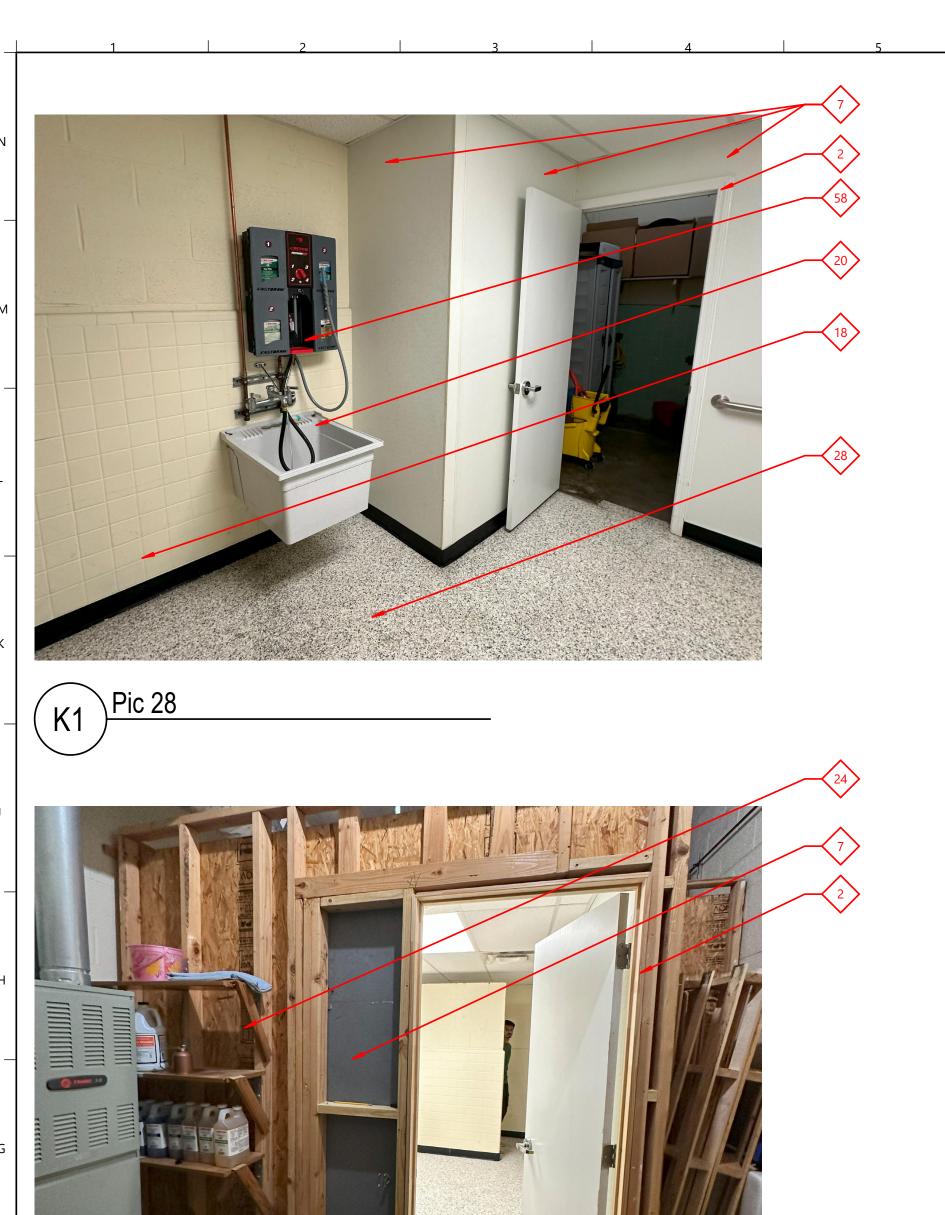
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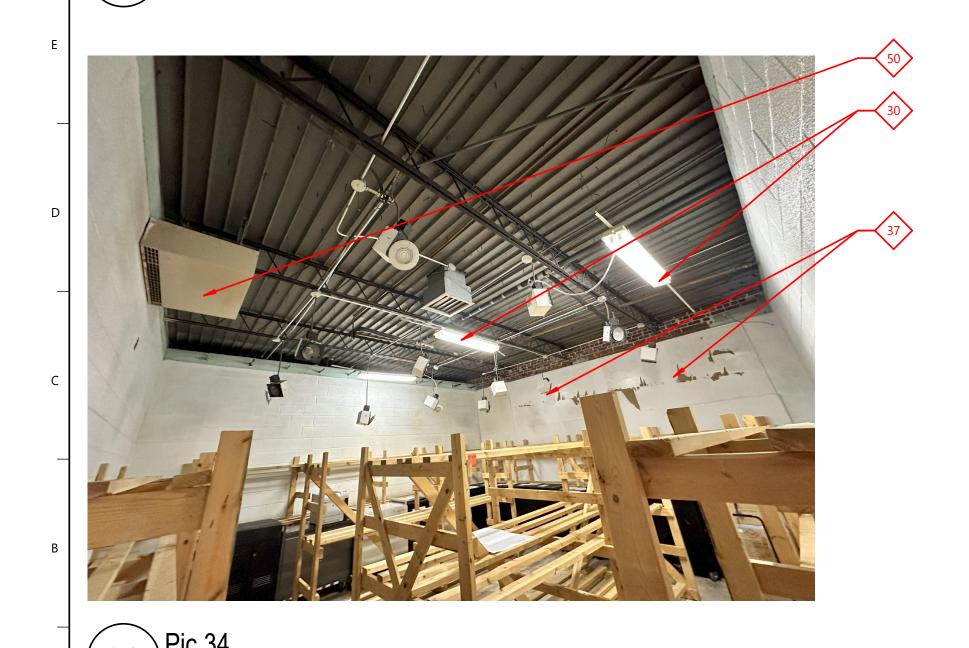
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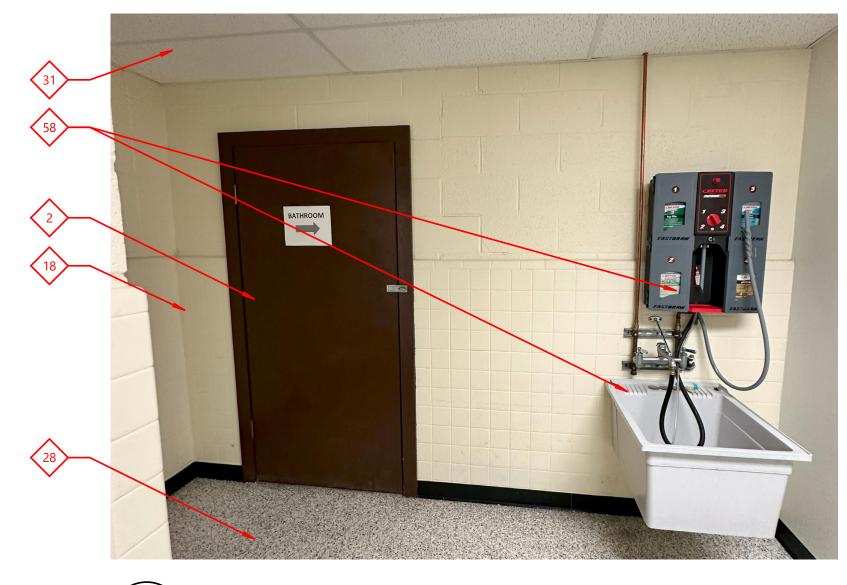
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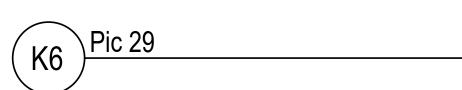
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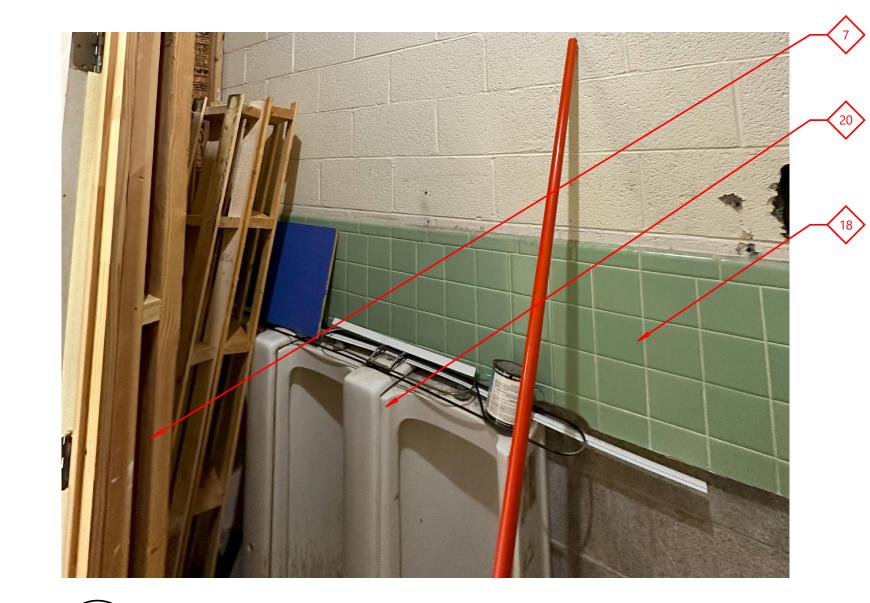




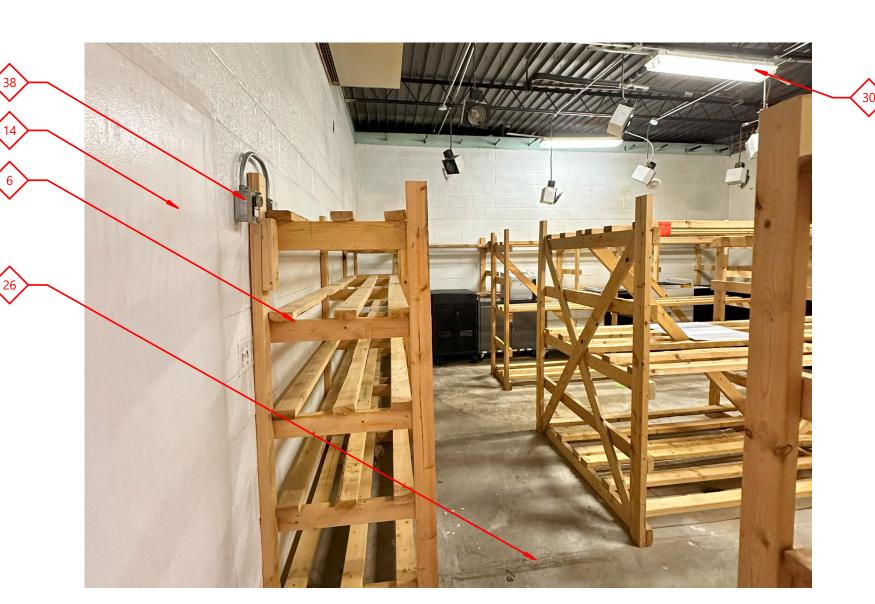


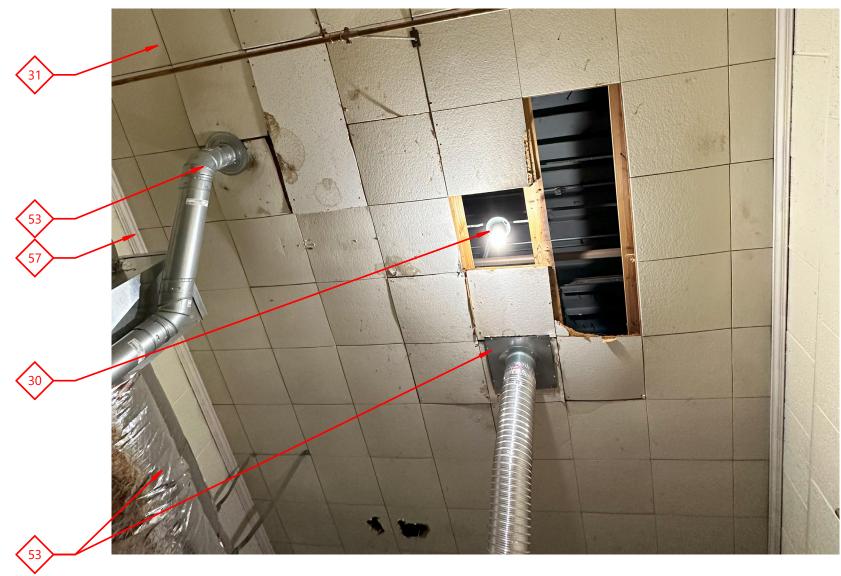




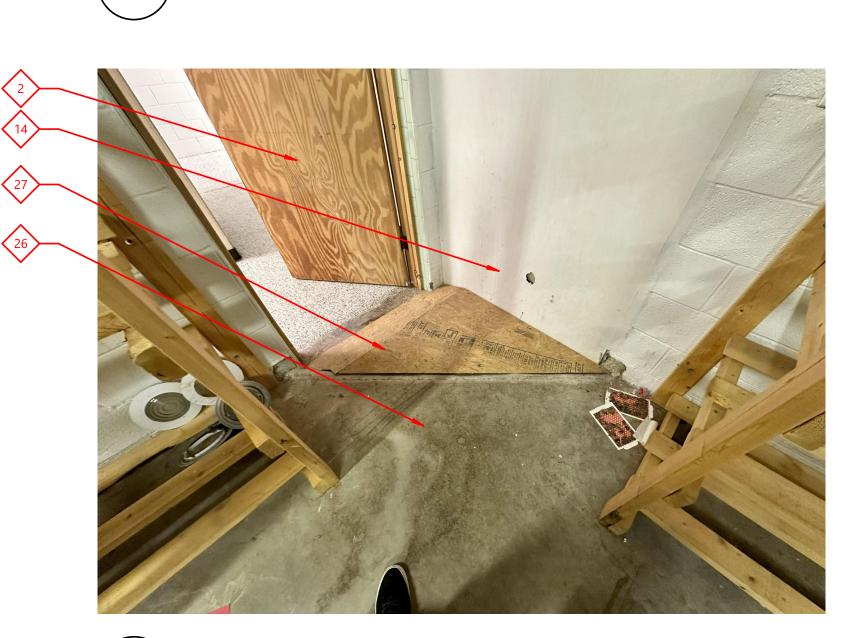














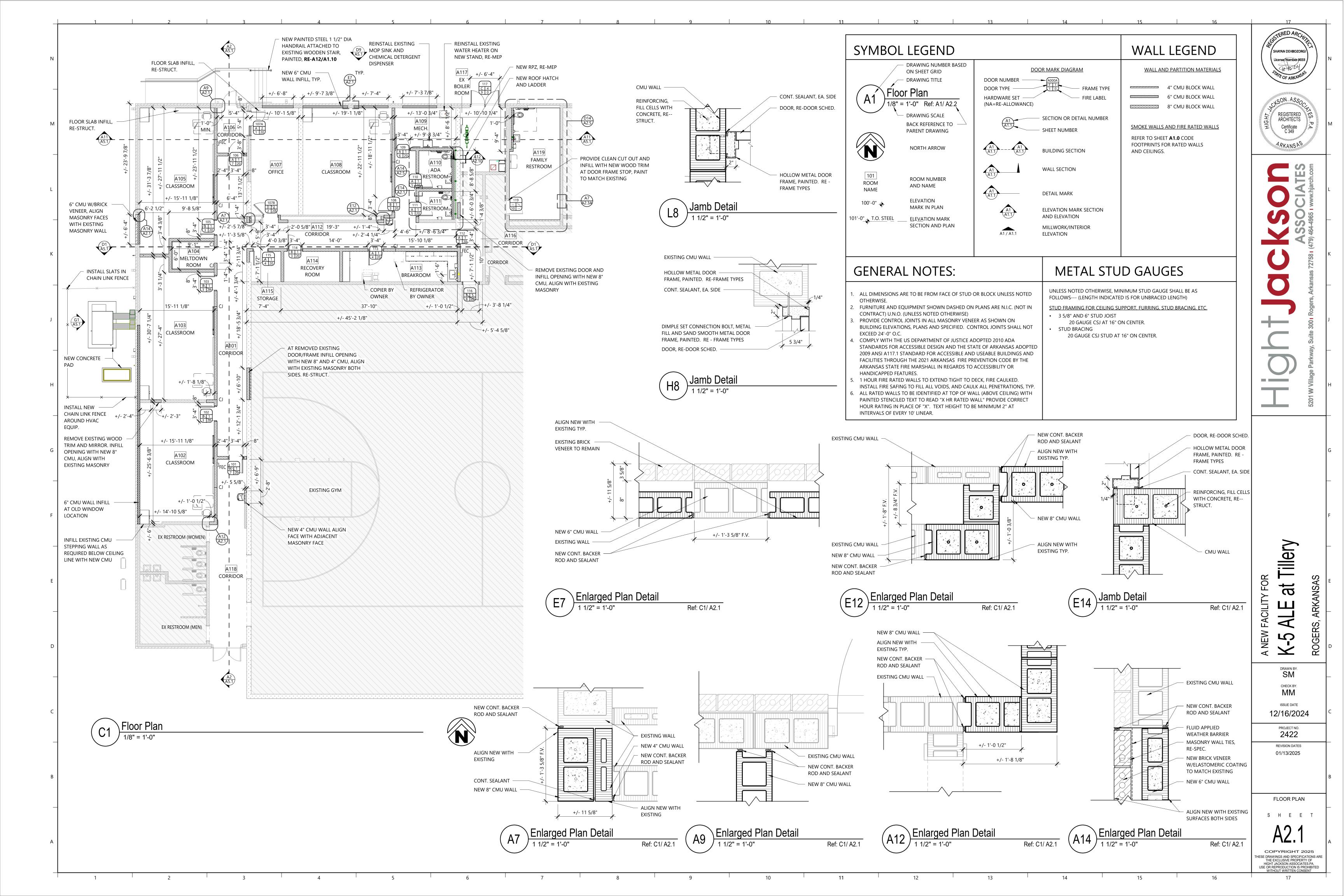
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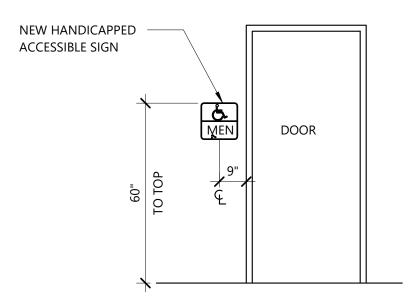
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Special	ty Plan Legend
FEC	FIRE EXTINGUISHER CABINET, ALL FEC LOCATIONS TO BE NEW U.N.O
1	SIGN TYPE, RE- ROOM SIGNAGE SCHEDULE
6МВ	6' MARKER BOARD, BOTTOM AT 3'-0" AFF
SB	INTERACTIVE DISPLAY BOARD (SMART BOARD), BY OWNER VENDOR CONTRACTOR
PT-1	ACCENT PAINT, RE- FINISH LEGEND
DS	SECURITY DROP SHADE

SIGN SHALL BE MOUNTED ON THE WALL ADJACENT TO LATCH SIDE OF DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. MOUNTING HEIGHT SHALL BE 60" A.F.F. TO THE TOP OF SIGN. MOUNTING LOCATION FOR SIGN SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.





	Room SIGNAGE Schedule			Sign Design Types		
	Room Signage Schedul		8"	6"	6"	10"
<u>/</u> #	ROOM NAME	DESIGN	PAIGER	PAIGER	VERBIAGE	
1	ACCESSIBLE RESTROOM	TYPE 1	RAISED SYMBOLS	RAISED SYMBOLS	4 FXII BDVIIIE	
$\sqrt{2}$	RESTROOM	TYPE 2	5 VERBIAGE	→ VERBIAGE	BRAILLE	
3	_ EXIT	TYPE 3	RESTROOM	RESTROOM		FAMILY RESTROOM
4	FAMILY RESTROOM	TYPE 4	TYPE 1	TYPE 2	TYPE 3	TYPE 4

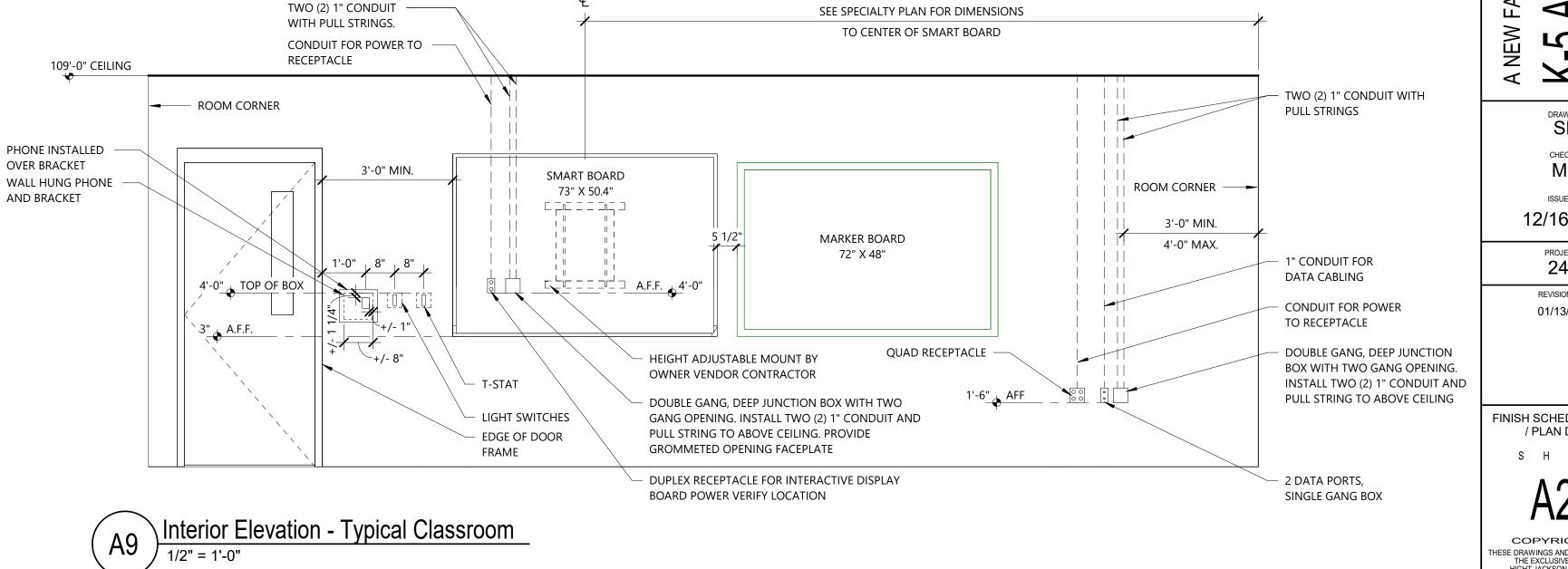
General Finish Notes

- 1. PROVIDE ZINC TERMINATION STRIP WHERE EPOXY CREMONA FLOOR FINISH TRANSITIONS TO ANOTHER FLOOR MATERIAL.
- 2. REFER TO REFLECTED CEILING PLANS FOR ALL CEILING HEIGHTS AND METAL STUD WITH GYPSUM BOARD HEADWALLS AND FURR DOWN
- LOCATIONS.
- 3. UNLESS NOTED OTHERWISE, PAINT WALLS WITHOUT CEILINGS FULL HEIGHT TO UNDERSIDE OF DECK. 4. PROVIDE 6" THICK UNFACED BATT INSULATION ABOVE ALL NEW CEILINGS
- 5. REFER TO CODE FOOTPRINT FOR FIRE SEPARATION WALLS.
- 6. UNLESS NOTED OR SHOWN ON DRAWINGS OTHERWISE, TERMINATE ALL NON-BEARING, NON-RATED PARTITIONS A MINIMUM 6" TO 8" ABOVE
- HIGHEST ADJACENT CEILINGS. 7. REFER TO REFLECTED CEILING PLANS FOR WALLS THAT MUST EXTEND TO DECK.
- 8. PROVIDE 4" RUBBER BASE AT ALL MILLWORK TOE SPACES.
- 9. REFER TO ELECTRICAL DRAWINGS FOR ALL ELECTRICAL OUTLETS AND SWITCH LOCATIONS. COORDINATE ALL ELECTRICAL OUTLETS AND SWITCHES WITH MILLWORK.
- 10. ACCENT PAINT MARKER INDICATES SURFACE TO BE PAINTED THE ACCENT COLOR. STOP ACCENT PAINT COLOR AT THE END OF WALL OR INTERSECTION OF ADJACENT WALL.
- 11. FLOOR MATERIAL TRANSITIONS AT DOOR WAYS SHALL HAPPEN BELOW DOOR LEAF IN CLOSED POSITION.
- 12. ALL INTERIOR HOLLOW METAL DOORS AND FRAMES TO BE PAINTED **PT-4**, EXTERIOR DOOR AND FRAMES TO BE PAINTED **PT-5** 13. REFER TO SPECIALTY PLANS FOR DETAILED FINISH INFORMATION, COLORS, & ACCENT WALLS NOT FOUND IN FINISH SCHEDULE.
- 14. PROVIDE CLEAR CONCRETE SEALER AT ALL EXPOSED CONCRETE FLOORS
- 15. COUNTERTOP TO BE **SS-1** AT MILLWORK LOCATIONS WITH SINK, UNLESS NOTED OTHERWISE. REFER TO MILLWORK ELEVATIONS AND SECTIONS.
- 16. AT FIRE RATED WALLS WHERE FIRE CAULK WILL BE EXPOSED, BACKSET FIRE CAULK AND CAULK OVER WITH COLOR MATCH CAULK.
- 17. PAINT ROOF HATCH AND ROOF HATCH ACCESS LADDER **PT-4**
- 18. PROVIDE **HPL-1** AT EXPOSED SHELVING
- 19. AT EXISTING CMU WALLS WITH MORTAR JOINTS STRUCK FLUSH, MATCH JOINT TYPE AT ANY INFILLED CMU. FILL VOIDS IN EXISTING MORTAR JOINTS FOR SMOOTH FINISH PRIOR TO BLOCK FILL AND PAINT APPLICATION.

	DAJL		
	EB-1	4" EPOXY BASE	DESCO EPOXY BASE TO MATCH EF-1
	NB	NO BASE	
OLS F	RB	RUBBER BASE	TARKETT/JOHNSONITE - #29 MOON ROCK
.01			
E [CEILING		
	AC-1	2' X 2' ACOUSTICAL CEILING TILE	SUSPENDED TYPICAL ACOUSTICAL CEILING
	ES	EXPOSED STRUCTURE	NO PAINT
	ESP-X	EXPOSED STRUCTURE PAINTED	"X" REPRESENTS PAINT NUMBER FROM WALL COLOR LISTED BELOW, DRY FALL
╜╠	PT-X	PAINTED GYPSUM BOARD	"X" REPRESENTS PAINT NUMBER FROM WALL COLOR LISTED BELOW, DRY FALL
F	FLOORS		
F	EF-1	EPOXY FLOORING	DESCO CREMONA SERIES, COLOR - WHITE WATER
E	EF-2	EPOXY FLOORING	DESCO GRANITE SERIES, COLOR - LINKS
N	NW	NO WORK	
5	SC	SEALED CONCRETE	
	MILLWORK		
ŀ	HPL-1	PLASTIC LAMINATE OPEN SHELVING	MANUF: WILSONART COLOR: 4886-38 PEARL
5	SS-1	SOLID SURFACE COUNTERTOP	MANUF: WILSONART COLOR: 9201 GS HOT STONE
Ţ	TFL-1	THERMALLY FUSED LAMINATE (MELAMINE) CABINET BODY	MANUF: WILSONART COLOR: 4886-38 PEARL
	OTHER		
-	DOORS	WOOD DOORS	BIRCH: CLEAR
V	WALLS		
-	WALLS EP-X	EPOXY PAINT	"X" REPRESENTS PAINT NUMBER FROM THE PT WALL COLOR LISTED BELOW
E		EPOXY PAINT FIBERGLASS REINFORCED PANEL	"X" REPRESENTS PAINT NUMBER FROM THE PT WALL COLOR LISTED BELOW COLOR TBD
E	EP-X		
E F	EP-X FRP	FIBERGLASS REINFORCED PANEL	COLOR TBD
	EP-X FRP PT-1	FIBERGLASS REINFORCED PANEL PAINT (FIELD)	COLOR TBD MANUF: SHERWIN WILLIAMS COLOR: SW 7029 AGREABLE GRAY
E F F F	EP-X FRP PT-1 PT-2	FIBERGLASS REINFORCED PANEL PAINT (FIELD) PAINT (ACCENT) PAINT (CEILING)	COLOR TBD MANUF: SHERWIN WILLIAMS COLOR: SW 7029 AGREABLE GRAY MANUF: SHERWIN WILLIAMS COLOR: SW 6177 SOFTENED GREEN

Finish Legend

BASE









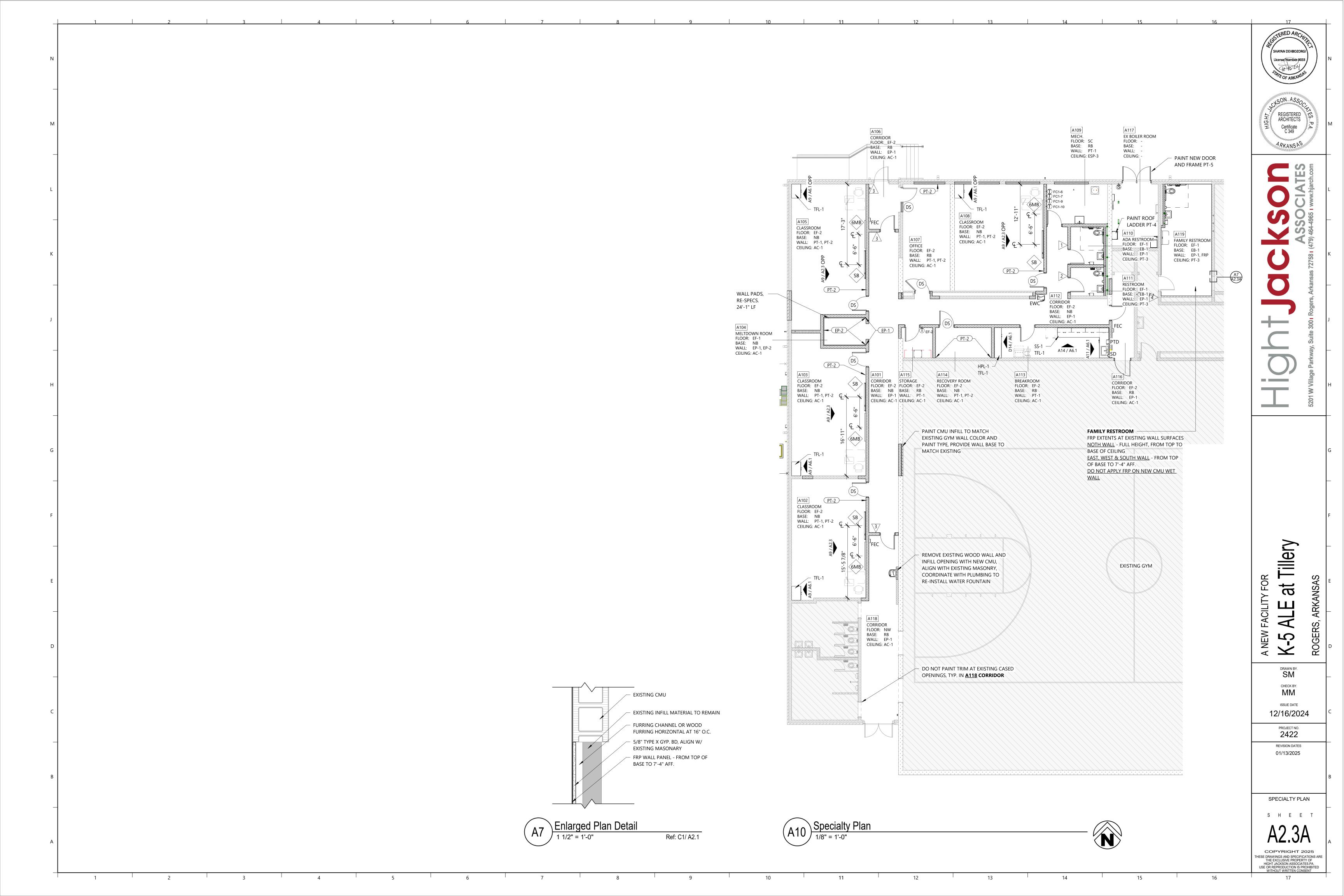
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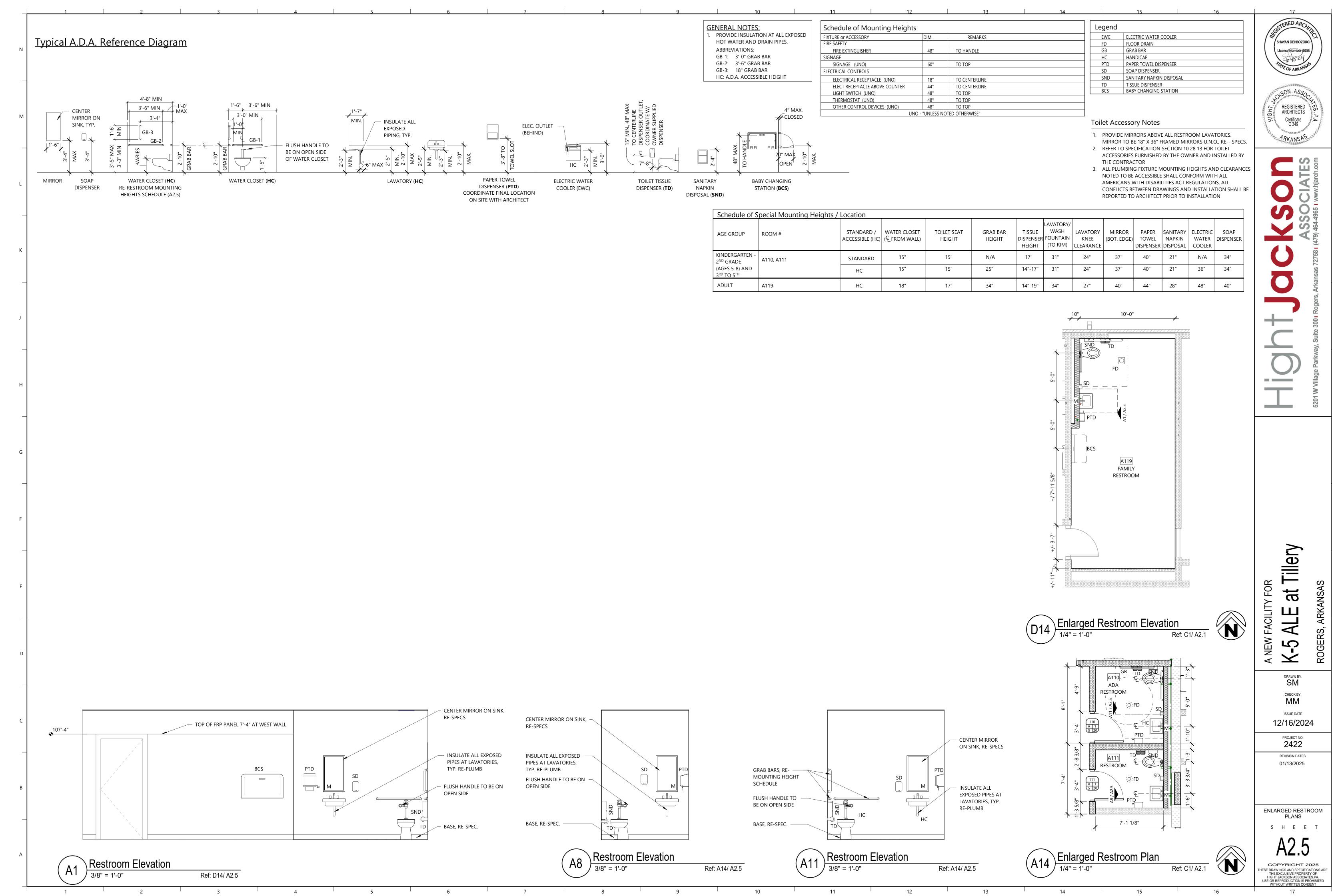
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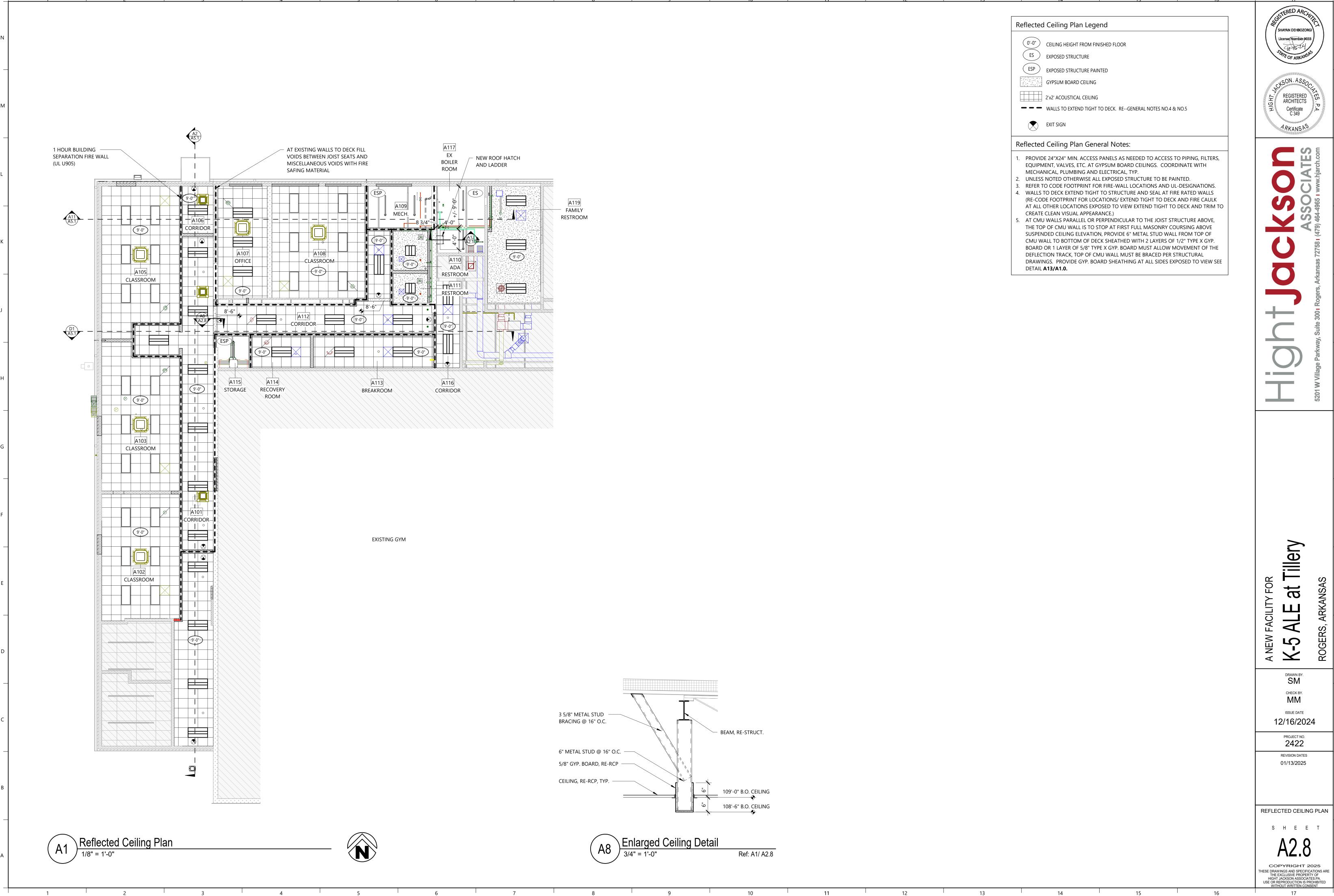
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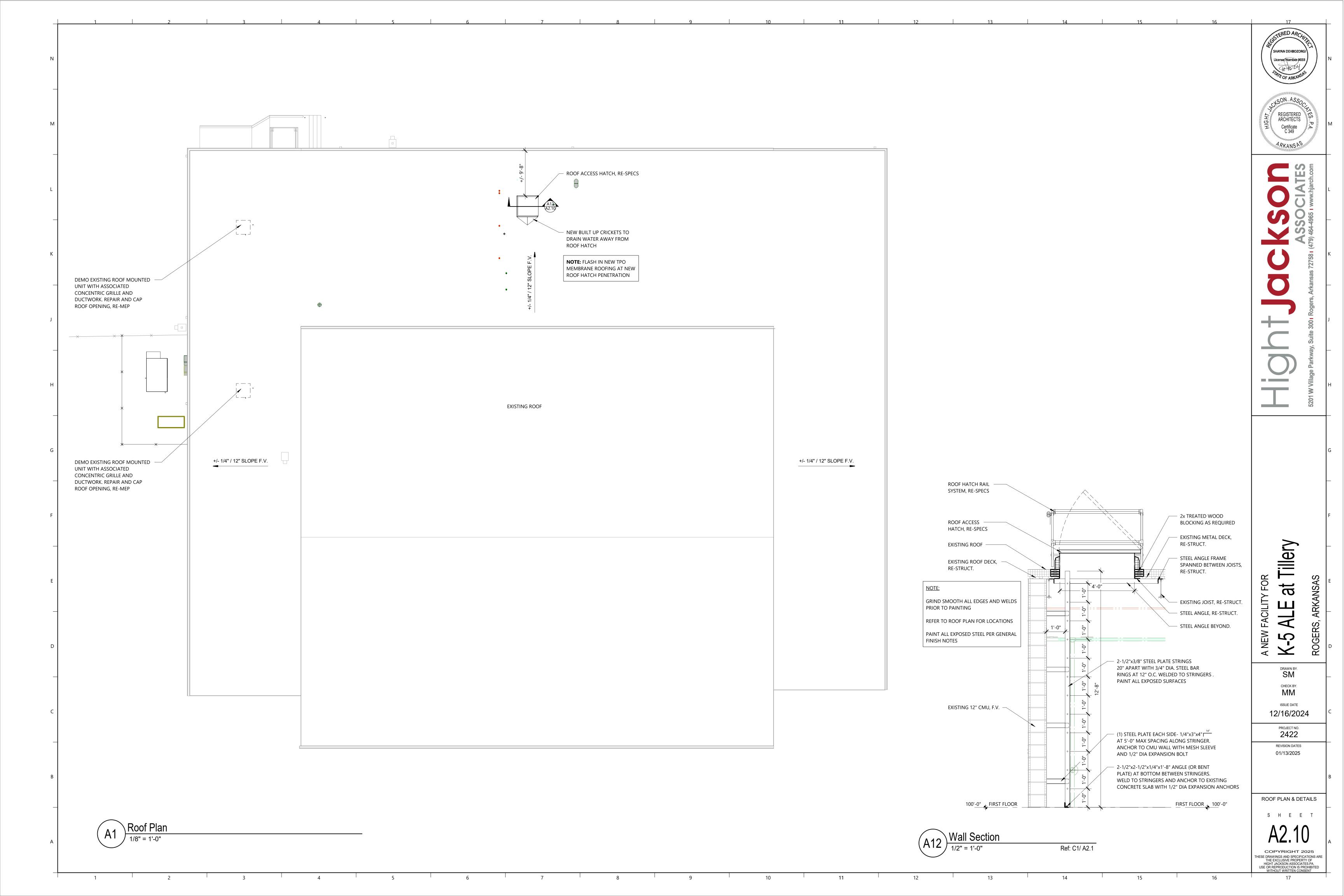


