# MENDENHALL COMMUNICATIONS SUITE RENOVATION

500 9TH STREET, GREENVILLE, NC 27858 SCO ID: 23-26440-01A



503 OBERLIN ROAD | SUITE 300 RALEIGH, NC 27605 919.833.3737 www.daviskane.com

PROJECT INFORMATIC

OMMUNIC



REVISIONS

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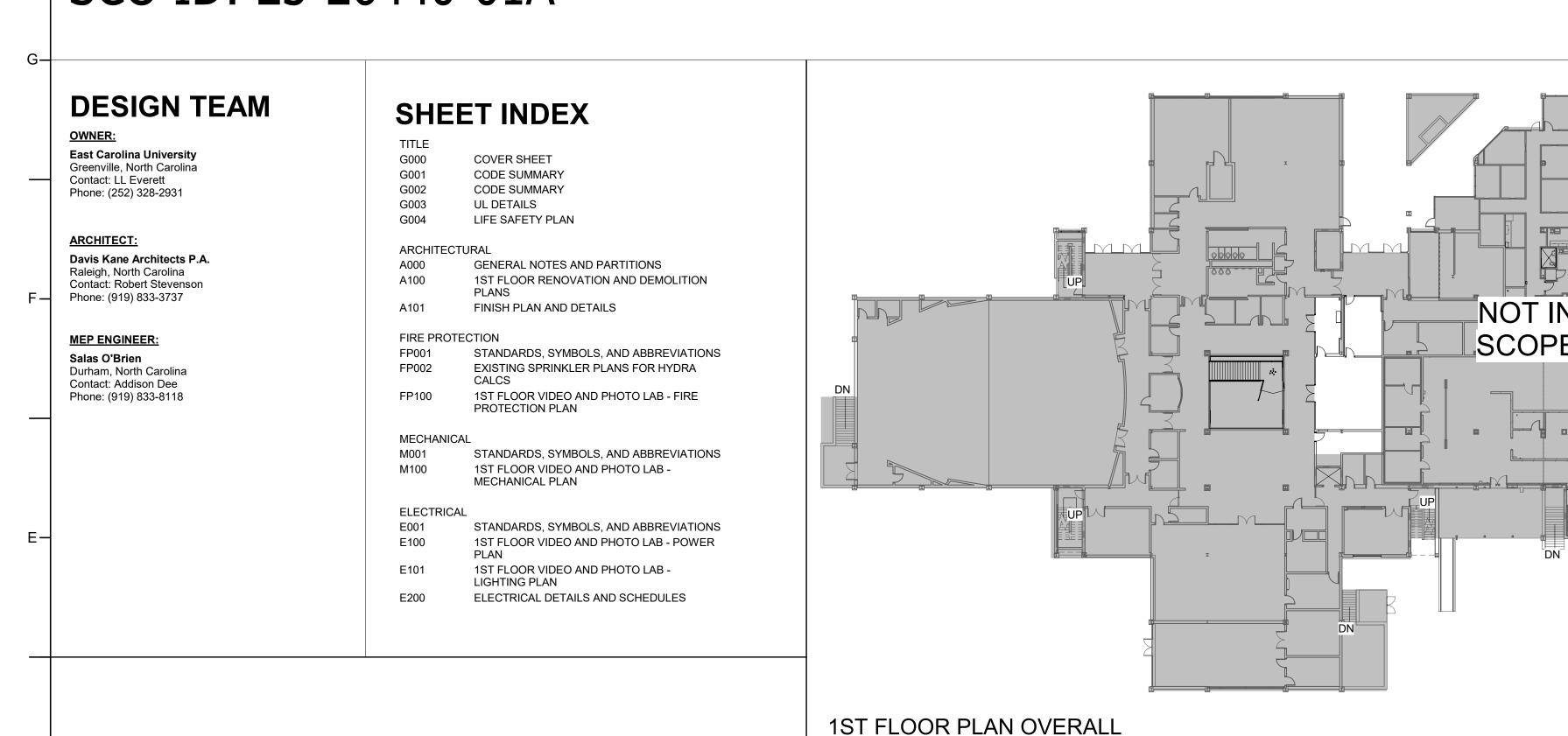
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DATE ISSUED

**BID DOCUMENTS** 

08/29/2023

SHEET TITLE **COVER SHEET** 



ANCHOR BOLT

**EXPANSION JOINT** 

**EXPANSION JOINT COVER** 

DI VICINITY MAP NOT TO SCALE **ABBREVIATIONS** PROJECT LOCATION -PLAN NORTH TRUE NORTH

ACCESS ACCESSORY ELEVATOR ACOUSTIC(AL) CEILING TILE ADJACENT EQUIPMENT ELECTRIC WATER COOLER ABOVE FINISHED FLOOR ALTERNATE EXIST EXISTING ALUMINUM EXPOSED ANODIZED EXTERIOR APPROXIMATE EXTG EXISTING ARCHITECTUR(AL) FACTORY FINISH AUDIO VISUAL FLOOR BOX FLOOR CLEAN OUT **BUILDING EXPANSION JOINT** FLOOR DRAIN BELOW FINISHED FLOOR FIRE EXTINGUISHER FURNITURE, FIXTURES & EQUIPMENT BUILDING FINISHED FLOOR ELEVATION BLOCKING BOTTOM OF DECK FLOOR FLUORESCENT BEARING FOUNDATION BASEMENT FACE OF CONCRETE FACE OF MASONRY CAST IRON GLASS FIBER REINFORCED PLASTIC CONTROL JOINT FIRE-RETARDANT-TREATED CENTER LINE FOOTING CEILING CLEAR CLASSROM GALVANIZED CONSTRUCTION MANAGER GENERAL CONTRACT(OR) CONCRETE MASONRY UNIT GLASS FIBER REINFORCED CONCRETE CLEAN OUT COLUMN GLAZING CONCRETE GYPSUM WALL BOARD CONSTRUCTION GYP BD GYPSUM BOARD CONTINUOUS CARPET CARD READER HEAVY DUTY COUNTER SUNK HARDWARE CERAMIC TILE HOLLOW METAL HORIZ HORIZONTAL DEPARTMENT DETAIL DIAMETER INSIDE DIAMETER DIMENSION INSIDE FACE DOWN SPOUT INSULATION DRAWING INTERIOR

ELEVATION

KICKPLATE

ELECTRIC(AL)

LUXURY VINYL TILE **MASONRY** MATERIAL MAXIMUM MECHANICAL MEMB MEMBRANE MFR MANUFACTURER MINIMUM MISCELLANEOUS MASONRY OPENING NOT APPLICABLE NOT IN CONTRCT NOMINAL NOT TO SCALE ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OVERHANG OVER HEAD OWNER PROVIDED CONTRACTOR OPENING(S) OPPOSITE PLASTIC LAMINATE PLYWOOD PAINT(ED) PROPERTY POUNDS / SQUARE FOOT POUNDS / SQUARE INCH PRESSURE-TREATED PARTITION PLOYVINYL CHLORIDE **QUARRY TILE** QUANTITY

LABORATORY

LAMINATE

LAVATORY

LINOLEUM

LOUVER

SIMILAR SOLID SURFACE SPECIFICATION(S) SPRINKLER SQUARE INCH STAINLESS STEEL SIGN TYPE STANDARD STEEL STORAGE STOREFRONT STRUCT STRUCTURAL SUSPENDED SYSTEM(S) TELEPHONE THRESHOLD TOP OF MASONRY TOP PF STEEL TYPICAL TERRAZZO UNLESS OTHERWISE NOTED UNINTERRUPTED POWER SUPPLY VINYL COMPOSITE TILE VERTICAL VERIFY IN FIELD WITHOUT WATER CLOSET

RETURN AIR RUBBER BASE REFLECTED CEILING PLAN

**ROOF DRAIN** 

WAINSCOT WELDED WIRE FABRIC WELDED WIRE MESH

SOLID CORE SQUARE FEET SPRAYED FIRE-RESISTIVE

ROOF DRAIN LEADER

STEEL REINFORC. BAR

REVISION(S) REVISED

REINFORCE(D)(ING)(MENT)

REFER(ENCE)

REQUIRED

SECTION

REQD

WIRED GLASS

WOOD

#### **APPENDIX B** 2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: MENDENHALL CO	MMUNICATIONS SUITE				
ADDRESS: 500 9TH STREET, GREENVIL			ZIP CODE:	27858	
OWNER/AUTHORIZED AGENT: L.L. EVE				(252) 328-2931	
E-MAIL: everettle@ecu.edu					
OWNED BY:	☐ CITY/COUNTY	☐ PRIVATE	$\boxtimes$ s	STATE	
CODE ENFORCEMENT JURISDICTION:	☐ CITY	☐ COUNTY	$\boxtimes$ S	STATE	
NAME OF JURISDICTION: STATE OF NO	ORTH CAROLINA				

#### CONTACT: ROBERT STEVENSON, ARCHITECT

DESIGNER	NAME	FIRM LI	C. # PH	ONE#	EMAIL
ARCHITECTURAL	Robert Stevenson	Davis Kane Architects	6214	(919) 833-3737	rstevenson@daviskane.com
CIVIL			-		
LANDSCAPE			-		
ELECTRICAL	Addison Dee	Salas O'Brien		(919) 832-8118	addison.dee@salasobrien.com
FIRE ALARM	Addison Dee	Salas O'Brien		(919) 832-8118	addison.dee@salasobrien.co
PLUMBING	Justin Sarfin	Salas O'Brien		(919) 832-8118	justin.sarfin@salasobrien.com
MECHANICAL	Roger Woods	Salas O'Brien		(919) 832-8118	roger.woods@salasobrien.co
SPRINKLER / STANDPIPE	Justin Sarfin	Salas O'Brien		(919) 832-8118	justin.sarfin@salasobrien.con
STRUCTURAL	Andrew Warnke	Kaydos-Daniels Engineering	038706	(919) 828-4966	andrew@kaydos-daniels.com
RETAINING WALLS >5' HIGH	-	-	-	-	-
OTHER	-	-	-	-	-
OTHER	-	-	-	-	-

#### YEAR EDITION OF CODE:

2018 NC BUILDING CODE:	<ul><li>□ NEW BUILDING</li><li>□ ADDITION</li><li>☑ RENOVATION</li></ul>	<ul><li>☐ 1ST TIME INTERIOR COMPLETION</li><li>☐ SHELL / CORE</li></ul>	☐ PHASED CONSTRUCTION - SHELL/ CORE
2018 NC EXISTING BUILDING CODE: (CHECK ALL THAT APPLY)	<ul><li>□ PRESCRIPTIVE</li><li>□ REPAIR</li><li>□ CHAPTER 14</li></ul>	<ul><li>☐ ALTERATION LEVEL I</li><li>☐ ALTERATION LEVEL III</li></ul>	☐ HISTORIC PROPERTY ☐ CHANGE OF USE
CONSTRUCTED (DATE): 1970	CUR	RENT OCCUPANCY(S) (CH. 3):	BUSINESS GROUP B
RENOVATED (DATE): 1987		POSED OCCUPANCY(S) (CH. 3):	
RISK CATEGORY (TABLE 1604.5):		PROPOSED:	•

#### BASIC BILLI DING DATA.

DASIC BUILDI	NG DA	IA.				
CONSTRUCTION TYPE:	□ I-A	⊠ II-A	☐ III-A	□ IV	☐ V-A	
(CHECK ALL THAT APPLY)	☐ I-B	☐ II-B	☐ III-B		☐ V-B	
SPRINKLERS:	□ NO	□ PARTIAL	☐ YES	☑ NFPA 13	☐ NFPA 13R	☐ NFPA 13D
STANDPIPES:	□ NO	⊠ CLASS-I	CLASS - II	CLASS - III	$oxed{oxed}$ WET	☐ DRY
PRIMARY FIRE DISTRICT:	oxtimes NO	☐ YES				
FLOOR HAZARD AREA:	$\boxtimes$ NO	☐ YES				
SPECIAL INSPECTIONS REQUIRED:	□ NO	⊠ YES				

#### **GROSS BUILDING AREA:**

FLOOR	EXISTING (SQ FT)	RENOVATED (SQ FT)	NEW (SQ FT)	SUB-TOTAL
GROUND FLOOR	12,120 SQ FT	0 SQ FT	0 SQ FT	38,983 SQ FT
1ST FLOOR	38,500 SQ FT	1,224 SQ FT	0 SQ FT	38,500 SQ FT
2ND FLOOR	41,450 SQ FT	0 SQ FT	0 SQ FT	42,135 SQ FT
TOTAL:	92,070 SQ FT	1,224 SQ FT	0 SQ FT	120,116 SQ FT

#### **ALLOWABLE AREA**

SPECIAL USES (CHAPTER 4 - LIST CODE SECTIONS): N/A SPECIAL PROVISIONS (CHAPTER 5 - LIST CODE SECTIONS):.

MIXED OCCUPANCY: NO XYES

PRIMARY OCCUPAN	CY CLASSIFICATION(S):				
ASSEMBLY:		☐ A-2	⊠ A-3	☐ A-4	☐ A-5
BUSINESS:	$\boxtimes$				
EDUCATIONAL:					
FACTORY:		☐ F-2 LOW			
HAZARDOUS:	☐ H-1 DETONATE	☐ H-2 DEFLAGATE	☐ H-3 COMBUST	☐ H-4 HEALTH	☐ H-5 HPM
INSTITUTIONAL:	☐ I-1	☐ I-2	☐ I-3	☐ I-4	
I-1 CONDITION	□ 1	□ 2			
I-2 CONDITION	□ 1	□ 2			
I-3 CONDITION	□ 1	□ 2	□ 3	□ 4	□ 5
MERCANTILE:					
RESIDENTIAL:	☐ R-1	☐ R-2	☐ R-3	☐ R-4	
STORAGE:	☐ S-1 MODERATE	☐ S-2 LOW	☐ HIGH-PILED		
	☐ PARKING GARAGE	☐ REPAIR GARAGE	OPEN	☐ ENCLOSED	
UTILITY AND MISC:					
ACCESSORY OCCUP	ANCY CLASSIFICATION	( <b>S</b> ): Storage S-2 Low,	Assembly A1, Asse	embly A3	
INCIDENTAL USES (T	ABLE 509):				
THIS SEPARATION IS	NOT EXEMPT AS A NO	N-SEPARATED USE (SE	EE EXCEPTIONS).		

SEPARATION: N/A

#### ACTUAL AREA OF OCCUPANCY A + ACTUAL AREA OF OCCUPANCY B ≤ 1 ALLOWABLE AREA OF OCCUPANCY B

	A-1+A-3	В		S-2		F-1			
GROUND	5,587 25,838	+ 18,533 62,512	+	8,065 65,013	+		=	0.64	1
FIRST	7,3 <sup>4</sup> 25,8 8	+ 11,960 62,512	+	1,729 65,013	+	6,046 41,675	=	0.65	1
SECOND	25,83	10,964	+	2,351 65,013	+	471 41,675	=	0.60	1

			00,010	,	
	UNI		Vo.		
STORY NO.	DESCRIPTION AND USE	STORY (A' 11 L)	TABLE 506.2 AREA	(C) AF :AF R FRONTAGE IN REAS .	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2</sup>
			MGA		1/1/2
G	A-1	38,983 SQ FT	46,500 SQ / F		46,5 ( SQ FT
1	A-1	38,500 SQ FT	46,500 SQ FT		40,500 SC FT
2	A-1	42,135 SQ FT	46,500 SQ FT		46,500 SQ F

<sup>1</sup> - Frontage area increases	from Section	n 506.3 are comp	uted thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width b. Total Building Perimeter c. Ratio (F/P) d. Minimum Width of Public Way
- e. Percentage of frontage increase  $If = 100[F/P 0.25] \times W/30^2$  Unlimited area applicable under conditions of Section 507.
- $^{3}$  Maximum Building Area = total number of stories in the building x D (506.2) <sup>4</sup> - The maximum area of open parking garages must comply with 406.5.4. The maximum area of traffic control
- towers must comply with Table 412.3.1. <sup>5</sup> - Frontage increase is based on the unsprinklered area value in Table 506.2.

#### **ALLOWABLE HEIGHT**

\*Indicate section number permitting reduction

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
BUILDING HEIGHT IN FEET	85 FEET	45 FEET	504.3
BUILDING HEIGHT IN STORIES	4 STORIES	3 STORIES	504.4

<sup>1</sup> Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4	
² The (ax ) in the ht of ir triffic contriction were list (, y \ th Tal ≥ (2.3.1. △	
<sup>3</sup> The n aximum height of open parking garages must comply with Table 406.5.4.	

#### FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPAR DISTANCE (FEET)	REQ.	RATING PROVIDED (w/ *Reduction)	DETAIL # AND SHEET #	FOR RATED	DESIGN # FOR RATED PENETRATION	FOR RATE
STRUCTURAL FRAME (INCLUDING COLUMNS, GIRDERS, TRUSSES)	-	1	1			-	-
BEARING WALLS	-	-	-	-	-	-	-
EXTERIOR NORTH	>30'	-	-	-	-	-	-
EXTERIOR EAST	>30'	-	-	-	-	-	-
EXTERIOR WEST	>30'	-	-	-	-	-	-
EXTERIOR SOUTH	>30'	-	-	_	_	-	-
INTERIOR	-	-	-	_	-	-	_
NONBEARING WALLS AND PARTITIONS	-	0	0	_	-	-	_
EXTERIOR NORTH	>30'	0	0	-	_	-	-
EXTERIOR EAS	>30'	0	0	-	_	-	-
EXTERIOR WEST	>30'	0	0	_	_	-	_
EXTERIOR SOUTH	30'	0	0	_	-	-	_
FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)	4/	10			RE		- -
FLOOR CEILING ASSEMBLY		_		-	-		
COLUMNS SUPPORTING FLOORS		1	1			. 7	
ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)		1	. 1			_	- 4
ROOF CEILING ASSEMBLY		1	1			_	
COLUMNS SUPPORTING ROOF		1	1			-	
SHAFT ENCLOSURES - EXIT		1	1			_	
SHAFT ENCLOSURES - OTHER		1	1			-	_
CORRIDOR SEPARATION		_	-	-	_	_	_
OCCUPANCY / FIRE BARRIER SEPARATION	ON	_	-	-	_	-	_
PARTY / FIRE WALL SEPARATION		_	_	_	_	_	_
SMOKE BARRIER SEPARATION		_	_	_	_	_	_
SMOKE PARTITION				_	_	_	_
TENANT / DWELLING UNIT / SLEEPING U	NIT	_	-	-	-	-	_
SEPARATION INCIDENTAL USE SEPARATION		_	_	_	_	_	_
		L		L			

#### PERCENT OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
· (NO	TAPP	LICAE	BLE)

#### LIFE SAFETY SYSTEM REQUIREMENTS

	. —	_ ~ 0	
EMERGENCY LIGHTING:	$\square$ NO	$\boxtimes$ YES	
EXIT SIGNS:	$\square$ NO	imes YES	
FIRE ALARM:	$\square$ NO	imes YES	
SMOKE DETECTION SYSTEMS:	$\square$ NO	☐ YES	□ PARTIAL
CARBON MONOXIDE DETECTION:	$\boxtimes$ NO	☐ YES	

#### LIFE SAFETY PLAN REQUIREMENTS

#### LIFE SAFETY PLAN SHEET: \_\_\_\_\_G003

- ☐ FIRE AND / OR SMOKE RATED WALL LOCATIONS (CHAPTER 7)
- ☐ ASSUMED AND REAL PROPERTY LINE LOCATIONS (IF NOT ON THE SITE PLAN)
- ☐ EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) N/A
- OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)
- OCCUPANT LOADS FOR EACH AREA

☐ CLEAR EXIT WIDTHS FOR EACH EXIT DOOR

- □ COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 2006.3.2(1))
- □ DEAD END LENGTHS (1020.4)
- MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3)
- ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
- A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR / CEILING AND / OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION AND SUPPORTING CONSTRUCTION FOR A FIRE BARRIER/FIRE PARTITION/SMOKE BARRIER.
- ☐ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND THE AMOUNT OF DELAY (1010.1.9.7) N/A
- ☐ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9) N/A
- LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES N/A
- ☐ LOCATION OF EMERGENCY ESCAPE WINDOWS (1030) N/A
- ☐ THE SQUARE FOOTAGE OF EACH FIRE AREA (202) N/A
- ☐ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT FOR OCCUPANCY CLASSIFICATION I-2 (407.5) N/A
- ☐ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE.

#### **ACCESSIBLE DWELLING UNITS** (SECTION 1107)

TOT 2 UN 2	ACCESSIBLE UNITS C'YIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
-	HOY		-	-	-	-	-

## ACCESSIBLE PARKING (DEC 10N 1106)

LOT OR AREA		L#C	# OF ACO	CE SIBL PARTING SPACE	ES PROVIDED	TOTAL # ACCESSIBLE
PARKING	REQUIRED	PROVIDED	ACCE JL IS E	/Al SPAC	F WITH	PROVIDED
-	-	-	-			-
-	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-

#### **PLUMBING FIXTURE REQUIREMENTS** (TABLE 2902.1)

U	SE	WATER CLOSETS		URINALS LAVA	ORIES	SHOWERS /	DRINKING FOUNTAINS		
		MALE	FEMALE		MALE	FEMALE	TUBS	REGULAR	ACCESSIBLE
SPACE	EXISTING	16	30	13	26	24	-	11	
	NEW	1	0	0	0	0	-	0	2
	REDUCED	0	0	0	0	0	-		
	REQUIRED	12	12	6	11	11		6	6

NOTE: REMOVING PLUMBING FIXTURES TO MAKE THE SPACE COMPLY WITH ACCESSIBILITY CODE REQUIREMENTS, THE REDUCED COUNT COMPLIES WITH TOTAL FIXTURE REQUIREMENT

#### ODEOLAL ADDDOMALO

SPECIAL APPROVALS				
SPECIAL APPROVAL REQUIRED:	□ NO			
☐ LOCAL JURISDICTION	⊠ SCO	☐ DHHS		
☐ DEPARTMENT OF INSURANCE	☐ DPI	OTHER:		
DESCRIPTION:				

**DAVIS KANE** ARCHITECTS, PA

503 OBERLIN ROAD | SUITE 300 RALEIGH, NC 27605 919.833.3737 www.daviskane.com

PROJECT INFORMATION

OMM

SEALS





DKA JOB NUMBER

REVISIONS

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Drawn By:

Plot Date: 9/1/2023 10:22:04 AM

DATE ISSUED

**BID DOCUMENTS** 08/29/2023

SHEET TITLE CODE SUMMARY

TI E	ENERGY SUMMARY
Ε	NERGY REQUIREMENTS: HE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE
_	NERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE
	ROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY CO OR THE STANDARD REFERENCE DESIGN VS ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.
E	XISTING BUILDING ENVELOPE COMPLIES WITH CODE:
	XEMPT BUILDING (PROVIDE CODE OR STATUTORY REFERENCE):
	CLIMATE ZONE: 3A
	METHOD OF COMPLIANCE: PRESCRIPTIVE
	(IF "OTHER", SPECIFY SOURCE HERE)
T	HERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)
	ROOF / CEILING ASSEMBLY (EACH ASSEMBLY)
	DESCRIPTION OF ASSEMBLY:
	R-VALUE OF TOTAL AGGEMBET:
	SKYLIC TO SIN ACH ASSEMBLY:
	C-V/_ E OF SKM IGHT:
	TC AL SQUARE FC OTAGE OF GYYLIGHTS IN EACH ASSEMBLY:
	EXT ERIF () LLS - EXISTING TO REM IN
	DESCR /T ) / C A. SEMBLY:
	R-VALUE OF INSULAT, ON;
	OPENINGS (WINDOWS OR LOCK 3 W 1 CLAZING)
	U-VALUE OF ASSEMBLY:
	SOLAR HEAT GAIN COEFEICIENT:
	PROJECTION FACTOR:
	DOOR R-VALUES:
	PROJECTION FACTOR:  DOOR R-VALUES:  EXTERIOR WALLS - ASSEMBLY 2  DESCRIPTION OF ASSEMBLY:
	U-VALUE OF TOTAL ASSEMBLY:
	R-VALUE OF INSULATION:
	OPENINGS (WINDOWS OR DOORS WITH GLAZING)
	U-VALUE OF ASSEMBLY:
	SOLAR HEAT GAIN COEFEICIENT:
	PROJECTION FACTOR:
	DOOR R-VALUES:
	WALLS BELOW GRADE - EXISTING TO REMAIN
	DESCRIPTION OF ASSEMBLY:
	R-VALUE OF INSULATION:
	FLOORS OVER UNCONDITIONED SPACE - EXISTING TO REMAIN
	DESCRIPTION OF ASSEMBLY:
	U-VALUE OF TOTAL ASSEMBLY:
	R-VALUE OF INSULATION:
	FLOORS SLAB ON GRADE  DESCRIPTION OF ASSEMBLY:
	U-VALUE OF TOTAL ASSEMBLY:
	R-VALUE OF INSULATION:
	HORIZONTAL / VERTICAL REQUIREMENT:
	SLAB HEATED:
_	
	STRUCTURAL DESIGN SUMMARY
5	DIRUCIURAL DESIGN SUMMART
	DESIGN LOADS
	IMPORTANCE FACTORS  SNOW (Is): 1.1
	SESIGN LOADS  IMPORTANCE FACTORS
	IMPORTANCE FACTORS   SNOW (Is):
	IMPORTANCE FACTORS   SNOW (Is):
	IMPORTANCE FACTORS
	IMPORTANCE FACTORS   SNOW (Is): 1.1
	IMPORTANCE FACTORS   SNOW (Is): 1.1   SEISMIC (IE): 1.25
	IMPORTANCE FACTORS   SNOW (Is): 1.1
	IMPORTANCE FACTORS   SNOW (Is): 1.1   SEISMIC (IE): 1.25
D	IMPORTANCE FACTORS   SNOW (Is):
D	IMPORTANCE FACTORS
D	IMPORTANCE FACTORS  SNOW (Is):
D	IMPORTANCE FACTORS  SNOW (Is): 1.1  SEISMIC (IE): 1.25  LIVE LC DS  ROG **(PSF): 30  MEZZANINE (ISF 90  FLO R PSF): 10  WIND LOAD  ULTIMATE WIND SP, ELD IPPN ASCE-7): 29  EXPOSURE CATEGORY: B  ROVIDE THE FOLLOWING SEISMIC DESIGN AF AMETURS  RISK CATEGORY (TABLE 1604.5):  SPECTRAL RESPONSE ACCELERATION:  \$\$_0.124 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
D	IMPORTANCE FACTORS  SNOW (Is):