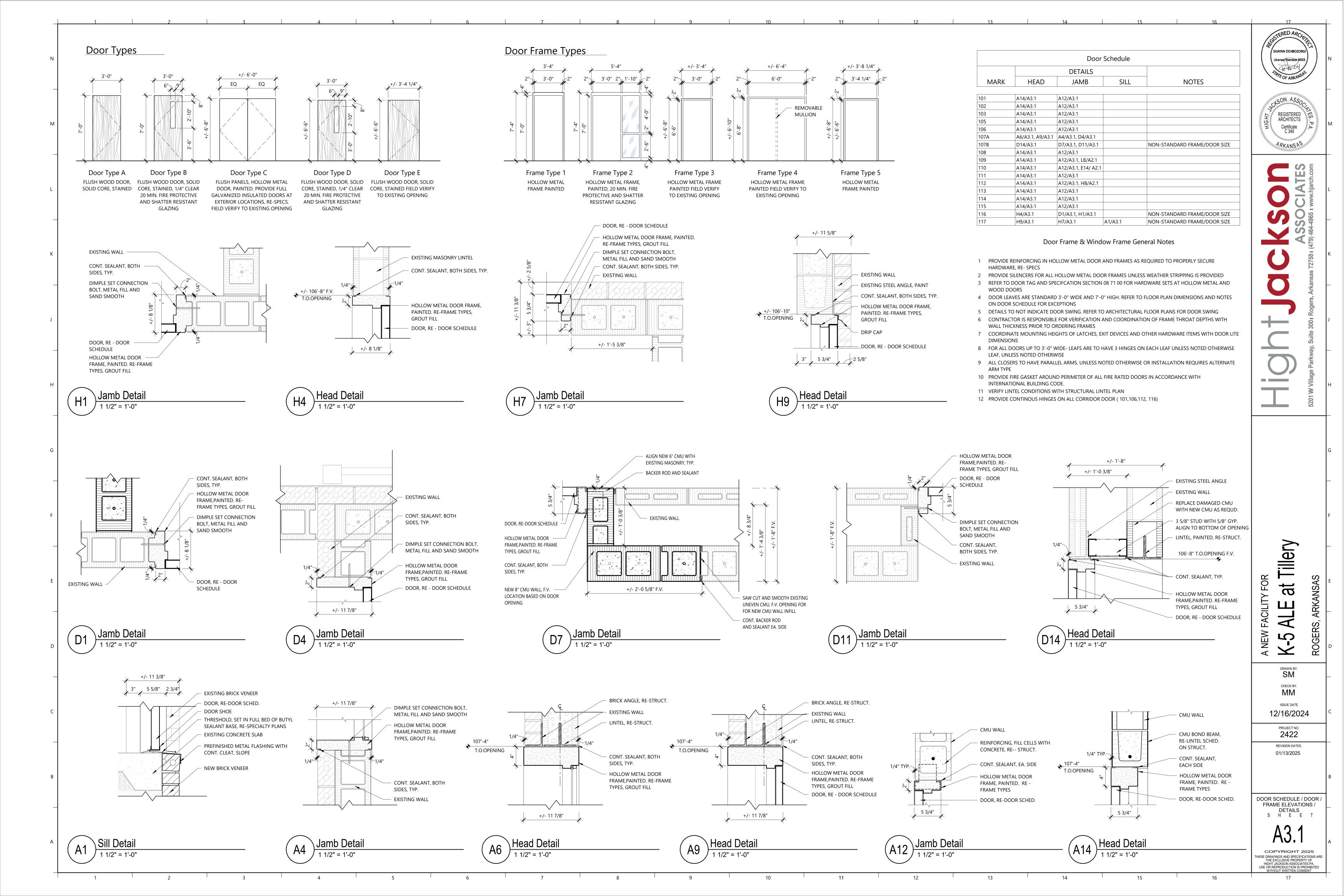


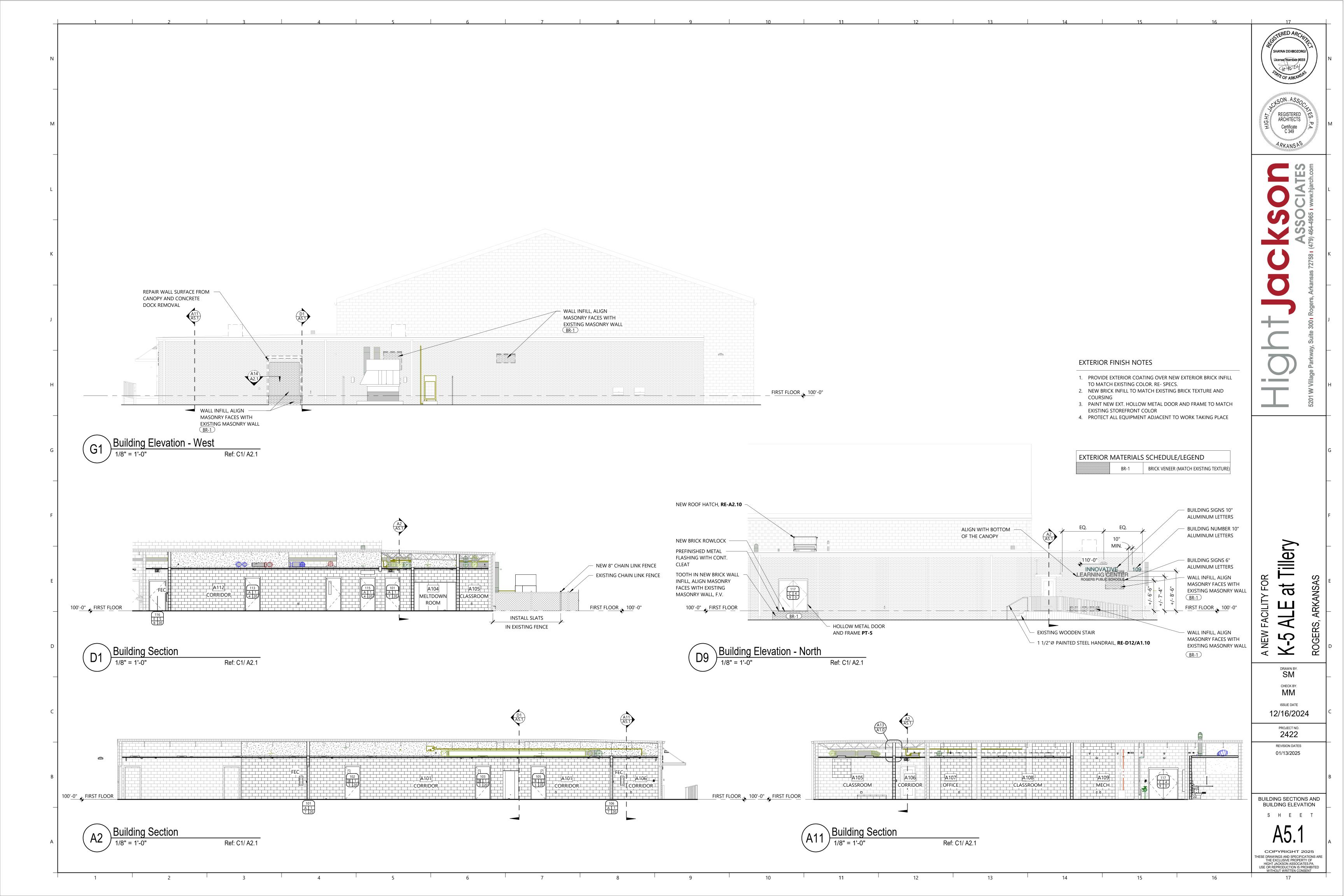


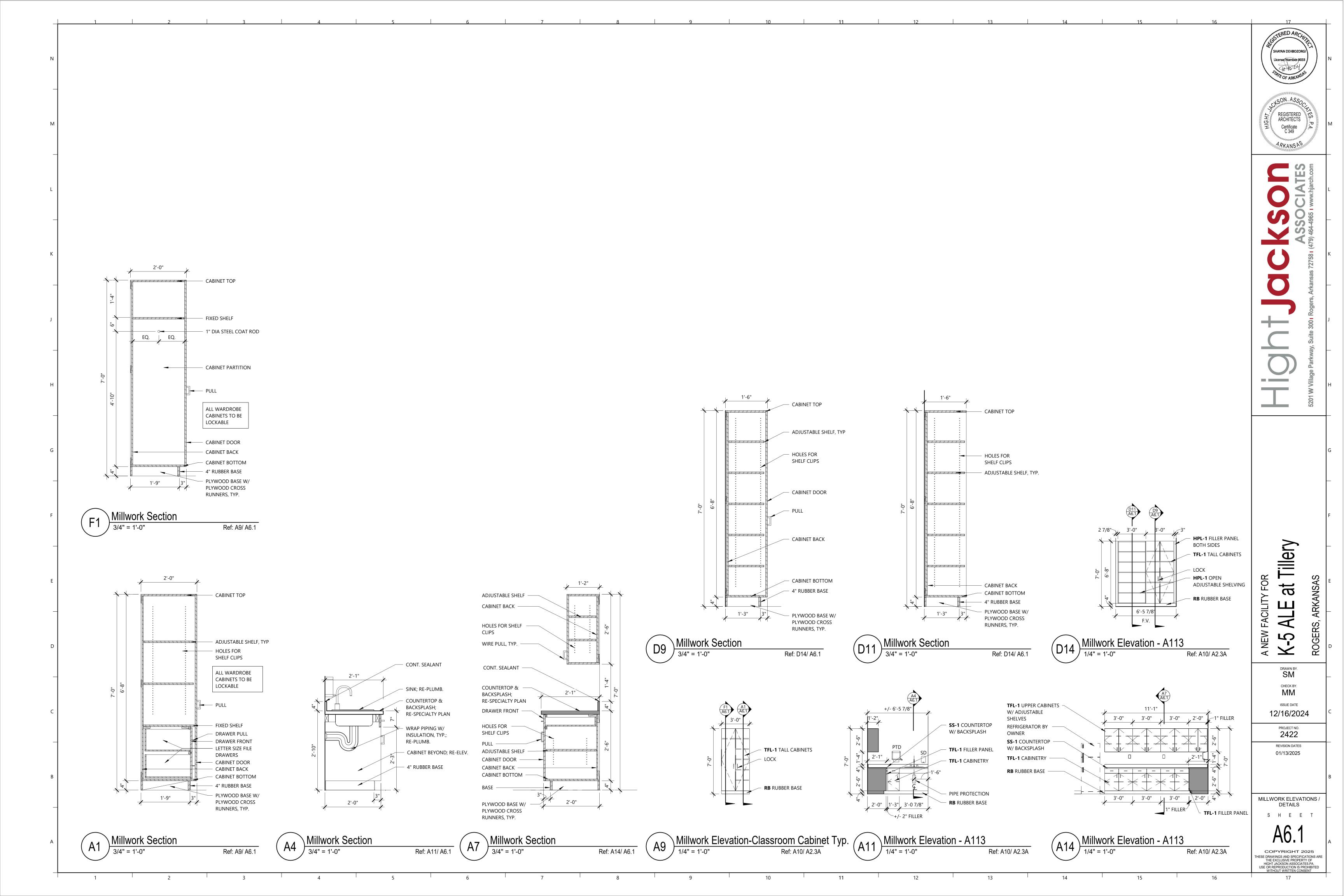


REFLECTED CEILING PLAN







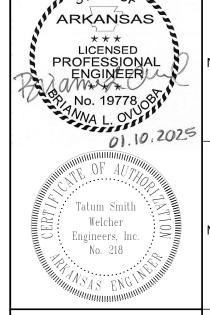


	0.0		3 4 1NODEOTIONO	<u> </u>	MASO	OND)	CONSTRUCTION	9	8	TRUC	TURAL STEEL
	SP	ECIA	AL INSPECTIONS		IVIAS		(IBC 1705.4)				1, 1705.13.1 & 1705.14.1)
			ce with Section 1705 of 2021 IBC. An independent testing agency shall be struction on the types of work listed under Section 1705. The following	PRIC	OR TO COL		CTION (ARTICLE 1.5, TMS-602-16)	PRIOR TO WEL	•	-	5.4-1, AISC 360-16; TABLE J6-1, AISC 341-16)
areas of work require Specia	al Inspections	in accorda		Verification & Inspection			Detailed Instructions				Detailed Instructions
3. Construction Manager/Cont	ractor shall co	ordinate a	iny additional Special Inspection requirements with the Owner and	Review material certificates, mix designs, test results and			Verify materials conform to requirements of approved construction documents. Mix design, test results, material certificates, and	Verify welding procedures (WPS) and manufacturer certifications	X		
applicable building authoritie4. Special Inspections are no		sibility of	the Structural Engineer of Record.	construction procedures				for welding consumable available			
			the Construction Manager. be emailed to the SEOR Brianna L. Ovuoba PhD, P.E.,			Х	certificates provided for: reinforcement; anchors, ties, fasteners, and	Verify type and grade of material.		X	For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
			ar days of completing the individual inspection(s).]			metal accessories; masonry units; mortar and grout materials. Construction procedures for cold-weather or hot-weather construction reviewed. Qualification of field testing personnel, and special inspector	Welder identification		Х	A system shall be maintained by which a welder who has welded a joint or member can be identified. For components of seismic force resisting
	CONC	CRET	E CONSTRUCTION				reviewed.	Fit-up groove welds			system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify joint preparation, dimensions, cleanliness, tacking, and backing.
	(IBC 1705	.3; TAE	BLES J9-2 & J9-3, AISC 341-16)				BEGINS (TABLE 4, TMS-602-16)			X	For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
Verification & Inspection	Continuous	Periodi	Detailed Instructions	Verification & Inspection Proportions of site-prepared	Continuous	Periodic	Detailed Instructions Verify mortar is type and color specified on construction documents,	Access holes		X	Verify configuration and finish. For components of seismic force resisting
Reinforcing steel, including prestressing tendons			Verify, prior to placing concrete, reinforcing is of specified type, grade and size; free of oil, dirt and rust; located and spaced properly; hooks,	mortar		X	conforms to ASTM C 270, and is mixed in accordance with Article 2.6 A and Article 2.6 C of TMS 602-16.	Fit-up of fillet welds			system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify dimensions, cleanliness, and tacking. For components of seismic
		Х	bends, ties, stirrups and supplemental reinforcement placed correctly; lap lengths, stagger and offsets provided; and all mechanical	Grade and size of prestressing	N/A	N/A	Verify prestressing tendons comply with Article 2.4 B of TMS-602-16 and			X	force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
			connections installed per the manufacturer's instructions and/or evaluation report.	tendons and anchorages Grade, type, and size of			anchorages, couplers, and end blocks comply with Article 2.4 H.	Check welding equipment		X	
Cast-in anchors	N/A	N/A	Verify anchor installation complies with ACI 318: 17.8.2.	reinforcement, connectors, anchor bolts, and prestressing		X	Verify reinforcement is placed in accordance with Article 3.4 of TMS-602-16. Prestressing tendons placed per Article 3.6 A.	Welder qualification records and continuity records		X	
Post-installed anchors			All post-installed anchors shall be specially inspected as required by the approved ICC-ES report. Anchors installed horizontally or in upwardly	tendons and anchorages					ING (TAI	BLE N5.	4-2, AISC 360-16; TABLE J6-2, AISC 341-16)
	N/A	N/A	inclined orientations to resist tension loads require continuous inspection per ACI 318:17.8.2.4. Verify all other mechanical and adhesive anchors	Prestressing technique Properties of thin-bed mortar for	N/A	N/A	Verify prestressing technique complies with Article 3.6 B of TMS-602-16. Verify mortar complies with Article 2.1 C of TMS-602-16. Continuous	·	Continuous	Periodic	Detailed Instructions
			comply with ACI 318: 17.8.2.	AAC masonry	N/A	N/A	inspection required for first 5000 sqft. of AAC masonry. Periodic inspection required thereafter.	Use of qualified welders		X	Verify that welders are appropriately qualified. For components of seismic force resisting system, perform on a random, daily basis per
Use of required mix design		X	Verify mixes comply with the approved construction documents; ACI 318: Ch. 19, 26.4.3, 26.4.4 and IBC 1904.1, 1904.2.	Sample panel construction	N/A	N/A	Verify sample panel complies with Article 1.6 D of TMS-602-16.	Control and handling of welding			AISC 341-16 Section J5.1. Verify packaging and exposure control. For components of seismic force
Concrete sampling for strength tests, slump, air content, and			Verify sampling in accordance with ASTM C172 and ASTM C31. See ACI 318: 26.12 for evaluation and acceptance of concrete. See ACI 318:	I I			ISTRUCTION (TABLE 4, TMS-602-16)	consumables		X	resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
temperature	^		26.5 for mixing requirements of concrete.	Verification & Inspection Size and location of structural	Continuous	Periodic	Detailed Instructions Verify locations of structural elements comply with approved plans.	Cracked tack welds			Verify welding does not occur over cracked tack welds. For components
Concrete & shotcrete placement Curing temperature and	X		Verify proper application techniques. See ACI 318: 26.5. Verify concrete surface temperature (other than high-early-strength) is	elements		Х	Confirm tolerances meet the requirements of Article 3.3 F of TMS			X	of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
techniques				Type, size, and location of			002-10.	Environmental conditions			Verify wind speed within limits, precipitation and temperature. For
		Х	>50°F in moist condition for at least 3 days unless accelerated curing is	anchors, including other details of anchorage of masonry to	f	X	Verify anchorages and connections are provided per approved plans, Section 1.2.1(e), 6.1.4.3, and 6.2.1 of TMS 402-16. Continuous			X	components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
			used. Verify compliance with cold weather requirements in ACI 318: 26.5.4 or hot weather requirements in ACI 318: 26.5.5, whichever is	structural members, frames, or other construction.			inspection required for Risk Category IV buildings.	WPS followed			Verify settings on welding equipment, travel speed, welding materials, shielding gas type/flow rate, preheat applied, interpass temperature
Pre-stressed concrete			applicable. Verify application of prestressing force and grouting of bonded	Welding of reinforcement			Verify welded splice has bars butted and welded to develop at least			X	maintained, and proper position. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16
	N/A	N/A	prestressing tendons in accordance with ACI 318: 26.10.		N/A	N/A	125% of yield strength of bar in tension or compression. See Section 6.1.6.1.2 of TMS 402-16.				Section J5.1.
Erection of precast concrete	N/A	N/A	Verify all precast elements are lifted, assembled and braced in accordance with the approved construction documents. See ACI 318:	Preparation, construction, and protection of masonry during cold			Verify cold-weather construction performed in accordance with Article	Welding techniques		×	Verify interpass and final cleaning, each pass within profile limitations, and quality of each pass. For components of seismic force resisting
Strength verification			26.9. Verify adequate strength has been achieved prior to the removal of	weather (<40°F) or hot weather (>90°F).		Х	1.8 C of TMS 602-16 and hot weather construction per Article 1.8 D of TMS 602-16.	Steel headed stud anchors		V	system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify placement and installation.
		Y	shores and forms or the stressing of post-tensioned tendons. See ACI	` '							I-3, AISC 360-16; TABLE J6-3, AISC 341-16)
		_ ^	318· 26 11 2	Application and measurement of	N/A	N/A	Verify compliance with Aricle 3.6 B of TMS 602-16		ING (IAL)LE NJ.4	1 0,7 1100 000 10, 17 1DLL 00 0,7 1100 011 10,
Formwork		^	318: 26.11.2. Verify forms are placed plumb and conform to the shapes, lines, and	prestressing force	N/A	N/A	Verify compliance with Aricle 3.6 B of TMS 602-16. Verify placement of grout in compliance with Article 3.5 of TMS 602-16	Verification & Inspection	Continuous		Detailed Instructions
Formwork		X		prestressing force Placement of grout and prestressing grout for bonded	N/A N/A	N/A N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS		•		
Limits on water added at the		X	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units	N/A	N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b	Verification & Inspection Welds cleaned Size, length, and location of	Continuous		Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting
Limits on water added at the truck or pump		,	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints	N/A		Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance	Continuous X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section,
Limits on water added at the		,	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed	N/A	N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria	Continuous X X		Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1.
Limits on water added at the truck or pump Proper placement techniques to		X	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms	N/A N/A	N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance	Continuous X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section,
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of		X	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints	N/A N/A	N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed	Continuous X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section,
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of		X	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and	N/A N/A	N/A	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required)	X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section,
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals	N/A N/A	N/A N/A X X O GROU	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities	Continuous X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section,
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field		X	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection	N/A N/A	N/A N/A X X O GROU	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member	X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals	N/A N/A PRIOR TO	N/A N/A X X O GROU	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds	X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space	N/A N/A PRIOR TO Continuous	N/A N/A X X O GROU	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or	X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection	N/A N/A PRIOR TO Continuous	N/A N/A X X O GROU	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds	X X X X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages	N/A N/A PRIOR TO Continuous	N/A N/A X X D GROU Periodic X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds	X X X X X X X X X X X X X	Periodic	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing	N/A N/A PRIOR TO Continuous N/A	N/A N/A X X D GROU Periodic X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC	X X X X X X X X X X X X X X X X X X X	Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16)
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages Placement of reinforcement,	N/A N/A PRIOR TO Continuous	N/A N/A X X D GROU Periodic X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTION	X X X X X X X X X X X X X X X X X X X	Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages Placement of reinforcement,	N/A N/A PRIOR TO Continuous N/A	N/A N/A X X D GROU Periodic X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC	X X X X X X X X X CTIONS (Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	prestressing force Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages Placement of reinforcement, connectors, and anchor bolts	N/A N/A PRIOR TO Continuous N/A	N/A N/A X X D GROU Periodic X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPE Verification & Inspection Structural steel details (fabricated	X X X X X X X X X X X X X X X X X X X	Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for	N/A N/A N/A PRIOR TO Continuous N/A	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTION Structural steel details (fabricated steel or steel frames) Anchor rods and other	X X X X X X X X X CTIONS (Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. NN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade,
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of prestressing tendons and anchorages Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons	N/A N/A N/A PRIOR TC Continuous N/A N/A	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTION Structural steel details (fabricated steel or steel frames)	X X X X X X X X X CTIONS (Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. NN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification of slump flow and	N/A N/A N/A PRIOR TO Continuous N/A N/A MINIMU Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. ITING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. ING (TABLE 3, TMS 602-16) Detailed Instructions Compressive strength tests should be performed in accordance with	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTIVE OTHER STEEL INSPECTIVE OF STRUCTURAL	X X X X X X X X X CTIONS (Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for self-consolidating grout	N/A N/A N/A PRIOR TC Continuous N/A N/A	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. Veriballed Instructions Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1011.	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTIVE OTHER STEEL INSPECTIVE OF STRUCTURAL	X X X X X X X X X CTIONS (Periodic X X X SECTIO	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify contour and finish
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for	N/A N/A N/A PRIOR TO Continuous N/A N/A MINIMUI Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. ING (TABLE 3, TMS 602-16) Detailed Instructions Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPECTIVE OF TREED INSPECTIVE OF STEEL	X X X X X X X X X X X X X X X X X X X	Periodic X X X Periodic X X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. IN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify contour and finish as well as dimensional tolerances. For seismic force resisting system components: Verify that no holes or
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for self-consolidating grout	N/A N/A N/A PRIOR TO Continuous N/A N/A MINIMU Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow strength for each wythe by "unit strength method" or by the "prism	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC Verification & Inspection Structural steel details (fabricated steel or steel frames) Anchor rods and other embedments supporting structural steel Reduced beam sections (RBS) Protected zones	X X X X X X X X X X X X X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. NN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify contour and finish as well as dimensional tolerances. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zone.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for self-consolidating grout Verification of f'm and f'AAC Verification of proportions of	N/A N/A N/A PRIOR TO Continuous N/A MINIMUI Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. ING (TABLE 3, TMS 602-16) Detailed Instructions Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1611. Determine compressive strength for each wythe by "unit strength method" or by the "prism test method" as specified in Arti	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC Verification & Inspection Structural steel details (fabricated steel or steel frames) Anchor rods and other embedments supporting structural steel Reduced beam sections (RBS) Protected zones H-piles	X X X X X X X X X X X X X X X X X X X	Periodic X X X Periodic X X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. IN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zone. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zone.
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for self-consolidating grout Verification of f'm and f'AAC	N/A N/A N/A PRIOR TO Continuous N/A N/A MINIMUI Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. ING (TABLE 3, TMS 602-16) Detailed Instructions Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; s	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC Verification & Inspection Structural steel details (fabricated steel or steel frames) Anchor rods and other embedments supporting structural steel Reduced beam sections (RBS) Protected zones	X X X X X X X X X X X X X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. DN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify contour and finish as well as dimensional tolerances. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zone. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zones of pilling. Verify exposed cut surfaces of galvanized structural steel main members and exposed corners of rectangular HSS have no cracks subsequent to
Limits on water added at the truck or pump Proper placement techniques to limit segregation Verify installation of the embedded parts, completion of the continuity of reinforcment across joints, and completion of connections in the field Verify installation tolerances of precast concrete diaphragm	 N/A	X X N/A	Verify forms are placed plumb and conform to the shapes, lines, and dimensions of the members as required by the approved construction documents. See ACI 318: 26.11.1.2. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. Verify during concrete placement. Applicable to composite construction in seismic force resisting system components. Perform on a random daily basis per AISC 341-16 Section J5.1. See Table J9-2, AISC 341-16. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to seismic design category C, D, E, or F. See ACI 318:26.13.1.3 and ACI 550.5.	Placement of grout and prestressing grout for bonded tendons is in compliance Placement of AAC masonry units and construction of thin-bed mortar joints Observation of preparation of grout specimens, mortar specimens, and/or prisms Placement of masonry unit and construction of mortar joints Materials and procedures with the approved submittals Verification & Inspection Grout space Placement of reinforcement, connectors, and anchor bolts Proportions of site-prepared grout and prestressing grout for bonded tendons Verification & Inspection Verification of slump flow and Visual Stability Index (VSI) for self-consolidating grout Verification of f'm and f'AAC Verification of proportions of materials in grout and premixed	N/A N/A N/A PRIOR TO Continuous N/A MINIMUI Continuous	N/A N/A X X D GROU Periodic X N/A X	Verify placement of grout in compliance with Article 3.5 of TMS 602-16 and grout for bonded tendons in compliance with Article 3.6 C of TMS 602-16. Verify mortar is placed in accordance with Articles 3.3 B.9, and 3.3 F.1.b of TMS 602-16. Continuous inspection is required for first 5000sqft. of AAC masonry. Periodic inspection required thereafter. Confirm specimen/prism preparation performed as required by Article 1.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify placement in accordance with Article 3.3 B of TMS 602-16. Verify materials and procedures conform to approved submittals. See Article 1.5 of TMS 602-16. TING (TABLE 4, TMS-602-16) Detailed Instructions Verify grout space is free of mortar droppings, debris, loose aggregate, and other deleterious materials and cleanouts are provided per Article 3.2 D and 3.2 F of TMS-602-16. Continuous inspection is required for Risk Category IV buildings. Verify reinforcement, cover, and protection of prestressing tendons, Sections 10.8 and 10.9 of TMS 402-16, and Articles 2.4 and 3.6 of TMS 602-16. Verify reinforcement, joint reinforcement, wall ties, anchor bolts and veneer anchors are installed in accordance with the approved construction documents, Section 6.1, 6.3.1, 6.3.6, and 6.3.7 of TMS 402-16, and Articles 3.2 E, and 3.4 of TMS 602-16. Continuous inspection is required for Risk Category IV buildings. Verify grout is proportioned per ASTM C 476 and has a slump between 8-11 inches. Self-consolidated grout shall not be proportioned onsite. See Article 2.6 B of TMS 602-16. Verify prestressing grout complies with Article 2.4 G.1.b of TMS 602-16. ING (TABLE 3, TMS 602-16) Detailed Instructions Compressive strength tests should be performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1019; slump flow and VSI performed in accordance with ASTM C 1611. Determine compressive strength for each wythe by "unit strength method" or by the "prism test method" as specified in Arti	Verification & Inspection Welds cleaned Size, length, and location of welds Welds meet visual acceptance criteria Arc strikes k-area Backing & weld tabs removed and finished, and fillet welds added (if required) Repair activities Document acceptance or rejection of welded joint/member Placement of reinforcing or contouring fillet welds Weld access holes Prohibited welds OTHER STEEL INSPEC Verification & Inspection Structural steel details (fabricated steel or steel frames) Anchor rods and other embedments supporting structural steel Reduced beam sections (RBS) Protected zones H-piles	X X X X X X X X X X X X X X X X X X X	Periodic X	Detailed Instructions Verify welds properly cleaned. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify crack prohibition, weld/base metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity meet visual acceptance criteria. Only required in components of seismic force resisting system. After rolled heavy shapes are welded, visually inspect the weld access hole for cracks. Verify no prohibited welds have been added without approval of the EOR. NN N5.7 & N5.8, AISC 360-16; TABLES J8-1 & J10-1, AISC 341-16) Detailed Instructions Verify compliance with the details in construction documents in items including: braces, stiffeners, member locations, and proper application of joint details at each connection. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify compliance with construction documents. Verify diameter, grade, type, length of anchor rod or embedded item, and extent or depth of embedment prior to placement of concrete. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. For seismic force resisting system components: Verify that no holes or unapproved attachments are made within the protected zone. For seismic force resisting system components: Verify that no holes or unapproved attachments occur within the protected zones of piling. Verify exposed cut surfaces of galvanized structural steel main members

(IBC 1705.2.1, 1705.13.1, & 1705.14.1) PRIOR TO BOLTING (TABLE N5.6-1, AISC 360-16; TABLE J7-1, AISC 341-16) Verification & Inspection Continuous | Periodic | Detailed Instructions Manufacturer's certifications X ---- Verify certifications available for fastener materials. Verify marked in accordance with ASTM requirements. For components Fasteners marked of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify proper selection for joint detail including grade, type, and bolt length if threads excluded from shear plane. For components of seismic Fastener selection force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify proper bolting procedure selected for joint detail. For components Bolting procedure X of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Verify connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable Connecting surfaces requirements. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Pre-installation verification testing ---- Observe and document for fastener assemblies and methods used. by installation personnel Verify proper storage provided for bolts, nuts, washers, and other fastener components. For components of seismic force resisting system Fastener storage perform on a random, daily basis per AISC 341-16 Section J5.1. **DURING BOLTING (TABLE N5.6-2, AISC 360-16; TABLE J7-2, AISC 341-16)** Continuous Periodic Detailed Instructions Verification & Inspection Position of fasteners Verify fastener assemblies, of suitable condition, are placed in all holes and washers, if required, are positioned as required. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. Joint brought into snug-tight For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. condition prior to the pretensioning operation Fastener components not turned For components of seismic force resisting system, perform on a random, by the wrench are prevented daily basis per AISC 341-16 Section J5.1. from rotating Fasteners are pretensioned in accordance with the RCSC specification, Pretensioning of fasteners progressing systematically from the most rigid point toward the free edges. For components of seismic force resisting system, perform on a random, daily basis per AISC 341-16 Section J5.1. **AFTER BOLTING (TABLE N5.6-3, AISC 360-16; TABLE J7-3, AISC 341-16)** Verification & Inspection Continuous Periodic Detailed Instructions

Document acceptance or rejection of bolted connections

STRUCTURAL STEEL (CONT.)



at ALE K-5

12/16/2024

DAZ

REQUIRED IBC SPECIAL INSPECTIONS

TATUM SMITH WELCHER STRUCTURAL ENGINEERS (479) 621-6128 ROGERS, ARKANSAS

TSW #: 24164 PM: BLO DE: DAZ

CONSTRUCTION SAFETY GENERAL NOTE THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS TECHNIQUES, SEQUENCES OR PROCEDURES, TEMPORARY SHORING/BRACING, OR FOR SAFETY

Concrete General Notes 3100:

All detailing, fabrication and placing of reinforcing steel shall conform to the ACI Standard "Details and Detailing of Concrete

PRECAUTIONS AND PROGRAMS, SINCE THESE ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY

2. Concrete at slab-on-grade shall develop a 28-day minimum compressive strength of 3,500 psi and have WWF.

All concrete for slab-on-grade shall have a 5" maximum slump.

4. All reinforcing steel shall be deformed bars conforming to ASTM A615, Grade 60.

5. All reinforcing bar splices shall be 44 bar diameters for #6 and smaller diameter bars. Reinforcing bar splices shall be 48 bar diameters for #7 and larger bar diameters.

6. All reinforcing bar hooks shall be ACI standard 90 degree hook, unless noted otherwise.

7. Smooth dowels shall be steel conforming to ASTM A36.

3. All slots, sleeves and other embedded items shall be set before concrete is placed. See Architectural, Electrical, Mechanical, and Vendor's drawings for size and locations.

9. Bar supports at slabs-on-grade shall be factory made wire bar supports, type "SBU" linear supports.

10. Epoxy for doweling reinforcement shall be HY-200 by Hilti, unless noted otherwise.

11. Use of compacted, free-draining pea gravel, crushed stone, or coarse sand underneath the building slab is recommended by TSW, Inc. Consult Geotechnical Engineer regarding potential substitution of free-draining coarse materials with approved subgrade. Slabs-On-Grade have been designed for a modulus of subgrade reaction (k-value) of 100 psi/in.

Concrete Masonry General Notes 4100:

All concrete masonry units shall be lightweight above finished floor and normal weight below grade. All hollow concrete masonry units shall conform to ASTM C90, Grade N, Type 1 with a minimum ultimate compressive prism strength (fm) of 2000 psi for the masonry assemblage. All concrete masonry shall be laid in Running (Common) Bond.

Mortar at exterior walls, all load-bearing walls, walls below grade and non-load-bearing walls higher than 20'-0" shall be Type S mortar and have a minimum compressive strength of 1,800 psi. Mortar at interior non-load-bearing walls not higher than 20'-0" and mortar at masonry veneer shall be Type N mortar and have a minimum compressive strength of 750 psi. All mortar shall conform to ASTM C270. Masonry cement shall not be used for mortar.

All grout shall be ready-mix concrete, with 3/8" diameter max. aggregate, have a minimum 28-day compressive strength of 2,000 psi and a design slump between 8" to 10" or preblended product (Core Fill Grout, Coarse CF-02, by Spec Mix) with a minimum 28day compressive strength of 2,000 psi and a design slump between 8" to 10".

All 8" CMU bond beam units shall be reinforced with one bar. See Masonry Wall Reinforcement Schedule on Drawing S3.0 for size of bars for vertical wall reinforcement and bond beam requirements. Provide corner bars and lap bond beam reinforcing 48 bar

5. All reinforcing steel shall be deformed bars conforming to ASTM A615, Grade 60.

6. All bolts, anchors, reinforcement and embedded items shall be grouted in place.

All reinforcing bar splices shall be 48 bar diameters, U.N.O.

8. At all 8" CMU walls except at interior non-load bearing walls, provide (1) vertical bar each cell for the first (2) cells adjacent to control joints in walls, at ends of walls, wall corners and on each side of wall openings, unless noted otherwise. Vertical bars shall match reinforcement for remainder of wall. See Masonry Wall Reinforcement Schedule on Drawing S3.0 for size of reinforcement.

Provide horizontal joint reinforcement at 16" o.c. Reinforcement shall be ladder design, min. 9 gage welded steel wire, hot dipped galvanized to 1.5 oz. width shall be 1 1/2" less than wall thickness.

Structural Steel General Notes 5100:

brought into snug contact.

EACH FACE

EACH WAY

ELEVATION

EXPANSION

EACH

EQUAL

EXISTING

All detailing, fabrication and erection of structural steel shall conform to the requirements of the AISC Specification for the Design, Fabrication and Erection of Structural Steel for Buildings.

Wide flanges shall conform to ASTM A992 with a yield strength of 50 ksi.

3. Headed stud anchors (H.S.A.'s) shall conform to ASTM A108

4. All other structural steel shall conform to the requirements of ASTM A36.

5. All welding shall conform to the Specifications of the American Welding Society. Welding electrodes shall be E-70 low hydrogen series. Welding shall be done by a certified welder.

6. High strength bolts shall typically be 3/4" diameter bolts conforming to ASTM A325. Connections shall be designed as bearing type with threads in shear plane. Holes shall be 1/16" larger than bolt size.

All bolts shall be tightened to a snug-tight condition. A snug tight condition is defined as the tightness attained by a few impacts of an impact wrench or the full effort of a man using an ordinary spud wrench. All connected elements must be

8. No openings shall be cut in structural members unless shown on the drawings.

9. All exposed edges of plates, beams, etc., shall be shop ground smooth and uniform.

Design Loads

1. Typical Roof Dead Load: 20 psf (PRESUMED) 2. Roof Live Load: 20 psf 7.07 in/hr 15 - Minute Intensity: 60 - Minute Intensity: 3.68 in/hr Snow Load: 15 psf Ground Snow Load: Flat-roof Snow Load at main roof (P_f) = 11.6 psf Slope Factor (C_s) = 1.0 Snow Exposure Factor (C_e) = 1.0 Snow Load Importance Factor (I_s) = 1.1

 Thermal Factor (C_t) = 1.0 5. Wind Load: 115 mph Ultimate Design Wind Speed (V_{ult}): Nominal Design Wind Speed (V_{asd}): 89.1 mph Risk Category III Wind Exposure B

 Internal Pressure Coefficient, GCpi = ±0.18 6. Components & Cladding Wind Load (Unfactored):

 Width of Edge Zone, a = 5.25 ft Wall Pressures (10 ft²) End Zone Wall = 33.5 psf Interior Zone = 27.2 psf Wall Pressures (100 ft²) End Zone Wall = 26.1 psf Interior Zone = 23.5 psf Roof Pressures (10 ft²) Corner Zone = 78.7 psf Eave & Rake Zone = 57.7 psf

 Interior Zone = 43.8 psf Roof Pressures (100 ft²) 54.0 psf Corner Zone = Eave & Rake Zone = 45.4 psf Interior Zone = 34.2 psf

Seismic:

 Risk Category III Seismic Importance Factor (I_e) = 1.25

• $S_S = 0.158$ • $S_1 = 0.091$ • $S_{DS} = 0.169$

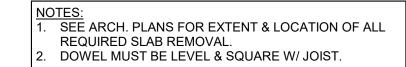
• $S_{D1} = 0.146$

 Site Class D (presumed per IBC Sec. 1613.3.2) Seismic Design Category C Basic Structural System:

Bearing Wall Systems Seismic Resisting System: Intermediate Reinforced Masonry Shear Wall Response Modification Coefficient (R): 3.5 Deflection Amplification Factor (C_d): 2.25 • Seismic Response Coefficient (C_s): 0.0602 Analysis Procedure: Equivalent Lateral Force

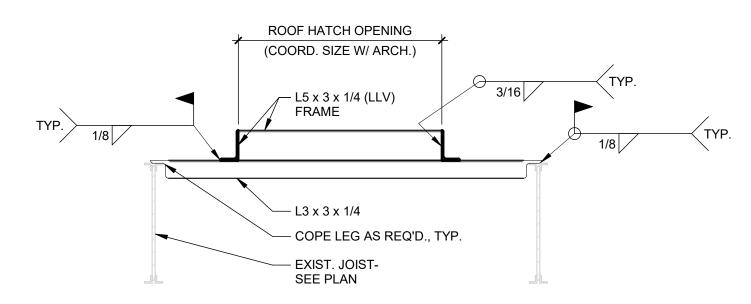
Procedure

2021 Arkansas Fire Prevention Code, Volume II (Incorporating IBC 2021)



PROVIDE 1/2"Ø x 8" SMOOTH **DOWELS CENTERED IN EXIST** SLAB @ 18" O.C. (3 MIN.)-- 1/2" EXP. JT. DRILL & EPOXY 4" INTO EXIST. USING HIT-HY 200 BY HILTI. GREASE END IN NEW SLAB EXIST CONC. TO REMAIN -Γ.O. EXIST. SLAB EL. FIELD VERIFY - FACTORY MADE WIRE **BAR SUPPORTS** 15 MIL POLYETHYLENE-CRUSHED STONE BASE-LAP 6" & TAPE EA. END —

REGRADE & RECOMPACT PRIOR TO CONC. PLACEMENT <u>TYP. FULL DEPTH SLAB REPLACEMENT</u>



TYP. ROOF HATCH OPENING DETAIL @ **EXIST. ROOF**

T.O. EXIST. SLAB EL FIELD VERIFY - #4's @ 12" O.C. E.W. STAGGERED DRILL & EPOXY REBAR 4" INTO EXISTING WALL/SLAB. USE HILTI HIT-HY 270 WHEN DRILLING INTO EXIST. MASONRY & HILTI HIT-HY 200 WHEN DRILLING INTO EXIST. CONCRETE

SLAB INFILL OVER TUNNEL

ARKANSAS

LICENSED

Welcher

Engineers, Inc

01.10.2025

PROFESSIONAL ENGINEER No. 19778

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> BLO ISSUE DATE 12/16/2024

DAZ

2422 REVISION DATES 01/13/2025

GENERAL NOTES & TYP. DETAILS SHEET

HESE DRAWINGS AND SPECIFICATIONS ARE USE OR REPRODUCTION IS PROHIBITE

FOUNDATION PSF POUNDS PER SQUARE AMERICAN INSTITUTE OF **FINISH** STEEL CONSTRUCTION POUNDS PER SQUARE FLOOR ARCH ARCHITECT FOOTING ASTM AMERICAN SOCIETY FOR **RADIUS** GAUGE TESTING AND MATERIALS REINFORCEMENT GALVANIZED REQ'D REQUIRED HEADED STUD ANCHOR ROOF TOP UNIT HOOK BOTT BOTTOM SLAB ON GRADE HORIZ **HORIZONTAL BEARING** SCHEDULE SCHED JOIST BEARING **BETWEEN** SECT ELEVATION COLD-FORMED STEEL STRUCTURAL ENGINEER JST JOIST CENTER LINE OF RECORD JOINT CLEAR SIMILAR ANGLE

TYPICAL STRUCTURAL ABBREVIATIONS

COL. COLUMN LG LONG CONC CONCRETE SPA SPACING LONG LEG HORIZONTAL CONN CONNECTION SPECS **SPECIFICATIONS** LLV LONG LEG VERTICAL CONT CONTINUOUS STD STANDARD LONGITUDINAL LONG DEFL. STIFFENER DEFLECTION STIFF MAXIMUM DIA, or Ø STEEL STL MBM METAL BUILDING DIMENSION TOP OF CONCRETE MANUFACTURER TOP OF FOOTING TOF **MECHANICAL** TOS TOP OF STEEL MFR **MANUFACTURER** DETAIL TOP OF WALL MINIMUM DRAWING **TRANSVERSE MISCELLANEOUS**

MTL

N.S.

O.C.

O.F.

OPNG

ANCHOR ROD FAR SIDE POUNDS PER FOOT F.V. AMERICAN CONCRETE FIELD VERIFY PROJECTION INSTITUTE STEEL JOIST INSTITUTE

METAL

NEAR SIDE

ON CENTER

OPENING

PEDESTAL

OUTSIDE FACE

TYP

TYPICAL

UNLESS NOTED

OTHERWISE

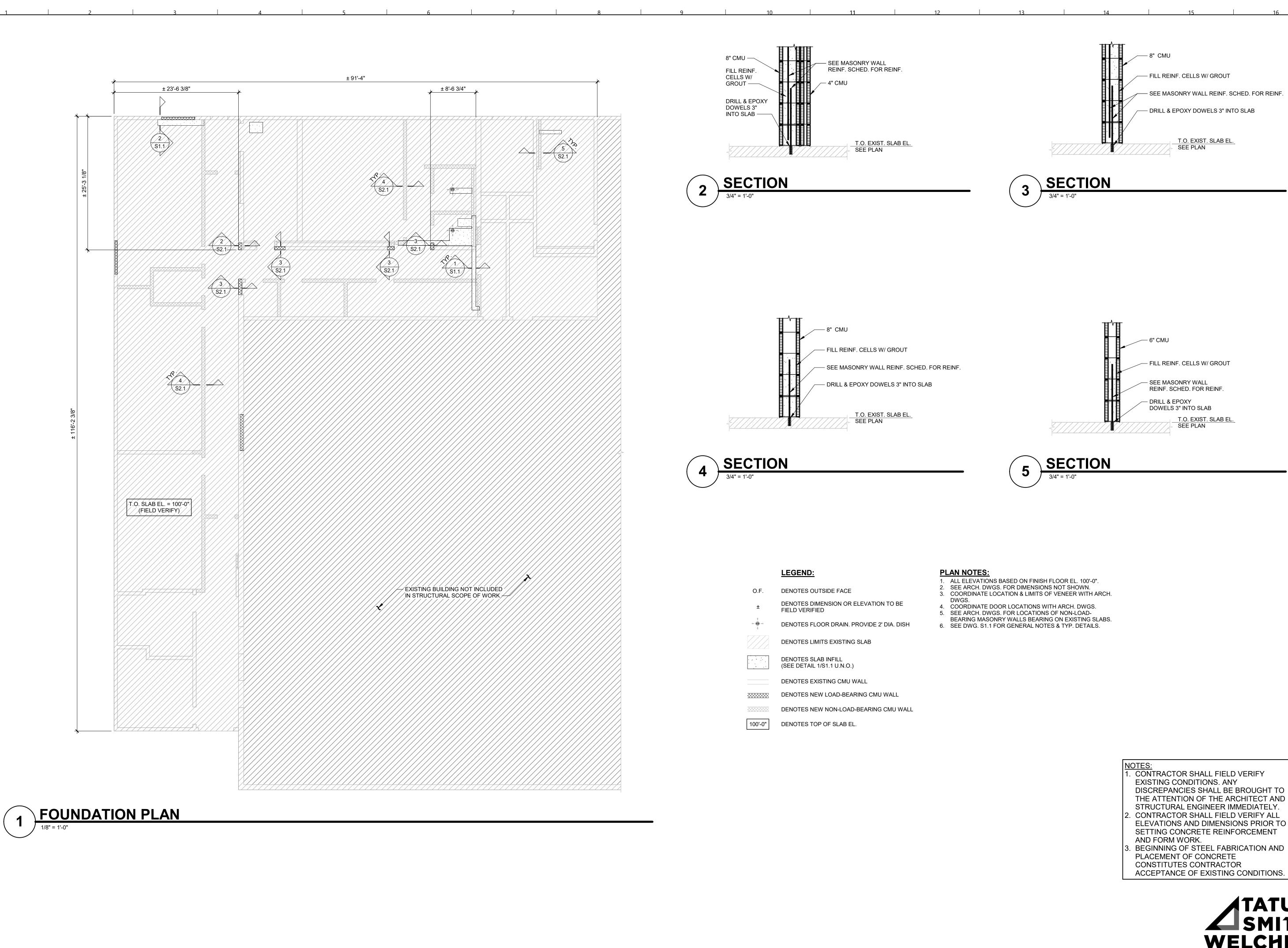
WORK POINT

WELDED WIRE FABRIC

VERTICAL

WITH

STRUCTURAL ENGINEERS (479) 621-6128 ROGERS, ARKANSAS TSW #: 24164 PM: BLO DE: DAZ



ARKANSAS Welcher

Tillery at A 5

> DAZ BLO ISSUE DATE 12/16/2024

> > 2422

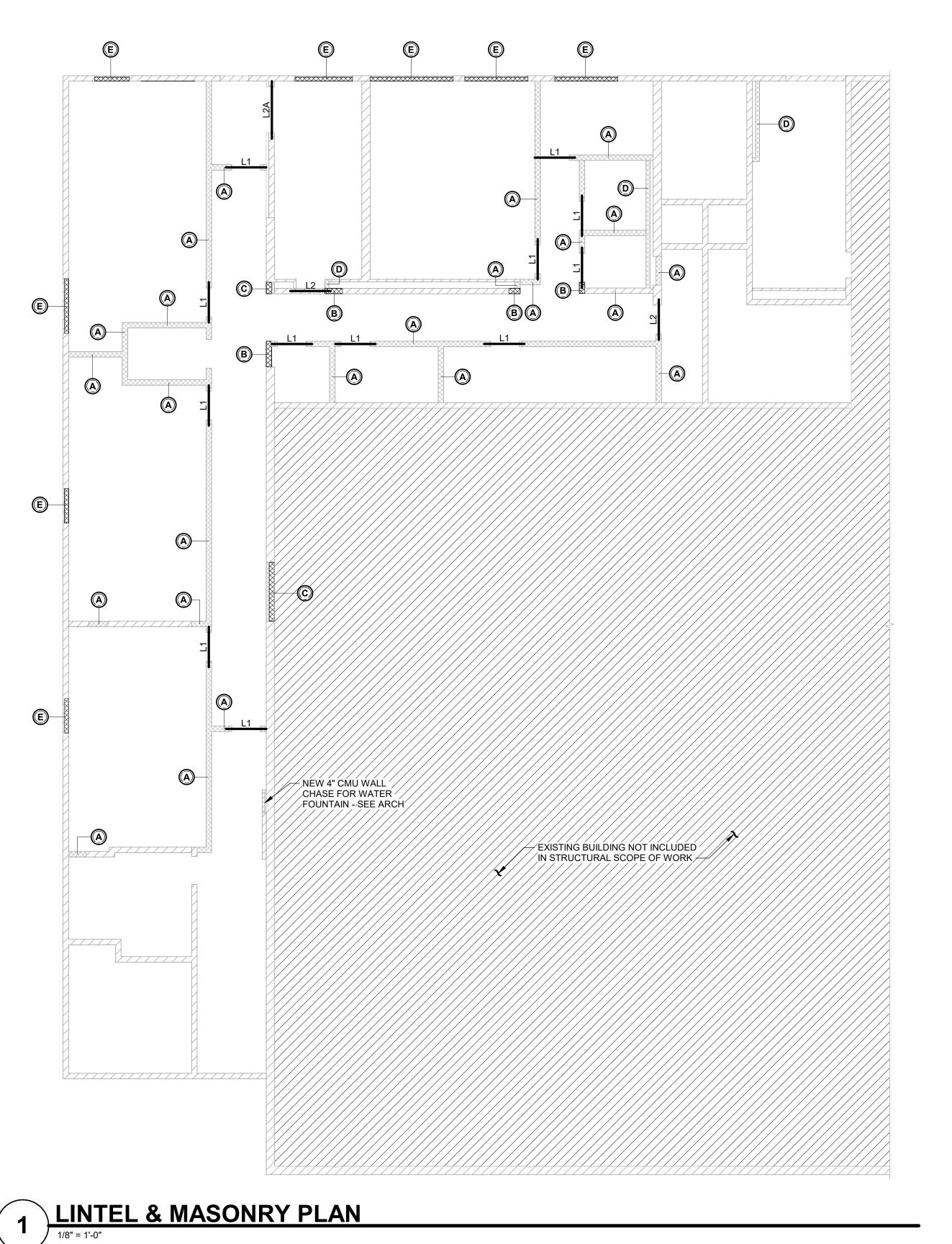
REVISION DATES 01/13/2025

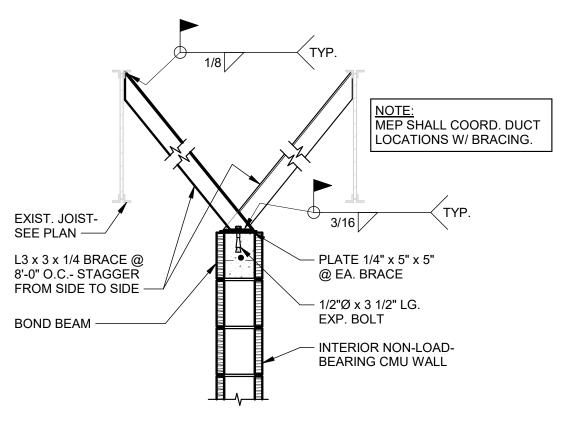
FOUNDATION PLAN

SHEET S2.1

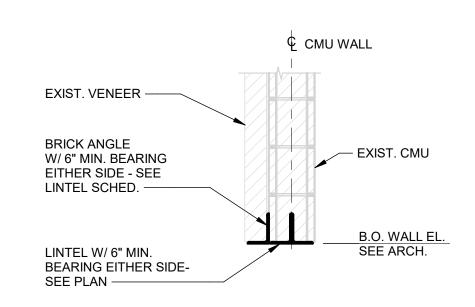
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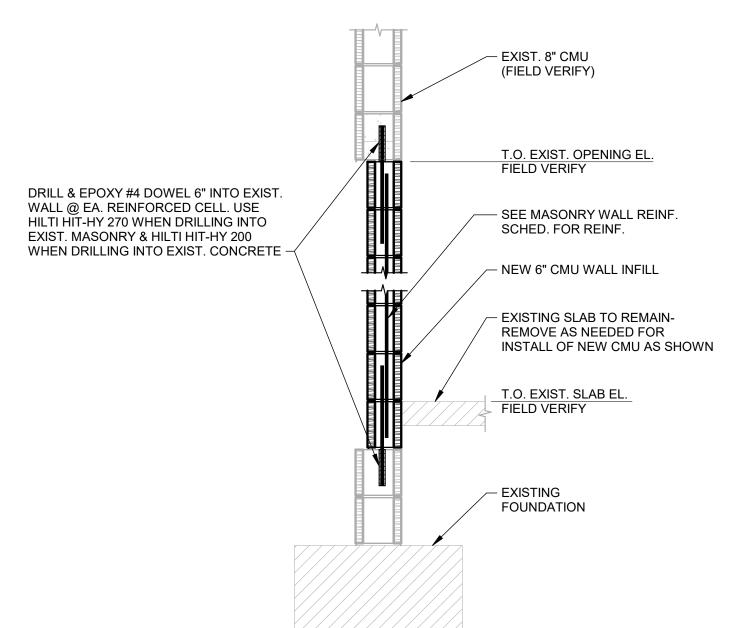


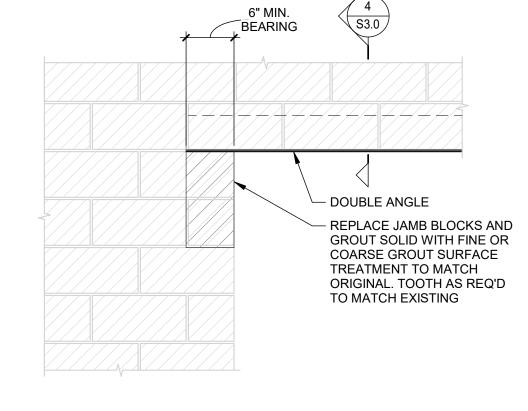


TYP. NON LOAD BEARING CMU WALL BRACING

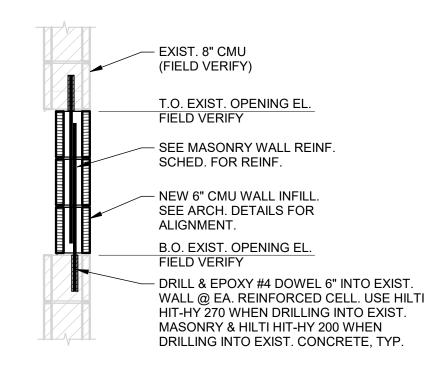


NEW CMU OPNG ANGLE LINTEL @ EXIST 8" CMU

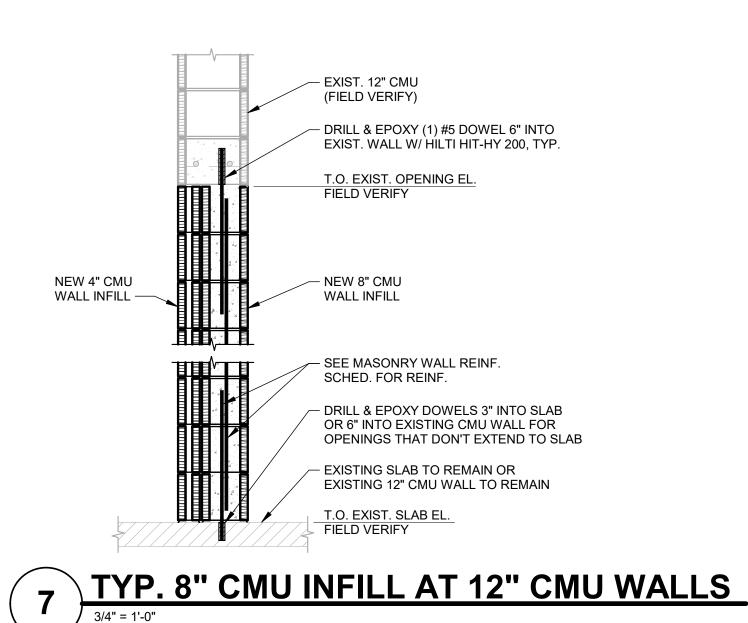




NEW OPENING IN EXISTING 8" MASONRY WALL DETAIL



TYP. 6" CMU INFILL AT EXTERIOR **WINDOWS AND LOUVERS**



TYP. 6" CMU INFILL AT EXTERIOR DOORS 3/4" = 1'-0"

	3/4 =	1-0		
NR	Y WALL REINF	ORCEME	NT SCHEDU	LE
BEAM IF.	BOND BEAM LOCATIONS	VERT. REINF.	FOUNDATION / BOTTOM DOWELS	REMARKS
			#5 x 2'-6" DOWEL @	

	LINTEL SCHEDULE												
MARK WALL TYPE & SIZE REINFORCEMENT OR BRICK ANGLE OR LOCATIONS (THICKNESS x HEIGHT) REINFORCEMENT OR PLATES REMARKS													
L1 8" CMU "CMU 8" x 8" BOND BM. (1) #5 BOTT SEE NOTES #1, #2, #4, #5 & #													
L2 8" CMU (2) L5 x 3 1/2 x 1/4 (LLV) SEE NOTES #1, #2 & 3/S3.0													
L5 x 3 1/2 x 1/4 SEE NOTES #1 #2 #3 8 3/53 0													
1. SEE 2. COC 3. BRIC 4. ALL 5. FILL	LINTEL SCHEDULE NOTES: 1. SEE ARCH. DWGS. FOR EXACT LOCATION OF ALL LINTELS. 2. COORDINATE ALL BOTTOM PLATE/BEAM/CMU/ANGLE ELEVATIONS WITH ARCH. DWGS. 3. BRICK LINTELS SHALL HAVE 6" MIN. BEARING EACH SIDE OF OPENING. 4. ALL CMU LINTELS SHALL HAVE 8" MIN. BEARING EACH SIDE OF OPENING. 5. FILL ALL CMU LINTELS WITH 2,000 PSI GROUT.												

OPENINGS NOT TO EXCEED 4'-0" WIDE. FOR OPENING WIDTHS LARGER THAN 4'-0", COORDINATE WITH

	MASONRY WALL REINFORCEMENT SCHEDULE													
MARK	WALL LOCATION	BOND BEAM REINF.	BOND BEAM LOCATIONS	BOND BEAM LOCATIONS VERT. REINF. FOUNDATION BOTTOM DOWN										
Α	8" CMU	(1) #4 BOTT.	TOP OF WALL	NONE	#5 x 2'-6" DOWEL @ 48" O.C. CENTER IN WALL	SEE NOTES								
В	8" CMU	(1) #4 BOTT.	TOP OF WALL	#5 @ 24" O.C.	#5 x 2'-6" DOWEL @ 24" O.C. CENTER IN WALL	SEE NOTES								
С	8" CMU + 4" CMU	(1) #4 BOTT.	TOP OF WALL	#5 @ 24" O.C.	#5 x 2'-6" DOWEL @ 24" O.C. CENTER IN WALL	SEE NOTES								
D	6" CMU	(1) #4 BOTT.	TOP OF WALL	NONE	#4 x 2'-0" DOWEL @ 48" O.C. CENTER IN WALL	SEE NOTES								
E	6" CMU INFILL	(1) #4 BOTT.	TOP OF WALL	#4 @ 24" O.C.	#4 x 2'-0" DOWEL @ 24" O.C. CENTER IN WALL	SEE NOTES								

MASONRY WALL REINFORCEMENT SCHEDULE NOTES: WHERE TOP OF WALL IS UNSUPPORTED BY THE ROOF FRAMING, BRACE TOP OF WALL WITH DIAGONAL L3 x 3 x 1/4 WELDED TO THE ROOF FRAMING ABOVE AT 8'-0" O.C. MAXIMUM (SEE DTL. 2/S3.0).

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LINTEL, BRACING & MASONRY PLAN AREAS S3.0

PLAN NOTES:

1. SEE DWGS. S1.1 & S1.2 FOR GENERAL NOTES & TYP. DETAILS.

DENOTES LINTEL MARK, SEE DENOTES EXISTING CMU WALL

DENOTES NEW LOAD-BEARING CMU WALL

DENOTES NEW NON-LOAD-BEARING CMU WALL DENOTES MASONRY WALL REINF. MARK,

SEE MASONRY WALL REINF. SCHED.

3. SEE DETAILS FOR CMU WALL INFILL DETAILS.

4. SEE DETAILS FOR DRILL & EPOXY DEPTH.

2. UNO AT SLAB-ON-GRADE DRILL AND EPOXY DOWELS 3" INTO SLAB (SEE DETAILS 2, 3, 4, & 5/S2.1)

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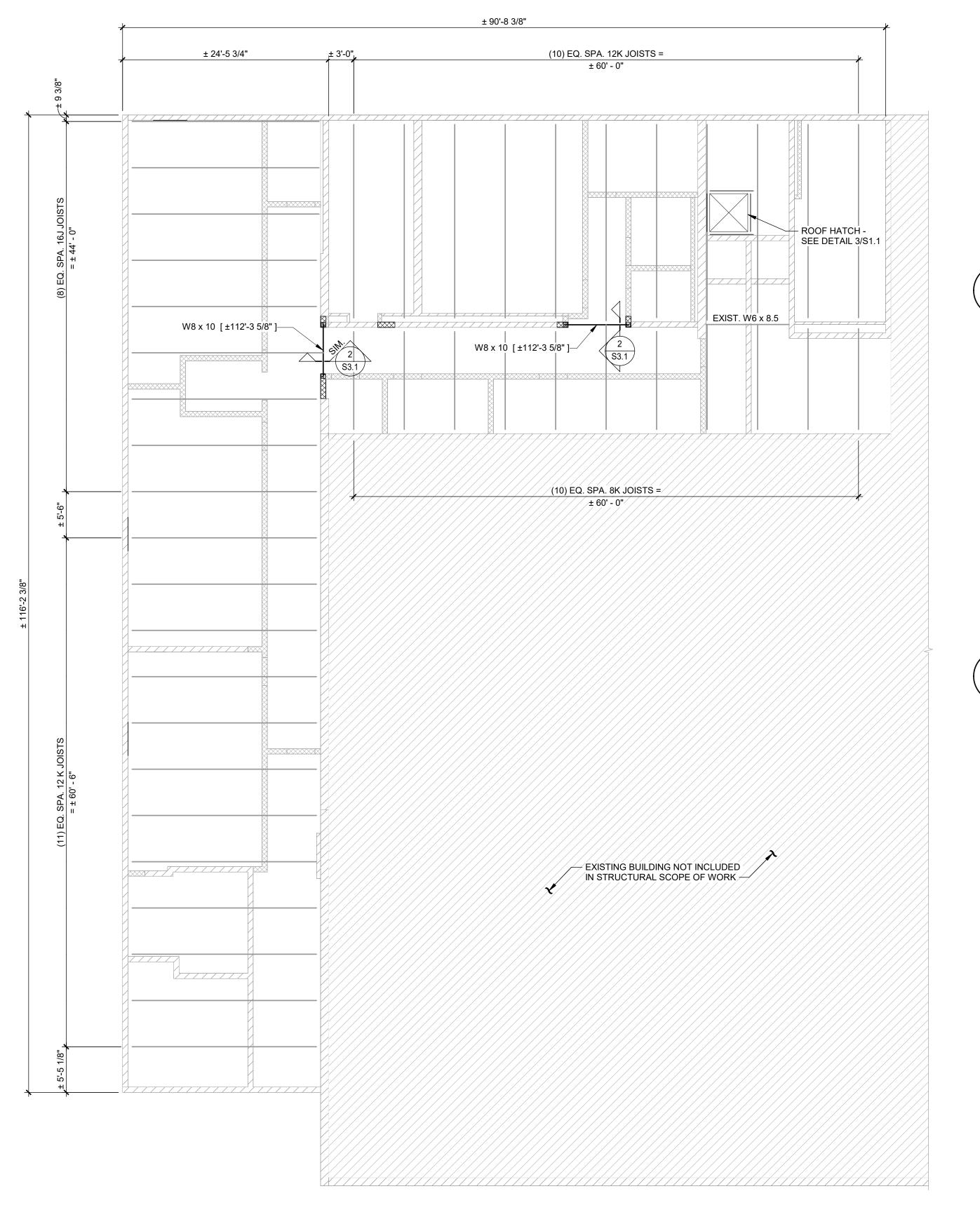
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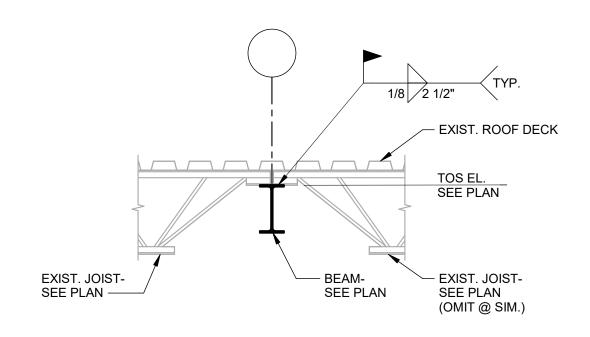
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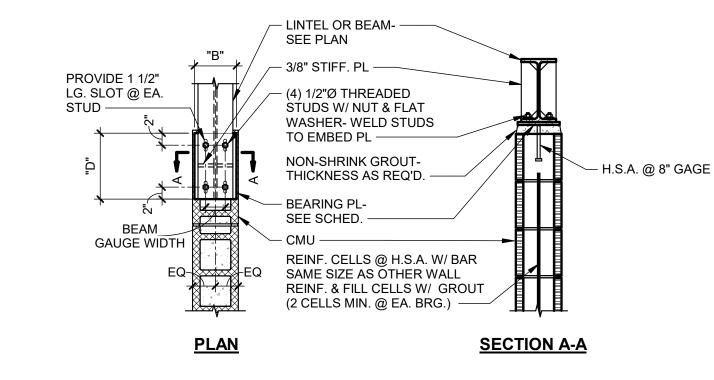
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PROFESSIONAL ENGINEER No. 19778

Welcher







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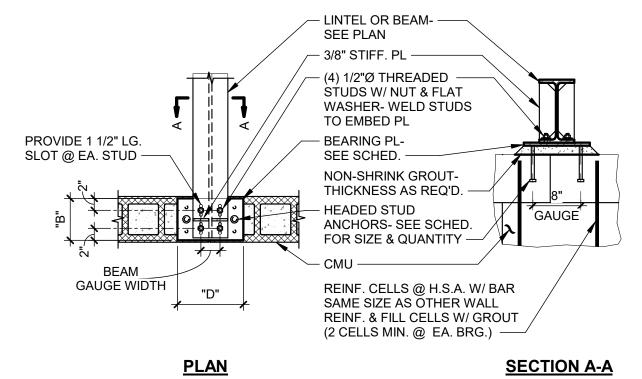
ROOF FRAMING PLAN & DETAILS

S H E E T

S3.1

TYP. INTR. BEAM & JOIST @ ROOF

TYP. WF LINTEL & BEAM **BEARING PLATE DETAILS**



TYP. WF LINTEL & BEAM **BEARING PLATE DETAILS**

BEARING PLATE SCHEDULE												
LINTEL/BEAM SIZE	LINTEL BRG. PL SIZE (t x B x D)	BEAM BRG. PL SIZE (t x B x D)	SEE DTL.	REMARKS								
W8x10	3/8" x 7" x 11"	3/8" x 7" x 11"	(2) 1/2"Ø x 6" H.S.A.	3/S3.1	8" CMU WALL							
W8x10	3/8" x 7" x 11"	3/8" x 7" x 11"	(2) 1/2"Ø x 6" H.S.A.	4/S3.1	8" CMU WALL							

LEGEND:

DENOTES OUTSIDE FACE

[112'-3 5/8"] DENOTES TOP OF BEAM ELEVATION

DENOTES FRAMED OPENING IN ROOF-COORDINATE SIZE & LOCATION W/ ARCH. (SEE DTL. 3/S1.1)

DENOTES EXISTING CMU WALL

DENOTES LOAD-BEARING CMU WALL

DENOTES NON-LOAD-BEARING CMU WALL

DENOTES DIMENSIONS TO BE FIELD VERIFIED

PLAN NOTES:

- 1. TOP OF STL. EL. 112'-3 5/8". (TYP. U.N.O.)
- 2. ALL ELEVATIONS BASED ON FINISH FLOOR EL. 100'-0". 3. SEE DWG. S1.1 FOR GENERAL NOTES & TYPICAL DETAILS.
- 4. SEE ARCH. DWGS. & FOUNDATION PLAN FOR DIMENSIONS
- NOT SHOWN. 5. SEE DWG. S3.0 FOR LINTEL PLANS & DETAILS.