FIELD TEST (provide copy of test report):\_\_\_

PILE SIZE, TYPE, AND CAPACITY: NA

PRESUMPTIVE BEARING CAPACITY: 2000PSF

```
MECHANICAL DESIGN SUMMARY
  MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
      THERMAL ZONE
                                21 DEGREES F
        WINTER DRY BULB:_
                                 95 DEGREES F
        SUMMER DRY BULB:_
      INTERIOR DESIGN CONDITIONS
                                 72 DEGREES F
        WINTER DRY BULB:
                                 75 DEGREES F
        SUMMER DRY BULB:
                                 50% MAXIMUM
        RELATIVE HUMIDITY:
                                 N/A
      BUILDING HEATING LOAD: _
      BUILDING COOLING LOAD:_
      MECHANICAL SPACING CONDITIONING SYSTEM
        UNITARY
             DESCRIPTION OF UNIT: _
             HEATING EFFICIENCY: _
             COOLING EFFICIENCY: ___
             SIZE CATEGORY OF UNIT: _
        BOILER
             SIZE CATEGORY. IF OVERSIZED, STATE REASON:_
        CHILLER
             SIZE CATEGORY. IF OVERSIZED, STATE REASON:_
      LIST EQUIPMENT EFFICIENCIES:_
ELECTRICAL DESIGN SUMMARY
ELECTRICAL SYSTEMS AND EQUIPMENT
                                NCECC PRESCRIPTIVE
    METHOD OF COMPLIANCE: _
    LIGHTING SCHEDULE (each fixture type)
      LAMP TYPE REQUIRED IN FIXTURE
                                       SEE LIGHTING FIXTURE SCHEDULE E 200
      NUMBER OF LAMPS IN THE FIXTURE
                                       SEE LIGHTING FIXTURE SCHEDULE E 200
      BALLAST TYPE USED IN THE FIXTURE
                                      SEE LIGHTING FIXTURE SCHEDULE E 200
      NUMBER OF BALLASTS IN THE FIXTURE SEE LIGHTING FIXTURE SCHEDULE E 200
      TOTAL WATTAGE PER FIXTURE
                                       SEE LIGHTING FIXTURE SCHEDULE E 200
      TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (WHOLE BUILDING OR SPACE BY SPACE) N/A
      TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED N/A
    ADDITIONAL EFFICIENCY PACKAGE OPTIONS
    (WHEN USING THE 2018 NCECC; NOT REQUIRED FOR ASHRAE 90.1)
    ☐ C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT
    ☐ C406.3 REDUCED LIGHTING POWER DENSITY
    ☐ C406.4 ENHANCED DIGITAL LIGHTING CONTROLS

☐ C406.5 ON-SITE RENEWABLE ENERGY
    ☐ C406.6 DEDICATED OUTDOOR AIR SYSTEM
     ☐ C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING
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PROJECT INFORMATION

**NUMMO** 

SEALS





DKA JOB NUMBER

REVISIONS

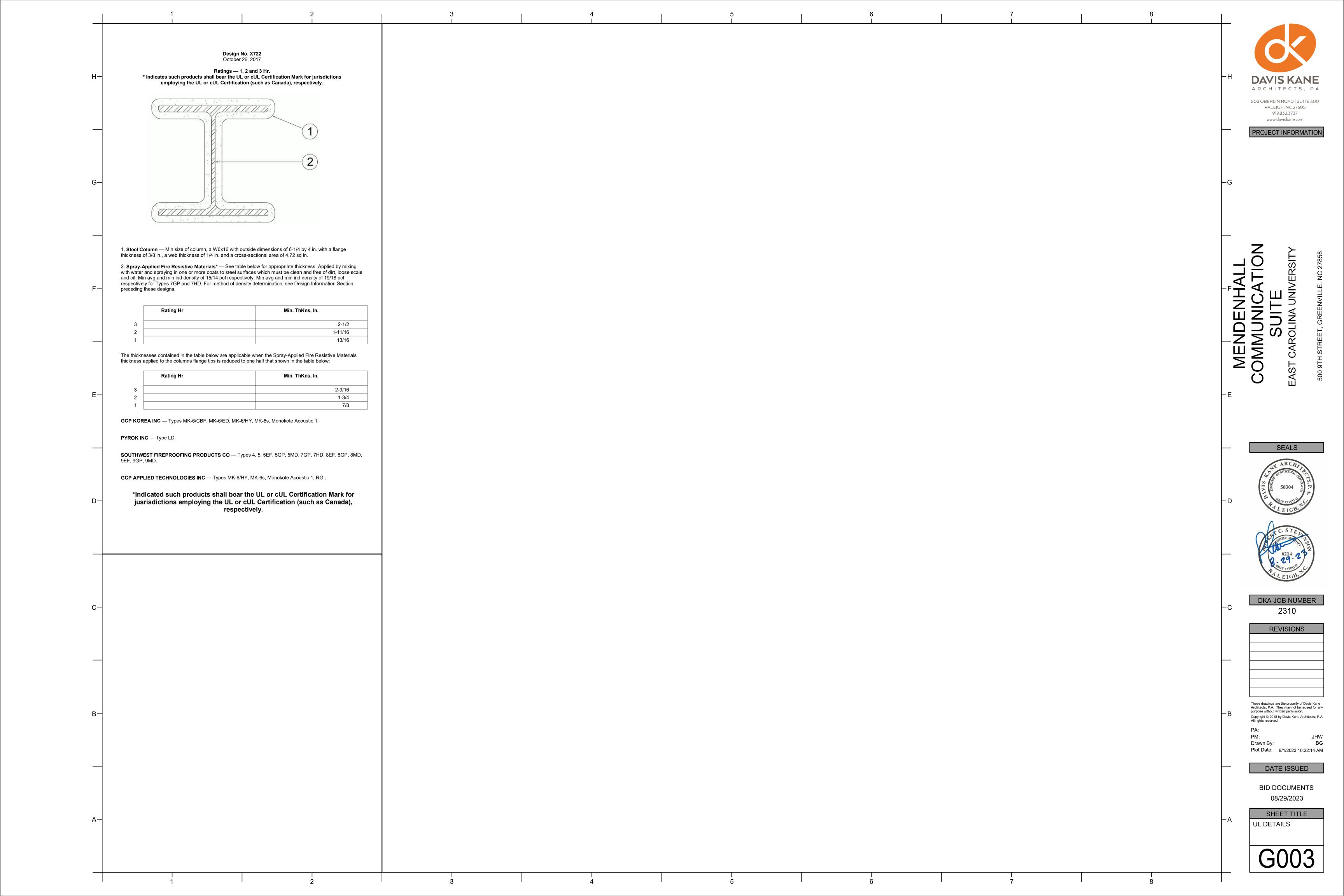
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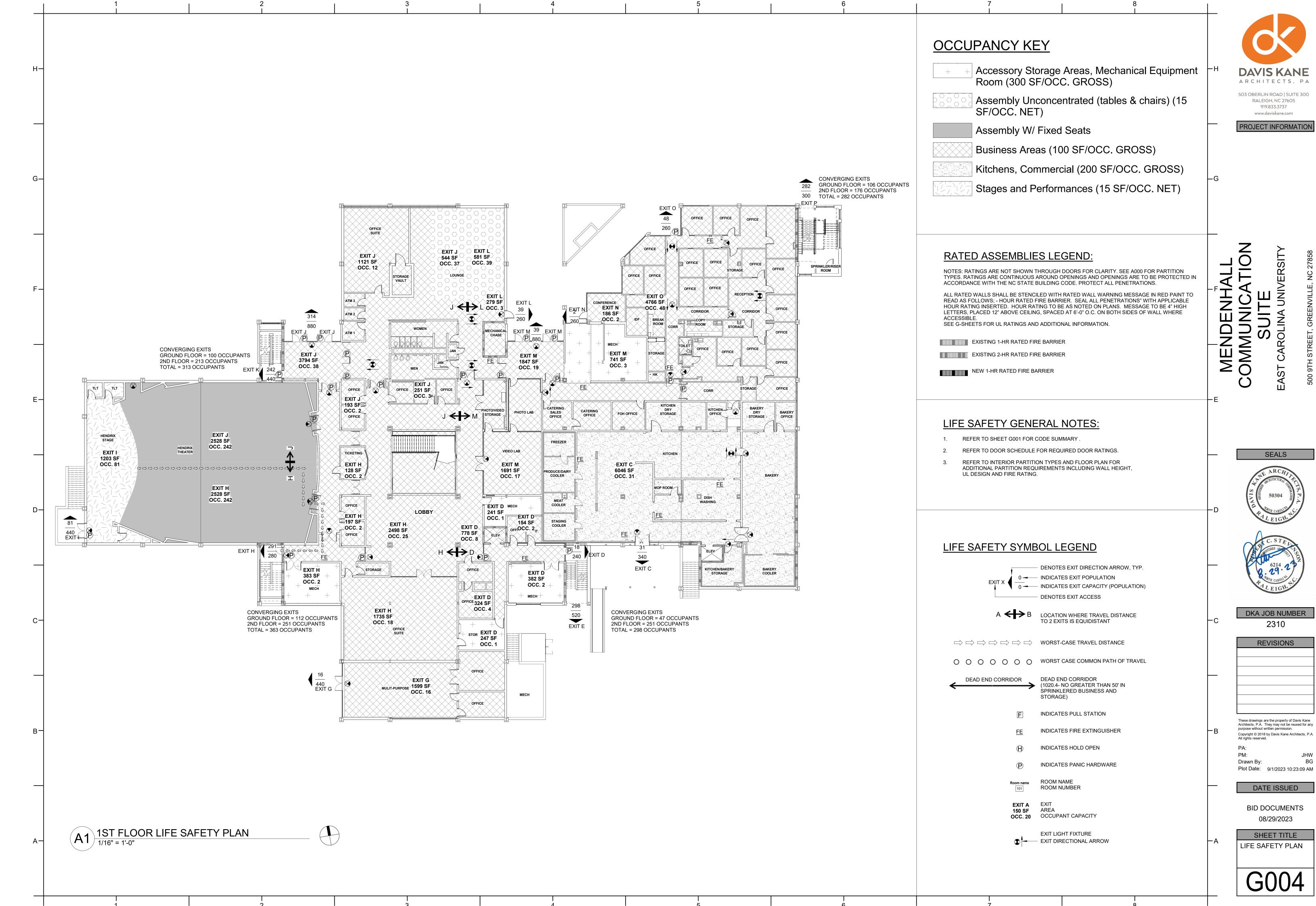
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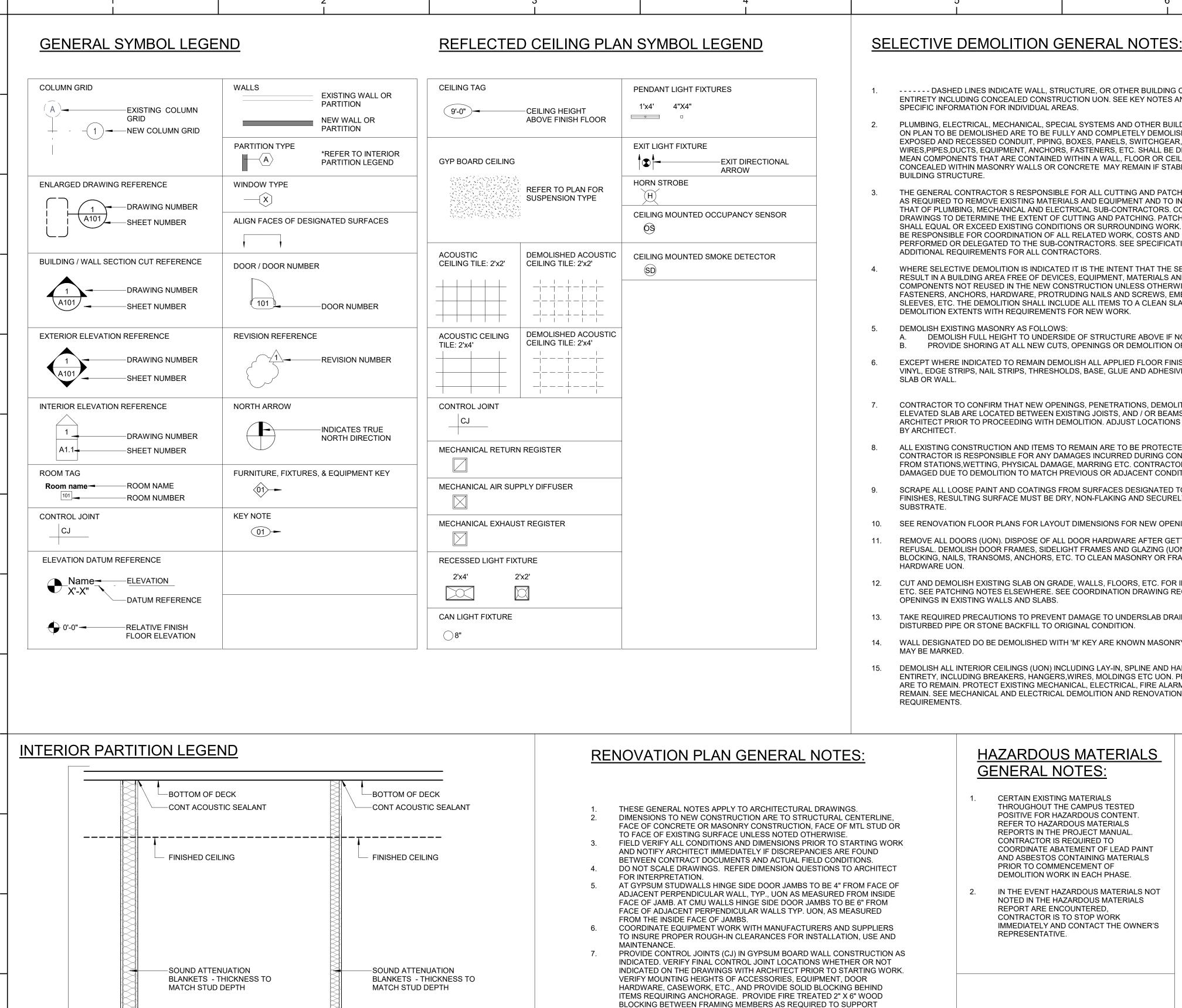
DATE ISSUED

BID DOCUMENTS 08/29/2023

SHEET TITLE CODE SUMMARY







-METAL STUD @ 16" OC,

SEE TAG FOR SIZE

DECK.

-RUBBER BASE

**B2** 2 1/2" METAL STUD

24 T

**EXTEND TO DECK ABOVE -**

-CONT ACOUSTIC SEALANT

─5/8" GYPSUM BOARD, EXTEND TO

-METAL STUD @ 16" OC,

SEE TAG FOR SIZE

EXTEND DECK.

-RUBBER BASE

A3 3 5/8" METAL STUD

\*\* T

WALL TYPE

**EXTEND TO DECK ABOVE -**

CONT ACOUSTIC SEALANT

-5/8" GYPSUM BOARD EACH SIDE,

- ----- DASHED LINES INDICATE WALL, STRUCTURE, OR OTHER BUILDING COMPONENTS TO BE DEMOLISHED IN ENTIRETY INCLUDING CONCEALED CONSTRUCTION UON. SEE KEY NOTES AND PLAN NOTES FOR MORE SPECIFIC INFORMATION FOR INDIVIDUAL AREAS.
- PLUMBING, ELECTRICAL, MECHANICAL, SPECIAL SYSTEMS AND OTHER BUILDING SYSTEM COMPONENTS NOTED ON PLAN TO BE DEMOLISHED ARE TO BE FULLY AND COMPLETELY DEMOLISHED AND REMOVED, UON. ALL EXPOSED AND RECESSED CONDUIT, PIPING, BOXES, PANELS, SWITCHGEAR, JUNCTIONS, FITTINGS, WIRES, PIPES, DUCTS, EQUIPMENT, ANCHORS, FASTENERS, ETC. SHALL BE DEMOLISHED. RECESSED SHALL MEAN COMPONENTS THAT ARE CONTAINED WITHIN A WALL, FLOOR OR CEILING SURFACE. PIPING FULLY CONCEALED WITHIN MASONRY WALLS OR CONCRETE MAY REMAIN IF STABLE AND SECURELY SUPPORTED BY BUILDING STRUCTURE.
- THE GENERAL CONTRACTOR S RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, FLOORS AND ROOF AS REQUIRED TO REMOVE EXISTING MATERIALS AND EQUIPMENT AND TO INSTALL ALL NEW WORK INCLUDING THAT OF PLUMBING, MECHANICAL AND ELECTRICAL SUB-CONTRACTORS. CONTRACTOR SHALL REFERENCE ALL DRAWINGS TO DETERMINE THE EXTENT OF CUTTING AND PATCHING. PATCHING, BACKFILL, REPAIRS, ETC. SHALL EQUAL OR EXCEED EXISTING CONDITIONS OR SURROUNDING WORK. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL RELATED WORK, COSTS AND EXTENT OF THE WORK SELF-PERFORMED OR DELEGATED TO THE SUB-CONTRACTORS. SEE SPECIFICATION SECTION "EXECUTION" FOR ADDITIONAL REQUIREMENTS FOR ALL CONTRACTORS.
- WHERE SELECTIVE DEMOLITION IS INDICATED IT IS THE INTENT THAT THE SELECTIVE DEMOLITION WORK WILL RESULT IN A BUILDING AREA FREE OF DEVICES, EQUIPMENT, MATERIALS AND ANY OTHER MISCELLANEOUS COMPONENTS NOT REUSED IN THE NEW CONSTRUCTION UNLESS OTHERWISE NOTED (UON). THIS INCLUDES FASTENERS, ANCHORS, HARDWARE, PROTRUDING NAILS AND SCREWS, EMBEDDED ANCHORS, BLOCKING, SLEEVES, ETC. THE DEMOLITION SHALL INCLUDE ALL ITEMS TO A CLEAN SLAB, WALL OR CEILING. COORDINATE DEMOLITION EXTENTS WITH REQUIREMENTS FOR NEW WORK.
- DEMOLISH EXISTING MASONRY AS FOLLOWS:

HARDWARE UON.

WEIGHT AND USE OF ITEMS TO BE SUPPORTED. WHERE MOUNTING

COORDINATE LOCATIONS WITH MANUFACTURER OR SUPPLIER AND REFER

MOUNTING HEIGHT QUESTIONS TO ARCHITECT FOR INTERPRETATION.

PROVIDE SEALANT BETWEEN DISSIMILAR MATERIALS SUCH AS GYPSUM

BOARD AND MASONRY, MASONRY AND CONCRETE, COUNTERTOPS AND

REPAIR AND PATCH SPRAYED FIRE-RESISTIVE AND FIRESTOP MATERIALS

WHERE DAMAGED DUE TO INSTALLATION OF NEW MATERIALS TO RESTORE

ST DENOTES SIGN TYPE, EG. ST-2A DENOTES SIGN TYPE 2A. SEE PLANS AND

COMPONENT DAMAGED OR OTHERWISE ALTERED BY THE INSTALLATION OF

CONTRACTOR TO PATCH AND REPAIR ANY EXISTING AREA, SURFACE OR

THE NEW WORK. PATCHES AND REPAIRS TO MATCH EXISTING IN KIND,

NEW CONSTRUCTION IS DESIGNATED ON DRAWINGS AS BEING NEW BY

MEANS OF A HATCH, SHADING, PATTERN, HEAVY LINES, OR INFILL WITH

'SHADING'. EXISTING CONSTRUCTION IS DESIGNATED WITH LIGHTER LINES

AND AREAS AND COMPONENTS ARE NOT FILLED OR SHADED. NOTE THAT

HATCHES, FILLS AND PATTERNS ARE USED ON DRAWINGS TO DESIGNATE

FOR TYPICAL REVEAL, CONTROL, AND TRIM NOTES AT GWB REFER TO

REPAIRS AND PATCHES REQUIRING PAINTED FINISH WILL REQUIRE PAINT TO

BE APPLIED AT ENTIRE CONTIGUOUS WALL OR CEILING AREA EXTENDING TO

HEIGHTS ARE NOT INDICATED, MOUNT ITEMS IN ACCORDANCE WITH

RECOGNIZED INDUSTRY STANDARDS.

SPECIFIED FIRE RATING. SEE ALLOWANCES.

DOOR SCHEDULE FOR SIGN LOCATIONS.

MATERIAL, TEXTURE, COLOR, ETC. UON.

OTHER CONDITIONS AS WELL. SEE LEGENDS.

CORNERS, STEPS OR OTHER CHANGE IN SURFACE PLANE.

REFER TO A000 FOR PARTITION CONSTRUCTION TYPE.

- DEMOLISH FULL HEIGHT TO UNDERSIDE OF STRUCTURE ABOVE IF NO HEIGHT GIVEN. PROVIDE SHORING AT ALL NEW CUTS. OPENINGS OR DEMOLITION OF EXISTING CONSTRUCTION.
- EXCEPT WHERE INDICATED TO REMAIN DEMOLISH ALL APPLIED FLOOR FINISHES INCLUDING VCT. CARPET VINYL, EDGE STRIPS, NAIL STRIPS, THRESHOLDS, BASE, GLUE AND ADHESIVES, ETC. TO A CLEAN STRUCTURAL SLAB OR WALL.
- CONTRACTOR TO CONFIRM THAT NEW OPENINGS, PENETRATIONS, DEMOLITION CUTS, ETC. IN EXISTING ELEVATED SLAB ARE LOCATED BETWEEN EXISTING JOISTS, AND / OR BEAMS, REPORT ANY CONFLICTS TO ARCHITECT PRIOR TO PROCEEDING WITH DEMOLITION. ADJUST LOCATIONS OF DEMOLITION AS AGREED UPON BY ARCHITECT.
- ALL EXISTING CONSTRUCTION AND ITEMS TO REMAIN ARE TO BE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES INCURRED DURING CONSTRUCTION ACTIVITIES INCLUDING FROM STATIONS, WETTING, PHYSICAL DAMAGE, MARRING ETC. CONTRACTOR TO REPAIR ANY SURFACES DAMAGED DUE TO DEMOLITION TO MATCH PREVIOUS OR ADJACENT CONDITION.
- SCRAPE ALL LOOSE PAINT AND COATINGS FROM SURFACES DESIGNATED TO RECEIVE NEW PAINT OR FINISHES, RESULTING SURFACE MUST BE DRY, NON-FLAKING AND SECURELY ADHERED TO UNDERLYING SUBSTRATE.
- SEE RENOVATION FLOOR PLANS FOR LAYOUT DIMENSIONS FOR NEW OPENINGS NOT SHOWN ON DEMO PLANS.
- REMOVE ALL DOORS (UON). DISPOSE OF ALL DOOR HARDWARE AFTER GETTING OWNER FIRST RIGHT OF REFUSAL. DEMOLISH DOOR FRAMES. SIDELIGHT FRAMES AND GLAZING (UON). DEMOLITION TO INCLUDE BLOCKING, NAILS, TRANSOMS, ANCHORS, ETC. TO CLEAN MASONRY OR FRAMED OPENINGS. DEMOLISH
- CUT AND DEMOLISH EXISTING SLAB ON GRADE, WALLS, FLOORS, ETC. FOR INSTALLATION OF NEW P, M, E, FP, ETC. SEE PATCHING NOTES ELSEWHERE. SEE COORDINATION DRAWING REQUIREMENTS FOR LOCATION OF OPENINGS IN EXISTING WALLS AND SLABS.
- TAKE REQUIRED PRECAUTIONS TO PREVENT DAMAGE TO UNDERSLAB DRAINAGE SYSTEM, RESTORE ANY DISTURBED PIPE OR STONE BACKFILL TO ORIGINAL CONDITION.
- WALL DESIGNATED DO BE DEMOLISHED WITH 'M' KEY ARE KNOWN MASONRY WALLS. NOT ALL MASONRY WALLS
- DEMOLISH ALL INTERIOR CEILINGS (UON) INCLUDING LAY-IN, SPLINE AND HARD CEILING SYSTEMS. DEMOLISH IN ENTIRETY, INCLUDING BREAKERS, HANGERS, WIRES, MOLDINGS ETC UON. PROTECT EXISTING BULKHEADS THAT ARE TO REMAIN. PROTECT EXISTING MECHANICAL, ELECTRICAL, FIRE ALARM DEVICES AND FIXTURES TO REMAIN. SEE MECHANICAL AND ELECTRICAL DEMOLITION AND RENOVATION PLANS FOR ADDITIONAL

- CEILING SYSTEMS. DEMOLISH IN ENTIRETY, INCLUDING BREAKERS. HANGERS,WIRES, MOLDINGS ETC UON. PROTECT EXISTING BULKHEADS THAT ARE TO REMAIN. PROTECT EXISTING MECHANICAL, ELECTRICAL, FIRE ALARM DEVICES AND FIXTURES TO REMAIN. SEE MECHANICAL AND ELECTRICAL DEMOLITION AND
- DEMOLISH ALL FLOOR COVERINGS AND RUBBER OR WOOD BASE, UON. TO INCLUDE REMOVAL OF ADHESIVES. TYPE OF SOME FLOOR COVERING VISIBLE IN EACH SPACE IS INDICATED BY THE DEMOLITION KEY NOTES. CONTRACTOR RESPONSIBLE FOR VERIFYING FLOOR COVERING AND DEMOLISHING FLOOR COVERINGS UNDERNEATH VISIBLE COVERINGS DOWN TO THE CONCRETE SLAB.
- DEMOLISH ALL FLOOR BUMPERS IN THEIR ENTIRETY. SEE HARDWARE SCHEDULE FOR ADDITIONAL REQUIREMENTS.
- REMOVE ALL INTERIOR SIGNAGE AND BRACKETS INCLUDING ROOM IDENTIFICATION SIGNAGE, DEPARTMENTAL SIGNAGE AND WAYFINDING SIGNAGE.
- FURNITURE AND LOOSE EQUIPMENT TO BE REMOVED BY OWNER FROM THE BUILDING PRIOR TO THE COMMENCEMENT OF THE WORK. ANY REMAINING ITEMS ARE TO BE DEMOLISHED BY GENERAL CONTRACTOR, UNO. CONTRACTOR TO COORDINATE WITH OWNER.
- ANY ITEMS INDICATED TO BE DEMOLISHED AFTER GIVING OWNER FIRST RIGHT OF REFUSAL SHALL BE DEMOLISHED ONLY AFTER RECEIVED NOTIFICATION FROM OWNER ITEMS SHOULD BE DISCARDED. ITEMS THAT THE OWNER WANTS POSSESSION OF SHALL BE CAREFULLY SALVAGED AND TURNED OVER TO THE
- CUTTING, BACKFILL, REPAIRS ETC, SHALL EQUAL OR EXCEED EXISTING CONDITIONS OF SURROUNDING WORK. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL RELATED WORK, COSTS AND EXTENT

1'-0"

BLOCKING SHALL BEGIN AND

**HEAVY DUTY** 

SHELVING STANDARD

HEAVY DUTY

SHELVING STANDARD

SPACED 18" OC

END AT THE TOP AND

SHELVING STANDARDS

PLAM ON 1" THICK

PARTICLE BOARD

BANDING

2X WOOD

OC TYP

**SECTION** 

BLOCKING @ 16"

5/8" GYP BOARD

A7 STORAGE ADJUSTABLE SHELVING

SHELF W PVC EDGE

18"

SHELF DEPTH

**BOTTOM OF HEAVY DUTY** 

DEMOLISH ALL INTERIOR CEILINGS (UON) INCLUDING LAY-IN. SPLINE AND HARD

RENOVATION PLANS FOR ADDITIONAL REQUIREMENTS.

PROVIDE CLEAN, SMOOTH SUBFLOORING FOR NEW WORK.

DISPOSE AFTER GIVING OWNER FIRST RIGHT OF REFUSAL.

REMOVE ALL CASEWORK, SHELVING, COUNTERTOPS, MIRRORS, PROJECTION SCREENS, MARKERBOARDS, TACKBOARDS, TACKSTRIPS, DISPLAY CASES, TV BRACKETS AND ALL OTHER WALL AND FLOOR MOUNTED EQUIPMENT/ FURNISHING UON. DISPOSE OFF AFTER OFFERINGS OWNER FIRST RIGHT OF REFUSAL. DEMOLITION TO INCLUDE SUPPORTS, FASTENERS, ADHESIVES AND ANCHORS. SOME LOCATIONS ARE INDICATED BY DEMOLITION KEY NOTES. CONTRACTOR TO VERIFY QUANTITIES AND LOCATIONS.

- DEMOLISH WALL BRACING WHERE WALLS ARE TO BE DEMOLISHED.
- EXISTING BUILDING STRUCTURE TO REMAIN, UON. PROTECT DURING THE DEMOLITION AND NEW WORK PROCESS. REPAIR ANY SURFACES DAMAGED DURING DEMOLITION AND NEW WORK.
- GC SHALL SURVEY ALL AREAS SCHEDULED FOR UNDER-SLAB CUTTING WITH PACHONMETER TESTING, IDENTIFYING PIPING, CONDUIT OR ITEMS IMBEDDED AND IMMEDIATELY BELOW CONCRETE PRIOR TO PERFORMING SLAB DEMOLITION. GC TO TAKE NECESSARY PRECAUTIONS TO PRESERVER EMBEDDED ITEMS SCHEDULED TO REMAIN IN SERVICE DURING CONSTRUCTION. GC TO CUT AND REMOVE SLAB SCHEDULED FOR DEMOLITION AND REPLACE PER THE CONTRACT DOCUMENTS. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- OF THE WORK SELF PERFORMED OR DELEGATED TO THEIR SUB-CONTRACTORS.
- COORDINATION DRAWINGS ARE REQUIRED TO BE PROVIDED BY THE GENERAL CONTRACTOR. ROOM NAMES AND NUMBERS ARE SHOWN ON THE DEMOLITION PLAN FOR DEMOLITION REFERENCE ONLY. NEW ROOM NAMES AND NUMBER ARE ASSIGNED ON THE RENOVATION PLAN.
- SEE SPECIFICATION SECTION "SELECTIVE DEMOLITION" AND OTHER DRAWINGS IN THIS SET FOR ADDITIONAL REQUIREMENTS FOR ALL CONTRACTORS.
- SEE DEMOLITION FLOOR PLAN KEY NOTES AND NOTES ON PLANS FOR ADDITIONAL REQUIREMENTS.

SHELVES

3'-0"

**ELEVATION** 

1'-0"



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PROJECT INFORMATION

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REVISIONS

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Plot Date: 9/1/2023 10:21:16 AM DATE ISSUED

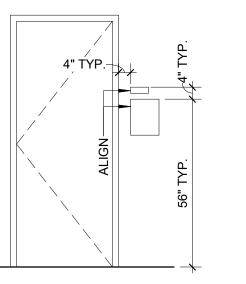
> **BID DOCUMENTS** 08/29/2023

SHEET TITLE GENERAL NOTES AND PARTITIONS

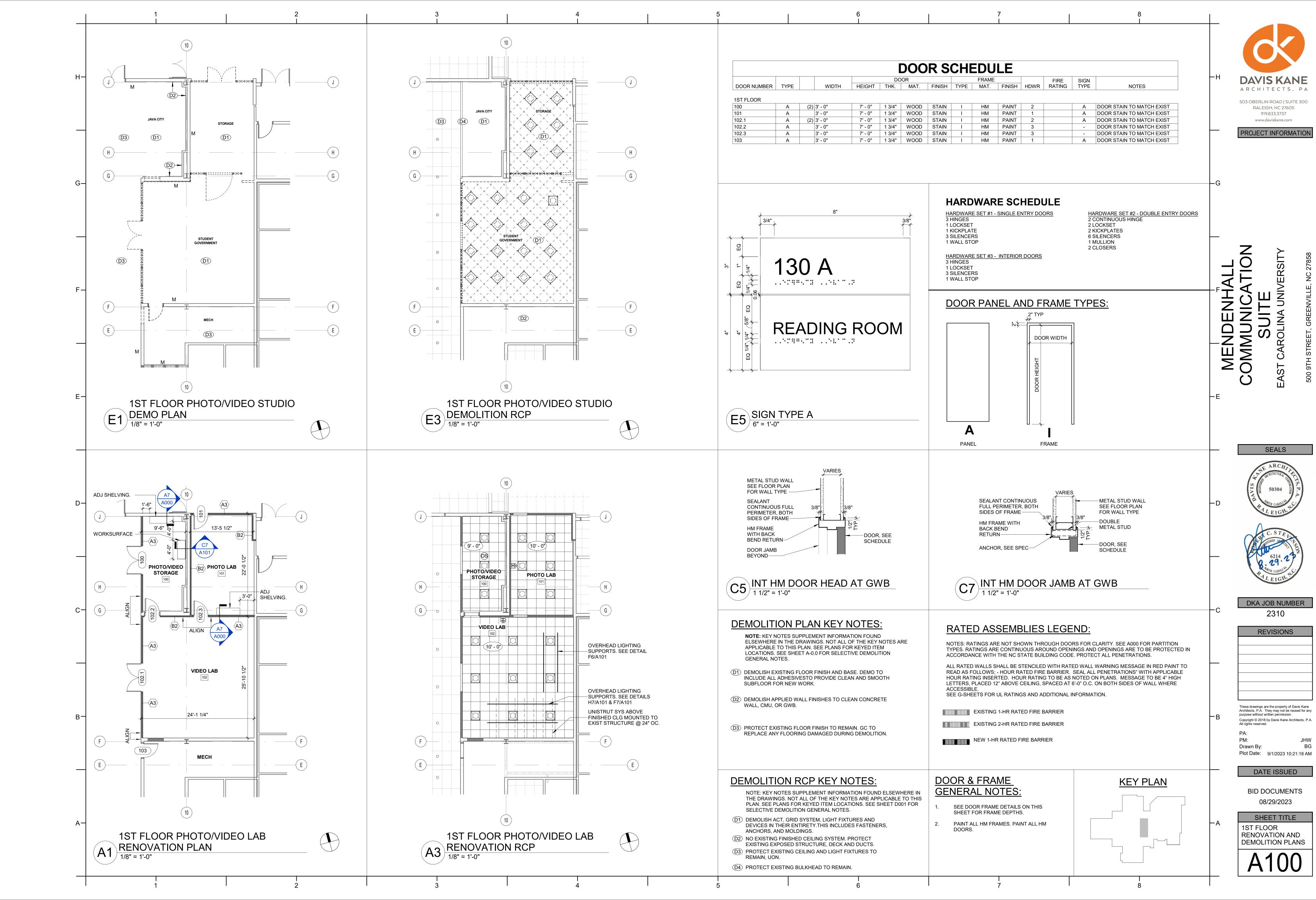
#### HAZARDOUS MATERIALS **GENERAL NOTES:**

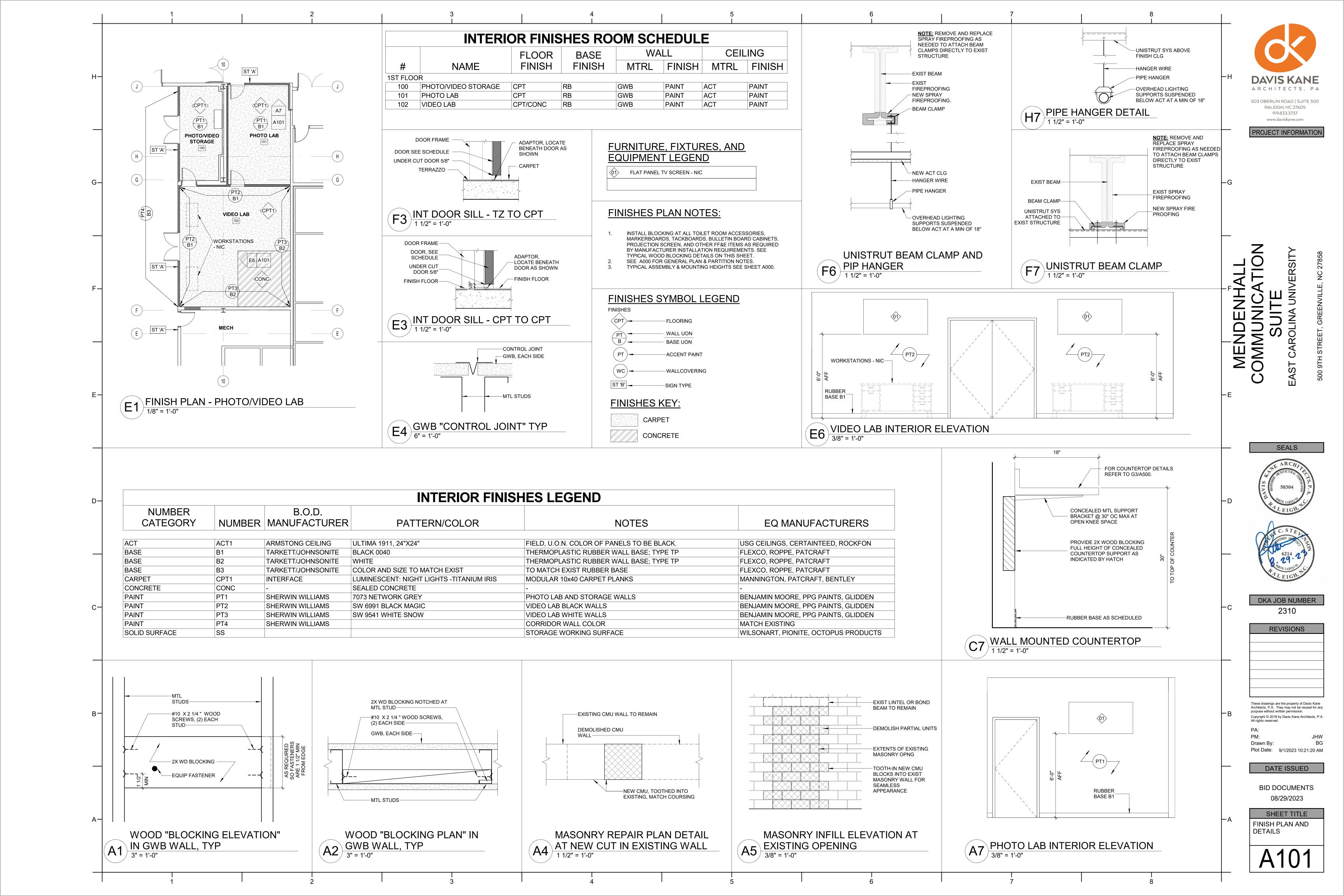
- CERTAIN EXISTING MATERIALS THROUGHOUT THE CAMPUS TESTED POSITIVE FOR HAZARDOUS CONTENT. REFER TO HAZARDOUS MATERIALS REPORTS IN THE PROJECT MANUAL CONTRACTOR IS REQUIRED TO COORDINATE ABATEMENT OF LEAD PAINT AND ASBESTOS CONTAINING MATERIALS PRIOR TO COMMENCEMENT OF DEMOLITION WORK IN EACH PHASE.
- IN THE EVENT HAZARDOUS MATERIALS NOT NOTED IN THE HAZARDOUS MATERIALS REPORT ARE ENCOUNTERED, CONTRACTOR IS TO STOP WORK IMMEDIATELY AND CONTACT THE OWNER'S REPRESENTATIVE.

## **MOUNTING HEIGHTS:**



TYPICAL ROOM SIGN





POUNDS; NUMBER ACV ALARM CHECK VALVE

AFG

CLG

COL

DIV

DN

DPV

FDV

FTG

GAL

GPM

JPC

MAX

ALT ALTERNATE

AUTO AUTOMATIC

BOP BOTTOM OF PIPE

CEILING

COLUMN

CUFT CUBIC FOOT; CUBIC FEET

DCDA DOUBLE CHECK DETECTOR ASSEMBLY

CONC CONCRETE

CUYD CUBIC YARD

CV CHECK VALVE

DI DUCTILE IRON

DIAMETER

DIVISION

DRY PIPE VALVE

FCV FLOOR CONTROL VALVE

FIRE HYDRANT

FLOOR

FLEX FLEXIBLE

FLA FULL LOAD AMPS

FIRE HOSE CABINET

FHVC FIRE HOSE VALVE CABINET

FACTORY MUTUAL

FLOW SWITCH

HORSE POWER

JOCKEY PUMP

INSIDE DIAMETER

JOCKEY PUMP CONTROLLER

MOCP MAXIMUM OVER CURRENT PROTECTION

NFPA NATIONAL FIRE PROTECTION ASSOCIATION

MINIMUM CIRCUIT AMPS

FOOT; FEET

FOOTING

GALLONS

HORIZ HORIZONTAL

HEIGHT

INCH

MAXIMUM

MFG MANUFACTURING

NIC NOT IN CONTRACT NTS NOT TO SCALE

OUTSIDE DIAMETER

OSY OUTSIDE SCREW AND YOKE

PSI POUNDS PER SQUARE INCH

RCV RISER CHECK VALVE

POST INDICATOR VALVE

PSIG POUNDS PER SQUARE INCH GAUGE

RPDA REDUCED PRESSURE DETECTOR ASSEMBLY

REVOLUTIONS PER MINUTE

SPCV SUCTION PRESSURE CONTROL VALVE

SYMBOL OR SYMMETRICAL

UNDERWRITERS LABORATORIES

UNLESS NOTED OTHERWISE

MFR MANUFACTURER

MIN MINIMUM

MTD MOUNTED

OC ON CENTER

OPNG OPENING

OTY QUANTITY

REV

RM

SCH

REINF REINFORCING

ROOM

SECT SECTION

SP STANDPIPE

SPRK SPRINKLER

TOP TOP OF PIPE

TYP TYPICAL

UNO

UTIL

W/

TOS TOP OF STEEL

UTILITY

VERTICAL

WMA WATER MOTOR ALARM

Ø ROUND; DIAMETER; PHASE

WITH

W/O WITHOUT

SPEC SPECIFICATION

REVISION

SCHEDULE

SQUARE FEET

SPRINKLER

TAMPER SWITCH

UNDER FLOOR

FIRE PUMP CONTROLLER

GENERAL CONTRACTOR

GALLONS PER MINUTE

FDC FIRE DEPARTMENT CONNECTION

FIRE DEPARTMENT VALVE

FINISHED FLOOR ELEVATION

FIRE PROTECTION OR FIRE PUMP

DOWN

DWG DRAWING

ELEC ELECTRICAL

ELEV ELEVATION

EQUIP EQUIPMENT

EXIST EXISTING

EACH

CTR CENTER

ABOVE FINISHED CEILING

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

ARCH ARCHITECTURAL; ARCHITECT

BAS BUILDING AUTOMATION SYSTEM

AUTHORITY HAVING JURISTICTION

ANSI AMERICAN NATIONAL STANDARDS INSTITUTE

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 $\simeq$ 

EXISTING PENDENT SPRINKLER HEAD TO REMAIN

NEW HEAD LOCATION

ALARM CHECK OR PREACTION VALVE

DRY PIPE VALVE

SIAMESE FIRE DEPT. CONNECTION STORZ FIRE DEPT. CONNECTION

FIRE HYDRANT LOCATION TYPICAL HANGER LOCATION HYDRAULIC CALCULATION NODE

ROADWAY VALVE AND BOX TEST HEADER THRUST BLOCK

VALVE (REFER TO SPECIFICATIONS) GATE VALVE

BALL VALVE CHECK VALVE

OSY GATE VALVE W/ TAMPER SWITCH BUTTERFLY VALVE W/ TAMPER SWITCH

FLOW SWITCH SPRINKLER ZONE CONTROL VALVE ASSEMBLY

WATER MOTOR ALARM EXISTING PIPING

PIPING TO BE DEMOLISHED NEW PIPING

**ELECTRICAL SYMBOLS** 

VARIABLE FREQUENCY DRIVE MOTOR STARTER

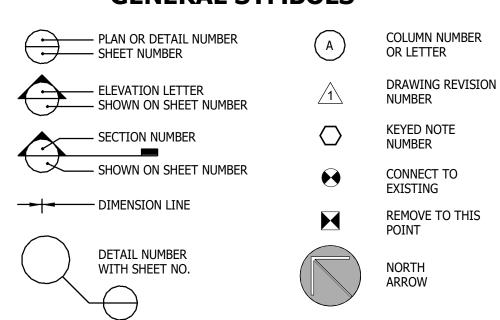
COMBINATION MOTOR STARTER/DISCONNECT FUSED DISCONNECT

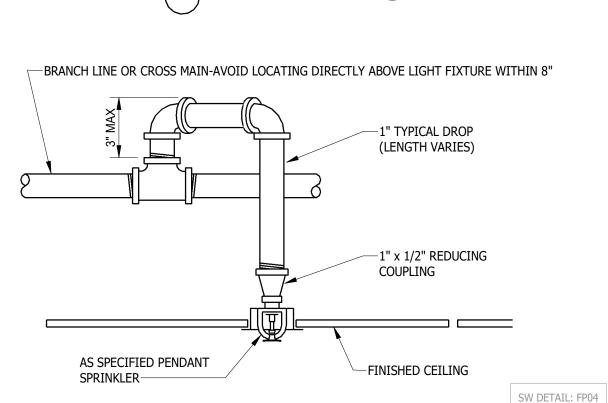
NON-FUSED DISCONNECT DISCONNECT, EXISTING OR BY OTHERS

POWER PANEL, EXISTING OR BY OTHERS TOGGLE SWITCH

MOTOR RATED TOGGLE SWITCH

### **GENERAL SYMBOLS**





TYPICAL SPRINKLER DROP DETAIL

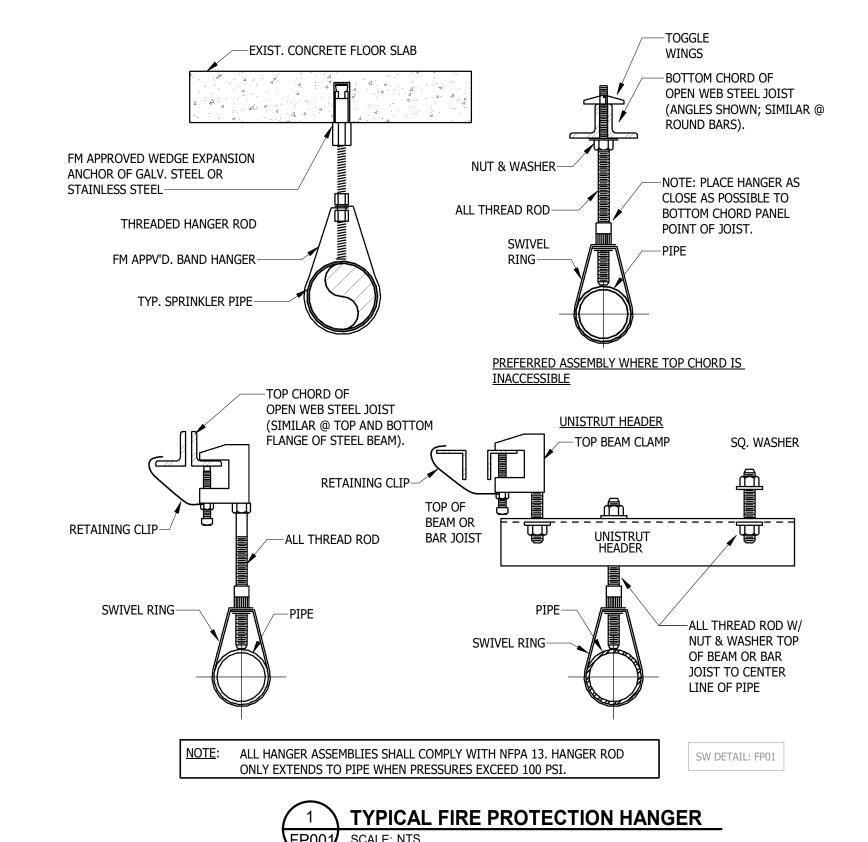
#### SPRINKLER DESIGN DATA

Project Name: ECU MENDENHALL COMMUNICA	System:	WET	
Project Street Address: 500 9TH STREET, GREE	Sys. Sq. Ft.:	N/A	
Suite: N/A	Floor#: 1ST FLOOR	Ceiling Height:	SEE ARCH PLANS
Designed By: SALAS O'BRIEN	Phone: 919-832-8118	Total Bldg. Hgt.:	N/A