STRUCTURAL ENGINEERS (479) 621-6128 ROGERS, ARKANSAS TSW #: 24164 PM: BLO DE: DAZ

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ROOF FRAMING PLAN

GENERAL PLUMBING NOTES

- 1. ALL PLUMBING MATERIALS AND INSTALLATION SHALL COMPLY WITH THE ARKANSAS STATE PLUMBING CODE, LATEST EDITION.
- 2. INSTALL ALL DOMESTIC HOT AND COLD WATER PIPING AS PER STATE
- AND LOCAL CODES. 3. INSULATE ABOVE GRADE CONCEALED DOMESTIC HOT AND COLD WATER LINES PER SPECIFICATIONS, SECTION 22 07 19.
- 4. INSTALL DEEP SEAL TRAPS AT ALL DRAIN CONNECTIONS. 5. WHERE FIRE RATED PARTITIONS OR FLOORS OCCUR, ALL FLOOR TO FLOOR AND ROOM TO ROOM PENETRATIONS SHALL BE PROPERLY FIRE SEALED WITH U.L. LISTED AND CLASSIFIED FIRE CAULK OR FIRE SEALED BY USING AN APPROVED FIRE SEAL SLEEVE METHOD WHICH MEETS U.L. REQUIREMENTS. ALL OTHER PENETRATIONS OF RATED CHASES OR MALLS SHALL BE PROPERLY FIRE SEALED AND WHERE EXTENDING THROUGH SUCH RATED SURFACE SHALL BE A RATED FIRE STOP PENETRATION. ALL FIRE STOPPING, FIRE CAULKING AND FIRE SLEEVING OR OTHER FIRE SEALING SHALL BE ACCEPTABLE BY THE LOCAL
- AUTHORITIES AND SHALL BEAR THE U.L. SEAL. 6. INSTALL DOMESTIC WATER LINES TIGHT AGAINST BUILDING ROOF STRUCTURE.
- 7. VERIFY LOCATION, INVERT AND SIZE OF ALL EXISTING UTILITIES PRIOR TO
- BEGINNING CONSTRUCTION. 8. PROVIDE CITY APPROVED REDUCED PRESSURE BACKFLOW PREVENTERS ON ALL DOMESTIC SERVICE LINES CONNECTED TO ALL DEVICES, APPURTENANCES, APPLIANCES AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION, SUCH AS STERILIZATION, DISTILLATION, PROCESSING, COOLING OR STORAGE OF FOODS OR ICE. WATER PUMPS, FILTERS, SOFTENERS, TANKS AND ALL OTHER APPLIANCES AND DEVICES THAT HANDLE OR TREAT POTABLE WATER SHALL BE PROTECTED AGAINST CONTAMINATION WITH SIMILAR BACKFLOW PREVENTER.
- 9. CONDENSATE PIPING FROM ROOF TOP AIR CONDITIONERS AND FAN COIL UNITS SHALL BE SCHEDULE 40 PVC. PROVIDE CONDENSATE TRAP. ROUTE CONDENSATE LINE TO NEAREST ROOF DRAIN OR GUTTER
- 10. ALL MECHANICAL INSTALLATIONS SHALL CONFORM TO THE LATEST ACCEPTABLE ARKANSAS STATE MECHANICAL CODE.
- 11. ALL MATER AND SEMER LINE MATERIALS AND INSTALLATION METHODS SHALL BE IN ACCORDANCE WITH THE CITY OF ROGERS STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION AS WELL AS THE ARKANSAS STATE PLUMBING CODE.
- 12. HORIZONTAL BRANCHES SHALL CONNECT TO HORIZONTAL STACK OFFSETS AND TO THE BASES OF STACKS AT A POINT LOCATED NOT
- LESS THAN 10 PIPE DIAMETERS DOWNSTREAM FROM THE STACK. 13. CONTRACTOR SHALL PROVIDE "AS BUILT" DRAWINGS OF ALL PLUMBING AND PIPING SYSTEMS UPON COMPLETION OF THE PROJECT.
- 14. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS, THE BUILDING SITE, AND OTHER INFORMATION PRESENTED FOR THE CONSTRUCTION OF THIS PROJECT. IF CONTRACTOR HAS QUESTIONS REGARDING ASSEMBLIES OR LAYOUTS WITH THE PROJECT HE SHALL MAKE THEM KNOWN TO THE ENGINEER IN WRITING PRIOR TO BIDDING THE PROJECT. CLAIMS MADE SUBSEQUENT TO THE BID WILL NOT BE ACCEPTED IF IT IS DETERMINED THAT PROPER FAMILIARIZATION COULD
- HAVE AVOIDED SUCH CLAIM. 15. COMPLY WITH STATE OF ARKANSAS ADOPTED ADA ACCESSIBLE
- GUIDELINES IN REGARD TO ACCESSIBLE FEATURES. 16. PROVIDE DRIP PAN FOR ENTIRE LENGTH OF PIPE WHERE PIPE MUST BE INSTALLED ABOVE ELECTRICAL EQUIPMENT.
- 17. MECHANICAL CONTRACTOR MUST REVIEW ALL ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND FLOOR DRAINS. IF PLUMBING FIXTURES OR DRAINS ARE SHOWN ON THE ARCHITECTURAL DRAWINGS THEY MUST BE INCLUDED IN THE CONTRACT EVEN IF NOT SHOWN ON THE MECHANICAL DRAWINGS.
- 18. DO NOT SCALE DIRECTLY FROM THE PLUMBING DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION.
- 19. ALL PLUMBING SANITARY WASTE AND VENT PIPING INSTALLED IN FIRE RATED WALLS OR PLENUM RETURN AIR SYSTEMS SHALL BE CAST IRON. REFER TO ARCHITECTURAL PLANS FOR LIFE SAFETY INFORMATION.

PLUMBING KEYED NOTES

- [1] INSTALL AN APPROVED TRAP GUARD PRODUCT THAT CONFORMS TO NSF-14, CSA B602-99 AND CSA B79-94.
- 2 MECHANICAL CONTRACTOR SHALL NOT INSTALL ANY WATER LINES ABOVE ELECTRICAL PANELS PANELS. REFER TO ELECTRICAL PLANS FOR PANEL LOCATIONS.
- 3 MECHANICAL CONTRACTOR TO PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER (RPZ) AND PRESSURE REDUCING VALVE (IF REQUIRED) AT THE DOMESTIC WATER SERVICE ENTRANCE IN BUILDING. THERE SHALL BE NO MYES OR TEES PRIOR TO THE RPZ. PROVIDE WATTS MODEL LF909M1QT OR APPROVED EQUAL RPZ. REFER TO 10/P3.1 FOR DETAIL.
- 4 MECHANICAL CONTRACTOR SHALL NOT INSTALL ANY WATER LINES ABOVE ELECTRICAL PANELS PANELS. REFER TO ELECTRICAL PLANS FOR PANEL LOCATIONS.
- 5 PROVIDE AND INSTALL 6 INCH DIRT LEG AND GAS STOP (BALL VALVE ONLY) AT ALL EQUIPMENT GAS CONNECTIONS. REFER TO DETAIL 8/P3.1.
- $oxedet{6}$ ROUTE COLD WATER LINE BACK DOWN TO BELOW SLAB TO RE-FEED EIXISTING COLD WATER LINE IN TUNNEL.

PLUMBING LEGEND

SANITARY WASTE PIPING

———-EX 55-———	EXISTING SANITARY WASTE PIPING
	VENT PIPING
	EXISTING VENT PIPING
	COLD WATER PIPING
EX.GM	EXISTING COLD WATER PIPING
	HOT WATER PIPING
MPG	MEDIUM PRESSURE GAS PIPING (5 PSIG)
	LOW PRESSURE GAS PIPING (11 IN. M.C.)
———EX 6———	EXISTING LOW PRESSURE GAS PIPING
	CONDENSATE DRAIN PIPING
<i>444444444444</i>	PIPING TO BE REMOVED
	GAS REGULATOR EQUAL TO SENSUS 243
	GAS BALL VALVE
	BALL VALVE
	CONNECTION POINT
	FIXTURES TO BE REMOVED
文	WATER HAMMER ARRESTOR (SIZE PER MANUFACTURER'S RECOMMENDED FIXTURE UNIT CAPACITY)
1	REFER TO KEYED NOTES
P-1	PLUMBING FIXTURE NUMBER (REFER TO PLUMBING FIXTURE SCHEDULE)

FLOOR DRAIN

FLOOR SINK

ACCESSIBLE

MALL CLEAN OUT

SANITARY SEMER

CLEAN OUT TO GRADE

ADA

MCO

COTG

				P	LUMBIN	IG FIXT	TURE S	CHEDULE
					C	ONNECTION	ON	
MARK	FIXTURE	MANUFACTURER	MODEL	MOUNT	CM	M HM S		REMARKS / ACCESSORIES
P-1	ACCESSIBLE WATER CLOSET	AMERICAN STANDARD	3461.001	FLOOR	1-1/2	-	4	WHITE VITREOUS CHINA, LOW CONSUMPTION, ELONGATED BOWL, FLUSH VALVE TOILET. PROVIDE SLOAN ROYAL #111 ES-S SENSOR OPERATED, FLUSH VALVE, OLSONITE #10 SCC OPEN SEAT AND SLOAN YJ TYPE PIPE SUPPORT. PROVIDE BLOCKING IN WALL AS REQUIRED FOR INSTALLATION OF YJ PIPE SUPPORT. PROVIDE ELECTRICAL BOX POSITIONING AND SUPPORT KIT WITH FLUSH VALVE. MOUNT 17" FROM TOP OF SEAT TO FLOOR. MOUNT GRAB BARS A MAXIMUM OF 36 IN. A.F.F.
P-2	ACCESSIBLE CHILD HEIGHT WATER CLOSET	AMERICAN STANDARD	2599. <i>00</i> 1	FLOOR	1-1/2	-	4	WHITE VITREOUS CHINA, LOW CONSUMPTION, ELONGATED BOWL, FLUSH VALVE TOILET. PROVIDE SLOAN ROYAL #111 ES-S SENSOR OPERATED, FLUSH VALVE, OLSONITE #10 SCC OPEN SEAT AND SLOAN YJ TYPE PIPE SUPPORT. PROVIDE BLOCKING IN WALL AS REQUIRED FOR INSTALLATION OF YJ PIPE SUPPORT. PROVIDE ELECTRICAL BOX POSITIONING AND SUPPORT KIT WITH FLUSH VALVE. INSTALL FIXTURE 15" FROM TOP OF SEAT TO FLOOR. MOUNT GRAB BARS AT 25 IN. A.F.F. MOUNT FLUSH VALVE AT 22 A.F.F. OR AS REQUIRED TO COORDINATE WITH GRAB BARS.
P-3	WATER CLOSET	AMERICAN STANDARD	2234.001	FLOOR	1-1/2	-	4	WHITE VITREOUS CHINA, LOW CONSUMPTION, ELONGATED BOWL, FLUSH VALVE TOILET. PROVIDE SLOAN ROYAL #111 ES-S SENSOR OPERATED FLUSH VALVE, OLSONITE #10 SCC OPEN SEAT AND SLOAN YJ TYPE PIPE SUPPORT. PROVIDE BLOCKING IN WALL AS REQUIRED FOR INSTALLATION OF YJ PIPE SUPPORT. PROVIDE ELECTRICAL BOX POSITIONING AND SUPPORT KIT WITH FLUSH VALVE. MOUNT 15" FROM TOP OF SEAT TO FLOOR.
P-4	ACCESSIBLE LAVATORY	AMERICAN STANDARD	0355.012	MALL	1/2	1/2	1-1/4	WHITE VITREOUS CHINA LAVATORY WITH FAUCET LEDGE AND BACK SPLASH. PROVIDE SLOAN ETF-600 SENSOR OPERATED FAUCET, GRID DRAIN, WADE #520 WALL CARRIER, HANDILAV MOLDED DRAIN & SUPPLY INSULATION KIT. MOUNT 34 IN. A.F.F. TO TOP OF RIM. PROVIDE HARDWIRED TRANSFORMER. PROVIDE WATTS LFMMV THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE TO 105 DEGREES F.
P-5	ACCESSIBLE CHILD HEIGHT LAVATORY	AMERICAN STANDARD	0355.012	MALL	1/2	1/2	1-1/4	WHITE VITREOUS CHINA LAVATORY WITH FAUCET LEDGE AND BACK SPLASH. PROVIDE SLOAN ETF-600 SENSOR OPERATED FAUCET, GRID DRAIN, WADE #520 WALL CARRIER, HANDILAV MOLDED DRAIN & SUPPLY INSULATION KIT. MOUNT 31 IN. A.F.F. TO TOP OF RIM. PROVIDE HARDWIRED TRANSFORMER. PROVIDE WATTS LFMMV THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE TO 105 DEGREES F.
P-6	CHILD HEIGHT LAVATORY	AMERICAN STANDARD	0355.012	MALL	1/2	1/2	1-1/4	WHITE VITREOUS CHINA LAVATORY WITH FAUCET LEDGE AND BACK SPLASH. PROVIDE SLOAN ETF-600 SENSOR OPERATED FAUCET, GRID DRAIN, WADE #520 WALL CARRIER, HANDILAV MOLDED DRAIN & SUPPLY INSULATION KIT. MOUNT 31 IN. A.F.F. TO TOP OF RIM. PROVIDE HARDWIRED TRANSFORMER. PROVIDE WATTS LFMMV THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE TO 105 DEGREES F.
P-7	ACCESSIBLE STAINLESS STEEL SINK	JUST MFG.	SL-2125-A-GR	COUNTER	1/2	1/2	1-1/2	SINGLE COMPARTMENT STAINLESS STEEL SINK (15-3/4x21x5-1/2 I.D.). PROVIDE JUST J-1174-R GOOSENECK FAUCET WITH WRIST BLADES AND JUST J-35-SSF STAINLESS STEEL GRID DRAIN, AND HANDILAY MOLDED DRAIN. CENTER, REAR DRAIN LOCATION. MECHANICAL CONTRACTOR TO PROVIDE ALL MATERIALS TO MAKE FINAL CONNECTIONS, INCLUDING TAIL PIECE AND ANGLE STOP VALVES. PROVIDE PIPE INSULATION. SINK MUST BE ADA COMPLIANT. MOUNT 34 IN. A.F.F. TO TOP OF RIM. PROVIDE WATTS LFMMV THERMOSTATIC MIXING VALVE. SET WATER TEMPERATURE AT 105 DEGREES F.
P-8	ACCESSIBLE ELECTRIC WATER COOLER WITH BOTTLE FILLER	ELKAY	EZS8MSLK	MALL	3/8	-	1-1/4	WALL MOUNTED, SINGLE, BARRIER FREE ELECTRIC WATER COOLER WITH BOTTLE FILLING UNIT; 8.0 GPH AT ARI STANDARDS, 115 VOLT, SINGLE PHASE, 370 WATTS, 6 FULL LOAD AMPS. MOUNT AT 36 INCHES A.F.F. TO TOP OF SPOUT.
P-9	ICE MAKER WALL BOX	GUY GRAY	BIM875	MALL	1/2	-	_	WALL MOUNTED ICE MAKER HOOK UP WITH ANGLE VALVE.
P-10	FLOOR DRAIN	MADE	1100	FLOOR	-	-	*	*CAST IRON FLOOR DRAIN, SIZE AS INDICATED ON PLANS OR MATCH INDICATED WASTE LINE. PROVIDE DEEP SEAL TRAP. COORDINATE DRAIN TOP MATERIAL WITH SPECIFIED FLOOR FINISH.
P-11	MALL CLEAN OUT	MADE	8550-R	MALL	-	-	*	*SIZE TO MATCH WASTE LINE, MAXIMUM TO 4 INCHES. PROVIDE WADE 8304 STAINLESS STEEL WALL ACCESS COVER.
P-12	MATER HAMMER ARRESTOR	MADE BELLOMS	SHOKSTOP	-	*	*	-	*SIZE WATER HAMMER ARRESTOR PER MANUFACTURER'S RECOMMENDATIONS. ALL STAINLESS STEEL CONSTRUCTION WITH WELDED NESTED BELLOWS. PROVIDE BALL VALVE FOR SHUT-OFF.
P-13	FLOOR SINK	MADE	9110	FLOOR	-	-	*	*CAST IRON FLOOR SINK WITH NICKEL BRONZE GRATE. SIZE AS INDICATED ON PLANS OR MATCH WASTE LINE SIZE WHEN NOT INDICATED. PROVIDE 3/4 GRATE AND DEEP SEAL TRAP.
P-14	CLEAN OUT TO GRADE	MADE	6000Z	TO GRADE	-	-	*	*SIZE TO MATCH WASTE LINE MAXIMUM TO 4 INCHES. PROVIDE HEAVY DUTY TRACTOR TYPE COVER.

1. COORDINATE COUNTER TOP FIXTURE INSTALLATION WITH MILLWORK.

- 2. INSTALL ACCESSIBLE FLUSH VALVE TO THE ACCESSIBLE SIDE. 3. MECHANICAL CONTRACTOR SHALL PROVIDE APPROVED TRAP GUARDS ON ALL FLOOR DRAINS.
 - REFER TO SHEET P1.1 FOR PLUMBING NOTES, LEGEND, & SCHEDULE.

REFER TO SHEET P2.0 FOR PLUMBING DEMO PLAN. REFER TO SHEET P2.1 FOR PLUMBING PLANS.

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Fort Smith, AR 72916

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PLUMBING NOTES, LEGEND, & SCHEDULE

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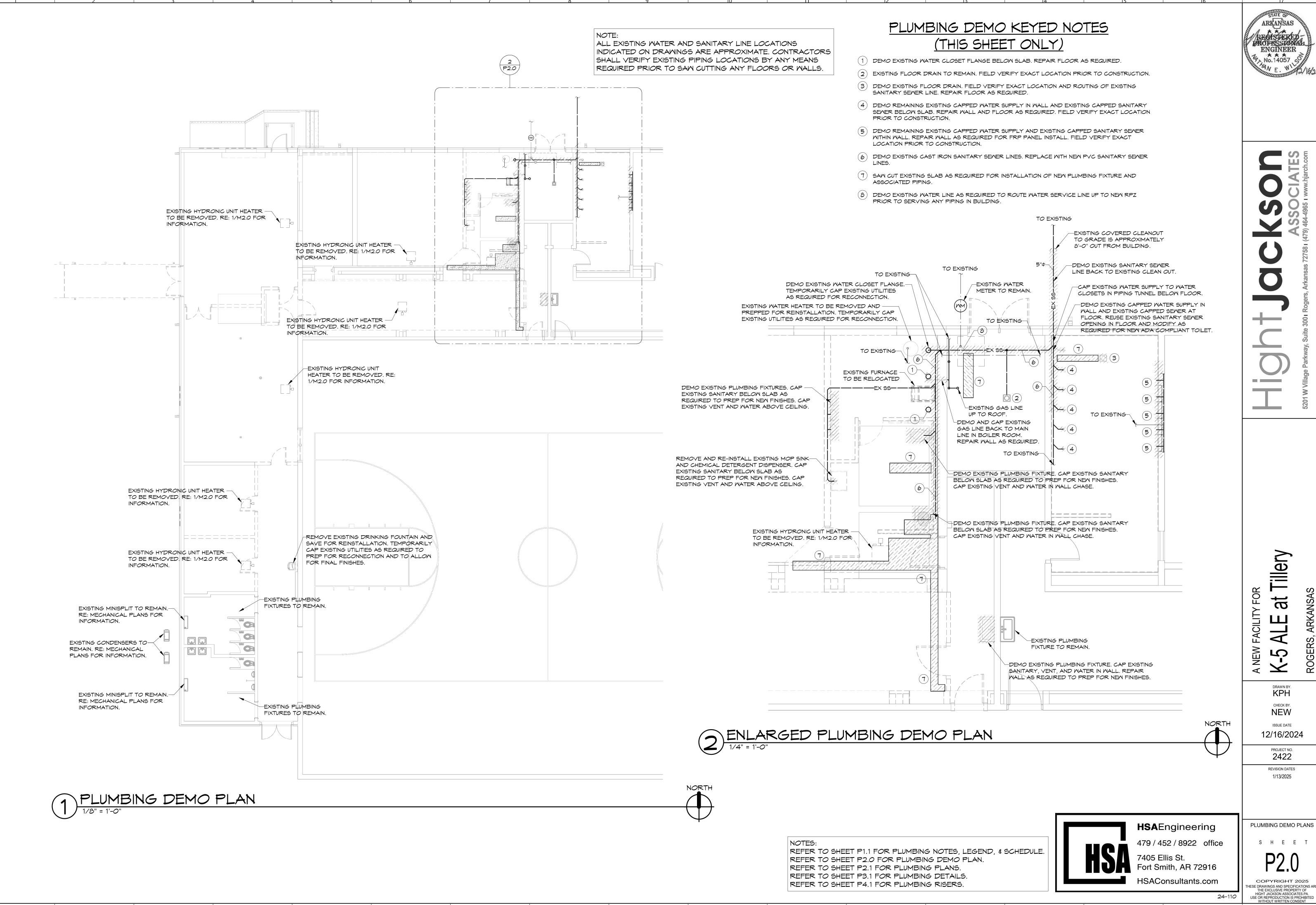
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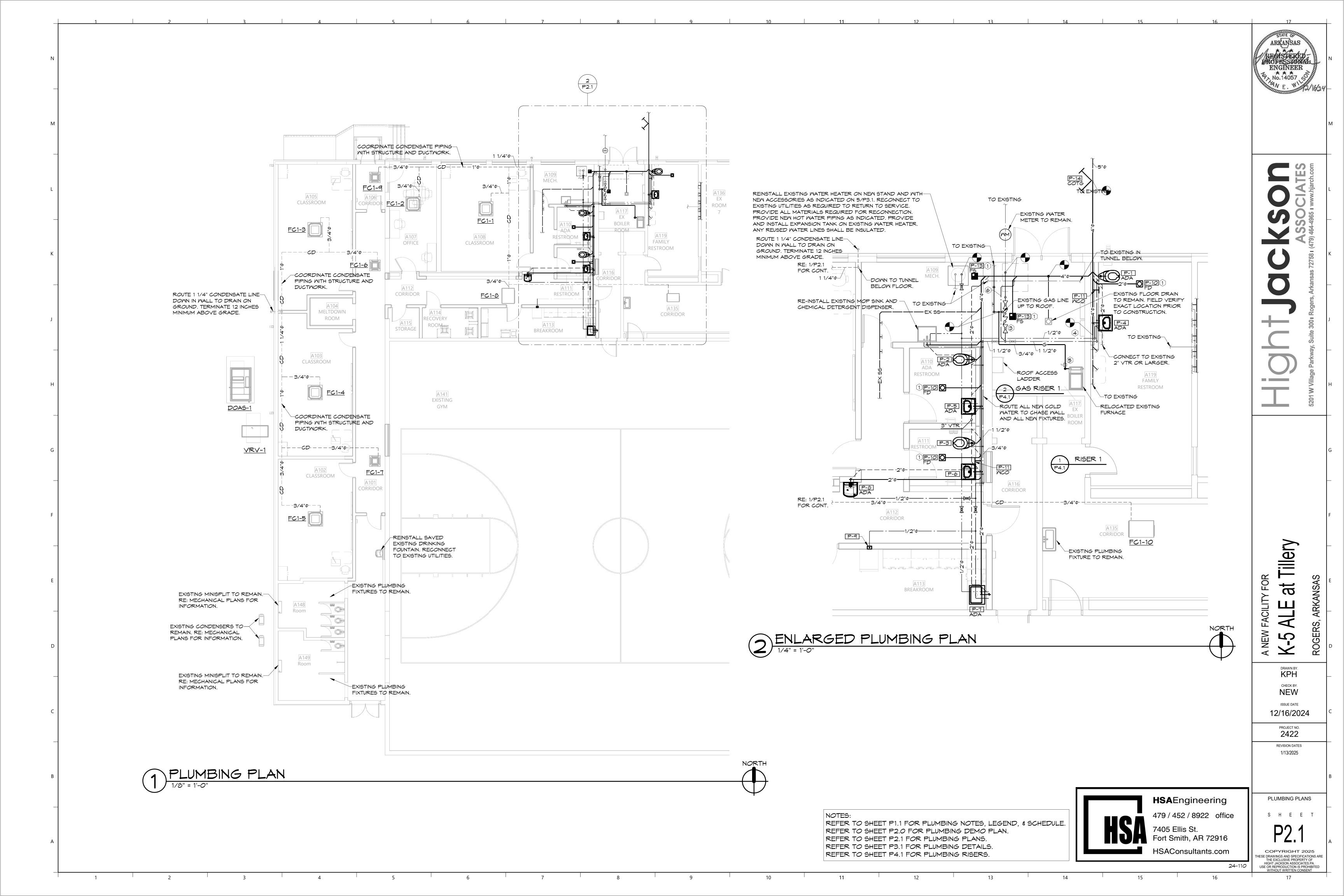
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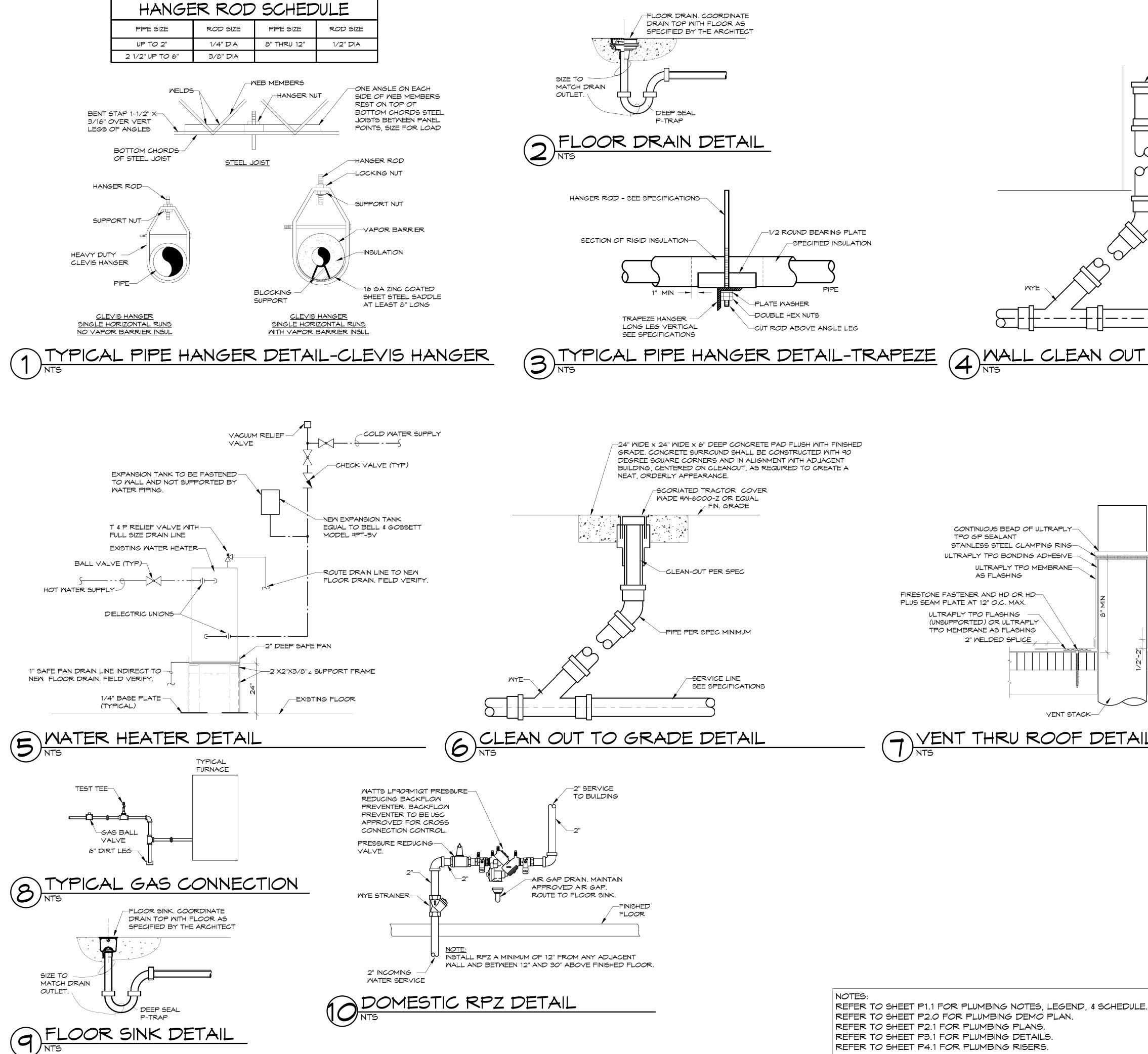
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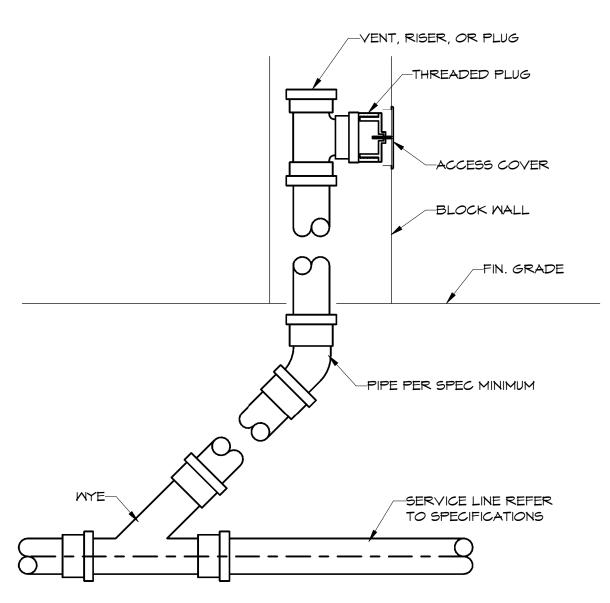
REFER TO SHEET P4.1 FOR PLUMBING RISERS.

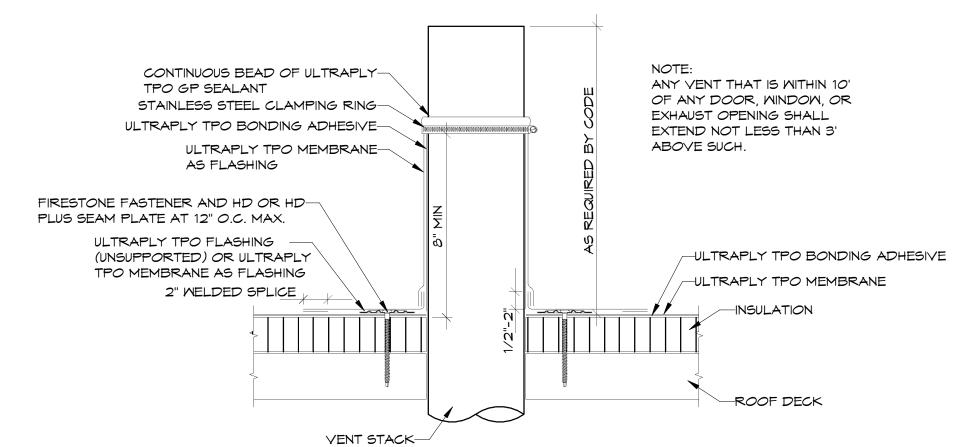
REFER TO SHEET P3.1 FOR PLUMBING DETAILS.











VENT THRU ROOF DETAIL

REFER TO SHEET P3.1 FOR PLUMBING DETAILS

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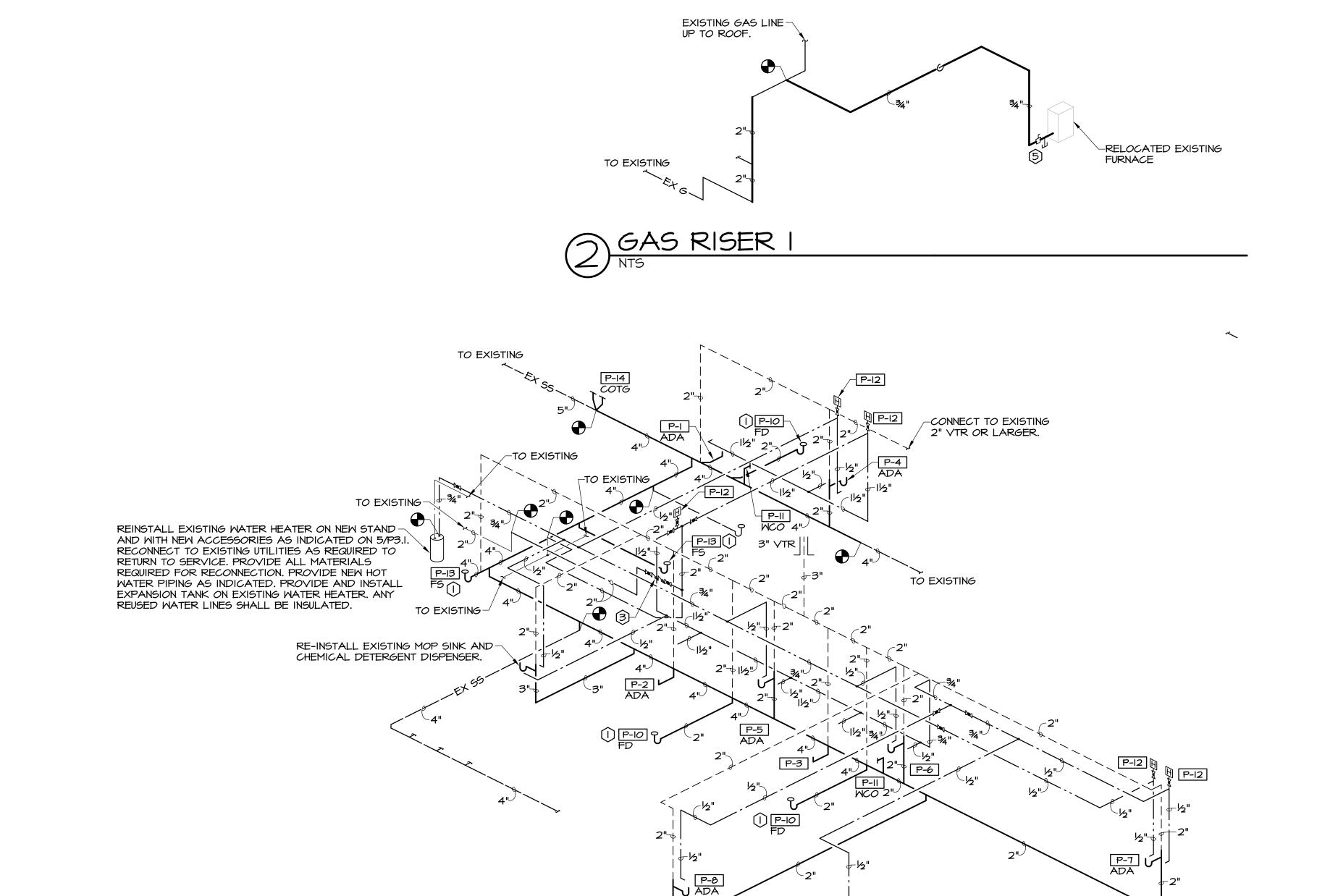
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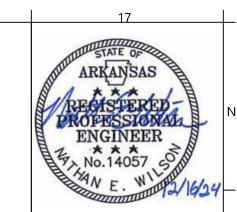
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PLUMBING RISERS

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REFER TO SHEET P2.1 FOR PLUMBING PLANS. REFER TO SHEET P3.1 FOR PLUMBING DETAILS.

REFER TO SHEET P4.1 FOR PLUMBING RISERS.

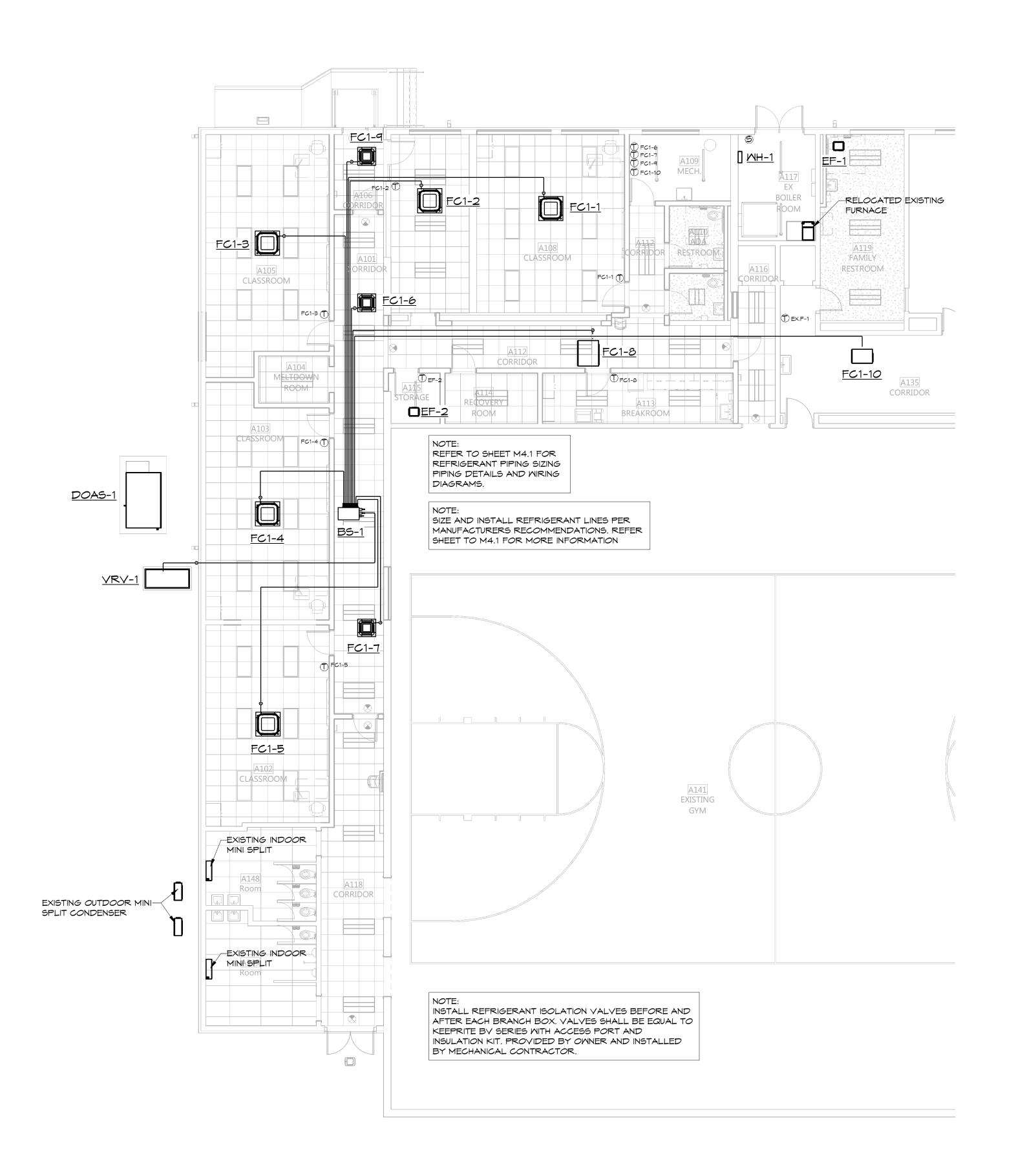
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1 MECH PIPING PLAN

1/8" = 1'-0"

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> PROJECT NO. 2422

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REFER TO SHEET M1.1 FOR HVAC LEGEND, GENERAL AND KEYED NOTES. REFER TO SHEET M3.1 FOR HVAC DETAILS. REFER TO SHEET M5.1 FOR HVAC SCHEDULES.