Occupancy: Business, A-3	Hazard: .		

		DESIGN	N SUMMARY		
	Zone #1	Zone #	Zone #	Zone #	Zone #
Design Method	HYDRAULIC	-	-	-	-
Design Area #	1	-	-	-	-
Location	VIDEO AND PHOTO LAB	-	-	-	-
Type of System	WET	-	-	-	-
Hazard Class	ORD GRP I	-	-	-	-
Criteria From	2013, NFPA 13	-	-	-	-
Design Area	1,125 SQ FT	-	-	-	-
Protection Area	MAX 130 SQ FT	-	-	-	-
Sprinkler Spacing	MAX 15'	-	-	-	-
Density	0.15 GPM/SQ FT	-	-	-	-
K-factor	5.6	-	-	-	-
Hose Allowance	250 GPM	-	-	-	-
G.P.M. Req'd	TBD BY DIV 21 CONTR	-	-	-	-
P.S.I. Req'd	TBD BY DIV 21 CONTR	-	_	-	-

#### EXISTING FIRE PLIMP TEST INFORMATION

	LXISTING LIKE FOME II	231 INFORMATION	
Tested by	JMP	Date/Time	11/15/2022
Rated Flow (GPM)	750 GPM	Rated Pressure (PSI)	100 PSI
Horsepower	60 HP	Discharge Pressure at Churn (PSI)	120 PSI
Discharge Pressure at 100% Rated Cap (PSI)	102 PSI	Flow Rate at 100% Rated Cap	750 GPM
Discharge Pressure at 150% Rated Cap (PSI)	70 PSI	Flow Rate at 150% Rated Cap	1,033 GPM



#### FIRE PROTECTION DRAWING LIST

1 71/	I NOTECTION DIVAVITAGE LIST
NO.	TITLE
FP001	STANDARDS, SYMBOLS & ABBREVIATIONS
FP002	EXISTING SPRINKLER PLANS FOR HYDRA CALCS
FP100	1ST FLOOR VIDEO & PHOTO LAB - FIRE PROTECTION PLAN

#### FIRE PROTECTION GENERAL NOTES

- 1 COORDINATE WORK WITH OTHER TRADES PRIOR TO PURCHASE AND INSTALLATION OF ANY PIPING, DUCTWORK OR EQUIPMENT. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES
- IMMEDIATELY. REFER TO THE ARCHITECTURAL PLANS FOR DIMENSIONS. DO NOT SCALE THESE DRAWINGS. ALL PIPING LAYOUTS AND LOCATIONS SHOWN ARE DIAGRAMMATIC AND DO NOT INDICATE ALL FITTINGS REQUIRED TO COMPLETE WORK. COORDINATE THE PIPING LAYOUT WITH ALL CONTRACTORS PRIOR TO INSTALLATION, INCLUDING CONDUITS AND CABLE TRAYS. PROVIDE ALL PIPING OFFSETS REQUIRED FOR THE COMPLETE INSTALLATION OF THE SYSTEM WHETHER OR NOT THE OFFSETS ARE INDICATED ON THE PLANS. INSTALL PIPING HIGH ENOUGH TO AVOID LIGHTS, CONDUIT AND MISCELLANEOUS PIPING. DO NOT BLOCK ACCESS TO DEVICES.
- 4 REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS AND ARCHITECTURAL DETAILS FOR EXACT LOCATION OF ALL CEILING AND SIDEWALL AIR DISTRIBUTION AND DEVICES.
- 5 INSTALL ALL EQUIPMENT WITH THE MANUFACTURER'S RECOMMENDATION AND CODE REQUIRED CLEARANCES. INSURE ALL ITEMS FURNISHED WILL FIT IN THE SPACE AVAILABLE. MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS AND FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE INTENT AND MEANING OF THE PLANS AND SPECIFICATIONS. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PURCHASE AND INSTALLATION.
- 6 COORDINATE LOCATIONS AND ELEVATIONS OF ALL EXPOSED ITEMS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND DETAILS.
- 7 FURNISH 24"x24" ACCESS DOORS (UNLESS OTHERWISE INDICATED) FOR ANY CONCEALED ITEMS, SUCH AS DRAINS, VALVES, ETC. COORDINATE EXACT LOCATIONS WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
- 8 THE ENTIRE FIRE PROTECTION SYSTEM SHALL BE INSTALLED IN A MANNER THAT IS COMPLIANT WITH ALL APPLICABLE CITY, COUNTY, AND NORTH CAROLINA STATE BUILDING CODE REOUIREMENTS, LOCAL BUILDING INSPECTOR REOUIREMENTS, ALL APPLICABLE NFPA STANDARDS, AS WELL AS THE STANDARDS OF THE UNDERWRITER WHERE REQUIRED. THE HAZARD CLASSIFICATION SHALL BE PER PLANS AND SPECIFICATIONS.
- 9 VERIFY LATEST ARCHITECTURAL ROOM, WALL, AND CEILING LAYOUTS PRIOR TO DESIGN OF SYSTEM 10 SUBMIT DESIGN INSTALLATION DRAWINGS AND HYDRAULIC CALCULATIONS PRIOR TO THE START OF CONSTRUCTION TO THE OWNER'S UNDERWRITER WHERE APPLICABLE, THE LOCAL FIRE MARSHAL, AND ANY OTHER AUTHORITIES HAVING JURISDICTION FOR REVIEW AND APPROVAL. DESIGN
- INSTALLATION DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE STAMPED OR SEALED BY A NICET III DESIGNER OR A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH
- 11 IDENTIFYING SIGNAGE, TAGS, AND LABELS CONFORMING TO THE FIRE PROTECTION INDUSTRY STANDARDS SHALL BE SECURELY AFFIXED TO THE SYSTEM.
- 12 SPRINKLERS INSTALLED IN AREAS WITHOUT CEILINGS, OR CEILING TILES, SHALL BE OF THE UPRIGHT TYPE.
- 13 SPRINKLER CONTRACTOR SHALL INSTALL SPRINKLER HEADS WITHIN THE CENTER OF ANY CEILING TILE BEING PENETRATED.
- 14 INSTALL A DRAIN AT ALL RISER LOCATIONS AS WELL AS ALL LOW POINTS IN THE SYSTEM. AN INSPECTORS TEST DRAIN SHALL BE INSTALLED ON THE SYSTEM. SPRINKLER PIPING SHALL SLOPE DOWN TO DRAIN LOCATIONS.

THESE FIRE PROTECTION DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE EXACT SPRINKLER HEAD COUNT AND LOCATION SHALL BE DETERMINED BY THE FIRE PROTECTION CONTRACTOR. THE FIRE PROTECTION MAINS INDICATED ARE FOR REFERENCE GUIDANCE ONLY AND ARE THE ENGINEERS SUGGESTED ROUTING BUT THE FINAL ROUTING SHALL BE DETERMINED BY THE CONTRACTOR. THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE WORKING DRAWINGS IN ACCORDANCE WITH NFPA 13 FOR REVIEW AND APPROVAL BY THE ENGINEER AND APPLICABLE AHJ.

ARCHITECTS, PA 503 OBERLIN ROAD | SUITE 300 RALEIGH, NC 27605 919.833.3737

PROJECT INFORMATIO

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DKA JOB NUMBER 2023-02457

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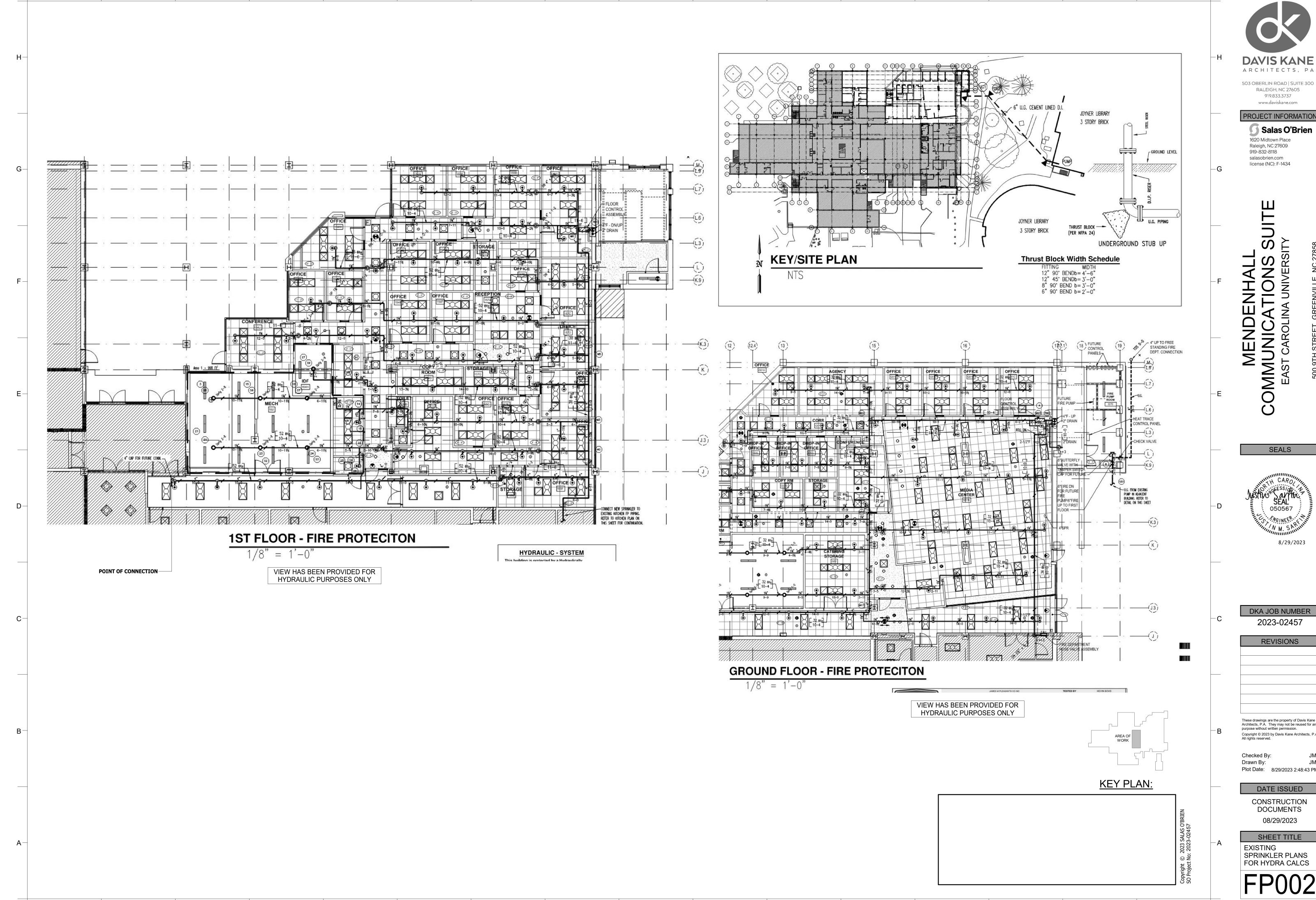
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DATE ISSUED CONSTRUCTION DOCUMENTS 08/29/2023

SHEET TITLE STANDARDS, SYMBOLS & **ABBREVIATIONS** 



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REVISIONS

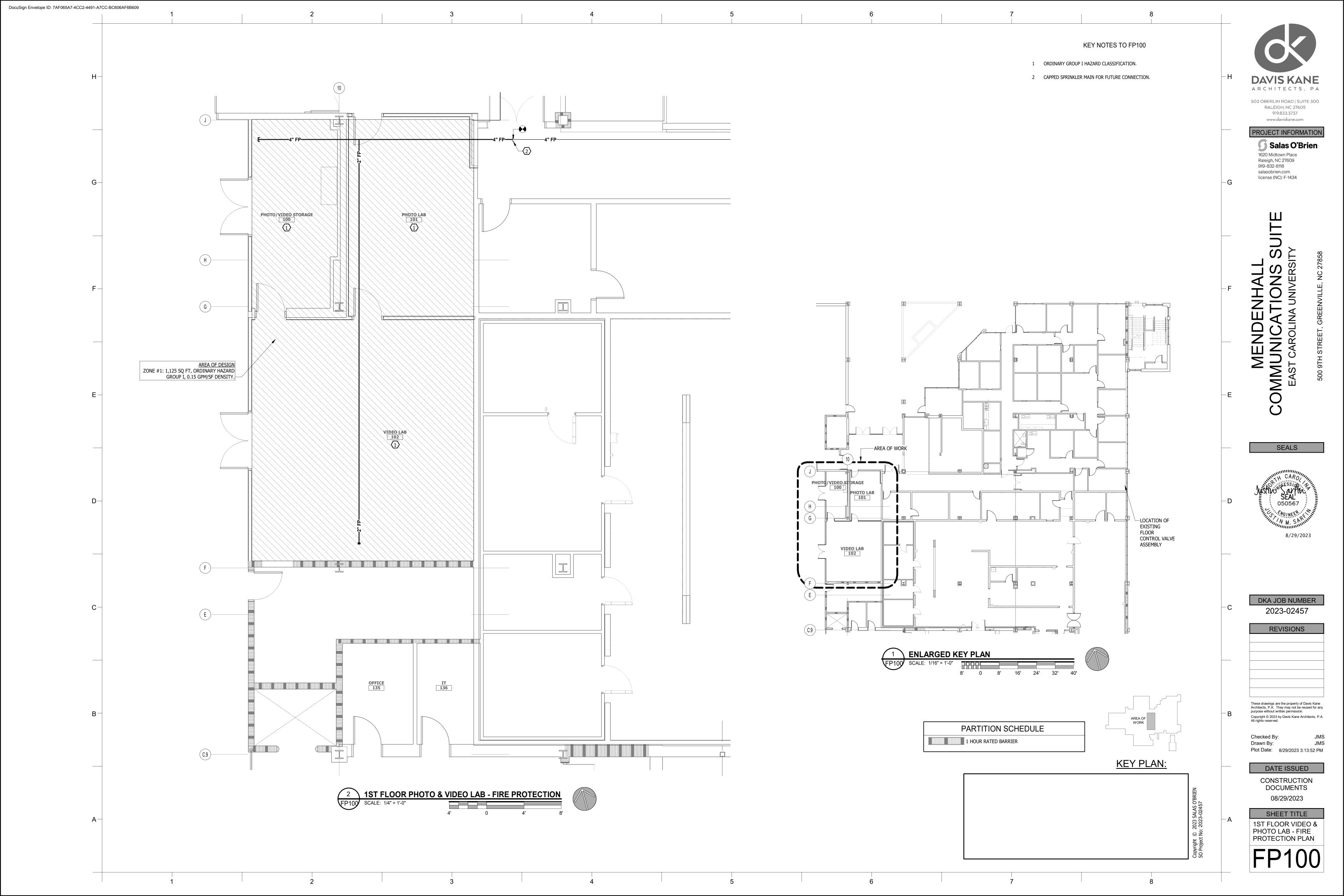
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CONSTRUCTION DOCUMENTS

08/29/2023 SHEET TITLE EXISTING SPRINKLER PLANS FOR HYDRA CALCS



HVAC HEATING, VENTILATION AND AIR CONDITIONING

INDIRECT DRAIN; INSIDE DIAMETER

LOW PRESSURE CONDENSATE RETURN

1000 BRITISH THERMAL UNITS PER HOUR

COMBINATION MOTOR STARTER AND DISCONNECT

LOW PRESSURE CONDENSATE SUPPLY

LEAVING WATER TEMPERATURE

MOTOR RATED TOGGLE SWITCH

MANUAL VOLUME DAMPER

NITROUS OXIDE; NUMBER

OPPOSED BLADE DAMPER

PLUMBING CONTRACTOR

PCHWP PRIMARY CHILLED WATER PUMP

PRESSURE INDEPENDENT

PUMPED CONDENSATE RETURN

PRESSURE REDUCING VALVE

POUNDS PER SQUARE INCH

POUNDS PER SQUARE INCH ABSOLUTE

POUNDS PER SQUARE INCH GAUGE

PRESSURE INDEPENDENT CONTROL VALVE

NET POSITIVE SUCTION HEAD

INTERNAL STATIC PRESSURE

LEAVING AIR TEMPERATURE

LIQUID PETROLEUM GAS

HTG HEATING

INCH

ISP

KW

KWH

LAT

LP

MAX

MFR

MH

MIN

MRT

MTD

MUA

MVD

N

N.C.

N.O.

NPSH

NTS

OC

PICV

PR

PNL

PSIG

QTY

SD

SS

STM

TAB

TOD

TOP

TOS

TSP

TU

TYP

UH

VAC

VERT

WG

W/O

HUB DRAIN; HEAT DETECTOR

HPR HIGH PRESSURE CONDENSATE RETURN

HAZARDOUS EXHAUST

HANDS-OFF-AUTOMATIC

HEX

HOA

HORIZ HORIZONTAL

HSTAT HUMIDISTAT

HT HEIGHT

HP HIGH PRESSURE

HPS HIGH PRESSURE STEAM

SECT SECTION

INVERT

KILOWATT

LB/HR POUNDS PER HOUR

MAXIMUM

MANHOLE

MINIMUM

MOUNTED

MAKE UP AIR

NITROGEN

NORMALLY CLOSED

NOT IN CONTRACT

NORMALLY OPEN

NOT TO SCALE

OUTSIDE AIR

ON CENTER

OUTSIDE DIAMTER

PRESSURE DROP

PANEL

POIN

RD ROUND

QUANTITY

RECIRC RECIRCULATING

REVISION

RETURN FAN

REINF REINFORCING

ROOM

SUPPLY AIR

SMOKE DAMPER

RETURN AIR

PHWP PRIMARY HOT WATER PUMP

POUNDS PER HOUR

POLYVINYL CHLORIDE

RELIEF; RELIEF AIR

RELATIVE HUMIDITY

REFRIGERANT LIQUID

REVOLUTIONS PER MINUTE

REDUCED PRESSURE ZONE

SCFM STANDARD CUBIC FEET PER MINUTE

SCHWP SECONDARY CHILLED WATER PUMP

SUPPLY FAN; SQUARE FEET

SHWP SECONDARY HOT WATER PUMP

STATIC PRESSURE LOSS

STATIC PRESSURE

STAINLESS STEEL

TRANSFER AIR

TOP OF DUCT

TOP OF PIPE

TOP OF STEEL

TERMINAL UNI

UNIT HEATER

VENTILATION AIR

VACCUUM (SUCTION)

VARIABLE FREQUENCY DRIVE

TEST AND BALANCE

TOTAL STATIC PRESSURE

UNDERWRITERS LABORITORIES INC.

SPEC SPECIFICATION

STEAM

TSTAT THERMOSTAT

TYPICAL

VENT

VERTICAL

WET BULB

WITHOUT

WATER GAUGE

EXPANSION TANK

WITH

REFRIGERANT SUCTION

OXYGEN

MANUFACTURER

MEDIUM PRESSURE

MOTOR STARTER

KILOWATT HOUR

LOW PRESSURE

HWR HEATING WATER RETURN

HWS HEATING WATER SUPPLY

HEAT EXCHANGER

#" SYSTEM ====

 $\longrightarrow$ 

——W—

\_\_\_\_\_XXXX

————

 $\boxtimes$ 

PIPE SIZE AND SYSTEM IDENTIFICATION

VALVE (REFER TO SPECIFICATIONS)

CALIBRATED BALANCING VALVE

**BUTTERFLY VALVE** 

GATE VALVE

GLOBE VALVE

CHECK VALVE

PLUG VALVE

BALL VALVE

GAS COCK

PIPE CAP

PIPE UNION

PIPE ANCHOR

PRESSURE GAUGE

THERMOMETER

STEAM TRAP

Y-TYPE STRAINER

BASKET STRAINER

PIPE TURNING UP

PIPE TURNING DOWN

CONCENTRIC REDUCER

ECCENTRIC REDUCER

PIPE ALIGNMENT GUIDE

FLEXIBLE PIPE CONNECTION

DIRECTION OF FLOW IN PIPE

PETES PLUG (P & T PORT)

BACKFLOW PREVENTER

PIPING TO BE DEMOLISHED

EXISTING PIPING

**ELECTRICAL SYMBOLS** 

MOTOR STARTER

FUSED DISCONNECT

TOGGLE SWITCH

- PLAN OR DETAIL NUMBER

- SHOWN ON SHEET NUMBER

— SHOWN ON SHEET NUMBER

SHEET NUMBER

—— SECTION NUMBER

DETAIL NUMBER

WITH SHEET NO.

ELEVATION LETTER

--- DIMENSION LINE

NON-FUSED DISCONNECT

VARIABLE FREQUENCY DRIVE

COMBINATION MOTOR STARTER/DISCONNECT

DISCONNECT, EXISTING OR BY OTHERS

POWER PANEL, EXISTING OR BY OTHERS

**GENERAL SYMBOLS** 

COLUMN NUMBER

DRAWING REVISION

OR LETTER

KEYED NOTE

CONNECT TO

REMOVE TO THIS

NO.

M001

**EXISTING** 

POINT

ARROW

NUMBER

NUMBER

MOTOR RATED TOGGLE SWITCH

SLOPE PIPE IN DIRECTION OF ARROW

PIPE CONNECTION AT BOTTOM OF MAIN

2-WAY CONTROL VALVE

3-WAY CONTROL VALVE

PRESSURE REDUCING VALVE

PRESSURE RELIEF VALVE

(SEE ABBREVIATIONS FOR SYSTEM TYPES)

BALANCING VALVE (REFER TO SPECIFICATIONS)

SUPPLY, VENTILATION, OUTSIDE

EXHAUST OR RELIEF AIR DUCT SECTION

RECTANGULAR DUCT DIMENSIONS

(IN PLAN WIDTH x HEIGHT INCHES)

FLAT OVAL DUCT DIMENSIONS

ROUND DUCT DIMENSIONS

DUCT TO BE DEMOLISHED

SLOPE DUCT IN DIRECTION OF ARROW

BELL MOUTH TAP FOR MEDIUM PRESSURE

CONICAL TAP WITH BALANCING DAMPER

WITH LOCKING QUADRANT OPERATOR

FOR LOW PRESSURE TAKEOFFS

SUPPLY DIFFUSER

RETURN GRILLE

EXHAUST GRILLE

MITERED ELBOW

RADIUS ELBOW

FLEXIBLE DUCT

FIRE DAMPER,

SMOKE DAMPER,

VOLUME DAMPER WITH MANUAL

OPERATOR AND LOCKING QUADRANT

DUCT MOUNTED MOTORIZED DAMPER

DUCT MOUNTED STEAM HUMIDIFIER

DUCT MOUNTED SMOKE DETECTOR

DAMPER TO MATCH RATING

DAMPER TO MATCH RATING

DAMPER TO MATCH RATING

CEILING RADIATION DAMPER,

DAMPER TO MATCH RATING

COMBINATION FIRE/SMOKE DAMPER,

AIR DISTRIBUTION SYMBOL, LETTER(S)

THERMOSTAT OR ROOM SENSOR

HUMIDISTAT OR ROOM SENSOR

DIRECT DIGITAL CONTROLS CABINET

EXISTING THERMOSTAT OR ROOM SENSOR

DENOTES TYPE, NUMBER INDICATES CFM

45° TAP WITH BALANCING DAMPER

WITH LOCKING QUADRANT OPERATOR

**EXISTING DUCT** 

**NEW DUCT** 

RETURN AIR DUCT SECTION

AIR DUCT SECTION

24x24

\_=

**TESTING AND BALANCING** 

TAB WORK SHALL BE COMPLETED BY AN INDEPENDENT BALANCING CONTRACTOR CERTIFIED BY THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU

GENERAL: AIR HANDLING AND DISTRIBUTION SYSTEMS, INCLUDING SUPPLY, RETURN, VENTILATION, AND EXHAUST AIRFLOWS SHALL BE BALANCED AND ADJUSTED IN ACCORDANCE WITH CHAPTER 10 OF ASHRAE STANDARD 111 AND SECTION 7.2.2 OF ASHRAE STANDARD 62.1. MAXIMUM AIR QUANTITIES AT EACH OUTLET OR INLET SHAL NOT VARY MORE THAN -5% TO +10% FROM THOSE INDICATED ON THE DRAWINGS.

FOUR COPIES OF THE DRAFT TEST AND BALANCE REPORTS SHALL BE PROVIDED TO THE A/E BEFORE THE FINAL INSPECTION. THE REPORTS SHALL COMPLY WITH REPORTING PROCEDURES DEFINED IN CHAPTER 13. ASHRAE STANDARD 111 AND AS HEREINAFTER SPECIFIED.

DRAFT REPORTS: UPON COMPLETION OF TAB PROCEDURES, PREPARE AND SUBMIT DRAFT REPORTS FOR REVIEW BY THE A/E. DRAFT REPORTS MAY BE HAND-WRITTEN, BUT MUST BE COMPLETE, FACTUAL, AND LEGIBLE. ORGANIZE AND FORMAT DRAFT REPORTS AS HEREINAFTER SPECIFIED.

FINAL REPORTS: AFTER REVIEW AND VERIFICATION BY THE FIELD CHECK BY THE A/E OF THE DRAFT REPORT, SUBMIT FINAL REPORTS, ORGANIZED AND FORMATTED AS HEREINAFTER SPECIFED.

REPORTS FORMAT: BIND REPORT FORMS COMPLETE WITH SCHEMATIC SYSTEMS DIAGRAMS AND/OR PLANS AND OTHER REFERENCED DATA IN REINFORCED. VINLY, THREE-RNG BINDERS.

**DUCT CLEANING:** 

GENERAL: MECHANICALLY CLEAN DUCT SYSTEMS SPECIFIED TO REMOVE ALL VISIBLE CONTAMINANTS SO THAT THE SYSTEMS ARE CAPABLE OF PASSING THE HVAC SYSTEM CLEANLINESS TESTS DEFINED BY NADCA ACR 2006.

SOURCE-REMOVAL CLEANING METHODS:

HVAC DUCTWORK SHALL BE CLEANED USING SOURCE-REMOVAL MECHANICAL CLEANING METHODS DESIGNED TO EXTRACT CONTAMINANTS FROM WITHIN THE HVAC SYSTEM AND TO SAFELY REMOVE THESE CONTAMINANTS FROM THE FACILITY. NO CLEANING METHOD, OR COMBINATION OF METHODS, SHALL BE USED THAT COULD POTENTIALLY DAMAGE COMPONENTS OF THE HVAC SYSTEM OR NEGATIVELY ALTER THE INTEGRITY OF THE SYSTEM.

USE CONTINUOUSLY OPERATING VACUUM-COLLECTION DEVICES TO KEEP EACH SECTION BEING CLEANED UNDER NEGATIVE PRESSURE.

CLEANING METHODS THAT REQUIRE MECHANICAL AGITATION DEVICES TO DISLODGE DEBRIS THAT IS ADHERED TO INTERIOR SURFACES OF HVAC SYSTEM COMPONENTS SHALL BE EQUIPPED TO SAFELY REMOVE THESE DEVICES. CLEANING METHODS SHALL NOT DAMAGE THE INTEGRITY OF HVAC SYSTEM COMPONENTS OR DAMAGE POROUS SURFACE MATERIALS SUCH AS DUCT AND PLENUM LINERS.

**CLEANING INSULATION:** 

EXPOSED INSULATION ELEMENTS PRESENT IN EQUIPMENT OR DUCTWORK SHALL BE THOROUGHLY CLEANED WITH HEPA VACUUMING EQUIPMENT WHILE THE HVAC SYSTEM IS UNDER CONSTANT NEGATIVE PRESSURE AND SHALL NOT BE PERMITTED TO GET WET ACCORDING TO NADCA ACR 2006.

CLEANING METHODS USED SHALL NOT CAUSE DAMAGE TO INSULATION AND WILL RENDER THE SYSTEM CAPABLE OF PASSING THE HVAC SYSTEM CLEANLINESS TESTS (SEE NADCA ACR 2006).

ANY MINERAL FIBER INSULATION MATERIALS THAT BECOME WET FROM OTHER CLEANING ACTIVITIES SHALL BE REPLACED.

COIL CLEANING:

CHILLED WATER COOLING COILS: CLEAN CHILLED WATER COOLING COILS AS FOLLOWS:

DE-ENERGIZE UNIT AND FOLLOW LOCK OUT/TAG PROCEDURES BEFORE CLEANING.

REMOVE DEBRIS GUARDS, CASING, ETC. TO PROVIDE ACCESS TO COILS.

USE A MILD DISH DETERGENT, SUCH AS DAWN® LIQUID, AS THE CLEANING AGENT.

KEEP THE SUPPLY FAN IN OPERATION TO PROVIDE DIFFERENTIAL AIR PRESSURE ACROSS THE COIL TO MOVE THE FLUSHING WATER AND CLEANING SOLUTION THROUGH THE COIL.

APPLY THE DETERGENT LIQUID (ABOUT A 10% SOLUTION IN WATER) WITH A PUMP SPRAYER ON THE

UPSTREAM FACE OF THE COIL, ALLOWING IT TO SOAK IN. THEN, FLUSH REPEATEDLY WITH CLEAN, COLD WATER. DO NOT USE A PRESSURE WASHER. REPEAT THIS PROCESS UNTIL SUDS AND WATER APPEAR ON THE DOWNSTREAM SIDE OF THE COIL,

WITH THE WATER OFF THE COIL FINALLY RUNNING "CLEAR".

INSPECT FINS FOR ALUMINUM OXIDATION AND DETERIORATION AND REPORT CONDITION TO A/E. IF FINS ARE BENT OR SMASHED, USE A COIL COMB TO STRAIGHTEN AS MUCH AS POSSIBLE. REPLACE CASING, DEBRIS GUARDS, ETC. AND RESTART UNIT.

COIL DRAIN PANS SHALL BE DRAINED AND CLEANED. AFTER CLEANING, TEST TO ENSURE THAT CONDENSATE DRAIN PANS ARE OPERATIONAL. REMOVE AND CLEAN CONDENSATE TRAP AND CLEAN DRAIN PIPING AS REQUIRED FOR DRAIN PAN SATISFACTORY OPERATION.

> APPENDIX B 2018 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

> > MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT Thermal Zone: 2013 ASHRAE FUNDAMENTALS, GREENVILLE NC, CLIMATE ZONE 3A winter dry bulb: 21°F

Interior design conditions 72°F winter dry bulb: 75°F summer dry bulb: relative humidity: 50% Building heating load: N/A N/A Building cooling load: Mechanical Spacing Conditioning System description of unit:

summer dry bulb: \_\_\_\_\_\_95°F\_\_\_\_\_

heating efficiency: cooling efficiency: size category of unit: -NO NEW EQUIPMENT— Size category. If oversized, state reason: Size category. If oversized, state reason:

List equipment efficiencies:

MECHANICAL DRAWING LIST TITLE STANDARDS, SYMBOLS & ABBREVIATIONS

M100 1ST FLOOR VIDEO & PHOTO LAB - MECHANICAL PLAN

**HVAC GENERAL NOTES** 

THE CONSTRUCTION WASTE MANAGEMENT AND INDOOR AIR QUALITY PLANS INCLUDED IN THE DOCUMENTS WILL BE ENFORCED AND DOCUMENTED. LOW EMITTING ADHESIVE & SEALANT MATERIALS AND PAINTS & COATINGS SHALL BE USED BY ALL TRADES. ALL SUCH MATERIALS SHOULD BE LABELED WITH

AND REAPPLIED WITH LOW VOC MATERIALS. COORDINATE WORK WITH OTHER TRADES PRIOR TO PURCHASE AND INSTALLATION OF ANY PIPING, DUCTWORK OR EQUIPMENT. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO INSTALLATION.

APPROPRIATE VOC LIMITS. MATERIALS THAT DO NOT COMPLY WILL BE REMOVED

REFER TO THE ARCHITECTURAL PLANS FOR DIMENSIONS. DO NOT SCALE THESE

DRAWINGS ALL DUCT AND PIPING LAYOUTS AND LOCATIONS SHOWN ARE DIAGRAMMATIC AND DO NOT INDICATE ALL FITTINGS REQUIRED TO COMPLETE WORK. COORDINATE THE DUCT AND PIPING LAYOUT WITH ALL CONTRACTORS PRIOR TO INSTALLATION, INCLUDING CONDUITS AND CABLE TRAYS. PROVIDE ALL DUCT AND/OR PIPING OFFSETS REQUIRED FOR THE COMPLETE INSTALLATION OF THE SYSTEM WHETHER OR NOT THE OFFSETS ARE INDICATED ON THE PLANS. INSTALL DUCTWORK AND PIPING HIGH ENOUGH TO AVOID LIGHTS, CONDUIT AND MISCELLANEOUS PIPING, BUT LOW ENOUGH TO ALLOW FOR EASY ACCESS TO SYSTEM BALANCING DEVICES. DO NOT BLOCK ACCESS TO DEVICES.

REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS AND ARCHITECTURAL DETAILS FOR EXACT LOCATION OF ALL CEILING AND SIDEWALL AIR DISTRIBUTION AND DEVICES.

LOCATE UNITS SUCH THAT ACCESS PANELS MAY BE FULLY OPENED (VIA TILE CEILING) FOR SERVICING UNIT. COORDINATE LOCATION WITH LIGHTING FIXTURES OR ANY OTHER EQUIPMENT.

ROUND DUCT RUN-OUTS TO DIFFUSERS SHALL BE SAME SIZE AS INLET DIAMETER SCHEDULED, UNLESS NOTED OTHERWISE. ALL DUCT DIMENSIONS ARE INSIDE CLEAR. SEE DETAILS AND SPECIFICATIONS FOR