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GENERAL HYAC NOTES

- COORDINATE GRILLE LOCATIONS WITH LIGHT FIXTURES AND CEILING GRID.
- 2. INDICATED DUCT SIZES ARE NET FREE AREA. 3. ADJUST ALL AIR QUANTITIES AS SHOWN ON THE PLANS AFTER COMPLETION OF THE JOB.
- 4. INSULATE THE SUPPLY GRILLE TOPS, RETURN AIR GRILLE PLENUMS AND EXHAUST AIR PLENUMS WITH 2 IN., 3/4 LB DENSITY FOIL BACKED INSULATION.
- 5. FIRE AND/OR SMOKE DAMPERS ARE INDICATED ON MECHANICAL DRAWINGS. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY LOCATIONS AND FIRE RATING REQUIREMENTS WHERE ANY DUCT PASSES THROUGH A PARTITION. REFER TO ARCHITECTURAL PLANS FOR LOCATION OF ALL FIRE AND SMOKE PARTITIONS. VERIFY REQUIRED DAMPER ASSEMBLY IN ALL DUCTS PENETRATING THESE WALLS PER ALL STATE AND LOCAL CODES.
- 6. EXTERNALLY INSULATE ALL ROUND SUPPLY AND RETURN DUCT. INTERNALLY INSULATE ALL RECTANGULAR SUPPLY AND RETURN DUCT PER MECHANICAL CODE. ATTACH THE INTERNAL INSULATION TO THE DUCT WITH APPROVED ADHESIVE AND WELDED FASTENERS.
- 7. MECHANICAL CONTRACTOR SHALL COORDINATE ALL DUCTWORK WITH FIELD CONDITIONS AND PROVIDE ALL OFFSETS, BENDS, TRANSITIONS AND SPECIAL FITTINGS FOR A COMPLETE INSTALLATION OF THE SYSTEMS.
- 8. INTERIOR OF ALL DUCT PLENUMS VISIBLE THROUGH GRILLE SHALL BE PAINTED MATTE BLACK PRIOR TO INSTALLATION.
- 9. INTERLOCK EXHAUST FANS WITH LIGHT SWITCHES. REFER TO ELECTRICAL PLANS.
- 10. PAINT ALL SUPPLY AND RETURN AIR GRILLES NOT SPECIFIED AS PRE-FINISHED, TO ARCHITECT'S SPECIFICATIONS UNLESS OTHERWISE SPECIFIED. 11. MAINTAIN 10 FT. MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES AND ALL EXHAUST OUTLETS,
- GAS FLUES AND PLUMBING VENTS. 12. INSTALL VOLUME CONTROL DAMPERS IN SUPPLY, RETURN, EXHAUST AND FRESH AIR BRANCH
- DUCT RUNS. 13. RECIRCULATING AIR SYSTEMS WITH A FAN CAPACITY GREATER THAN 2.000 NOMINAL CFM SHALL AUTOMATICALLY SHUT DOWN BY MEANS OF AN APPROVED SMOKE DETECTOR PLACED IN THE RETURN AIR STREAM PRIOR TO ANY EXHAUSTING FROM THE BUILDING OR MIXING WITH
- FRESH AIR MAKEUP. ALL CONTROLS SHALL BE LISTED. UPON ACTIVATION OF THE SAFETY CONTROL, THE SYSTEM SHALL NOT RESTART UNTIL THE SAFETY CONTROL IS MANUALLY RESET. 14. ALL MECHANICAL INSTALLATIONS SHALL CONFORM TO THE LATEST ACCEPTABLE MECHANICAL
- CODE. 15. SEAL ALL DUCT SEAMS WITH HARDCAST IRON GRIP 601 SEALANT SYSTEM OR AN APPROVED EQUAL. DUCT TAPE, WHETHER LISTED OR NOT, WILL NOT BE ACCEPTED.
- 16. FABRICATE AND INSTALL ALL GALVANIZED DUCT SYSTEMS TO SMACNA DUCT CONSTRUCTION
- STANDARDS, LATEST EDITION, AND MECHANICAL CODE. 17. SMOKE DETECTOR PROVIDED AND INSTALLED BY FIRE ALARM CONTRACTOR.
- 18. DO NOT SCALE DIRECTLY FROM THE HVAC DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL INFORMATION.

HVAC KEYED NOTES

- $\begin{bmatrix}1\end{bmatrix}$ MAINTAIN A MINIMUM OF 10 FT. CLEARANCE BETWEEN ALL EXHAUST OUTLETS, FLUES, PLUMBING VENTS AND ANY FRESH AIR INTAKES. IF 10 FT. CLEARANCE CAN NOT BE MAINTAINED EXHAUST OUTLET, FLUE, OR VENT MUST TERMINATE AT A POINT AT LEAST 36 IN. ABOVE HIGHEST FRESH AIR INTAKE MITHIN 10 FT. LIMIT.
- 2 LOCATE THERMOSTAT OR SENSOR AS INDICATED WITH THE CENTER OF THE THERMOSTAT AT 48 IN. ABOVE FINISHED FLOOR. SEAL ALL THERMOSTAT CONDUITS AT TOP AND BOTTOM OF CONDUIT. PROVIDE INSULATED BACKING FOR MOUNTING THERMOSTATS.
- 3 SMOKE DETECTORS TO BE INSTALLED IN THE SUPPLY AND RETURN AIR DUCTS AND INTERLOCKED WITH AIR HANDLER FAN FOR SHUT-OFF PER N.F.P.A. 90 A & B ON ALL AIR HANDLERS GREATER THAN 1000 C.F.M. SUPPLY AIR DUCT SMOKE DETECTOR SHALL BE INSTALLED ON SUPPLY SIDE OF AIR HANDLING SYSTEM DOWN STREAM OF ANY AIR FILTERS AND PRIOR TO ANY BRANCH DUCT CONNECTIONS. EXCEPTION: THE SMOKE DETECTOR IN THE SUPPLY AIR STREAM MAY BE OMITTED IN SYSTEMS 2000 C.F.M. OR LESS. CAPACITY. RECIRCULATING AIR SYSTEMS WITH FAN CAPACITY LESS THAN 2000 C.F.M., BUT SERVING AREAS USED FOR EGRESS SHALL HAVE AUTOMATIC SMOKE DETECTION SHUTDOWN. SMOKE DETECTORS SHALL BE PROVIDED, INSTALLED AND WIRED BY FIRE ALARM CONTRACTOR. MECHANICAL CONTRACTOR SHALL WIRE SMOKE DETECTOR TO THE FAN SHUT OFF CONTACTS. MECHANICAL CONTRACTOR SHALL PROVIDE ALL ACCESSORIES REQUIRED TO MAKE THE FAN SHUT OFF CONNECTION. LOCATE SMOKE DETECTORS IN RETURN AIR DUCT PRIOR TO THE INTRODUCTION OF THE OUTSIDE AIR

MECHANICAL LEGEND

SUPPLY DUCT SECTION

RETURN OR EXHAUST DUCT SECTION

CEILING SUPPLY GRILLE

CEILING RETURN GRILLE CEILING EXHAUST GRILLE

SIDEWALL SUPPLY OR RETURN GRILLE

1 SEE KEYED NOTES

SUPPLY, RETURN, OR EXHAUST DUCT

[////] DEMO DUCT

EXISTING SUPPLY, RETURN, OR EXHAUST DUCT

OR VOLUME DAMPER

RECTANGULAR DUCT FIRE DAMPER

ROUND DUCT FIRE DAMPER (NUMBER DENOTES FIRE RATING OF 1FD WALL. EXAMPLE: 1FD = ONE HR. RATED WALL)

FLEX DUCT CONNECTION MAXIMUM OF 5 FT.

THERMOSTAT. MOUNT AT 48" A.F.F TO TOP (NUMBER DENOTES FURNACE OR AIR HANDLER UNIT)

SMOKE DETECTOR

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PROJECT NO.

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HVAC NOTES & LEGEND

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20 GAUGE GALVANIZED SHEET METAL CAP OVER ENTIRE -CURB. FABRICATE FROM SINGLE SHEET OF METAL WITH WELDED CORNERS. -3-5/8 METAL STUD FRAMING @ 16" O.C. 3-5/8 METAL STUD FRAMING INSIDE ~ -3/4" PLYWOOD COVER OVER PERIMETER OF CURB. EXISTING CURB OPENING. EXISTING ROOF CURB. - SEAL PERIMETER AND ANY SEAMS AIR TIGHT WITH ALL PURPOSE EXISTING EXHAUST FAN OR-SEALANT. INTAKE HOOD ROOF CURB. - FASTEN TO EXISTING CURB WITH #10 TEK EXISTING ROOF MEMBRANE. SCREWS AT 18" O.C. MINIMUM. 3" MINIMUM -4" TOTAL THICKNESS OF POLYSTYRENE RIGID EXISTING ROOF INSULATION. FOAM INSULATION. EXISTING ROOF DECK. EXISTING DUCT DROP-NEM SHEET METAL CAP. INSTALL FROM CURB. CAP JUST BELOW BOTTOM OF ROOF

NOTE:
ADDITIONAL METAL STUD FRAMING TO BE LOCATED 8" BELOW
TOP OR CURB AND INSULATION INSTALLED ON TOP OF METAL
STUDS IF NO BACKDRAFT DAMPER IS EXISTING.

2) EXISTING EQUIPMENT CURB CAP DETAIL

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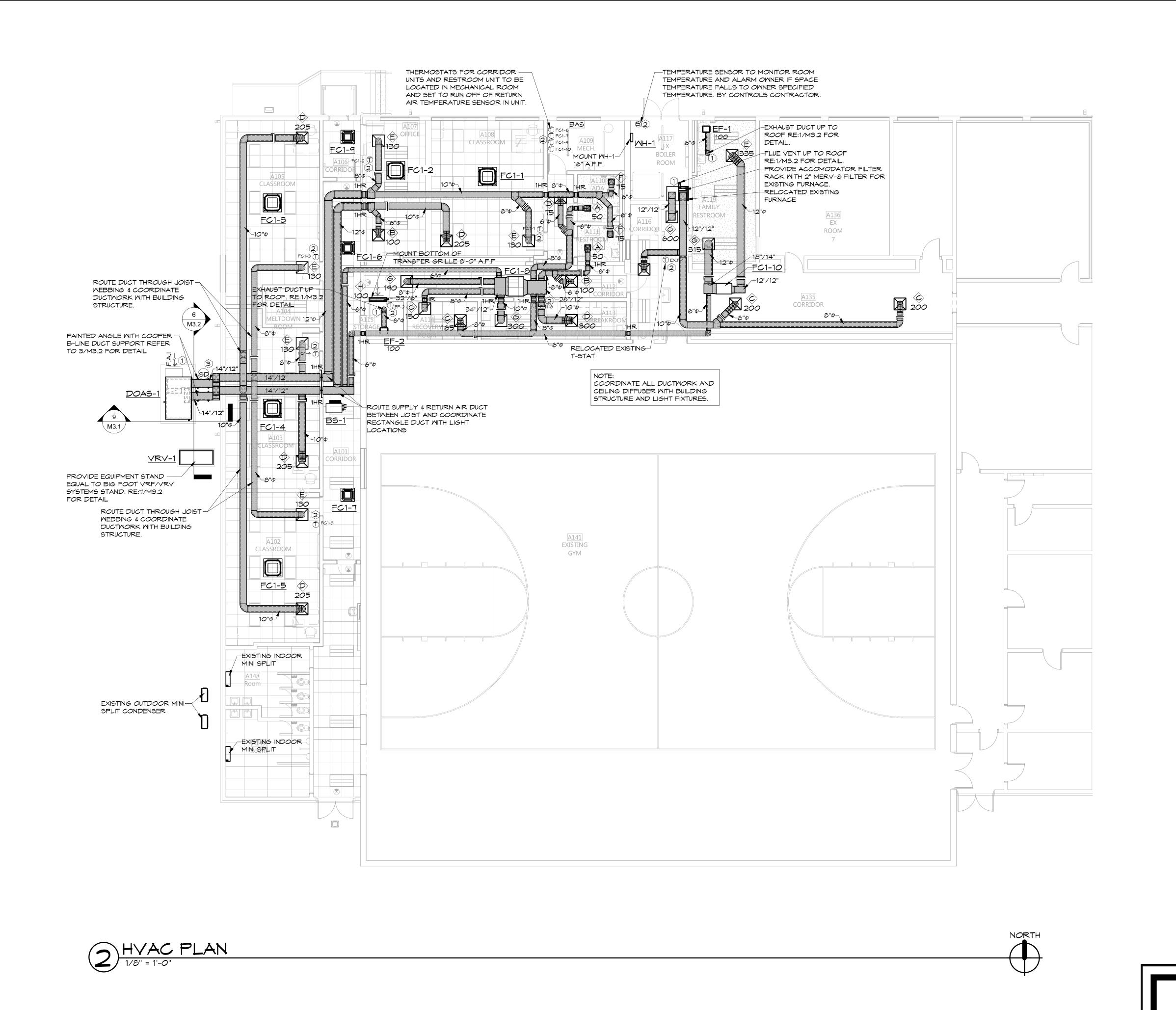
HVAC DEMO PLAN

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MECHANICAL DEMO PLAN

1/8" = 1'-0"



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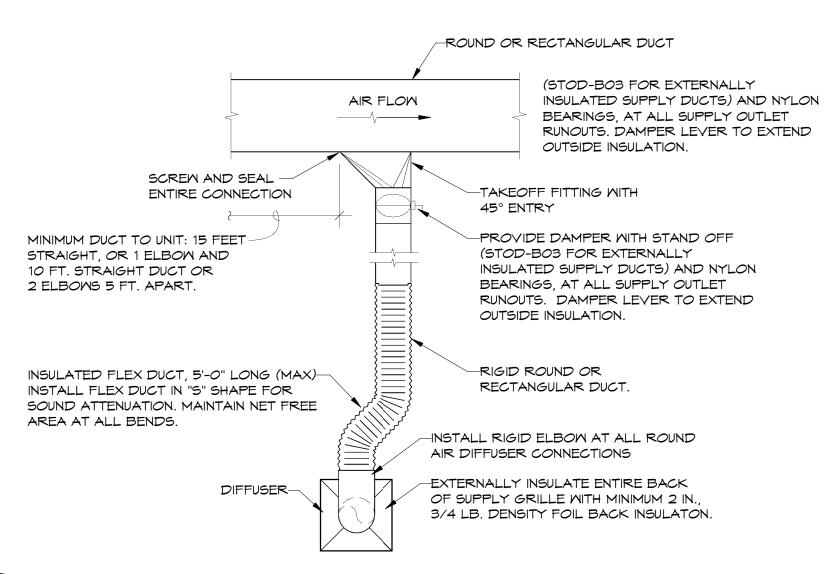
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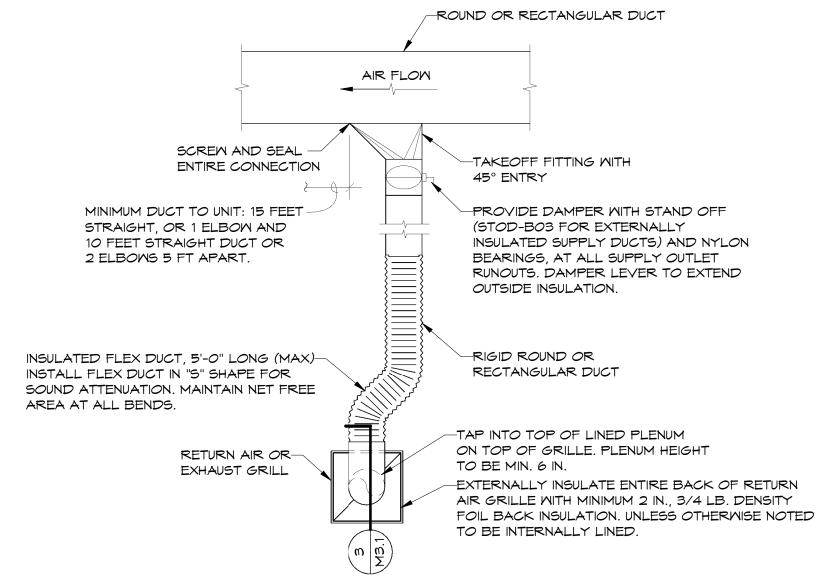
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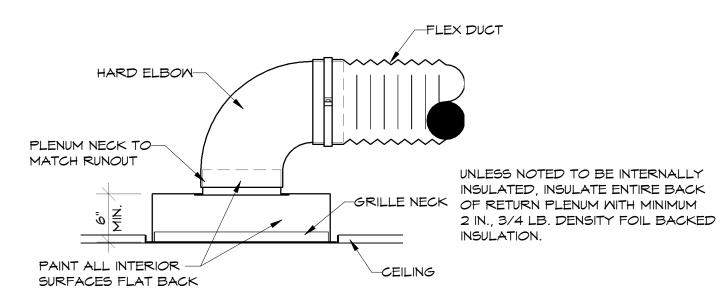
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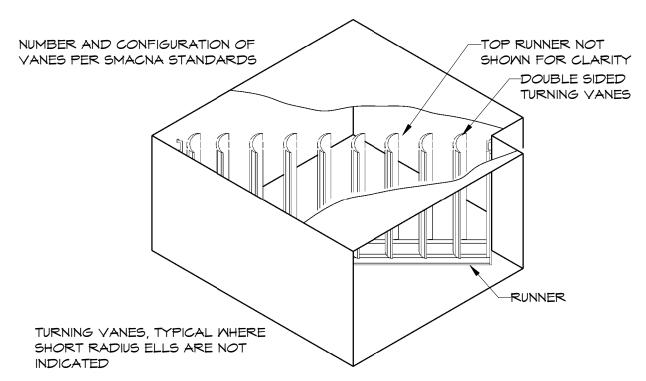


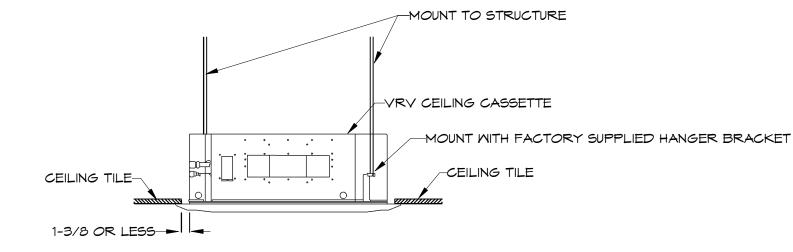


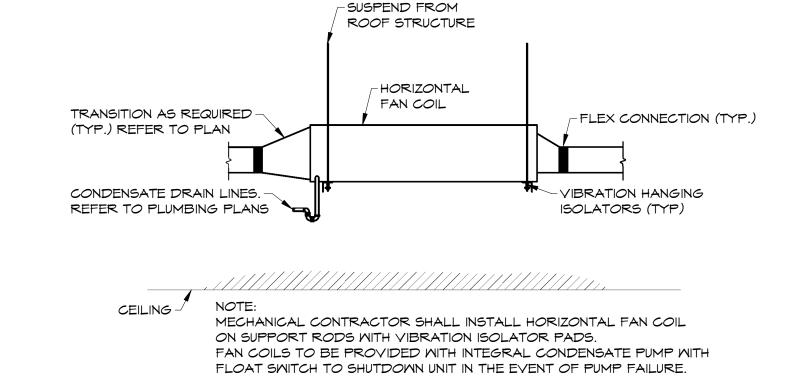








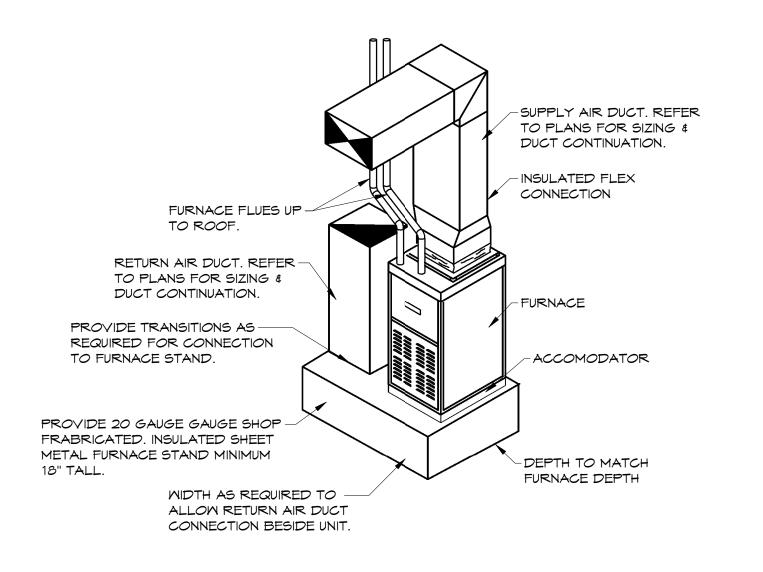


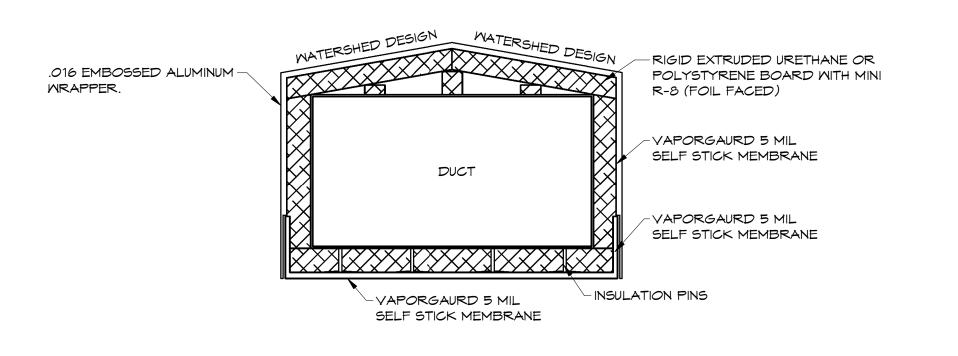


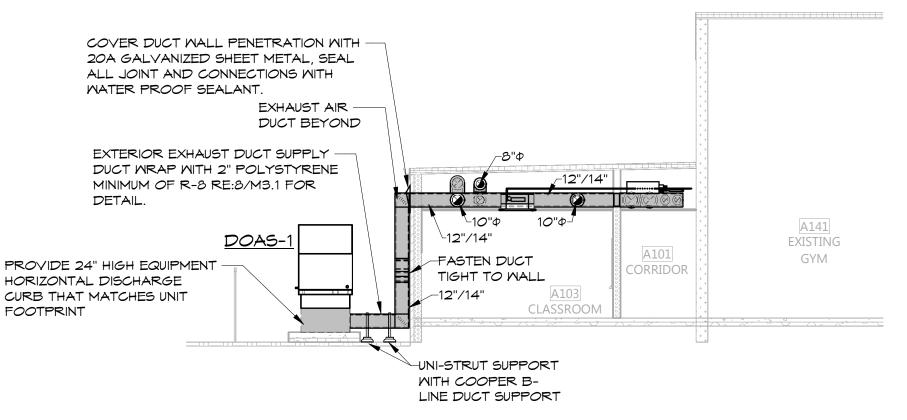




6 HORIZONTAL AIR HANDLER







FURNACE STAND DETAIL

8 EXTERIOR DUCT INSULATION DETAIL

9 DOAS DUCT SECTION

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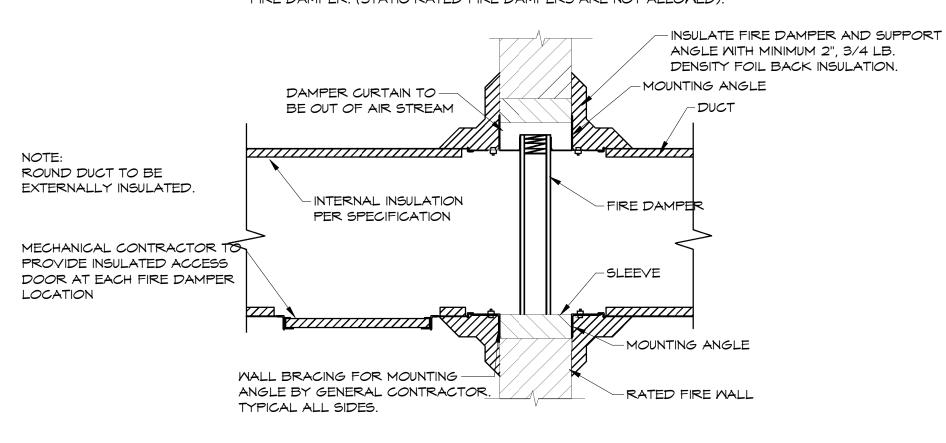
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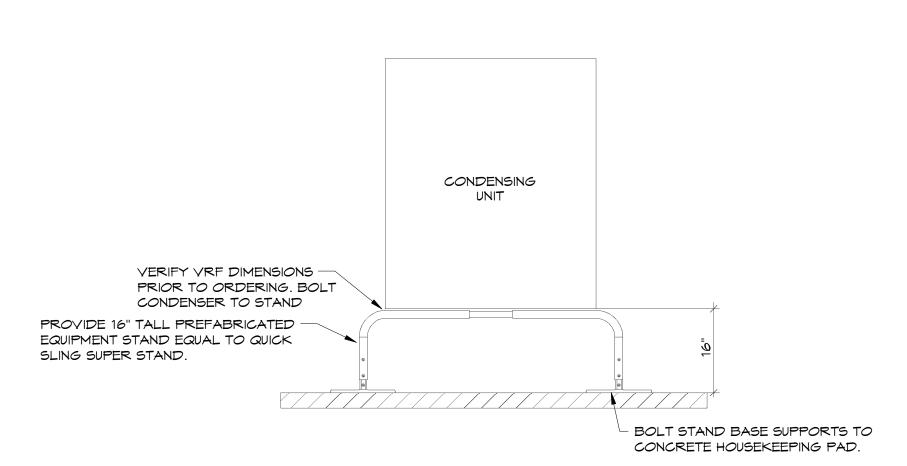
1 B-VENT CAP DETAIL

TYPICAL INSTALLATION SHOWN FOR VERTICAL FIRE DAMPER. HORIZONTAL FIRE DAMPERS TO BE SPRING LOADED. ALL FIRE DAMPERS AND INSTALLATIONS TO CONFORM TO N.F.P.A. 90A & B AND ALL STATE AND LOCAL CODES. FIRE DAMPERS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE LATEST U.L. SAFETY STANDARD 555 AND U.L. LABELED AS A DYNAMIC RATED FIRE DAMPER. (STATIC RATED FIRE DAMPERS ARE NOT ALLOWED).

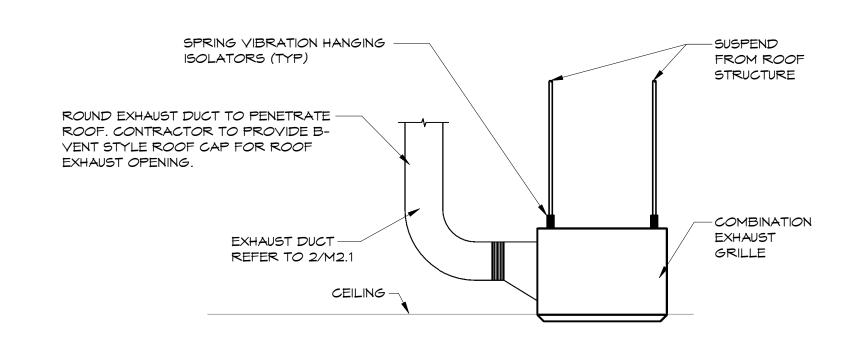


GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS OR DOORS IN DRYWALL CEILINGS ADJACENT TO ACCESS DOORS IN DUCTWORK. COORDINATE WITH MECHANICAL CONTRACTOR.

INTERNALLY LINED FIRE DAMPER DETAIL NTS

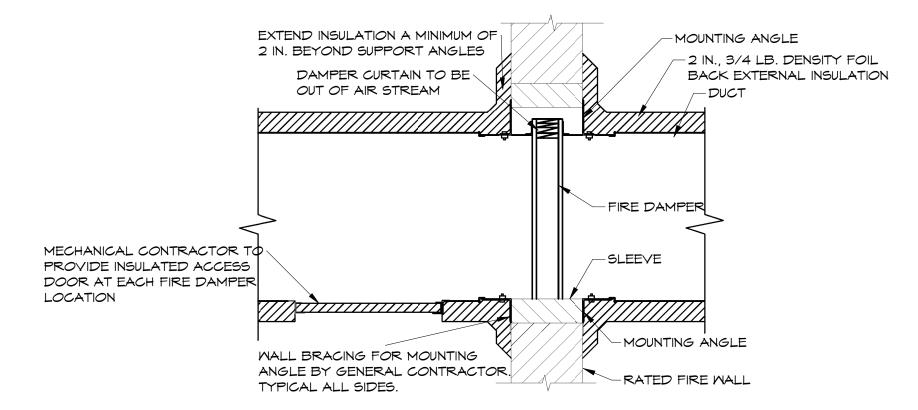


7 VRY CONDENSER STAND



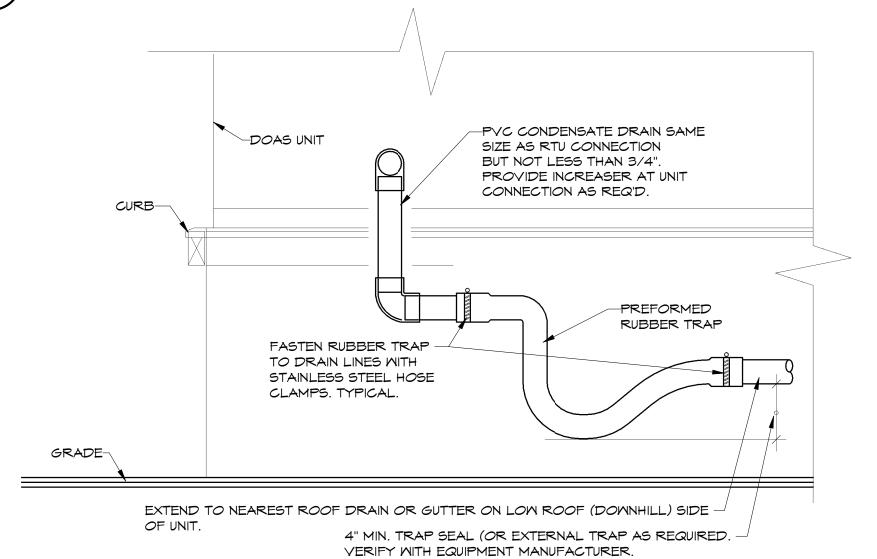
2 EXHAUST FAN DETAIL

TYPICAL INSTALLATION SHOWN FOR VERTICAL FIRE DAMPER. HORIZONTAL FIRE DAMPERS TO BE SPRING LOADED. ALL FIRE DAMPERS AND INSTALLATIONS TO CONFORM TO N.F.P.A. 90A & B AND ALL STATE AND LOCAL CODES. FIRE DAMPERS SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE LATEST U.L. SAFETY STANDARD 555 AND U.L. LABELED AS A DYNAMIC RATED FIRE DAMPER. (STATIC RATED FIRE DAMPERS ARE NOT ALLOWED).



GENERAL CONTRACTOR TO PROVIDE ACCESS PANELS OR DOORS IN DRYWALL CEILINGS ADJACENT TO ACCESS DOORS IN DUCTWORK. COORDINATE WITH MECHANICAL CONTRACTOR.

EXTERNALLY INSULATED FIRE DAMPER DETAIL



8 DOAS UNIT 3/4" CONDENSATE DETAIL

24 GA. — INNER DUCT EXTERNALLY MRAP MITH 1" POLYSTYRENE -DUCT SUPPORT EQUAL TO COOPER DB_DS-SERIES ISOLATION PAD CHANNEL SUPPORT SYSTEM. -CONCRETE PAD 1. DUCT SHALL BE SUPPORTED AT ALL ELBOWS AND TEES AND AT 10 FT. MAX. SPACING. 2. DO NOT ATTACH BLOCKING TO CONCRETE PAD. 3. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

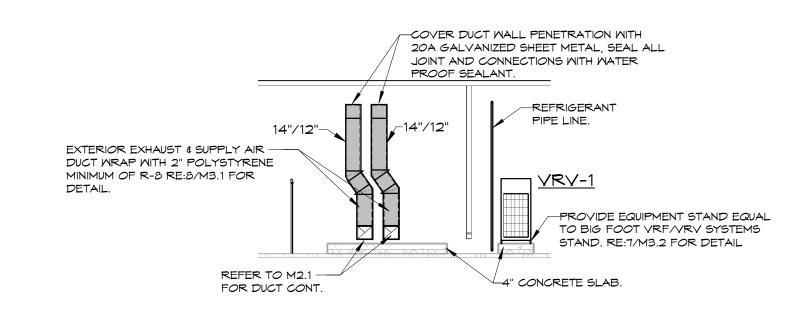
- 28 GA. EMBOSSED ALUMINUM WRAPPER

AROUND ENTIRE DUCT SEALED TIGHT

WITH SILICONE. CROWN AT TOP OF

WRAPPER TO SHED WATER.

3 EXTERIOR DUCT SUPPORT DETAIL



6 DOAS DUCT SECTION B

TYPICAL -PACKAGED UNIT.



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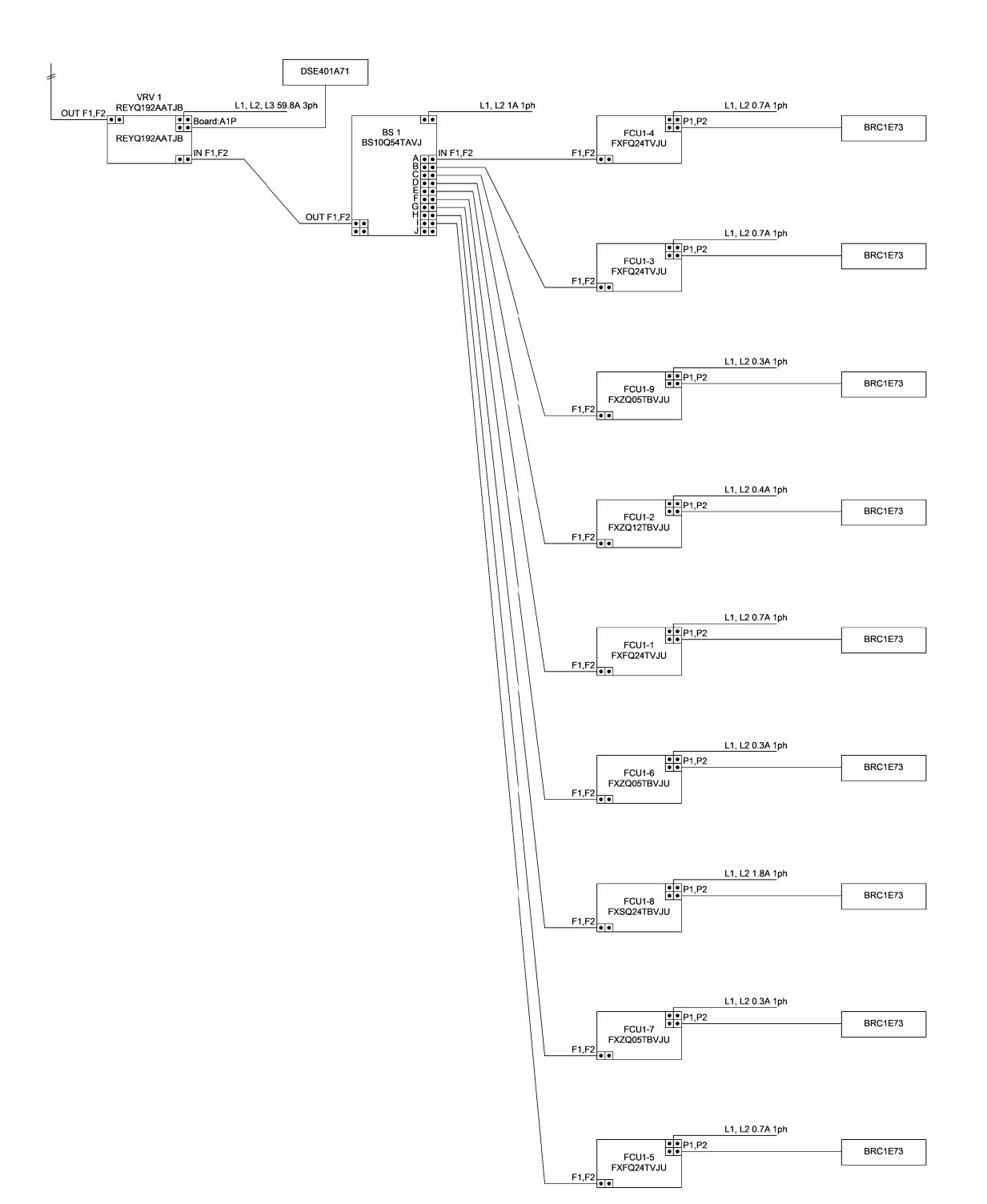
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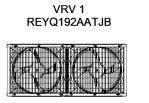
BACnet Interface DMS502B71 VRV 1 (9) REYQ192AATJB OUT F1,F2 L,N Ethernet 100BASE-TX Itouch Manager DCM601B71

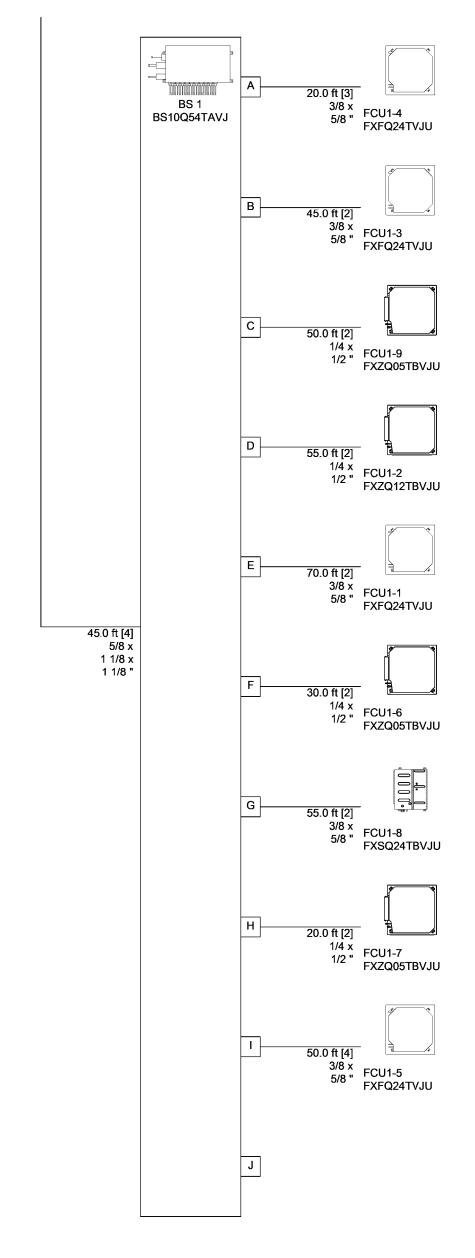
1 VRY CONTROL WIRING

2 VRY CONTROL WIRING DETAIL



MECHANICAL CONTRACTOR TO COORDINATE FINAL EQUIPMENT PIPING LENGTHS AND FINAL CONNECTION ORDER WITH EQUIPMENT SUPPLIER PRIOR TO INSTALLATION





3 VRV PIPING DETAIL

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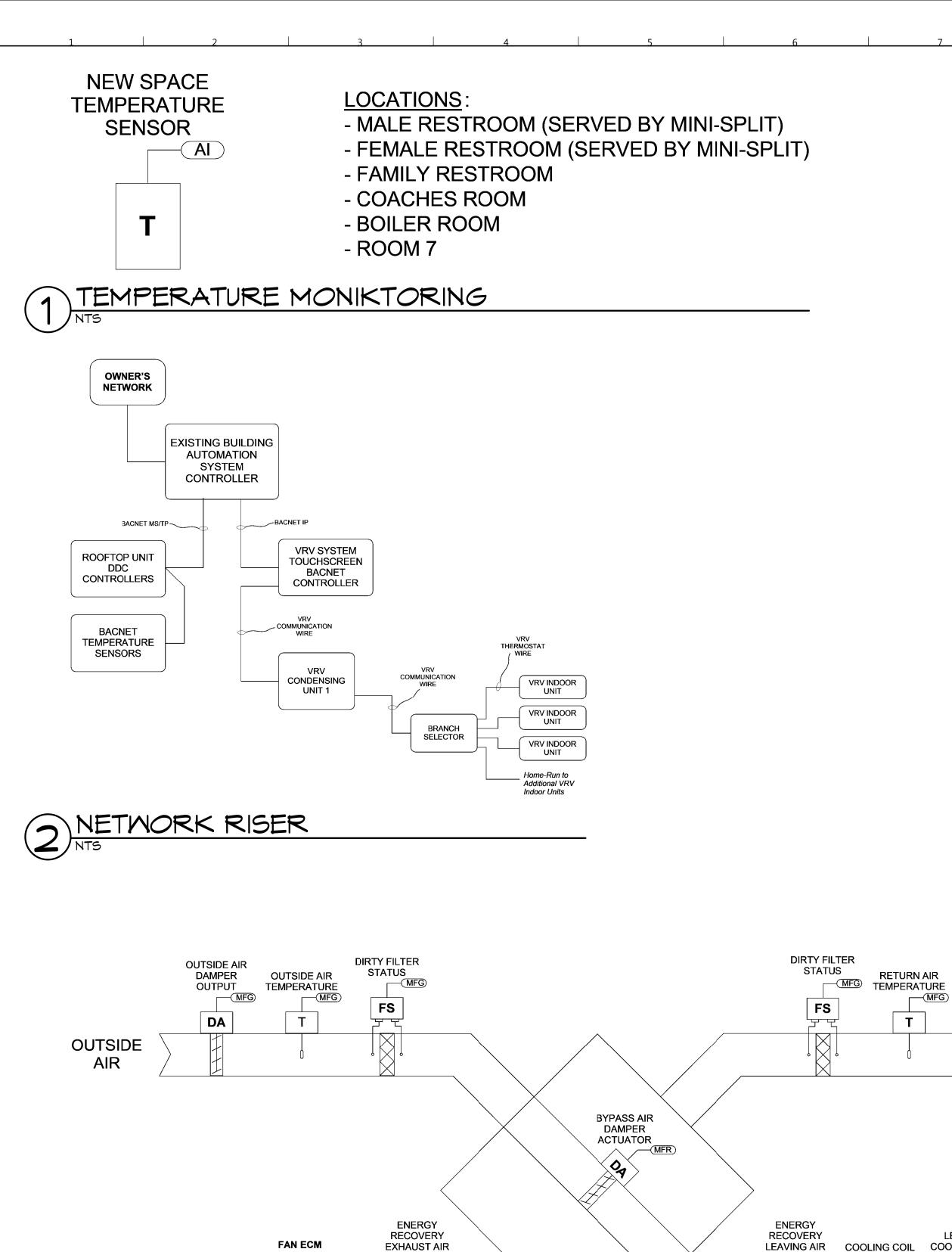
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TEMPERATURE

—(MFG)

SPEED

BACKDRAFT

DAMPER

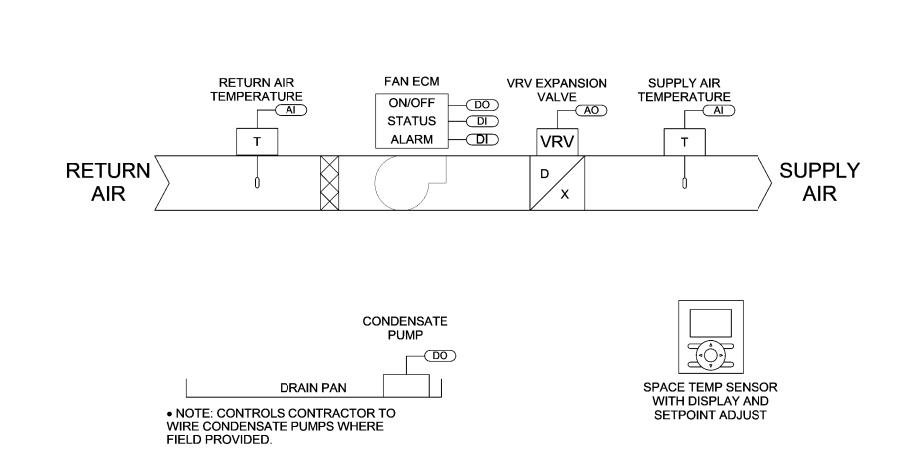
EXHAUST

STATUS -

ALARM

DEDICATED OUTSIDE AIR UNIT CONTROL

—(MFG)



VRV FAN COIL UNIT SEQUENCE OF OPERATION

MODE OF OPERATION:

THE UNIT SHALL BE SET AND LOCKED IN AUTO MODE AT THE THERMOSTAT SO THAT BOTH HEATING AND COOLING OPERATION CAN OCCUR AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE AT SETPOINT. THE SYSTEM MODE SHALL BE EITHER OCCUPIED OR UNOCCUPIED BASED ON A BUILDING AUTOMATION SYSTEM (BAS) SCHEDULE, AN OPERATOR OVERRIDE COMMAND FROM THE BAS, OR A TEMPORARY OCCUPANCY OVERRIDE SIGNAL FROM THE SPACE TEMPERATURE SENSOR. COMMANDS OR OVERRIDES FROM THE BAS SHALL TAKE PRIORITY OVER ANY LOCAL CHANGES MADE AT THE SPACE SENSOR.

THE SYSTEM SHALL ALLOW FOR EITHER LOCAL CONTROL (SETPOINT INPUT AT THERMOSTAT) OR BAS CONTROL (SETPOINT INPUT AT BAS) OF THE SETPOINT. THE SPACE TEMPERATURE SENSOR SHALL BE SET FOR A SINGLE OCCUPIED SPACE COOLING TEMPERATURE SETPOINT THE OCCUPIED SPACE TEMPERATURE HEATING SETPOINT SHALL BE CALCULATED USING AN OFFSET DIFFERENTIAL VALUE OF 3°F (ADJ). THE INITIAL OCCUPIED SPACE TEMPERATURE COOLING SETPOINT SHALL BE 72°F (ADJ). THE INITIAL OCCUPIED SPACE HEATING SETPOINT IS AUTOMATICALLY SET TO 69°F BASED ON THE 3°F DIFFERENTIAL VALUE. THE OCCUPIED SPACE TEMPERATURE SETPOINT RANGE SHALL BE LIMITED TO WITHIN +/-2°F OF THE UNOCCUPIED SPACE TEMPERATURE SETPOINTS.

THE UNIT FAN SHALL BE ON CONTINUOUSLY DURING OCCUPIED OPERATION.

ON AN INCREASE IN SPACE TEMPERATURE ABOVE THE OCCUPIED SPACE TEMPERATURE SETPOINT, THE UNIT ELECTRONIC EXPANSION VALVE SHALL MODULATE AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE AT THE UNOCCUPIED SPACE TEMPERATURE SETPOINT. INTERNAL PID LOOP CONTROL OF THE ELECTRONIC EXPANSION VALVE SHOULD BE UTILIZED TO MINIMIZE OVER/UNDERSHOOTING OF THE SPACE TEMPERATURE FROM SETPOINT. ONCE COOLING OPERATION HAS BEEN ENGAGED, THE UNIT SHALL NOT BE ALLOWED TO ENTER INTO HEATING OPERATION UNTIL THE SPACE TEMPERATURE HAS FALLEN 1°F BELOW THE OCCUPIED SPACE TEMPERATURE SETPOINT FOR AT LEAST 15 MIN. IF THE SPACE TEMPERATURE FALLS MORE THAN 2°F BELOW THE OCCUPIED SPACE TEMPERATURE SETPOINT. THE 15 MIN GUARD TIMER DELAY SHALL BE BYPASSED AND THE SYSTEM SHALL SWITCH FROM COOLING OPERATION TO HEATING OPERATION.

ON AN DECREASE IN SPACE TEMPERATURE BELOW THE OCCUPIED SPACE TEMPERATURE SETPOINT, THE UNIT ELECTRONIC EXPANSION VALVE SHALL MODULATE AS REQUIRED TO MAINTAIN THE SPACE TEMPERATURE AT THE UNOCCUPIED SPACE TEMPERATURE SETPOINT INTERNAL PID LOOP CONTROL OF THE ELECTRONIC EXPANSION VALVE SHOULD BE UTILIZED TO MINIMIZE OVER/UNDERSHOOTING OF THE SPACE TEMPERATURE FROM SETPOINT. IF THE SPACE TEMPERATURE REMAINS BELOW HEATING SETPOINT WITH THE VRV OPERATING IN FULL HEATING, THE AUXILIARY HEAT SHALL BE COMMANDED ON TO MEET THE SPACE TEMPERATURE SETPOINT.

ONCE HEATING OPERATION HAS BEEN ENGAGED, THE UNIT SHALL NOT BE ALLOWED TO ENTER INTO COOLING OPERATION UNTIL THE SPACE TEMPERATURE HAS RISEN 1°F BELOW THE OCCUPIED SPACE TEMPERATURE SETPOINT FOR AT LEAST 15 MIN. IF THE SPACE TEMPERATURE RISES MORE THAN 2°F ABOVE THE OCCUPIED SPACE TEMPERATURE SETPOINT, THE 15 MIN GUARD TIMER DELAY SHALL BE BYPASSED AND THE SYSTEM SHALL SWITCH FROM HEATING OPERATION TO COOLING OPERATION.

UNOCCUPIED MODE:

DURING UNOCCUPIED OPERATION, THE SYSTEM SHALL BE SUBJECT TO THE UNOCCUPIED MODE HEATING AND COOLING SETPOINTS. THE INITIAL UNOCCUPIED HEATING SETPOINT SHALL BE 65°F (ADJ). THE INITIAL UNOCCUPIED COOLING SETPOINT SHALL BE 80°F (ADJ).

THE SPACE TEMPERATURE SENSOR SHALL BE EQUIPPED WITH A TEMPORARY OCCUPANCY OVERRIDE FEATURE THAT SHALL OVERRIDE THE SYSTEM INTO OCCUPIED MODE FOR A PERIOD OF 2 HOURS (ADJ).

3) VRY FAN COIL UNIT CONTROL

HEATING COIL DISCHARGE AIR

TEMPERATURE

SUPPLY

AIR

OUTPUT

HTG

DOAS SEQUENCE OF OPERATIONS:

MODE OF OPERATION:

THE UNIT MODE OF OPERATION SHALL BE EITHER OCCUPIED OR UNOCCUPIED. MODE OF OPERATION SHALL BE DETERMINED BY THE BUILDING AUTOMATION SYSTEM (BAS) SCHEDULE OR OVERRIDE COMMAND FROM THE BAS. THE DOAS UNIT IS INTENDED TO PROVIDE ROOM NEUTRAL AIR FOR VENTILATION DURING THE OCCUPIED MODE

OCCUPIED OPERATION:

THE SUPPLY FAN WILL OPERATE CONTINUOUSLY. THE FAN WILL RUN AT A CONSTANT SPEED (SPEED SET DURING TEST AND BALANCE) TO MAINTAIN THE SCHEDULED VENTILATION RATE OF THE UNIT.

THE EXHAUST FAN WILL OPERATE CONTINUOUSLY. THE FAN WILL RUN AT A CONSTANT SPEED (SPEED SET DURING TEST AND BALANCE) TO MAINTAIN THE SCHEDULED EXHAUST RATE OF THE UNIT.

THE UNIT SHALL OPERATE IN THE FACTORY CONTROLLER'S "DEHUMIDIFICATION ALWAYS" MODE OF OPERATION. WHEN THE LEAVING COOLING COIL AIR TEMPERATURE RISES ABOVE ITS SETPOINT OF 55°F (ADJUSTABLE AT UNIT CONTROLLER), THE UNIT VARIABLE SPEED COMPRESSOR(S) WILL BE MODULATED TO MAINTAIN THE LEAVING COIL AIR TEMPERATURE AT SETPOINT. WHEN THE UNIT DISCHARGE AIR TEMPERATURE IS BELOW ITS SETPOINT OF 70°F (ADJUSTABLE AT THE UNIT CONTROLLER), THE UNIT GAS HEATING COIL WILL BE MODULATED TO MAINTAIN THE UNIT DISCHARGE AIR TEMPERATURE AT SETPOINT.

UNOCCUPIED OPERATION:

THE SUPPLY AND EXHAUST FAN SHALL BE OFF, THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED, AND ALL HEATING AND COOLING COMMANDS SHALL BE DISABLED. THE UNIT SHALL REMAIN IN UNOCCUPIED MODE UNTIL COMMANDED ON BY THE BAS VIA SCHEDULE OR OPERATOR OVERRIDE COMMAND.

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RETURN AIR

RELATIVE

HUMIDITY

LEAVING

COOLING COIL

TEMPERATURE COMMAND

TEMPERATURE

OUTPUT

CLG

REHEAT

HGR

| D /

RETURN

FAN ECM

STATUS -

SPEED (MFG)

ALARM — MFG

—(MFG)

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HVAC CONTROL

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REMARKS/ACCESSORIES

- 1. FACTORY INSTALLED BACNET CONTROLLER TO CONNECT TO BAS.
- 2. 2" MERV 8 PLEATED MEDIA FILTER.

DAIKIN DPSC05

- 3. 100% MODULATING INVERTER DRIVEN COMPRESSORS.
- 4. 2" DOUBLE WALL FOAM INSULATED PANELS.
- 5. HINGED ACCESS DOORS. 6. VARIABLE SPEED ECM/VFD MOTORS ON ALL FANS (SUPPLY, EXHAUST AND CONDENSER)
- 7. MODULATING HOT GAS REHEAT COIL FOR DEHUMIDIFICATION (MINIMUM OF 70°F LAT)
- 8. STAINLESS STEEL DOUBLE SLOPED DRAIN PAN.
- 9. LOW LEAK DAMPERS. 10. PROVIDE WITH ENERGY RECOVERY ENTHALPY WHEEL.
- 11. LCD CONTROLLER FOR UNIT DIAGNOSTICS AND OPERATIONAL SETPOINTS.
- 12. FAN AND MOTOR SPRING ISOLATION.
- 13. PROVIDE WITH 24" TALL HORIZONTAL DISCHARGE CURB. 14. NON-FUSED DISCONNECT SMITCH AND NON POWERED CONVINCE OUTLET.
- 15. PROVIDE FACTORY INSTALLED RETURN AIR SMOKE DETECTORS. 16. PROVIDE WITH STAINLESS STEEL GAS HEAT EXCHANGER WITH MODULATING 5:1 TURNDOWN.

MODEL ESP IN. MG ESP IN. MG CFM

1.0

	VALVAIR COOLED CONDENGER GCHEDHLE (OMNER RROWNED)													
	VRY AIR-COOLED CONDENSER SCHEDULE (OWNER PROVIDED)													
				CO	OLING		HEATING	REFRIGERAN	ELECTRICAL					
					AMBIENT		AMBIENT						NET	
			NOM.		DESIGN		DESIGN °F	FACTORY	EST. ADD'L				MEIGHT	REMARKS /
MARK	MFG.	MODEL	TONS	MBH	°F DB	MBH	DB/MB	CHARGE (LBS)	REF (LBS)	MCA	MOP	YOLT/PH/HZ	(LBS)	ACCESSORIES
VRV-1	DAIKIN	REYQ192AATJB	16	137.4	95	140.2	7.0/4.0	25.8	52.8	59.8	60	208 / 3 / 60	960	1 THRU 16

COOLING

LAT°F

52/51

64.8 | 46.4 | 105

95/78

75/62

81/68

7/5

70/50

EAT°F

81/68

REMARKS/ACCESSORIES

- 1. SYSTEM RATING DATA BASED ON DESIGN AMBIENT CONDITION FOR COOLING AND FOR HEATING.
- 2. SUBMITTED PERFORMANCE DATA MUST BE FULLY DE-RATED FOR ALL COMPONENTS AND ACCESSORIES, INCLUDED BUT NOT LIMITED TO, LINE LENGTH VERTICAL SEPARATION AND CONNECTION RATIO.
- 3. SYSTEM MUST PROVIDED CONTINUOUS HEATING DURING DEFROST AND OIL RETURN. SYSTEMS WITHOUT THIS CAPABILITY MUST BE DE-RATED TO ACCOUNT FOR HEATING LOST DURING DEFROST CYCLE AND UNIT.
- 4. CONDENSING UNIT MUST HAVE FULLY MODULATING INVERTER COMPRESSORS AND AUTO CHANGEOVER FUNCTIONS.
- 5. NON-YFD COMPRESSORS (INCLUDING DIGITAL SCROLL AND COMPRESSORS WITH HOT GAS BYPASS) WILL NOT BE PERMITTED. 6. VRF SYSTEMS USING SOLENOID CONTROL VALVES MUST INCLUDE FULL PORT ISOLATION VALVES BEFORE AND AFTER REFRIGERANT CONTROL BOX AND PROVIDE ACOUSTIC TREATMENT TO ATTENUATE VALVE NOISE BELOW
- NC 20 IN ALL OCCUPIED MODES. ISOLATION VALVES PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR.
- 7. SYSTEM SHALL BE PROVIDED WITH I-TOUCH MANAGER CONTROLLER WITH WEB BASED SOFTWARE FOR DISPLAYING UP TO 8 DILL NET SYSTEMS WITH 128 INDOOR UNITS PER SYSTEM. PC BY OTHERS.
- 8. MANUFACTURERS SUBMITTAL MUST INCLUDE REFRIGERANT PIPING DIAGRAM WITH PIPE DIAMETERS, LENGTHS, AND REFRIGERANT VOLUME.
- 9. SUBSTITUTE MANUFACTURER SHALL BE RESPONSIBLE FOR ADDITIONAL PIPING AND REFRIGERANT. 10. CONTRACTOR TO VERIFY PIPING DIMENSIONS.
- 11. INSTALLING CONTRACTOR MUST HAVE SUCCESSFULLY COMPLETED MANUFACTURERS CERTIFIED INSTALLATIONS CLASS WITHIN PAST 36 MONTHS.

EXHAUST | SUPPLY | EXHAUST

1040

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51.1

- 12. CONTRACTOR TO FURNISH AND INSTALL INSULATION ON REFRIGERANT PIPING. CONTRACTOR TO VERIFY ALL PIPING DIMENSIONS.
- 13. MANUFACTURER REPRESENTATIVE MUST HAVE LOCAL STOCK OF PARTS, FACTORY CERTIFIED TECHNICIAN ON STAFF. 14. MANUFACTURER MUST PROVIDE 10 YEARS PARTS WARRANT ON ALL FCUS. CONDENSING UNITS MODEL CHANGEOVER DEVICES AND ZONE CONTROLS. WARRANTY CONDITIONS MUST BE CLARIFIED DURING SUBMITTAL PHASE.
- 15. PROVIDE 16 INCH TALL PREFABRICATED EQUIPMENT STAND EQUAL TO BIG FOOT VRF/VRV SYSTEM STAND. VERIFY VRF EQUIPMENT DIMENSIONS PRIOR TO ORDERING. BOLT STAND BASE SUPPORTS TO CONCRETE HOUSEKEEPING PAD.
- 16. HAIL GUARDS TO BE PROVIDED BY OWNER AND INSTALLED BY MECHANICAL CONTRACTOR.

	VRY INDOOR FAN COIL SCHEDULE (OWNER PROVIDED)														
				CONDENSING	SUPPLY	OUTSIDE	COOLING			HEA"	TING	ELECTRICAL			REMARKS /
MARK	MFG.	MODEL	UNIT TYPE	UNIT SERVED	CFM	AIR (CFM)	TMBH	SMBH	EAT (DB)	TMBH	EAT	MCA	MOP	VOLT/PH/HZ	ACCESSORIES
FC1-1	DAIKIN	FXFQ24TVJU	CEILING CASSETTE	VRV-1	775		19.0	16.9	73	26.9	70	0.7	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-2	DAIKIN	FXZQ12TBYJU	CEILING CASSETTE	VRV-1	350		9.5	6.7	73	13.6	70	0.4	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-3	DAIKIN	FXFQ24TVJU	CEILING CASSETTE	VRV-1	775		19.0	16.9	73	26.9	70	0.7	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-4	DAIKIN	FXFQ24TVJU	CEILING CASSETTE	VRV-1	775		19.0	16.9	73	26.9	70	0.7	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-5	DAIKIN	FXFQ24TVJU	CEILING CASSETTE	VRV-1	775		19.0	16.9	73	26.9	70	0.7	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-6	DAIKIN	FXZQ05TBVJU	CEILING CASSETTE	VRV-1	300		4.7	4.3	73	6.4	70	0.3	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-7	DAIKIN	FXZQ05TBVJU	CEILING CASSETTE	VRV-1	300		4.7	4.3	73	6.4	70	0.3	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-8	DAIKIN	FXSQ24TBVJU	CONCEALED DUCTED	VRV-1	740	100	19.2	14.9	73	27.0	70	1.8	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 8
FC1-9	DAIKIN	FXZQ05TBVJU	CEILING CASSETTE	VRV-1	300		4.7	4.3	73	6.4	70	0.3	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 7, 8
FC1-10	DAIKIN	FXSQ12TBVJU	CONCEALED DUCTED	VRV-1	335	20	9.5	8.3	73	13.5	70	0.8	15	208 / 1 / 60	1, 2, 3, 4, 5, 6, 8

REMARKS/ACCESSORIES

- 1. INDOOR UNIT SELECTION SHOULD BE MADE USING ACTUAL CAPACITIES, NOT NOMINAL CAPACITIES OR MODEL NUMBERS. ALL COOLING AND HEATING CAPACITIES AND AIRFLOMS
- LISTED ABOVE ARE TO BE MET. SUBSTITUTIONS MUST MEET OR EXCEED EACH VALUE.
- 2. INTEGRAL CONDENSATE PUMP FROM FACTORY WITH FLOAT SWITCH TO SHUT DOWN UNIT IN EVENT OF PUMP FAILURE. 3. WIRED BACKLIT LED DISPLAY REMOTE TEMPERATURE SENSOR (MODE, ON/OFF, FAN SPEED, TEMP ADJUSTMENT, CANCEL AND PROGRAM MENU).
- 4. FACTORY MOUNTED LEV (ELECTRONIC LIQUID EXPANSION VALVE).
- 5. START-UP COMPANY TO HAVE COMPLETED SERVICE COURSE BY FACTORY AT FACTORY AUTHORIZED LOCATION. MUST BE APPROVED BY ENGINEER PRIOR TO TRAINING. 10 YEAR PARTS WARRANTY AND 1 YEAR LABOR WARRANTY. START DATE SET BY GENERAL CONTRACTOR.
- 6. PROVIDE HANGING HARDWARE AS REQUIRED, SUPPORT UNIT FROM BUILDING STRUCTURE ABOVE. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- 7. PROVIDE WITH SELF CLEANING FILTER KIT.
- 8. PROVIDE WITH GPS NEEDLEPOINT BIPOLAR IONIZATION SYSTEM.

			EXHAU	ST FAN S	CHEDUL	E (OMNE	R PRO	/IDED)			
				ESP. IN		INLET	FAN	ELEC.	TRIC	CAL	UNIT	REMARKS /
MARK	MFG.	MODEL	CFM	MC	MATTS	SONES	RPM	YOLT	PH	HZ	MEIGHT	ACCESSORIES
EF-1	GREENHECK	SP-B110	100	0.5	80	2.6	812	115	1	60	10 lb	1, 2, 3, 4
EF-2	GREENHECK	SP-A200	100	0.5	35	3.7	823	115	1	60	24 lb	1, 2, 4, 5

REMARKS/ACCESSORIES

- PROVIDE FACTORY BACKDRAFT DAMPER.
- 2. PROVIDE DIRECT DRIVE MOTOR WITH FAN SPEED CONTROLLER.
- 3. INTERLOCK EXHAUST FAN MITH LIGHT SMITCH BY ELECTRICAL CONTRACTOR. 4. PROVIDE STANDARD GRILLE CONSTRUCTION.
- 5. PROVIDE WITH LINE VOLTAGE THERMOSTAT INSTALLED BY ELECTRICAL CONTRACTOR.

	VRY ZONE HEAT RECOVERY DEVICE SCHEDULE (OWNER PROVIDED)												
			CONDENSING	MAX CAPACITY				UNIT					
MARK	MANUFACT	MODEL	UNIT SERVED	PER PORT MBH	M.C.A	M.O.P	VLT / PH / HZ	MEIGHT	ACCESSORIES				
BS-1	DAIKIN	BS10Q54TAVJ	VRV-1	54	1.0	15	208 / 1 / 60	105	1, 2, 3, 4				

1 THRU 16

REMARKS/ACCESSORIES

1.2

35.4

50

208/3/60

1.2

1. INDIVIDUAL CONTROL AND CHANGEOVER WITH EXTENDED RANGE OF PRODUCT OFFERING 4, 6, 10 AND 12 PORT OPTIONS.

1240

- 2. UNLIMITED NUMBER OF UNUSED PORTS PER BOX OR SYSTEM.
- 3. NO DRAIN PIPING REQUIRED. 4. STANDARD LIMITED WARRANTY: 10 YEARS WARRANTY ON ALL PARTS.

			A	IR DISTRI	BUTION SCHED	ULE		
MARK	CFM	NECK SIZE	MFG.	MODEL	TYPE	FINISH	FRAME	REMARKS/ ACCESSORIES
Α	50-100	6"Ф	TITUS	TMS	4-WAY SUPPLY	MHITE	SURFACE	1, 4, 6
В	50-100	6"Ф	TITUS	TMS	4-WAY SUPPLY	MHITE	T-BAR LAYIN	1, 6
C	105-200	8"Φ	TITUS	TMS	4-WAY SUPPLY	MHITE	T-BAR LAYIN	1
D	225-300	10"Ф	TITUS	TMS	4-WAY SUPPLY	MHITE	T-BAR LAYIN	1
E	335	12"Ф	TITUS	TMS	4-WAY SUPPLY	MHITE	T-BAR LAYIN	1
F	400-450	12" X 12"	TITUS	50F	EXHAUST	MHITE	SURFACE	2, 4, 6
G	200-1200	20" X 20"	TITUS	355RL	RETURN	MHITE	T-BAR LAYIN	1, 3, 5
Н	100	34" × 8"	TITUS	355RL	MALL TRANSFER	MHITE	SURFACE	1, 3

REMARKS/ACCESSORIES

- 1. STEEL CONSTRUCTION.
- 2. ALUMINUM CONSTRUCTION. 3. NO SCREW HOLES.
- 4. 12" X 12" MODULE.
- 5. PROVIDE GRILLE WITH 1" FARR 30/30 FILTERS.
- 6. PROVIDE TITUS MODEL TRM RAPID FRAME IN AREAS OF GYP BOARD CEILINGS.

	MAL	L HEATER	R SCHEDU	LE (OMNE	R PROVIDED)
			HEA.	TING		
MARK	MFG	MODEL	INPUT KW	FUEL TYPE	VOLT / PH / HZ	ACCESSORIES
MH-1	MARKEL	F3425	5	ELECTRIC	208 / 1 / 60	1, 2, 3

REMARKS/ACCESSORIES

- 1. PROVIDE WITH BUILT-IN TAMPER-PROOF THERMOSTAT.
- 2. PROVIDE HARDWARE FOR SURFACE MOUNTING. MOUNT 12" ABOVE FINISHED FLOOR.
- 3. PROVIDE FACTORY CIRCUIT BREAKER.

		HSA Engineering
		479 / 452 / 8922 office
	H HSA	7405 Ellis St. Fort Smith, AR 72916
2		HSAConsultants.com

SHEET

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12/16/2024

HVAC SCHEDULES

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REFER TO SHEET M1.1 FOR HVAC LEGEND, GENERAL AND KEYED NOTES. REFER TO SHEET M2.1 FOR HVAC PLANS. REFER TO SHEET M3.1 FOR HVAC DETAILS.

MIRELESS INTERNET EQUIPMENT FURNISHED BY OWNER AND INSTALLED BY THE CONTRACTOR, FURNISH AND INSTALL TWO DATA CABLE.

DATA: REQUIRES 4" SQUARE OUTLET BOX, APPROPRIATE PLASTER RING, AND 1" C. STUBBED TO AN ACCESSIBLE LOCATION ABOVE A REMOVABLE CEILING TILE. MINIMUM OF ONE DATA CABLE AT EACH LOCATION SHOWN UNLESS OTHERWISE NOTED.

TELEPHONE: REQUIRES 4" SQUARE OUTLET BOX APPROPRIATE PLASTER RING, AND 3/4" C. STUBBED TO AN ACCESSIBLE LOCATION ABOVE A REMOVABLE CEILING TILE. NUMBER DENOTES THE NUMBER OF TELEPHONE PORTS/CABLES TO BE PROVIDED. MINIMUM OF TWO CABLES AT EACH LOCATION IS REQUIRED UNLESS OTHERWISE NOTED FLUSH MOUNTED JUNCTION BOX. VERIFY MOUNTING HEIGHT WITH MILLWORK DETAILS AND/OR THE OWNER'S REPRESENTATIVE. AT EQUIPMENT LOCATIONS VERIFY THE EXACT LOCATION WITH

THE EQUIPMENT INSTALLER PRIOR TO ROUGH-IN. FUSED/NON-FUSED DISCONNECT-FUSE ALL EQUIPMENT PER MANUFACTURER RECOMMENDATION FOR THE ACTUAL EQUIPMENT FURNISHED. MOUNT DISCONNECT FOR HVAC CONDENSER UNITS WITH

TOP OF SMITCH AT 36" A.F.F. MOTOR RATED SWITCH USED FOR EQUIPMENT DISCONNECTING MEANS. SINGLE PHASE: PROVIDE WITH THERMAL OVERLOAD SIZED PER MOTOR LOAD.

SWITCH TYPE 1221 ("3" INDICATES 3-WAY SWITCH, "D" INDICATES DIMMER COORDINATE WITH FIXTURE/LAMP TYPE AND CIRCUIT

WALL MOUNTED DUAL TECHNOLOGY MOTION SENSOR SMITCH WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS. WALL MOUNTED PASSIVE INFRARED COMBINATION MOTION SENSOR SWITCH AND SINGLE POLE WALLBOX SLIDE DIMMER. WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.

LEVITON OSD10 OR EQUAL

"OS" - CEILING MOUNTED DUAL TECHNOLOGY MOTION SENSOR PROVIDE AND INSTALL THE APPROPRIATE POWER PACK. COORDINATE SWITCHING WITH ACTUAL MOTION SENSOR USED. COORDINATE LOCATION AND NUMBER WITH ACTUAL MOTION SENSOR USED. WIRE PER MANUFACTURERS RECOMMENDATION PROVIDE OCCUPANCY SENSOR WHICH IS THE CORRECT TYPE FOR THE SPACE. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.

"OS" - WALL MOUNTED DUAL TECHNOLOGY MOTION SENSOR PROVIDE AND INSTALL THE APPROPRIATE POWER PACK. COORDINATE SMITCHING MITH ACTUAL MOTION SENSOR USED. COORDINATE LOCATION AND NUMBER WITH ACTUAL MOTION SENSOR USED. WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE OCCUPANCY SENSOR WHICH IS THE CORRECT TYPE FOR THE SPACE.

EXIT LIGHT - ARROW DENOTES INCLUSION OF ARROW ON LENS CONTRACTOR TO COORDINATE PROPER MOUNTING DETAILS. THERMOSTAT, MOUNT AT 48" A.F.F TO TOP OF BOX (NUMBER DENOTES HYAC UNIT).

SENSOR, MOUNT AT 48" A.F.F TO TOP OF BOX (NUMBER DENOTES HYAC UNIT).

SHEET NUMBER

LEGEND(CONT.)

ELECTRICAL PANEL BRANCH CIRCUIT HOMERUN. PANEL AND CIRCUIT NUMBER INDICATED.

FIRE ALARM CONTROL PANEL MOUNTED 50" A.F.F. FIRE ALARM ANNUNCIATOR PANEL MOUNTED 52" A.F.F. MANUAL PULL STATION MOUNTED MINIMUM OF 42";

MAXIMUM OF 48" A.F.F. FIRE ALARM MODULE FOR CONTROL; PROVIDE ALL LOW

VOLTAGE WIRING. PHOTOELECTRIC SMOKE DETECTOR. WALL MOUNTED

HEAT DETECTOR. WALL MOUNTED $\vdash(HD)$ PHOTOELECTRIC SMOKE DETECTOR. CEILING MOUNTED

HEAT DETECTOR. CEILING MOUNTED

SMOKE/CARBON MONOXIDE DETECTOR, CEILING MOUNTED

DUCT DETECTOR-FURNISHED AND INSTALLED BY THE FIRE

ALARM CONTRACTOR. COORDINATE QUANTITY AND LOCATION WITH MECHANICAL PLANS. CEILING FIRE ALARM VISUAL STROBE LIGHT-WP DENOTES MEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 3/4"

CONDUIT STUBBED ABOYE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING. MALL MOUNT FIRE ALARM VISUAL STROBE LIGHT-MP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX

WITH ¾" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING.

NUMBER DENOTES CANDELA RATING. CEILING FIRE ALARM SPEAKER/STROBE LIGHT-WP DENOTES MEATHER RESISTANT. REQUIRES 4" SQUARE BOX MITH 3/4" CONDUIT STUBBED ABOYE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING: LETTER DENOTES VOICE (S) OR

WALL MOUNT FIRE ALARM SPEAKER/STROBE LIGHT-WP DENOTES WEATHER RESISTANT. REQUIRES 4" SQUARE BOX WITH 34" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING. NUMBER DENOTES CANDELA RATING.

CAMERA JUNCTION BOX WITH 3/4" CONDUIT TO NEAREST ACCESSIBLE CEILING FOR SECURITY CAMERA. REFER TO PLANS FOR ADDITIONAL NOTES. PROVIDE ONE DATA CABLE TO EACH CAMERA LOCATION, COORDINATE EXACT LOCATION WITH OWNER FLUSH MOUNTED OUTLET BOX, TOP AT 48" A.F.F. FOR CARD READER. SUPPLY 3," CONDUIT TO AN ACCESSIBLE AREA ON THE INTERIOR, AND ONE 3/4" CONDUIT TO DOOR FRAME HEADER. FURNISH 120 VOLTS FROM THE

NEAREST RECEPTACLE CIRCUIT. VERIFY WITH SECURITY CONTRACTOR

TIME CLOCK: INTERMATIC #ET8215C FOR LIGHTING CONTROL APPLICATIONS. INTERMATIC #T2005 FOR CIRCULATION PUMPS

C = COORDINATE LOCATION WITH MILLWORK-MOUNTING HEIGHTS VARY. REFER TO THE ARCHITECTURAL MILLMORK DRAWINGS

W = WALL MOUNTED @ 48" A.F.F.-OR AS SHOWN. GFI = GROUND FAULT CIRCUIT INTERRUPTER.

MP = MEATHER RESISTANT RECEPTACLES ARE "GFI", WITH METAL MEATHER RESISTANT "WHILE-IN-USE" COVERS.

MM = MICROWAYE OVEN. EM = FIXTURE CONTAINS EMERGENCY BATTERY PACK.

NL = UNSWITCHED EMERGENCY FIXTURE.

H = MOUNT HORIZONTALLY IN MILLMORK. EC = ELECTRICAL CONTRACTOR AFF = ABOVE FINISHED FLOOR

AFG = ABOVE FINISHED GRADE EMC = ELECTRIC MATER COOLER EWH = ELECTRIC MATER HEATER

NTS = NOT TO SCALE

GENERAL ELECTRICAL NOTES-ALL SHEETS THESE NOTES ARE ONLY A SUPPLEMENT TO THE SPECIFICATIONS

1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR A COMPLETE WORKING INSTALLATION.