INSULATION REQUIREMENTS. PROVIDE BALANCING DAMPERS WHERE INDICATED ON THE PLANS AND WHERE REQUIRED FOR SYSTEM BALANCING.

INSTALL ALL EQUIPMENT WITH THE MANUFACTURER'S RECOMMENDATION AND CODE REQUIRED CLEARANCES. INSURE ALL ITEMS FURNISHED WILL FIT IN THE SPACE AVAILABLE. MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS AND FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE INTENT AND MEANING OF THE PLANS AND SPECIFICATIONS. NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES

PRIOR TO PURCHASE AND INSTALLATION. COORDINATE LOCATIONS AND ELEVATIONS OF ALL EXPOSED MECHANICAL ITEMS WITH ARCHITECTURAL PLANS, ELEVATIONS, AND DETAILS. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: SENSORS, WALL DEVICES, SIDEWALL

GRILLES, CONTROL PANELS, AND ALARMS. FURNISH 24"x24" ACCESS DOORS (UNLESS OTHERWISE INDICATED) AT ALL MAINTENANCE ITEMS THAT ARE CONCEALED; SUCH AS EQUIPMENT, VALVES, DAMPERS, SENSORS, ETC. COORDINATE EXACT LOCATIONS WITH

ARCHITECT/ENGINEER PRIOR TO INSTALLATION. ALL WORK AND MATERIALS USED IS TO BE IN ACCORDANCE WITH THE 2018 NC MECHANICAL CODE.

#### **HVAC DEMOLITION NOTES**

SEE REQUIREMENTS OF SECTION 019916 OF THE SPECIFICATION. THIS DEMOLITION PLAN MAY OR MAY NOT REFLECT ALL EXISTING HVAC COMPONENTS AND SYSTEMS, THIS DRAWING IS BASED ON AVAILABLE DRAWINGS AND/OR VISUAL OBSERVATIONS AND IS INTENDED TO INDICATE THE MAGNITUDE OF DEMOLITION WORK REQUIRED BUT NOT TO EXCLUDE WORK NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID.

THE SCOPE OF THE DEMOLITION WORK REQUIRED INCLUDES REMOVAL OF ITEMS THAT MUST BE REINSTALLED OR REPLACED IN ORDER TO REMOVE ANOTHER ITEM OR INSTALL NEW WORK.

ALL EXISTING EQUIPMENT REMOVED SHALL BE DISPOSED OF BY THIS

CONTRACTOR (UNLESS NOTED OTHERWISE).

CONTRACTOR TO PATCH BUILDING CONSTRUCTION (WALLS, FLOORS, CEILINGS, ROOF, ETC.) DISTURBED BY HVAC DEMOLITION TO MATCH EXISTING. HVAC CONTRACTOR TO MINIMIZE DISTURBANCE OF REMAINING CONSTRUCTION.

THERMOSTATS AND SENSORS CONTAINING MERCURY SHALL BE DISPOSED IN ACCORDANCE WITH THE EPA RESOURCE CONSERVATION ANS RECOVERY ACT (RCRA). CONTRACTORS SHALL REFER TO EPA WEBSITE FOR HANDLING PROCEDURES FOR DISPOSAL AND SPILL MANAGMENT OF PRODUCTS CONTAINING

#### **PLUMBING DEMOLITION NOTES:**

SEE REQUIREMENTS OF SECTION 019916 OF THE SPECIFICATION. THIS DEMOLITION PLAN MAY OR MAY NOT REFLECT ALL EXISTING PLUMBING COMPONENTS AND SYSTEMS. THIS DRAWING IS BASED ON AVAILABLE DRAWINGS AND/OR VISUAL OBSERVATIONS AND IS INTENDED TO INDICATE THE MAGNITUDE OF DEMOLITION WORK REQUIRED BUT NOT TO EXCLUDE WORK NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO SUBMISSION OF BID.

THE SCOPE OF THE DEMOLITION WORK REQUIRED INCLUDES REMOVAL OF ITEMS THAT MUST BE REINSTALLED OR REPLACED IN ORDER TO REMOVE ANOTHER ITEM OR INSTALL NEW WORK.

ALL EXISTING EQUIPMENT REMOVED SHALL BE DISPOSED OF BY THIS

CONTRACTOR (UNLESS NOTED OTHERWISE).

GENERAL CONTRACTOR TO PATCH BUILDING CONSTRUCTION (WALLS, FLOORS, CEILINGS, ROOF, ETC.) DISTURBED BY PLUMBING DEMOLITION TO MATCH EXISTING. PLUMBING CONTRACTOR TO MINIMIZE DISTURBANCE OF REMAINING CONSTRUCTION AND SHALL COORDINATE DEMOLITION AND REPAIR WITH GENERAL CONTRACTOR.

SEALS

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DKA JOB NUMBER 2023-02457

REVISIONS

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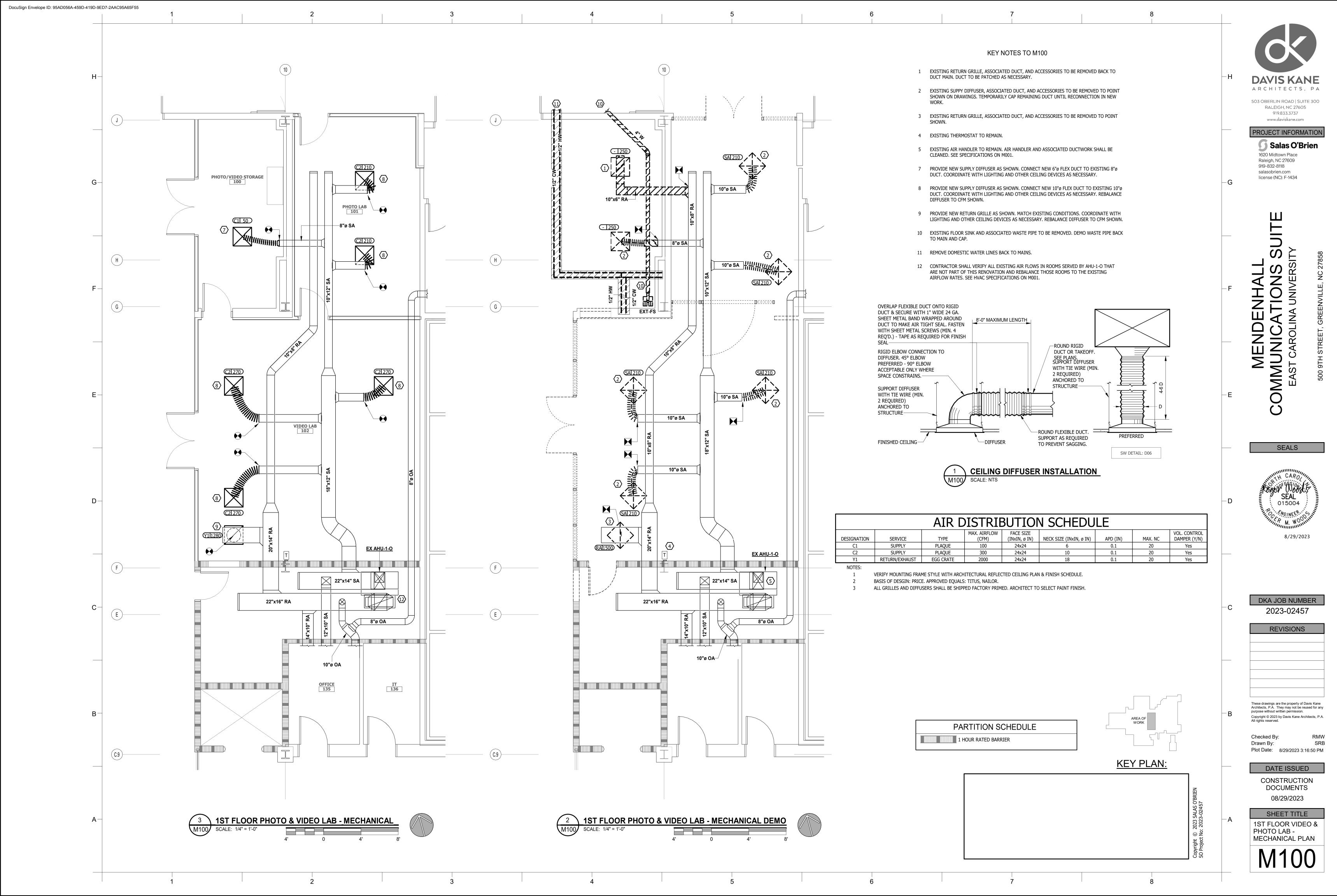
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DATE ISSUED CONSTRUCTION

DOCUMENTS 08/29/2023 SHEET TITLE STANDARDS.

SYMBOLS & **ABBREVIATIONS** 



AMPERES OR AMP METER

ABOVE FINISHED CEILING

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

ATS AUTOMATIC TRANSFER SWITCH

AMERICAN WIRE GAGE

BELOW FINISHED CEILING

CCTV CLOSED CIRCUIT TELEVISION SYSTEM

BELOW FINISHED GRADE

AMPERE INTERRUPTING CAPACITY

AMERICAN NATIONAL STANDARDS INSTITUTE

ALTERNATING CURRENT

AMP FRAME

ALT ALTERNATE

CD/Cd CANDELA

COAX COAXIAL CABLE

CONTR CONTRACTOR

COPPER

DWG DRAWING

ELEC ELECTRICAL

CLG CEILING

ΑT

AWG

CTV

CU

ECB

EGC

ETR

FFE

GB

GEC

GFCI

GND

HD

HOA

KW

LTG

MCB

MCS

NOM

NTS

OC

PH

ARCH ARCHITECTURAL

AMP TRIP

CELSIUS; COIL

CIRCUIT BREAKER

CT CURRENT TRANSFORMER

EXHAUST FAN

EMERGENCY

FLOOR

FLA FULL LOAD AMPS

FEET; FOO

GAUGE; GAGE

GROUND BUS

GROUND

HERTZ

HEAVY DUTY

HORSEPOWER

ISOLATED GROUND

JUNCTION BOX

KILOVOLT AMPERE

LIGHT EMMITING DIODE

LOCKED ROTOR AMPS

MOTOR; METERING

MAIN CIRCUIT BREAKER

MOTOR CONTROL CENTER

MOLDED CASE SWITCH

NEC NATIONAL ELECTRICAL CODE

MOTOR CONTROL PROTECTOR

NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

NFPA NATIONAL FIRE PROTECTION ASSOCIATION

POINT; POTENTIAL TRANSFORMER

NORMALLY OPEN; NUMBER

KILOVOLT

KILOWATT

KWH KILOWATT HOUR

LIFE SAFETY

METAL CLAD

LIGHTING

MINIMUM

N, NEU NEUTRAL

NF NON-FUSED

NIC NOT IN CONTRACT

NOMINAL

NIGHT LIGHT

NOT TO SCAL

ON CENTER

OVERLOAD

POLE

PHASE

PANEL

PULL BOX

PHOTOCEL

POWER FACTOR

MAIN LUG ONLY

FUSE

FLEX FLEXIBLE

CABLE TELEVISION

ENCLOSED CIRCUIT BREAKER

ELECTRICAL METALLIC TUBING

EMERGENCY POWER OFF

ELECTRIC WATER COOLER

FLC FLEXIBLE LIQUIDTIGHT CONDUIT

FLEXIBLE METAL CONDUIT

GENERAL CONTRACTOR

HANDS-OFF-AUTOMATIC

GROUNDING ELECTRODE CONDUCTOR

HVAC HEATING, VENTILATING & AIR CONDITIONING

INTERMEDIATE METAL CONDUIT

GROUND FAULT (CIRCUIT) INTERRUPTER

FIRE ALARM CONTROL PANEL

FATC FIRE ALARM TERMINATION CABINET

FINISHED FLOOR ELEVATION

EXISTNG TO REMAIN

EQUIPMENT GROUNDING CONDUCTOR

PER UNIT NAMEPLATE

RATED LOAD AMPS

SOLID NEUTRAL

SPECIFICATION

**SWITCHBOARD** 

SWITCHGEAR

TELECO TELECOMMUNICATIONS

TEMPERATURE

TELEVISION

TYPICAL

VOLUME

WIREGUARD

WEATHERPROOF

**EXPLOSION PROOF** 

ROUND; DIAMETER; PHASE

**ELECTRICAL CIRCUITING KEY** 

X-#,#,# -----AREA DEVICE HOMERUN

X-# LOCAL DEVICE CIRCUIT

X-#,#,# ——AREA LIGHTING HOMERUN

DESIGNATION

WHERE INDICATED

—DEVICE AS INDICATED

WHERE INDICATED

DESIGNATION, PER

**SWITCHING GROUP** 

SWITCH TYPE AS INDICATED

—LOCAL LIGHTING CIRCUIT

**DESIGNATION INDICATES** 

DESIGNATION (UNSWITCHED)

CIRCUIT DESIGNATION

TYPE OF LUMINAIRE

-SWITCHLEG BETWEEN

LUMINAIRES

X-#\_ EMERGENCY LIGHT FIXTURE

(UNSWITCHED)

X-# EXIT LIGHT FIXTURE CIRCUIT

**GENERAL SYMBOLS** 

PLAN OR DETAIL NUMBER

— SHOWN ON SHEET NUMBER

---- SHEET NUMBER

——— SECTION NUMBER

SHOWN ON SHEET NUMBER

DETAIL NUMBER

WITH SHEET NO.

ELEVATION LETTER

—— DIMENSION LINE

TRANSFORMER

**IMPEDANCE** 

**WIRE** 

WITH

SURGE PROTECTED

RIDGID METAL CONDUIT

SURGE PROTECTED DEVICE

SINGLE POLE DOUBLE THROW

SINGLE POLE SINGLE THROW

TELEPHONE BACK BOARD

TOTAL HARMONIC DISTORTION

UNLESS NOTED OTHERWISE

VOLTS DIRECT CURRENT

VOLTS ALTERNATING CURRENT

VARIABLE FREQUENCY DRIVE

UNDERWRITERS LABORATORIES INC.

ROUND

SPD

SPDT

SPEC

SPST

SWBD

SWGR

TEMP

THD

TYP

UNO

VFD

VOL

**XFMR** 

REVISION

POLYVINYL CHLORIDE (CONDUIT)

SIGNAL NOTIFICATION APPLIANCE CIRCUIT

ОН

 $\odot$ 

SUPPLEMENTAL GROUND BAR

ELECTRICAL DEMAND METER

SURGE PROTECTION DEVICE

WALL MTD FIRE ALARM PULL STATION

SMOKE DETECTOR FOR ELEVATOR RECALL, CEILING MTD

SMOKE DETECTOR WITH SOUNDER BASE, CEILING MTD

SMOKE DETECTOR WITH SOUNDER BASE, WALL MTD

WALL MTD REMOTE ALARM INDICATOR LAMP (RAIL)

WALL MTD SPEAKER TYPE AUDIO/VISUAL APPLIANCE

WALL MTD CHIME TYPE AUDIO/VISUAL APPLIANCE

CEILING MTD HORN TYPE AUDIO/VISUAL ALARM APPLIANCE

CEILING MTD SPEAKER TYPE AUDIO/VISUAL ALARM APPLIANCE

FLOW SWITCH FIRE ALARM CONNECTION, SWITCH PROVIDED BY OTHERS

POST INDICATOR VALVE FIRE ALARM CONNECTION, VALVE PROVIDED BY

TAMPER SWITCH FIRE ALARM CONNECTION, SWITCH PROVIDED BY OTHERS

CEILING MTD CHIME TYPE AUDIO/VISUAL ALARM APPLIANCE

WALL MTD VISUAL ALARM APPLIANCE

CEILING MTD FIRE ALARM VISUAL DEVICE

FIRE ALARM MONITOR MODULE

FIRE ALARM TEMPERATURE SENSOR

CEILING MTD FIRE ALARM SPEAKER

LINEAR BEAM TRANSMITTER

FIRE ALARM WALL MTD SPEAKER

FIREMAN'S 2-WAY TELEPHONE

FIRE ALARM ISOLATION MODULE

FIRE ALARM ANNUNCIATOR PANEL

FIRE ALARM CONTROL PANEL

DOOR CONTROL ID TAG

SECURITY PANIC BUTTON

EMERGENCY TELEPHONE

RL

RESCUE ASSISTANCE STATION

RESCUE ASSISTANCE LIGHT

EXISTING TO BE DEMOLISHED

EXISTING TO REMAIN

CORD REEL

FIRE ALARM TERMINAL CABINET

SECURITY SYSTEM KEYPAD, 42" AFF

CCTV SECURITY CAMERA WITH FIXED MOUNT

CCTV SECURITY CAMERA WITH PTZ FEATURES

MASTER RESCUE ASSISTANCE STATION

CCTV DOME SECURITY CAMERA WITH 360 FEATURES

ACCESS CONTROL CARD READER

FIRE ALARM ASPIRATION SMOKE DETECTOR

DIGITAL ALARM COMMUNICATIONS TRANSMITTER

SUPPLEMENTAL NOTIFICATION APPLIANCE CABINET

LINEAR BEAM RECEIVER

FIRE ALARM CONTROL MODULE OR RELAY

FIRE ALARM BELL; # INDICATED DIAMETER IN INCHES