2. THIS CONTRACTOR IS TO COMPLY WITH THE STATE OF ARKANSAS ADOPTED ADA

ACCESSIBLE GUIDELINES IN REGARD TO ACCESSIBLE FEATURES. 3. AT ALL MILLWORK LOCATIONS COORDINATE THE ELECTRICAL INSTALLATION WITH THE

ARCHITECTURAL DRAWINGS.

4. PROVIDE FIRE RATED CAULKING WHERE CONDUIT OR OTHER ELECTRICAL ITEMS PASS THOUGH FIRE-RATED WALLS, CEILINGS AND FLOORS.

5. INSTALL ALL CONDUIT STRAIGHT AND PARALLEL WITH THE BUILDING LINES. ALL CONDUIT IS CONCEALED IN PUBLIC PLACES

6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL PERMIT AND FEE COSTS AND SHALL INCLUDE THESE COSTS IN THE BID PRICE FOR THIS PROJECT

7. THE ENTIRE ELECTRICAL INSTALLATION SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES AND ORDINANCES. IF A CONFLICT IS FOUND BETWEEN APPLICABLE CODES, THE MORE STRINGENT SHALL APPLY. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL APPLICABLE MUNICIPAL CODES AND ORDINANCES.

8. THE SUBMISSION OF A PROPOSAL WILL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED THEMSELVES WITH THE DRAWINGS, SPECIFICATION BOOK, THE BUILDING SITE AND OTHER INFORMATION PRESENTED FOR THE CONSTRUCTION OF THIS PROJECT. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORESEEN HAD A COMPLETE AND THOROUGH EXAMINATION BEEN MADE.

9. DO NOT SCALE DIRECTLY FROM THE ELECTRICAL DRAWINGS. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL INFORMATION.

10. THE CONTRACTOR SHALL GUARANTEE ALL MORK FOR WHICH MATERIALS ARE FURNISHED FABRICATED OR FIELD ERECTED. THIS CONTRACTOR GUARANTEE SHALL EXIST FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND/OR MORKMANSHIP OF ANY KIND.

11. WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF THE WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES WILL BE MADE WITH OUT THE EXPRESSED WRITTEN CONSENT OF THE OWNER.

12. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES TO INSURE THAT ALL CIRCUITS AND DEVICES ARE OF A PROPER SIZE FOR ACTUAL EQUIPMENT FURNISHED. THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICT WHICH CAUSES CHANGES TO ANY SYSTEM AS DESIGNED ON THESE DRAWINGS. FAILURE ON THE PART OF THE CONTRACTOR TO NOTIFY THE ENGINEER OR ARCHITECT OF SUCH CONFLICTS PLACES THE SUBSEQUENT CHANGES UPON THE CONTRACTOR.

13. WHEN INSTALLING POLE BASES OR UNDERGROUND UTILITIES, FIELD VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES. EXACT LOCATION OF POLE BASES AND CONDUIT TO BE DETERMINED IN THE FIELD.

14. THE ELECTRICAL CONTRACTOR IS TO PROVIDE, AT YET TO BE DECIDED LOCATIONS, TEN (10) CONDUIT STUB-UPS. WHICH ARE TO INCLUDE 4" OUTLET BOXES, PLASTER RINGS, COVER PLATES, AND CONDUIT TO ABOVE THE CEILING, FIVE ONE GANG AND FIVE TWO GANG. IN ADDITION, PROVIDE TEN (10) SINGLE GANG STUB-UPS WHICH ARE TO INCLUDE 4 OUTLET BOXES, PLASTER RINGS, COVER PLATES, INCLUDING ONE RECEPTACLE OR SWITCH WITH 50 FEET OF CIRCUIT WIRING PER SINGLE GANG STUB-UP. COMBINED TOTAL NUMBER OF STUB-UPS REQUIRED IS TWENTY (20).

15. ALLOM FOR THE ADDITION OF 2 (TMO) NEW EXIT LIGHTS WITH WIRING TO UNSWITCHED LIGHTING CIRCUIT

16. ELECTRICAL CONTRACTOR AND MASON TO COORDINATE LOCATION OF ALL WALL INSTALLED DEVICES WITH ARCHITECTURAL FINISHES, SUCH AS ACOUSTIC WALL PANELS, WALL FURR OUTS, DOOR LOCATIONS, SIGNAGE, ETC.

17. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE FOLLOWING SYSTEMS:

A. POWER AND LIGHTING:

1. ALL DEVICE PLATES ARE STAINLESS STEEL. COORDINATE COLOR OF DEVICES WITH THE ARCHITECT. 2. ALL 20A 120V AND 250V NON-LOCKING TYPE RECEPTACLES, UNLESS OTHERWISE NOTED, SHALL BE TAMPER RESISTANT TYPE PER NEC 406.12.

3. WHERE DEVICES ARE SHOWN NEXT TO EACH OTHER, THEY ARE INTENDED TO BE GANGED. FIELD VERIFY ACTUAL SPACE AVAILABLE AND NOTIFY THE ARCHITECT WHERE THERE ARE SPACE

4. LOW VOLTAGE WIRING IS TO BE ENCASED IN CONDUIT IN AREAS WITH NO CEILING. 5. RECEPTACLES FOR EQUIPMENT SUCH AS ELECTRIC WATER COOLERS SHALL BE LOCATED IN THE WALL AT A LOCATION WHICH IS CONCEALED BY THE EQUIPMENT CABINET.

6. ALL EMPTY CONDUITS ARE TO CONTAIN A NYLON PULL STRING. EMPTY CONDUITS 2" AND LARGER ARE TO BE SMABBED OUT AND LEFT WITH A NYLON PULL ROPE FOR THE USE OF THE OWNER.

7. COVER PLATES FOR EXTERIOR RECEPTACLES ARE TO BE METAL, MEATHER PROOF WHILE IN USE. 8. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL DRIVER AND LAMP COMBINATIONS THAT MILL PROVIDE THE OWNER WITH A FIVE YEAR WARRANTY ON THE DRIVER.

9. COORDINATE WITH THE GENERAL CONTRACTOR AND THE INSULATION CONTRACTOR TO HOLD THE BATT INSULATION AWAY FROM ALL LAY-IN FIXTURES. CLEARANCE SHOULD BE 3" ON ALL SIDES, AND TOTALLY CLEAR ON THE TOP

10. ROOM NUMBERS USED IN THE PANEL SCHEDULES ARE TO REFLECT ROOM NUMBERS BY THE OWNER.

ARCHITECT WILL PROVIDE CROSS OVER LIST DURING THE PROJECT 11. OCCUPANCY SENSORS ARE TO BE LAID OUT BY THE LIGHTING REPRESENTATIVE FURNISHING THE EQUIPMENT HSA WILL PROVIDE AUTO CAD DRAWINGS AS NECESSARY. ELECTRICAL CONTRACTOR RESPONSIBLE FOR LOCATION DETAILS AND MOUNTING. SENSORS SHOWN ARE FOR REFERENCE

12. FURNISH 2-4" CONDUITS SLEEVES THOUGH FIRE WALLS UNLESS OTHERWISE NOTED. SEAL PER RATING

OF THE WALL 13. WHERE INDIRECT (SUSPENDED) LIGHTING IS USED, THE ELECTRICAL CONTRACTOR SHALL CONTRACT WITH THE CEILING CONTRACTOR TO PROVIDE THE NECESSARY TIES TO THE STRUCTURE ABOVE AT EACH POINT OF ATTACHMENT OF THE FIXTURE HANGERS.

14. CLASSROOM LIGHTS ARE CONTROLLED BY OCCUPANCY SENSORS. THEY ARE SWITCHED WITH THE ROW AT THE TEACHING WALL INDEPENDENT OF THE REST OF THE LIGHTS.

15. IT SHALL BE ACCEPTABLE TO USE LUTRON VIVE WIRELESS LIGHTING CONTROLS IF THEY ARE MORE COST EFFECTIVE THAN HARDWIRED LIGHTING CONTROLS. IF WIRELESS LIGHTING CONTROLS ARE USED THE FOLLOWING SHALL APPLY. ALL ROOMS ARE TO BE CONFIGURED AS "STAND ALONE" TYPE ROOMS UNLESS OTHERWISE NOTED. A FULL BUILDING WIRELESS LIGHTING CONTROL SYSTEM THAT CONNECTS AND MONITORS ALL STAND ALONE ROOMS IS NOT REQUIRED. MANUFACTURER IS TO BE LUTRON VIVE PROVIDE MINIMUM 4 HOURS OF ON SITE TRAINING. TRAINING IS TO BE RECORDED AND GIVEN TO THE OWNER.

16. PROVIDE PRICING FOR DEVICES LOCATED AT EXISTING CONCRETE BLOCK WALLS AS FOLLOMS: UNLESS OTHERWISE NOTED CONDUIT, BOXES, AND WIRING FOR ALL DEVICES ARE TO BE CONCEALED IN EXISTING WALLS AND ABOVE CEILINGS. INSTALL MC CABLE AND FLEXIBLE CONDUIT DOWN EXISTING CONCRETE BLOCK WALLS TO DEVICE LOCATIONS AS REQUIRED. INSTALL CUT-IN BOXES AT THESE LOCATIONS.

17. WIRE SIZES: WIRE SIZE 120V

> A. #12 LESS THAN 75 FEET B. #10 BETWEEN 75-150 FEET C. #8 BETWEEN 150-250 FEET

D. #6 BETWEEN 250-375 FEET

1. ALL FIRE ALARM OUTLET BOXES ARE TO BE PAINTED RED.

2. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING BREAKER LOCK FOR LOCKING FIRE ALARM PANEL BREAKER IN THE "ON" POSITION.

3. THE FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING A PLAN BOX NEXT TO THE FIRE ALARM CONTROL PANEL. COORDINATE EXACT SIZE AND LOCATION OF BOX WITH THE CITY FIRE MARSHAL PRIOR TO INSTALLATION.

4. INSTALL FIRE ALARM SYSTEM PER N.F.P.A. AND ALL STATE AND LOCAL ORDINANCES. 5. COORDINATE THE OVERALL FIRE ALARM SYSTEM WITH THE FIRE MARSHAL FURNISHING ALL DEVICES AND SYSTEMS NECESSARY FOR A COMPLETE ACCEPTABLE SYSTEM. NO EXTRA CHARGES WILL BE ALLOWED, OUTSIDE OF THE CONTRACT PRICE. THE FIRE ALARM CONTRACTOR IS TO SUBMIT PLANS TO THE FIRE MARSHAL FOR

FINAL APPROVAL PRIOR TO BEGINNING CONSTRUCTION 6. DUCT DETECTORS ARE SUPPLIED AND INSTALLED BY THE FIRE ALARM CONTRACTOR, IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO FURNISH ALL WIRING NECESSARY TO CONNECT THESE DEVICES TO THE FIRE ALARM SYSTEM. PROVIDE WITH REMOTE INDICATOR OR SEPARATELY ZONED. COORDINATE QUANTITY AND LOCATION WITH THE MECHANICAL DRAWINGS.

GENERAL ELECTRICAL NOTES (CONTINUED.)

C. CONDUIT AND CABLE SYSTEM FOR DATA AND TELEPHONE WIRING

1. CONDUIT FOR DATA AND TELEPHONE SYSTEM, TO INCLUDE SLEEVES IN

2. DATA OUTLETS IN THE FLOOR REQUIRE 1" CONDUIT FROM EACH ONE TO A POINT ABOVE AN ACCESSIBLE CEILING. NO DAISY CHAINING OF DATA OUTLETS/CONDUITS IS ALLOWED.

3. CABLE IS NOT TO BE INSTALLED EXPOSED. VERIFY WITH MECHANICAL PLANS FOR PLENUM SPACES CABLE IN THESE AREAS IS PLENUM RATED

4. ELECTRICAL CONTRACTOR IS TO PROVIDE, INSTALL AND TERMINATE ALL DATA/TELEPHONE WIRING. REFER TO SPECIFICATIONS FOR EXACT REQUIREMENTS.

5. PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR UNUSED DATA OUTLETS. 6. CONCTRACTOR TO INSTALL OWNER PROVIDED WIFI DEVICES. 7. CONCTRACTOR TO INSTALL OWNER PROVIDED WALL PHONE BRACKETS AND

D. UNDERGROUND CONDUITS AND SLEEVES AS NECESSARY FOR DISTRIBUTION: DO NOT ROUTE GROUPS OF CONDUITS OR SLEEVES ABOVE FOOTINGS UNLESS

NOTED TO DO SO. IF CONFLICT OCCURS, CONSULT ARCHITECT AND ENGINEER. 2. DO NOT ROUTE CONDUIT OR SLEEVES BELOW BEARING WALLS WHEN RUNNING PARALLEL WITH WALLS.

3. LIMIT WIDTH OF CONDUIT AND SLEEVES NOT TO EXCEED 3'-0" IN WIDTH AS IT PASSES UNDER WALL FOOTING. ALIGN ITEMS PERPENDICULAR TO THE FOOTINGS AS IT PASSES BELOW THE FOOTING.

4. PROVIDE A MINIMUM SPACING OF 2'-0" BETWEEN CONDUIT GROUPS AS THEY PASS

5. DO NOT ROUTE CONDUITS OR SLEEVES UNDER COLUMN FOOTINGS OR PAD FOOTINGS.

E. GROUNDING SYSTEM

1. ALL CONDUITS ARE TO CONTAIN A GREEN GROUNDING CONDUCTOR, SIZED PER

F. EQUIPMENT REQUIREMENTS: 1. VERIFY EXACT FUSE SIZE AND EQUIPMENT REQUIREMENTS WITH THE ACTUAL

EQUIPMENT FURNISHED BY THE OTHER CONTRACTORS. 2. ALL HOT WATER CIRCULATION PUMPS ARE TO BE CONTROLLED VIA 7 DAY TIME CLOCKS PROVIDED BY THE MECHANICAL CONTRACTOR.

3. FINAL EQUIPMENT CONNECTIONS: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS REQUIRED TO MAKE FINAL ELECTRICAL CONNECTIONS TO ALL EQUIPMENT FURNISHED ON THIS PROJECT. VERIFY ALL REQUIREMENTS, CONDUCTOR SIZES, OVERCURRENT PROTECTION, PHASES, VOLTAGES, MOTOR ROTATION, ETC., WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE FUSED DISCONNECT IF REQUIRED BY MANUFACTURER. FURNISH HARD WIRING FOR ALL WATER HEATERS AND

4. THE ELECTRICAL CONTRACTOR IS TO PROVIDE ALL CONTACTORS, MAGNETIC STARTERS, AND MISCELLANEOUS WIRING NECESSARY TO CONTROL EXHAUST FANS AND OTHER AUTOMATICALLY OPERATED EQUIPMENT. THE CONTROLS CONTRACTOR IS TO FURNISH ONE RELAY PER ITEM AS COMPATIBLE WITH THEIR CONTROL SYSTEM.

G. HYAC CONTROL:

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT FROM EACH HVAC UNIT TO ITS RESPECTIVE THERMOSTAT, HUMIDISTAT, AND/OR SENSOR, AS REQUIRED. COORDINATE EXACT LOCATIONS WITH MECHANICAL CONTRACTOR AND ARCHITECT PRIOR TO ROUGH-IN.

2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING NECESSARY FOR LINE VOLTAGE CONTROL SYSTEMS.

3. ALL LOW VOLTAGE CONTROL WIRING SHALL BE ENCLOSED IN CONDUIT IN SPACES

4. COORDINATE ALL HVAC WIRING WITH THE MECHANICAL DRAWINGS

AND THE MECHANICAL CONTRACTOR. 5. THE ELECTRICAL CONTRACTOR IS TO PROVIDE A MAGNETIC STARTER FOR EACH EXHAUST FAN. THIS STARTER IS CONTROLLED BY THE LIGHTING/MOTION

SENSOR SYSTEM. 6. THE ELECTRICAL CONTRACTOR IS TO PROVIDE AND INSTALL ALL LINE VOLTAGE THERMOSTATS.

H. TEACHING WALL/DESK SETUP

1. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL BOXES CONDUIT, POWER AND NETWORK CABLING FOR TEACHING WALL AND TEACHING DESK SETUPS.

2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR RELOCATING ALL TEACHING WALL LOW VOLTAGE WIRING, BOXES, AND FACE PLATES. 3. COORDINATE ALL REQUIREMENTS WITH OWNER PRIOR TO INSTALLATION.

I. SECURITY CAMERAS

1. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES AND

CONDUIT FOR SECURITY CAMERAS SHOWN ON THE PLANS. 2. EACH CAMERA LOCATION REQUIRES ONE DATA CABLE, AN OUTLET BOX

AND 3/4" CONDUIT ABOVE AN ACCESSIBLE CEILING.

3. THE OWNER VENDOR CONTRACTOR (DIGI SECURITY) SHALL PROVIDE THE SECURITY CAMERA SYSTEM AND ALL OF ITS COMPONENTS.

1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL BOXES AND CONDUIT FOR THE CARD READER STUB UPS. CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING 120 VOLT POWER TO EACH ACCESS CONTROL CABINET LOCATED IN THE DATA ROOM AND AT EACH DOOR. CONDUIT AT DOORS WITH LOCKS IS TO BE INSTALLED CONCEALED IN THE

2. ACCESS CONTROL SYSTEM IS PROVIDED BY THE OWNER VENDOR CONTRACTOR (DIGI SECURITY) COORDINATE ALL REQUIREMENTS PRIOR TO



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ELECTRICAL LEGEND, **HSA**Engineering NOTES & DETAILS 479 / 452 / 8922 office SHEE

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GENERAL ELECTRICAL SITE NOTES (THIS SHEET ONLY)

- 1. PROVIDE AND INSTALL SERVICE CONDUITS PER AEP SPECIFICATIONS, CONDUITS SHALL BE 3-3" GRAY SCHEDULE 40 UL PYC CONDUITS, AND HAVE A MINIMUM OF 48" OF FILL ON TOP OF CONDUITS. ENCASE CONDUITS IN 4" COVER OF CONCRETE (SLURRY FILL) FROM THE POWER POLE TO THE SERVICE DISCONNECTS.
- 2. PROVIDE 36" LONG PVC SMEEPS FOR SERVICE CONDUITS. PROVIDE ALL TRENCHING, BACKFILLING, SAMCUTTING AND PATCHING OF HARD SURFACES, ECT FOR CONDUITS.
- 3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL COSTS OF INSTALLATION AND CONNECTING THE ELECTRICAL SERVICE CONDUITS. COORDINATE CONNECTION TO EXISTING OVERHEAD LINES WITH AEP.

ELECTRICAL SITE PLAN LEGEND

UNDERGROUND ELECTRIC

- — — -EX-OHE— — — -EXISTING OVERHEAD ELECTRIC

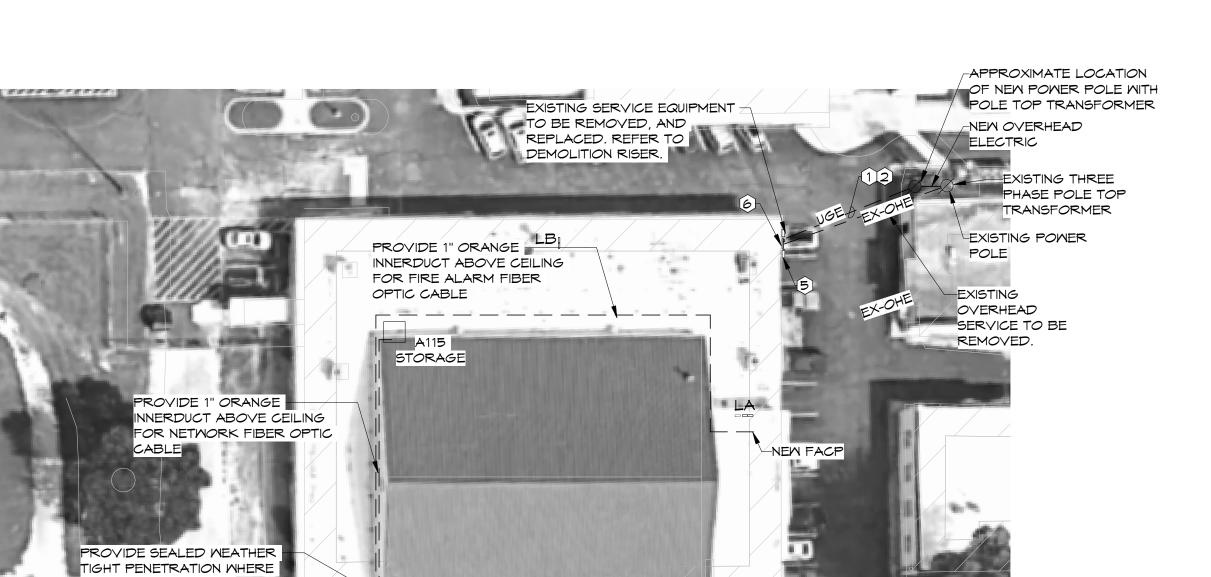
POWER POLE

UTILITY CONTACTS:

AEP/SWEPCO CHRIS ANDREOLLI (479) 973-2434

KEYED ELECTRICAL SITE NOTES (THIS SHEET ONLY)

- 1 ELECTRICAL SERVICE, REFER TO GENERAL NOTE 1, AND 2 FOR INSTALLATION. REFER TO RISER DIAGRAM FOR CONDUIT AND WIRE SIZES.
- 2 IDENTIFY OUTDOOR UNDERGROUND LINES WITH CONTINUOUS STRIP OF PLASTIC UTILITY MARKER. TAPE SHOULD STATE AT REGULAR INTERVALS: "CAUTION (STATE UTILITY) PIPE BELOW". INSTALL TAPE ONE FOOT DIRECTLY ABOVE PIPE BEFORE BACKFILLING TO GRADE.
- 3) PROVIDE 2-2" CONDUITS FOR FIBER OPTIC CABLE & FIRE ALAM CONNECTION, INSTALL ON TOP OF EXISTING CANOPY. PROVIDE WEATHER RESISTANT PULL BOXES AS REQUIRED. COORDINATE WITH FIBER INSTALLER.
- PROVIDE AND INSTALL FIBER OPTIC CABLE FROM MDF RACK TO NEW IDF RACK IN STORAGE A115. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- NEW EXTERIOR DISCONNECTS REFER TO ELECTRICAL RISER FOR REQUIREMENTS.
- NEW UTILITY CO METER & CT CAN, COORDINATE INSTALLATION AND REQUIREMENTS WITH AEP.
- 7 PROVIDE AND INSTALL FIBER OPTIC CABLE FROM NEW FACP IN GYM TO EXISTING FACP SCHOOL BUIDLING. REFER TO STRUCTURED CABLING SPECIFICATIONS FOR FIBER OPTIC CABLING TYPE.





ELECTRICAL SITE PLAN

1" = 30'-0"



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ELECTRICAL SITE PLAN S H E E T

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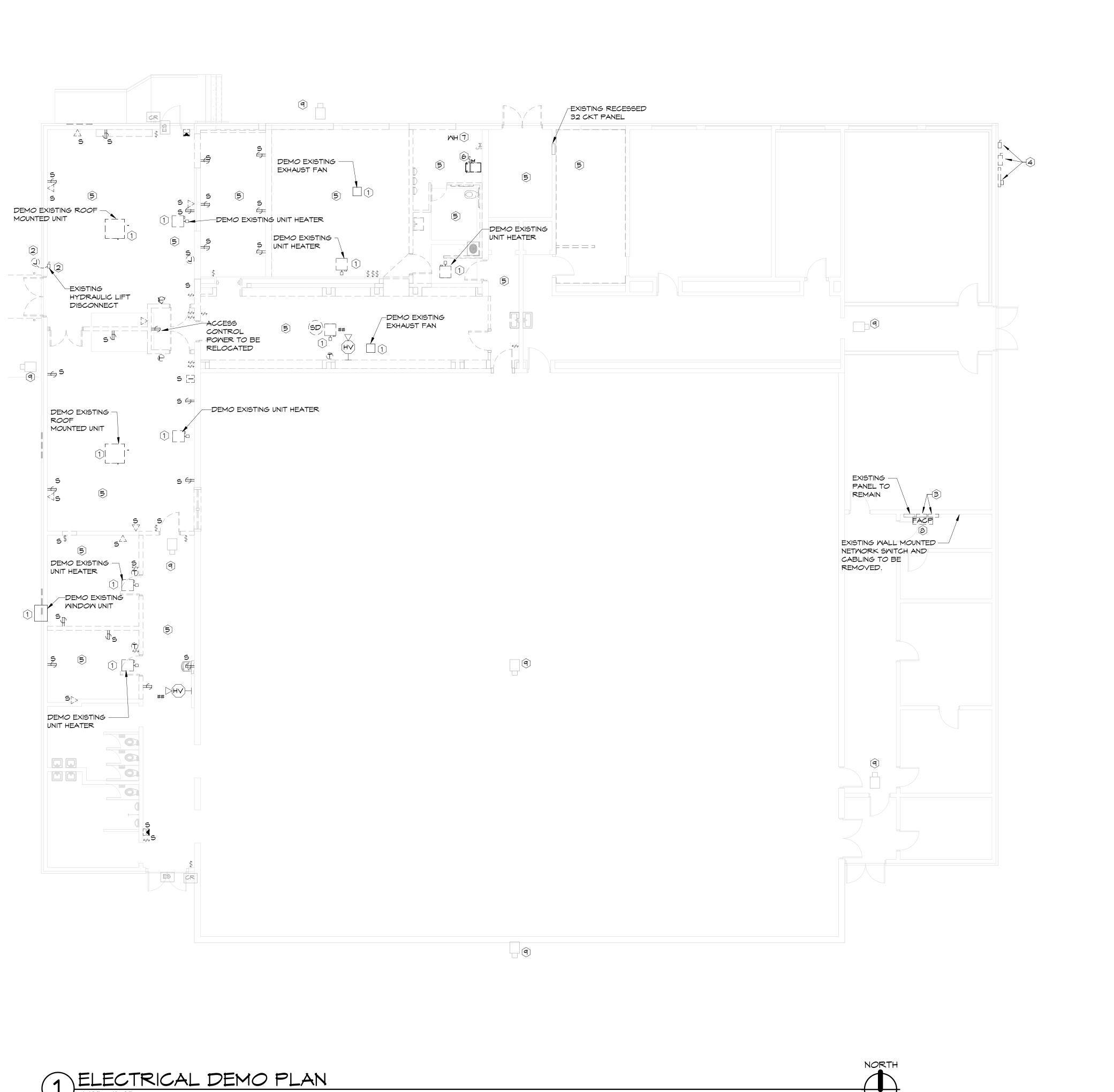
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CONDUITS ENTER THE



DEMOLITION LEGEND

- ELECTRICAL DEVICES WITH DASHED LINES ARE TO BE DEMOLISHED; DISCONNECT REMOVE CONDUIT AND WIRE BACK TO JUNCTION POINT. MAINTAIN CONTINUITY TO REMAINING DEVICES ON THAT CIRCUIT. FIELD VERIFY EXISTING CONDITIONS.
- GRAYED OUT ELECTRICAL DEVICES ARE TO BE REMOVED AND REPLACED WITH NEW DEVICES

ELECTRICAL DEMOLITION GENERAL NOTES

- 1. FOR ALL DEVICES IN WALLS/MILLWORK BEING DEMOLISHED: DISCONNECT REMOVE CONDUIT AND WIRE BACK TO JUNCTION POINT. MAINTAIN CONTINUITY TO REMAINING DEVICES ON THAT CIRCUIT.
- 2. REMOVE ALL DEVICES IN CEILINGS THAT ARE TO BE DEMOLISHED: DISCONNECT REMOVE CONDUIT AND WIRE BACK TO JUNCTION POINT. MAINTAIN CONTINUITY TO REMAINING DEVICES ON THAT CIRCUIT.
- 3. ALL DEVICES AND COVER PLATES SHALL BE REMOVED THROUGHOUT THE SPACE BEING REMODELED. NEW DEVICES AND COVER PLATES SHALL BE INSTALLED.
- 4. ALL EXISTING SURFACE MOUNTED RACEWAY AND DEVICES ARE TO BE REMOVED IN ALL SPACES BEING
- REMODELED. 5. ALL EXISTING LIGHT FIXTURES AND LIGHTING CONTROL DEVICES IN RENOVATED AREA ARE TO BE REMOVED
- AND DISPOSED OF UNLESS OTHERWISE NOTED. 6. FOR ALL UNUSED CIRCUITS, REMOVE CONDUIT AND WIRE BACK TO SOURCE, LABEL BREAKER AS SPARE.
- 7. REFER TO ARCHITECTURAL DRAWINGS FOR AREAS TO BE DEMOLISHED 8. GRAYED OUT DEVICES SHOW EXISTING TO REMAIN DEVICE LOCATIONS. ALL EXISTING DEVICES ARE TO BE
- REPLACED. 9. DEVICES SHOWN AS BOLD OR DASHED ARE TO BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED.
- 10. FIELD VERIFY ALL EXISTING CONDITIONS. 11. REMOVE POWER TO ALL EXISTING EQUIPMENT TO BE DEMOLISHED, COORDINATE WITH ALL TRADES.
- 12. FOR ALL EXISTING WIFI DEVICES REMOVE AND DISPOSE OF PER THE OWNERS DIRECTION. ALL WIFI DEVICES ARE TO BE REPLACED WITH NEW.
- 13. REMOVE ALL EXISTING DATA CABLING THROUGHOUT THE ENTIRE BUILDING. COORDINATE WITH THE OWNER. ALL DATA CABLING THROUGHOUT THE BUILDING IS TO BE REPLACED.
- 14. DISCONNECT AND REMOVE ALL FIRE ALARM DEVICES AND PANEL THROUGH ENTIRE BUILDING PROVIDE BLANK COVER FOR UNUSED JUNCTION BOXES IN CONCRETE AND MASONRY WALLS.
- 15. DEMO EXISTING INTERCOM CALL STATIONS, AND SPEAKERS IN ROOMS BEING REMODELED. AT EVERY INTERCOM CALL STATION THE BOX IS TO BE REMOVED AND MASONRY WALL IS TO BE PATCHED TO COVER

KEYED ELECTRICAL DEMOLITION NOTES

- 1 REMOVE POWER TO ALL EXISTING EQUIPMENT TO BE DEMOLISHED, COORDINATE WITH ALL TRADES.
- 2 EXISTING HYDRAULIC LIFT TP BE REMOVED, DISCONNECT AND REMOVE ALL CONDUIT WIRE AND ASSOCIATED CONTROLS BACK TO SOURCE LABEL BREAKER AS SPARE.
- 3 EXISTING FUSED AND BREAKER PANELS ARE TO BE REMOVED, ALL EXISTING CIRCUITS THAT ARE TO REMAIN WILL BE FED FROM A NEW PANEL INSTALLED IN PLACE. PROVIDE NEW GROUND WIRE OR BRANCH CIRCUIT FEEDER AS REQUIRED, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR TRACING OUT ALL EXISTING CIRCUITS BEING REMORKED. PROVIDE LABELS IN PANEL FOR ALL EXISTING CIRCUITS. FIELD VERIFY EXISTING CONDITIONS. EXTEND ALL CONDUCTORS AND CONDUIT AS NECESSARY.
- (4) EXISTING METER AND SERVICE DISCONNECTS TO BE REMOVED AND REPLACED REFER TO ELECTRICAL RISERS AND POWER PLANS FOR LOCATION AND ADDITIONAL INFORMATION.
- (5) REMOVE EXISTING LIGHTS AND CONTROLS IN SPACE.
- (6) EXISTING FURNACE TO BE RELOCATED, SPLICE AND EXTEND EXISTING CIRCUIT AS REQUIRED.
- (7) EXISTING WATER HEATER TO BE DISCONNECTED AND RECONNECTED, COORDINATE WITH PLUMBING
- 8 EXISTING FIRE ALARM CONTROL PANEL TO BE REMOVED.
- 9 PROVIDE NEW DATA CABLE TO EXISTING CAMERA.

SUBSCRIPTS: ER= EXISTING TO REMAIN RE= REMOVE EXISTING RRE= REMOVE AND RELOCATE EXISTING S= SURFACE MOUNT

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ELECTRICAL DEMO PLAN

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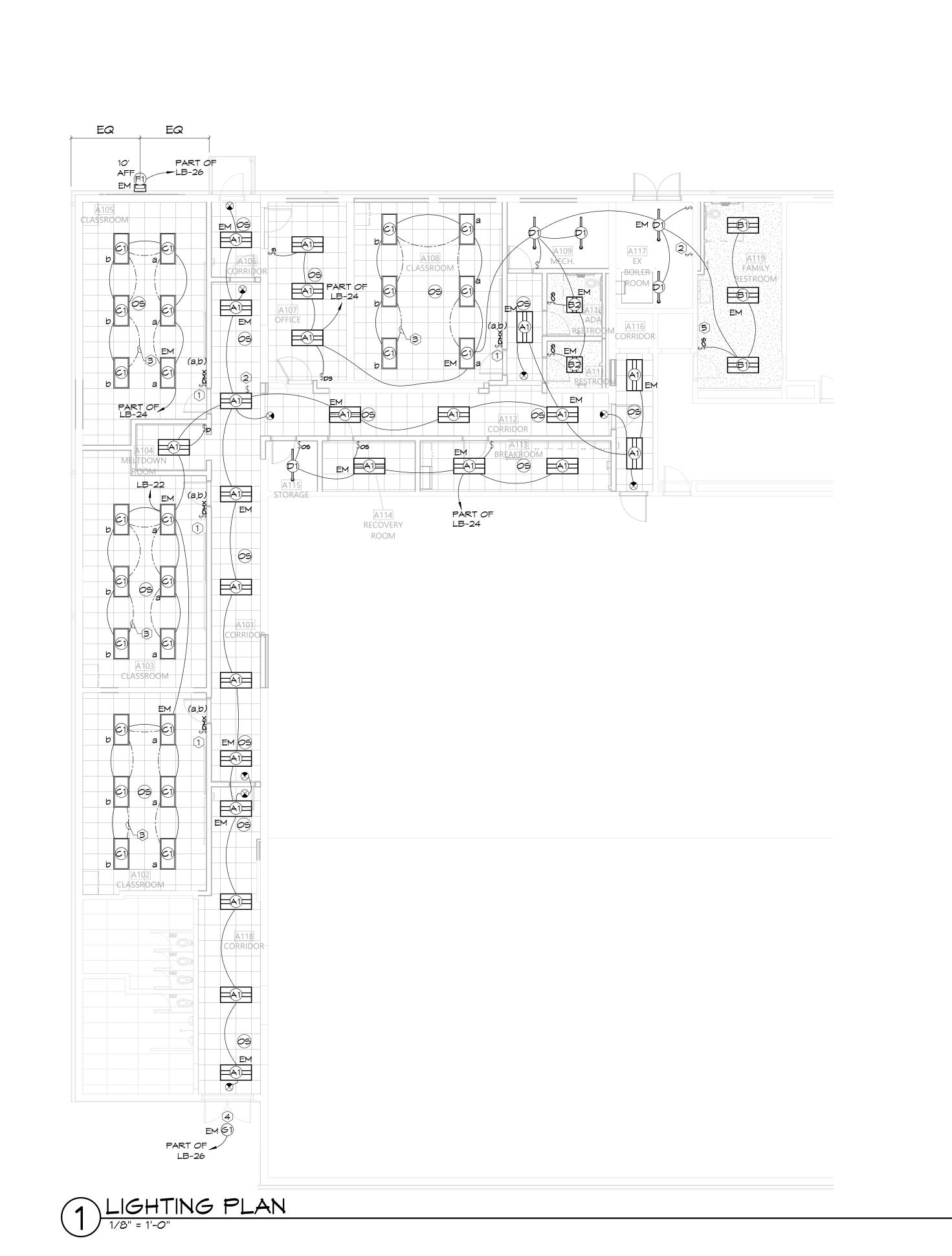
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GENERAL LIGHTING NOTES

- 1. ZONES FOR DMX CONTROLLED LIGHTING NOTED BY LOWER CASE LETTERS(a,b), PROVIDE ALL PROGRAMMING AND SET UP OF CONTROLLER AND ZONES. ZONES LISTED BELOW. LIGHTING CONTROL ZONES - CONTROLLER ROOM
- A. ROOM A102 CLASSROOM
- a. TEACHING WALL(3 FIXTURES) b. CLASSROOM LIGHTS(3 FIXTURES)
- B. ROOM A103 CLASSROOM
- a. TEACHING MALL(3 FIXTURES) b. CLASSROOM LIGHTS(3 FIXTURES)
- C. ROOM A105 CLASSROOM a. TEACHING WALL(3 FIXTURES)
- b. CLASSROOM LIGHTS(3 FIXTURES) D. ROOM A108 CLASSROOM
- a. TEACHING WALL(3 FIXTURES) b. CLASSROOM LIGHTS(3 FIXTURES)

KEYED LIGHTING NOTES

- (1) PROVIDE AND INSTALL DMX CONTROLLER MODEL "STICK-DE3" OR EQUAL, PROVIDE TWO GANG, DEEP BOX FOR MOUNTING, MOUNT POWER SUPPLY IN BACK BOX. PROVIDE ALL LOW VOLTAGE CABLING AND PROGRAMMING REQUIRED. ELECTRICAL CONTRACTOR TO PROVIDE OWNER TRAINING FOR CONTROLLER OPERATION.
- 2 SMITCH FOR ROOMS 101, 106, 112, AND 118 IS LOCATED IN ROOM A117 EX BOILER. PROVIDE A LABEL FOR SWITCH WITH THE CORRESPONDING ROOM NUMBERS.
- 3 3/4" CONDUIT AND DMX CABLE BETWEEN FIXTURES, DAISY CHAIN FIXTURES TOGETHER.
- (4) RUN CONDUIT ON TOP OF EXISTING CANOPY. CONDUIT PENETRATING THE ROOF IS TO BE WATER TIGHT.
- (5) INSTALL NEW SWITCH IN EXISTING JUNCTION BOX.

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ELECTRICAL LIGHTING PLAN S H E E T

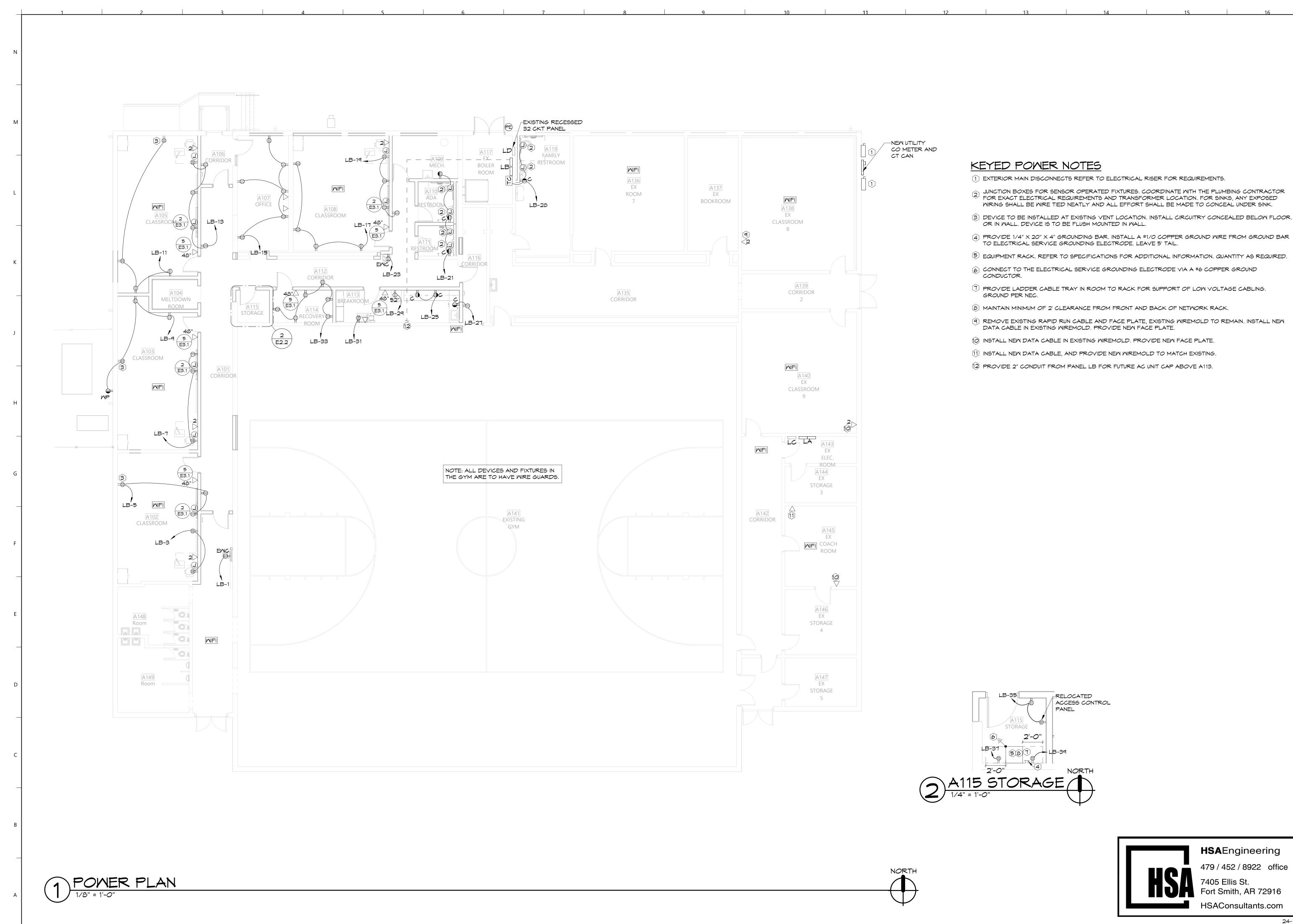
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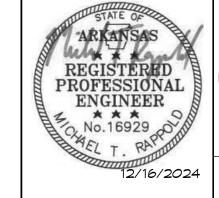
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ELECTRICAL POWER PLAN

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KEYED MECHANICAL POWER NOTES

- 1 UNIT PROVIDED WITH FACTORY MOUNTED DISCONNECT.
- 2 INTERLOCK EXHAUST FAN WITH LIGHTS IN SPACE.
- 3 EXHAUST FAN OPERATES VIA LINE VOLTAGE THERMOSTAT.
- 4 CONNECT TO EXISTING CIRCUIT, SPLICE AND EXTEND CIRCUIT AS REQUIRED.



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1 MECHECHANICAL POWER PLAN

1/8" = 1'-0"



REGISTERED PROFESSIONAL ENGINEER No.16929

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A NEW FACILITY FOR

SPECIAL SYSTEMS PLAN S H E E T

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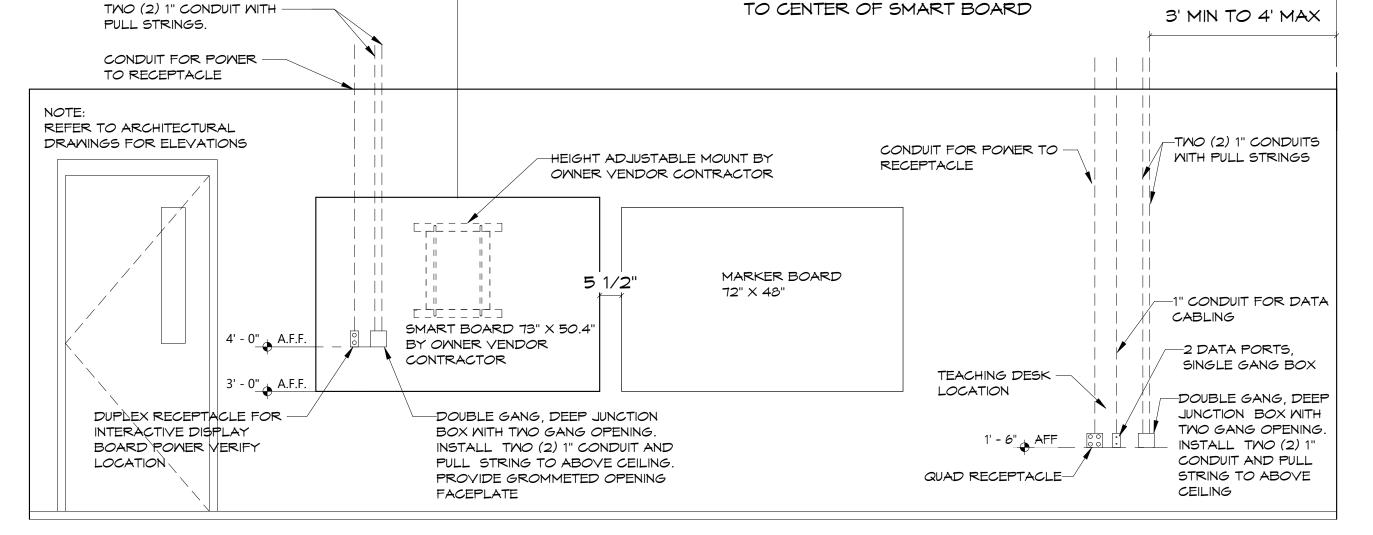
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SPECIAL SYSTEMS PLAN

MOUNTING HEIG	нтѕ	
ELECTRICAL OUTLET DEVICE TYPE	MASONRY WALL, BASE (STARTER) COURSE HEIGHT 4 INCH / 8 INCH MOUNTING HEIGHT ABOVE	SHEETROCK WALL, BASE MOUNTING HEIGHT ABOVE FLOOR TO BOTTOM OF OUTLET (DEVICE) BOX
* RECEPTACLES OUTLETS, MICROPHONE OUTLETS (JACKS), EQUIPMENT OUTLETS (JACKS), TELEVISION OUTLETS (JACKS), PORTABLE TELEPHONE OUTLETS, COMPUTER OUTLETS, ETC.	FLOOR TO BOTTOM OF OUTLET (DEVICE) BOX	
* GENERAL DEVICE THROUGHOUT	18"	18"
* MECHANICAL EQUIPMENT ROOMS	52"	48"
* ABOVE 24" HIGH COUNTER TOPS	30"	32"
* ABOVE 30" HIGH COUNTER TOPS	36"	40"
* ABOVE 36" HIGH COUNTER TOPS	44"	44"
* ABOVE 48" HIGH COUNTER TOPS	52"	56"
* ABOVE BACKSPLASH TOP	2" (MINIMUM)	2" (MINIMUM)
* ABOVE OR ADJACENT TO LAVATORIES	44"	44"
* BEHIND DOMESTIC REFRIGERATORS	52"	56"
* BEHIND DOMESTIC WASHERS AND DRYERS	36"	32"
* SERVING DOMESTIC DISHWASHERS	2"	2"
* WALL-MOUNTED TELEPHONE OUTLETS	44"	44"
* TELEPHONE/VIDEO CONTROL	44"	44"
TOGGLE SMITCHES	44"	44"
RECESSED MOTOR CONTROLLERS	44"	44"
ELECTRICAL PANELS, TERMINAL CABINETS, ETC., TO CENTER OF TUB OR BOX	50"	48"
MALL SMITCHES	44"	44"
HVAC THERMOSTAT/SENSOR	44"	44"
VOLUME CONTROLS, CALL-IN SWITCHES, DOOR BELL BUTTONS	44"	44"
HORN/STROBES (FIRE ALARM)	80"	80"
* PULL STATIONS (FIRE ALARM)	42" MINIMUM 48" MAXIMUM	42" MINIMUM 48" MAXIMUM

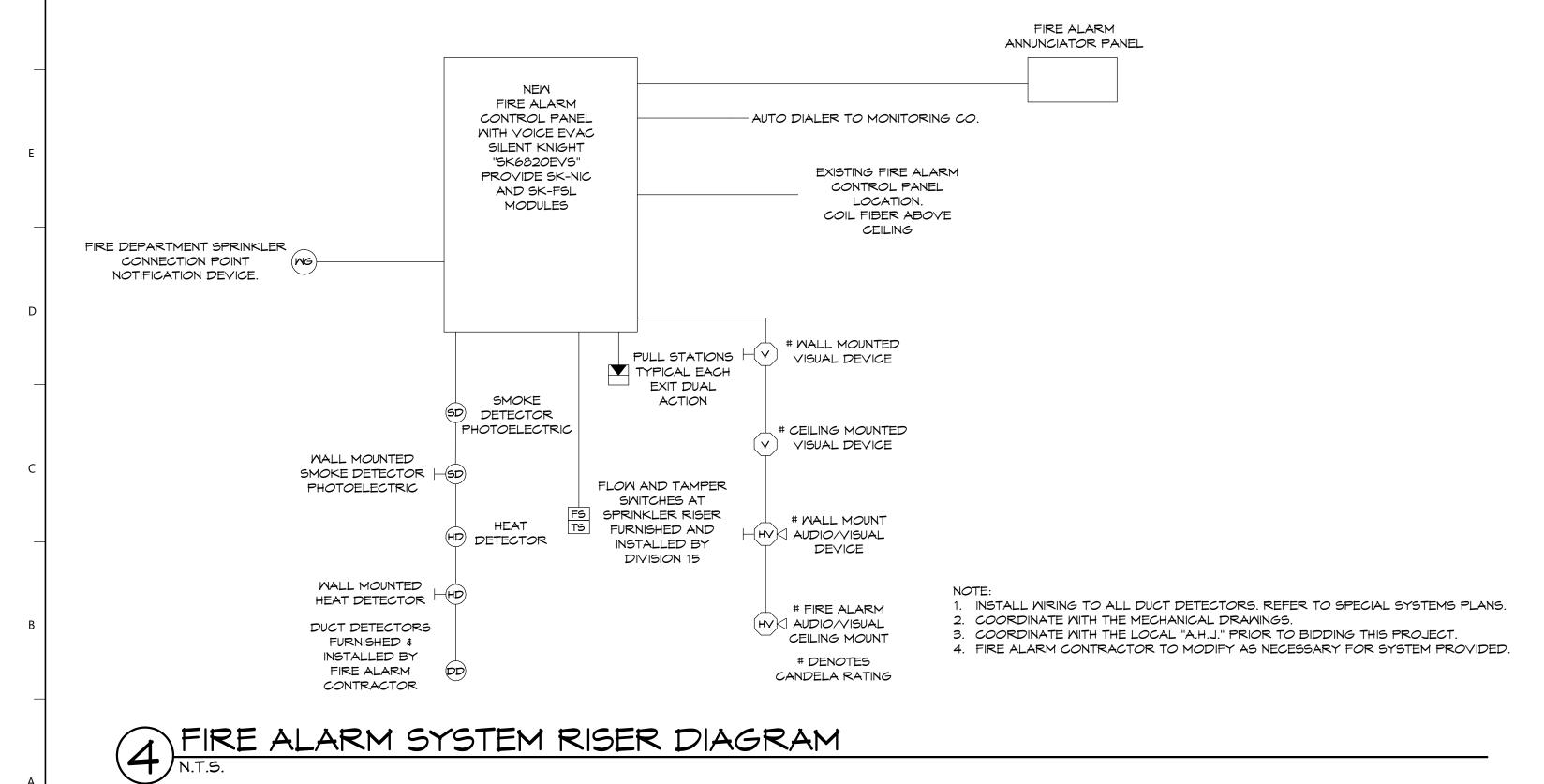
NOTE: VERIFY ALL MILLMORK LOCATIONS WITH THE ARCHITECTURAL MILLMORK DRAWINGS PRIOR TO ROUGH-IN. * OPERATING HANDLE TO BE MOUNTED NO LESS THAN 42" OR NO MORE THAN 48" A.F.F.

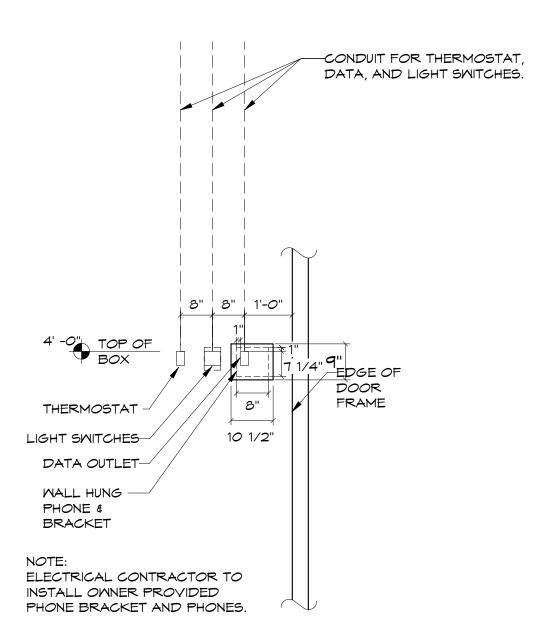
1 MOUNTING HEIGHT TABLE



SEE ARCH SPECIALTY PLAN FOR DIMENSIONS

2 TEACHING WALL & DESK DETAIL
N.T.S.







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ELECTRICAL DETAILS S H E E T

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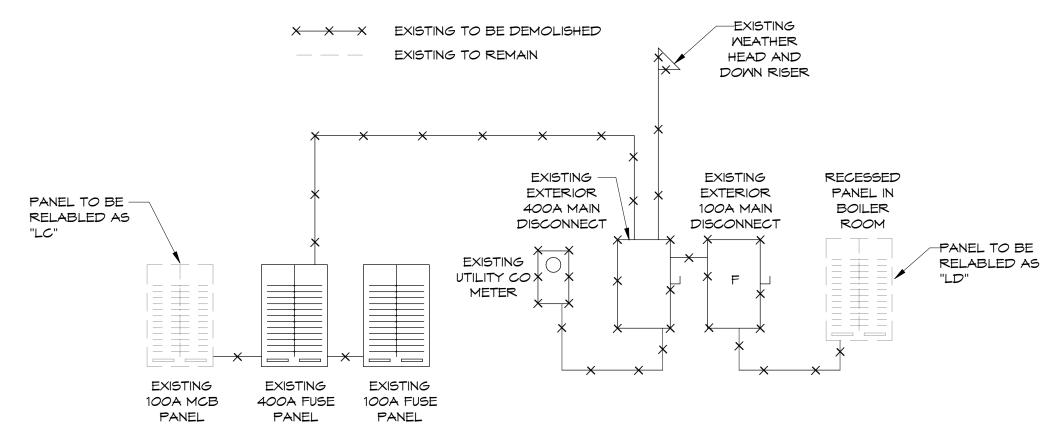
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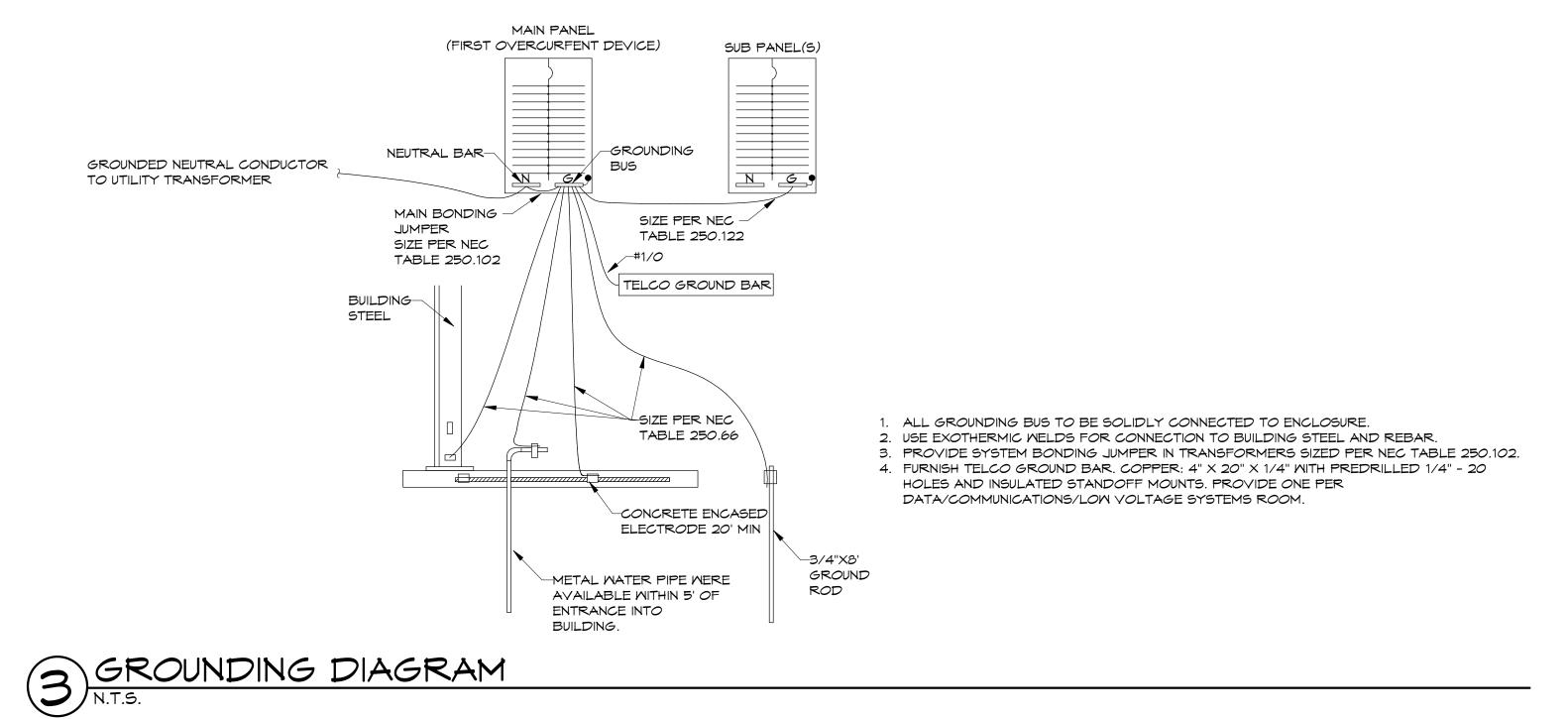
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DEMO RISER LEGEND



DEMOLITION ELECTRICAL RISER DIAGRAM

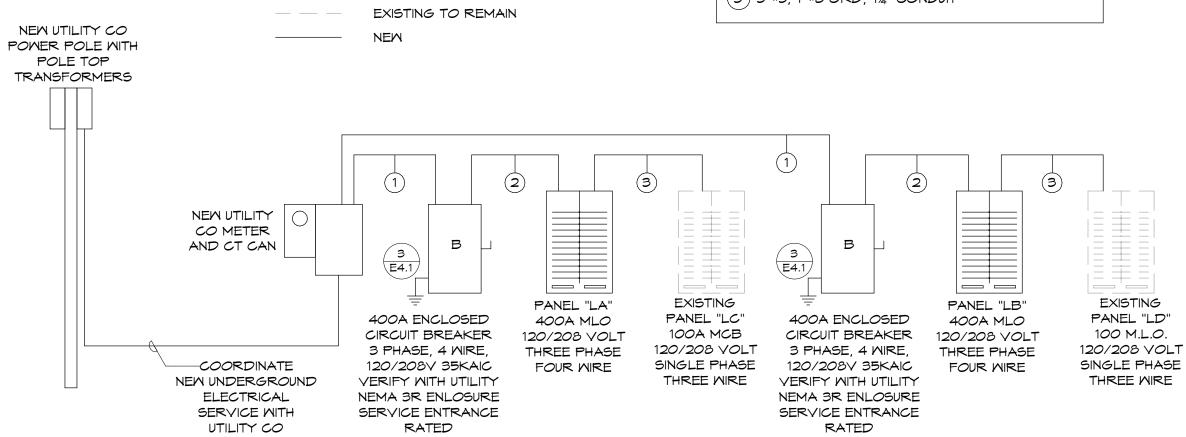


FEEDER SCHEDULE

(1) 2 SETS: 4-#3/0; 2" CONDUIT EACH

(2) 2 SETS: 4-#3/0, 1-#3 GRD; 2" CONDUIT EACH

(3) 3-#3, 1-#8 GRD; 11/4" CONDUIT



NEW ELECTRICAL RISER DIAGRAM
N.T.S.

RISER LEGEND

1 MARNING

MAXIMUM AVAILABLE FAULT CURRENT: (SYMMETRICAL RMS AMPERES)

DATE: XX/XX/XX

NOTES:

- 1. LABEL SHALL BE ATTACHED TO ELETRICAL SERVICE
- EQUIPMENT PER NEC 110.24. 2. PROVIDE DURABLE WEATHERPROOF LABEL.
- 3. LABEL IS SHOWN TO SCALE. 4. ELECTRICAL CONTRACTOR SHALL COORDINATE AVAILABLE FAULT CURRENT WITH UTILITY AND COMPLETE LABEL ACCORDINGLY

FAULT CURRENT LABEL
N.T.S.

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ELECTRICAL RISER DIAGRAMS SHEET

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								L	IGHTING FIXTURE SCHEDULE	
	V 01 F	1413 TT	LAMP		MOUNT	TING				
MARK	VOLT	MAII		BRK	T PEN	REC	SUF	MANUFACTURER	CATALOG NO.	REMARKS
								H.E. WILLIAMS	LT-24-L64/840-AF-DIM-UNV	2'X4' LED DIRECT INDIRECT TROFFER, 6500 LUMEN OUTPUT. 0-10V
A1	UNY	49	 4000K			X		ELITE LIGHTING	24-0VHP-LED-6500L-DIM10-MV0LT-40K-85	
								METALUX	24CZ2-65-5-UNV-L840-CD1-U	
								H.E. MILLIAMS	LT-24-L64/840-AF-(L55)-DFK-2448M-DIM-UNV	2'X4' LED DIRECT INDIRECT TROFFER, 5500 LUMEN OUTPUT. 0-10V
B1	UNY	41	 4000K			X		ELITE LIGHTING	24-0VHP-LED-6000L-DIM10-MV0LT-40K-85-24FK	DIMMING, GYP BOARD FLANGE KIT
								METALUX	24CZ2-55-S-UNV-L840-CD1-U / DF-24M-U	
								H.E. MILLIAMS	LT-22-L61/840-AF-(L55)-DFK-2424W-DIM-UNV	2'X2' LED DIRECT INDIRECT TROFFER, 5500 LUMEN OUTPUT. 0-10V
B2	UNY	40	 4000K			×		ELITE LIGHTING	22-0VHP-LED-5000L-DIM10-MV0LT-40K-85-22FK	DIMMING, GYP BOARD FLANGE KIT
								METALUX	22CZ2-55VHE-S-UNV-L840-CD1-U / DF-22M-U	
								CORONET	TSSM-2X4-RGBM**-HIGH-UNV-DB-M-**-SD-NA-NA-NA	2'X4' LED DIRECT INDIRECT TROFFER, RGBM WITH DMX DRIVER, 6700
C1	UNV	56	 RGBM			×		ELITE LIGHTING	24-0VHP-LED-RGBW-60K-18K-8000L-ELD0DMX.1-MV0LT-40K-85	LUMEN OUTPUT.
								DAY-O-LITE	NASL-2062-D-WOA-RGBW-SO-24-G-W-DIM10	
								H.E. MILLIAMS	75R-4-L50/840-(L46)-(2)VBY-3/PWU-DIM-UNV	4' UTILITY STRIP LIGHT, 4600 LUMENS, CHAIN HUNG TO 10' AFF UNLESS
D1	UNY	40	 4000K		×			ELITE LIGHTING	4-0C1-LED-5000L-DIM10-MV0LT-40K-85 0CVH	OTHERWISE NOTED.
								METALUX	4ST2L4O4OR-AYC-CHAIN/SET	
								MULE LIGHTING	PVT-U-A-G-S/R-BA	EXIT SIGN, EDGE LIT, UNIVERSAL MOUNT- SEE PLANS FOR NUMBER OF SIDES
EXIT	UNY	5	 4000K				×	ELITE LIGHTING	ELX-611-G-AL-2-CL	AND CHEVRONS. REQUIRES UNSWITCHED HOT WIRE.
								BARR <i>O</i> N	S900U-WB-SR-CTBS-AG	
								LSI	XMS-LED-8L-SIL-FT-UNV-DIM-40-70CRI-CTBS	18" WALL PACK, 8200 LUMEN OUTPUT, TYPE 4W DISTRIBUTION, REFER TO
F1	UNV	60	 4000K				×	ELITE LIGHTING	OMP-FC-207-LED-MVOLT-40K-T4D-CTBS	PLANS FOR MOUNTING HEIGHTS.
								MCGRAW EDISON	GMC-SA1-D-740-U-T4M-CTBS	
								H.E. MILLIAMS	VG1-L30/840-T5-CT-CTBS-EM/6WC-DIM-UNV	SURFACE MOUNT CANOPY LIGHT, 3000 LUMEN OUTPUT, TYPE 5
G 1	UNY	40	 4000K				×	ELITE LIGHTING	OVR-103-LED-4000L-DIM10-MVOLT-40K-CTB5-10EMG-LED	DISTRIBUTION.
								MCGRAW EDISON	CLC515	

Fault Rating: 22K AIC

Fed From: SERVICE DISCONNECT

Location: EX ELEC. ROOM A143

COND WIRE GRD. # OF

NOTE: HOLD ALL INSULATION OFF RECESSED FIXTURES AT A MINIMUM OF 3" TO THE SIDE.

NOTE : EXIT LIGHTS AND EMERGENCY LIGHTS REQUIRES UNSWITCHED HOT WIRE PER MANUFACTURER RECOMMENDATION

NOTE : FIXTURES MARKED AS "CTBS" REQUIRE STANDARD FINISHED SELECTED BY THE ARCHITECT.

NOTE : FOR ALL FIXTURES WITH O-10V DIMMING, PROVIDE LOW VOLTAGE CABLE. NOTE : FIXTURES MARKED NL REQUIRE UNSMITCHED HOT WIRE.

NOTE : ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL LED AND DRIVER COMBINATIONS THAT WILL PROVIDE THE OWNER WITH A FIVE YEAR WARRANTY ON THE FIXTURE.

NOTE: FIELD VERIFY ALL FIXTURE LENGTHS NOTES AS LENGTH PER PLANS. PROVIDE CONTINUOUS RUNS OF FIXTURES. COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND THE ARCHITECT. NOTE: ORDER OF LIGHT FIXTURE MANUFACTURES IN SCHEDULE DOES NOT RELATE TO ANY ORDER OF

IMPORTANCE ON PREFERENCE. ALL LIGHT FIXTURE MANUFACTURERS LISTED ARE ACCEPTABLE AND

MEANT TO BE EQUIVALENT. NOTE: EM OR NL DENOTES EMERGENCY BATTERY PACK GOOD FOR MINIMUM OF 1.5 HOURS.

PANEL SCHEDULE

Panel Name: LB Amp Rating: 400 A Mains: MLO MCB Rating: N/A **Volts/Phase/Wire** 120/208 Mye / 3 / 4

Manufacturer: SQUARE D Panel Type: NQ Mounting: Surface Remarks: CU BUS

Fault Rating: 22K AIC Fed From: SERVICE DISCONNECT Location: EX BOILER ROOM A117

OF GRD. WIRE COND

	COND	IAIIDE	(80	# 05					В		c					# OF	<u>]</u>	SRD. WIRE CON			
Circuit Description					Poles	TRIP	CKT	,	`		,			CKT	TRIP	Poles	# OF Mires			. SIZE	
EXISTING					1	30	1	0	0					2	20	1					EXISTING
EXISTING					1	30	3			0	0			4	20	1					EXISTING
EXISTING					1	20	5					0	0	6	20	1					EXISTING
EXISTING					1	20	7	0	0					8	20	1					EXISTING
EXISTING					2	20	9			0	0			10	20	1					EXISTING
							11					0	0	12	20	1					EXISTING
EXISTING					2	20	13	0	0					14	20	1					EXISTING
							15			0	0			16	20	1					EXISTING
EXISTING					1	20	17					0	0	18	20	1					EXISTING
EXISTING					1	20	19	0	0					20	20	1					EXISTING
Spare					2	30	21			0	0			22	20	2					EXISTING
							23					0	0	24							
Spare					2	30	25	0	0					26	15	1					EXISTING
							27			0	0			28	30	1					EXISTING
Spare					2	20	29					0	0	30	30	1					EXISTING
							31	0	0					32	30	1					EXISTING
Spare					2	20	33			0	0			34	30	1					EXISTING
							35					0	0	36	30	1					EXISTING
FACP	3/4	12	12	3	1	20	37	200	0					38	30	1					EXISTING
Spare					1	20	39			0	0			40	25	1					EXISTING
Spare					1	20	41					0	0	42	25	1					EXISTING
Spare					1	20	43	0	0					44	15	1					EXISTING
Spare					1	20	45			0	0			46	20	1					Spare
Spare					1	20	47					0	0	48	20	1					Spare
Spare					1	20	49	0	0					50	20	1					Spare
Spare					1	20	51			0	0			52	20	1					Spare
Spare					1	20	53					0	0	54	20	1					Spare
Spare					1	20	55	0	0					56	20	1					Spare
Spare					1	20	57			0	0			58	20	1					Spare
Spare					1	20	59					0	0	60	20	1					Spare
Spare					1	20	61	0	0	_	_			62	20	1					Spare
Spare					1	20	63			0	0	_	_	64	20	1					Spare
Spare					1	20	65					0	0	66	20	1					Spare
Spare					1	20	67	0	0	_	_			68	20	1					Spare
Spare					1	20	69			0	0			70	20	1					Spare
Spare					1	20	71					0	0	72	20	1					Spare
Spare					1	20	73	0	0	_	_			74	20	1					Spare
PANEL "LC"	*	*	*	4	2	100	75			0	0			76	30	2					Spare
							77					0	0	78							
FUTURE GYM HVAC UNIT					3	200	79	0	0					80	25	2					Spare
							81			0	0			82							
							83	200	2 \ / A	2 ,	/ \	0	0	84	20	1					Spare
							Load:	200		0\		0\									
						Total .	Amps:	2	A	0	A	0	A								

PANEL SCHEDULE

Manufacturer: SQUARE D

Mounting: Surface

Remarks: CU BUS

Panel Type: NQ

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel To	otals	
Lighting	O VA	0.00%	O VA			
Receptacle	O VA	0.00%	O VA	Total Conn. Load: 2	00 VA	
HVAC	O VA	0.00%	O VA	Total Est. Demand: 2	00 VA	
Motor	O VA	0.00%	O VA	Total Conn. Current: 1	A	
Other	200 VA	100.00%	200 VA	Total Est. Demand Current: 1	A	
Kitchen	OVA	0.00%	O VA			

PANEL SCHEDULE DOES NOT SHOW EXISTING LOADS.

Panel Name: LA

Amp Rating: 400 A

MCB Rating: N/A

Mains: MLO

Volts/Phase/Wire 120/208 Wye / 3 / 4

ALL BREAKERS LABELED EXISTING ARE EXISTING CIRCUITS TO BE RECONNECTED/REFED.

*REFER TO ELECTRICAL RISER FOR WIRE, GROUND, AND CONDUIT SIZES.

	Circuit Description	. SIZE	SIZE	SIZE	Mires	Poles	TRIP	CKT							CKT	TRIP F	oles	Mires	SIZE	SIZE	. SIZE	Circuit Description
	*EMC	3/4	10	10	3	1	20	1	180	4248					2	50	3	5	10	8	3/4	DOAS-1
	R-RM: 102 CLASSROOM	3/4	10	10	3	1	20	3			720	4248			4							
	R-RM: 102 CLASSROOM	3/4	10	10	3	1	20	5					720	4248	6							
	R-RM: 103 CLASSROOM	3/4	10	10	3	1	20	7	720	7092					8	60	3	5	10	6	3/4	VRV-1
	R-RM: 103 CLASSROOM	3/4	10	10	3	1	20	9			900	7092			10							
	R-RM: 105 CLASSROOM	3/4	10	10	3	1	20	11					1080	7092	12							
	R-RM: 105 CLASSROOM	3/4	12	12	3	1	20	13	1080	908					14	15	2	4	12	12	3/4	FC1-1 - FC1-9, BS-1
	R-RM: 107 OFFICE	3/4	12	12	3	1	20	15			1080	908			16							
	R-RM: 108 CLASSROOM	3/4	12	12	3	1	20	17					720	2500	18	30	2	4	10	10	3/4	MH-1
	R-RM: 108 CLASSROOM	3/4	12	12	3	1	20	19	900	2500					20							
]	R-RMS: 109, 110, 111	3/4	12	12	3	1	20	21			560	1594			22	20	1	3	10	10	3/4	L-RMS: 101-104,106,116,118
	*EMC	3/4	12	12	3	1	20	23					600	1475	24	20	1	3	12	12	3/4	L-RMS: 105,107-115, 117, 119
	R-RM: 113 BREAK ROOM	3/4	12	12	3	1	20	25	360	90					26	20	1	3	10	10	3/4	***EXTERIOR LIGHTING
	R-RM: 113 BREAK ROOM	3/4	12	12	3	1	20	27			360	490			28	20	1	3	12	12	3/4	R-RM: 119 FAMILY RESTROOM
	*R-RM: 113 BREAK ROOM	3/4	12	12	3	1	20	29					1200	0	30	100	2	4	**	**	**	PANEL "LD"
	R-RM: 113 BREAK ROOM	3/4	12	12	3	1	20	31	600	0					32							
	R-RM: 114 RECOVERY	3/4	12	12	3	1	20	33			1080	0			34	20	1					Spare
	R-RM: 115 STORAGE	3/4	12	12	3	1	20	35					540	0	36	20	1					Spare
	R-RM: 115 STORAGE	3/4	12	12	3	1	20	37	360	0					38	20	1					Spare
	R-RM: 115 STORAGE	3/4	12	12	3	1	20	39			360	0			40	20	1					Spare
	BAS PANEL	3/4	12	12	3	1	20	41					300	0	42	20	1					Spare
	Spare					1	20	43	0	0					44	30	2					Spare
	Spare					1	20	45			0	0			46							
	Spare					1	20	47					0	0	48	50	2					Spare
	Spare					1	20	49	0	0					50							
	Spare					1	20	51			0	0			52	20	2					Spare
	Spare					1	20	53					0	0	54							
	Spare					1	20	55	0	0					56	20	1					Spare
	Spare					1	20	57			0	0			58	20	1					Spare
	Spare					1	20	59					0	0	60	20	1					Spare
	Spare					1	20	61	0	0					62	20	1					Spare
	Spare					1	20	63			0	0			64	20	1					Spare
	Spare					1	20	65					0	0	66	20	1					Spare
	Spare					1	20	67	0	0					68	20	1					Spare
	Spare					1	20	69			0	0			70	20	1					Spare
	Spare					1	20	71					0	0	72	20	1					Spare
	Spare					1	20	73	0	0					74	20	1					Spare
	Spare					1	20	75			0	0			76	20	1					Spare
	Spare					1	20	77					0	0	78	20	1					Spare
	Spare					1	20	79	0	0					80	200	3					FUTURE GYM HVAC UNIT
	Spare					1	20	81			0	0			82							
	Spare					1	20	83					0	0	84							
1															1							· · · · · · · · · · · · · · · · · · ·

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel To	otals
Lighting	1474 VA	125.00%	1843 VA		
Receptacle	14280 VA	85.01%	12140 VA	Total Conn. Load: 58	8904 VA
HVAC	40950 VA	100.00%	40950 VA	Total Est. Demand: 5	7133 VA
Motor	O VA	0.00%	O VA	Total Conn. Current: 16	64 A
Other	2200 VA	100.00%	2200 VA	Total Est. Demand Current: 15	59 A
Kitchen	O VA	0.00%	O VA		

19392 VA

162 A

20475 VA

*REQUIRES GFCI BREAKER

REFER TO ELECTRICAL RISER FOR WIRE, GROUND, AND CONDUIT SIZES. *CIRCUIT CONTROLLED VIA PHOTOCELL ON, TIME CLOCK OFF. COORDINATE ON/OFF TIMES WITH OWNER.

HSAConsultants.com

24-11*0*

SHEET

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Total Load: 19038 VA

159 A

Total Amps:

ISSUE DATE

12/16/2024

at

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ENGINEER No.16929

12/16/2024

REVISION DATES

ELECTRICAL SCHEDULES

HSAEngineering 479 / 452 / 8922 office Fort Smith, AR 72916