DOOR HOLDER

OTHERS

CLOCK

WALL MTD HORN TYPE AUDIO/VISUAL APPLIANCE

SMOKE DETECTOR, CEILING MTD, MULTI SENSOR

CEILING MTD REMOTE ALARM INDICATOR LAMP

SMOKE DETECTOR, DUCT MTD (WITH RAIL)

SMOKE DETECTOR, CEILING MTD

CARBON MONOXIDE DETECTOR

HEAT DETECTOR, CEILING MTD

SMOKE DETECTOR, WALL MTD

WALL MTD HEAT DETECTOR

GROUND PER NEC

WALL MTD LIGHTING FIXTURE AND OUTLET FLUSH MOUNTED MUSHROOM HEAD PUSH BUTTON FLUSH MOUNTED PUSH BUTTON PENDANT LIGHTING FIXTURE AND OUTLET

DOWNLIGHT LIGHTING FIXTURE AND OUTLET WALL MTD LIGHTING FIXTURE AND OUTLET

PENDENT MOUNTED STRIP FIXTURE

CEILING MTD LIGHTING FIXTURE AND OUTLET WALL MTD EXIT SIGN AND OUTLET, SINGLE FACE. ARROW INDICATES

CEILING MTD EXIT SIGN AND OUTLET, DUAL FACE. ARROWS INDICATE

EMERGENCY LIGHT BATTERY PACK - TWO HEAD UNIT.

CEILING MOUNTED EMERGENCY BATTERY LIGHT EMERGENCY LIGHT REMOTE HEAD

GROUND MOUNTED FLOODLIGHT AND OUTLET

AREA LUMINAIR AND STANDARD FLUSH MTD TOGGLE SWITCH, SPST, 20A, 120/277V FLUSH MTD TOGGLE SWITCH, DPST, 20A, 120/277V

FLUSH MTD 3-WAY TOGGLE SWITCH, 20A, 120/277V FLUSH MTD 4-WAY TOGGLE SWITCH, 20A, 120/277V FLUSH MTD DIMMER SWITCH, 20A, 120/277V

FLUSH MTD KEY SWITCH, 20A, 120/277V FLUSH MOUNTED OCCUPANCY SENSOR SWITCH, 20A, 120/277V

LIGHT ON WITH OPEN SWITCH FLUSH MTD TOGGLE SWITCH WITH PILOT LIGHT. LIGHT ON WITH

FLUSH MTD LIGHTED HANDLE TOGGLE SWITCH, SPST, 20A, 120V.

CLOSED SWITCH. TIMED SWITCH

CEILING MTD INFRA-RED OCCUPANCY SENSOR SWITCH CEILING MTD ULTRASONIC OCCUPANCY SENSOR SWITCH

CEILING MTD DUAL TECHNOLOGY (IR, U) OCCUPANCY SENSOR SWITCH

PHOTOCELL FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W

FLUSH MTD DUPLEX GFCI RECEPTACLE, 20A, 125V, 3W

FLUSH MTD DUPLEX RECEPTACLE WITH DUPLEX USB OUTLETS, 20A, 125V. 3W FLUSH MTD SINGLE RECEPTACLE, 20A, 125V, 3W

FLUSH MTD QUADRUPLEX RECEPTACLE, 20A, 125V, 3W FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W, SPLIT WIRED WITH

TOP OUTLET SWITCHED. FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W, INSTALLED VERTICALLY 4" ABOVE BACKSPLASH OR COUNTERTOP IF NO BACKSPLASH EXISTS.

FLUSH MTD OUADRUPLEX RECEPTACLE, 20A, 125V, 3W, INSTALLED VERTICALLY 4" ABOVE BACKSPLASH OR COUNTERTOP IF NO BACKSPLASH EXISTS.

WALL MOUNTED POWER DEVICE FLOOR BOX WITH DEVICE(S). REFER TO SCHEDULES FOR MARK

WALL MTD TELECOM OUTLET, REFER TO SCHEDULES FOR MARK CEILING MTD RECEPTACLE AND OUTLET, 20A, 125V

CEILING MTD TELECOM OUTLET, REFER TO SCHEDULES FOR MARK CEILING MTD DUPLEX RECEPTACLE & TELECOM OUTLET, REFER TO SCHEDULES FOR MARK

CEILING MTD PUBLIC ADDRESS SPEAKER FLUSH MTD VOLUME CONTROL FOR SPEAKER

**(b)** 

V

COLUMN NUMBER

DRAWING REVISION

OR LETTER

NUMBER

NUMBER

**KEYED NOTE** 

CONNECT TO

REMOVE TO THIS

**EXISTING** 

**POINT** 

NORTH

ARROW

WALL MTD TELEVISION ANTENNA/ELECTRICAL OUTLET, REFER TO SCHEDULES FOR MARK

(WIFI) WIRELESS ACCESS POINT. PANELBOARD, 250V LEVEL

PANELBOARD, 600V LEVEL

HOMERUN; ARROW HEADS INDICATE NUMBER OF CIRCUITS, LETTERS AND NUMBERS DESIGNATE PANEL AND CIRCUITS. SHORT TICK MARKS INDICATE NUMBER OF CURRENT CARRYING PHASE CONDUCTORS. LONG TICK MARK(S) INDICATE NEUTRAL(S). GROUNDING CONDUCTORS REQUIRED BY SPECIFICATIONS ARE NOT SHOWN. CONDUCTOR SIZES SPECIFIED ON THE PANEL SCHEDULES ARE MANDATORY FOR THE ENTIRE CIRCUIT EXCEPT WHERE SPECIFICATIONS REQUIRE A SIZE

INCREASE FOR VOLTAGE DROP. SURFACE METAL RACEWAY WITH DEVICES, LETTER DESIGNATES TYPE PENDANT MTD, PLUG-IN BUS DUCT WITH PLUG-IN CIRCUIT BREAKER OR FUSIBLE SWITCH AND TAP BOX. DUCT AND SWITCH RATING AS NOTED.

TOP # - DEVICE MAXIMUM RATING OR FRAME SIZE BOTTOM # - FUSE SIZE OR DEVICE SETTING DISCONNECT SWITCH.

COMBINATION DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER. SEE SCHEDULE OR NOTE. FLUSH MTD MANUAL MOTOR STARTER SWITCH WITHOUT OVERLOAD

MAGNETIC MOTOR STARTER 3 POLE CIRCUIT BREAKER IN ENCLOSURE. # INDICATES CB RATING. VARIABLE FREQUENCY DRIVE CONTROLLER, 40" AFF, PROVIDED BY

HVAC OR PLUMBING CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR

MAGNETIC CONTACTOR, SIZE PER SCHEDULE JUNCTION, PULL, TAP OR OUTLET BOX (CODE SIZE) TIME CLOCK

MAGNETIC RELAY, SIZE PER SCHEDULE

**ELECTRICAL DRAWING LIST** E001 STANDARDS, SYMBOLS & ABBREVIATIONS 1ST FLOOR VIDEO & PHOTO LAB - POWER PLAN 1ST FLOOR VIDEO & PHOTO LAB - LIGHTING PLAN ELECTRICAL DETAILS & SCHEDULES

#### **ELECTRICAL GENERAL NOTES**

- ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED FOR THIS PROJECT. SYMBOLS NOT SHOWN ON THIS ELECTRICAL SYMBOL LEGEND ARE IDENTIFIED ON THE DRAWINGS WHERE
- THEY OCCUR. UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS, MOUNTING HEIGHT OF
- DEVICES IS TO BE THE CENTERLINE OF THE DEVICE. UNLESS OTHERWISE INDICATED, SWITCHES AND SIMILAR DEVICES ARE TO BE LOCATED 42" AFF;
- RECEPTACLES ARE TO BE VERTICALLY MOUNTED AT 18" AFF WITH THE GROUNDING TERMINAL ON THE
- TELEPHONE & DATA OUTLETS ARE TO BE MOUNTED AT 18" AFF UNLESS OTHERWISEINDICATED. "W" INDICATES MOUNTING AT 42" AFF; "C" INDICATES MOUNTING ABOVECOUNTERTOP WITH ALIGNMENT AND
- HEIGHT AS INDICATED FOR RECEPTACLES SIMILARLY MOUNTED
- FIRE ALARM PULL STATIONS ARE TO BE VERTICALLY MOUNTED AT 42" AFF. FIRE ALARM INDICATING APPLIANCES SHALL BE 15 Cd RATING, UNLESS NOTED OTHERWISE ON THE PLANS. FIRE ALARM INDICATING APPLIANCES ARE TO BE MOUNTED WITH THE LOWER EDGE OF THE VISUAL ELEMENT AT 6'-8" AFF OR 6" BFC, WHICHEVER IS LOWER. WHERE DUCTWORK, CONDUIT, OR OTHER
- OBSTRUCTIONS BLOCK DIRECT VIEW OF APPLIANCE, MOUNT 6" BELOW SUCH OBSTRUCTIONS. CEILING MOUNTED SMOKE DETECTORS ARE SHOWN IN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH CEILING FEATURES. WALL MOUNTED SMOKE DETECTECTORS ARE TO BE MOUNTED 10' BELOW FINISHED CEILING TO THE CENTER OF DEVICE AND A MINIMUM OF 12" FROM ADJACENT WALLS OR OTHER OBSTRUCTIONS
- COORDINATE SMOKE DETECTOR AND HEAT DETECTOR LOCATIONS WITH HVAC SUPPLY AND RETURN GRILLES. MAINTAIN 3'-0" CLEARANCE BETWEEN EDGE OF SUPPLY GRILL AND EDGE OF SMOKE DETECTOR UPPER CASE LETTER (OR LETTER/NUMBER COMBINATION) ADJACENT TO FIXTURE OR SWITCH DESIGNATES
- TYPE. SEE FIXTURE SCHEDULE FOR DETAILS. LOWER CASE LETTER ADJACENT TO FIXTURE OR SWITCH DESIGNATES CONTROL RELATIONSHIP 13 NUMBER ADJACENT TO FIXTURE, SWITCH, OR RECEPTACLE DESIGNATES CIRCUIT CONNECTION.
- SINGLE DIAGONAL LINE ACROSS A FIXTURE INDICATES FIXTURE IS UNSWITCHED FOR 24 HOUR DIAGONAL HATCH ACROSS A FIXTURE INDICATES FIXTURE IS SUPPLIED FROM THE CRITICAL BRANCH OF
- THE ESSENTIAL ELECTRICAL SYSTEM. CROSS HATCH ACROSS A FIXTURE INDICATES FIXTURE IS SUPPLIED FROM THE LIFE SAFETY BRANCH OF THE ESSENTIAL ELECTRICAL SYSTEM.

#### **ELECTRICAL DEMOLITION GENERAL NOTES**

- (ER) EXISTING ELECTRICAL ITEM TO REMAIN. REFEED FROM EXISTING CIRCUITING IF DEMOLITION IN ADJACENT AREAS DISCONNECT EXISTING CIRCUITING.
- (R) EXISTING ELECTRICAL ITEM TO BE REMOVED INCLUDING ALL WIRING, CONDUIT AND ASSOCIATED ELECTRICAL
- ALL DEMOLITION WORK IS TO BE COORDINATED WITH PHASING OF CONSTRUCTION AND BID ALTERNATES AS OUTLINED ON ARCHITECTURAL SHEETS.
- REMOVE ALL ELECTRICAL CONDUIT, CABLE, WIRING, DEVICES, JUNCTION BOXES, FITTINGS, AND RELATED ITEMS FROM ALL WALLS, CEILINGS, FLOORS, AND/OR PORTIONS OF SAME INDICATED AS BEING DEMOLISHED BY ANY DIVISION OF THE CONTRACT DOCUMENT SET OR INDICATED ELSEWHERE IN THE CONTRACT DOCUMENT SET AS REQUIRING ELECTRICAL DEMOLITION.
- REMOVE ALL LIGHTING FIXTURES AND RELATED ITEMS FROM THE DEMOLITION AREA OR OTHER AREAS WHERE NEW LIGHTING FIXTURES ARE TO BE INSTALLED. EXISTING CONDUIT OR CABLE SERVING ITEMS OUTSIDE THE DEMOLITION AREA MAY REMAIN IF THEY ARE CONCEALED BY THE NEW CONSTRUCTION AND MEET THE SPECIFICATIONS REQUIREMENTS OF THE PRESENT PROJECT. NEW FIXTURES ARE TO BE SUPPLIED BY NEW (OR
- 4 EXTEND OR RELOCATE ALL EXISTING CIRCUITS AND RELATED ITEMS SERVING EXISTING UTILIZATION OR OTHER EQUIPMENT WHERE SUCH CIRCUITS OR ITEMS ARE DISRUPTED DUE TO DEMOLITION ACTIVITIES OF ANY DIVISION OF THIS PROJECT. RELOCATE ALL EXISTING JUNCTION BOXES OR SIMILAR ITEMS THAT WILL BE RENDERED INACCESSIBLE BY NEW CONSTRUCTION FURNISHED UNDER ANY DIVISION OF THIS PROJECT. PROVIDE ANY AND ALL TEMPORARY ELECTRICAL SUPPLY (SUPPLIES) AS NEEDED TO MEET THIS REQUIREMENT REMOVE ALL ABANDONED CIRCUITS BACK TO THE POINT OF SUPPLY OR BACK TO THE POINT WHERE OTHER REMAINING LOADS ARE CONNECTED. LABEL ANY UNUSED OVERCURRENT DEVICES AS "SPARE".
- WHERE EQUIPMENT OR DEVICES ARE REMOVED AND NOT REPLACED BY A SIMILAR ITEM OR EQUIPMENT REPAIR WALL SURFACES TO MATCH EXISTING SURROUNDING SURFACE. PAINT AS REQUIRED TO MATCH
- PROVIDE NEW SUPPORT(S) OR RE-SUPPORT AS REQUIRED ALL EXISTING CONDUIT, JUNCTION BOXES, CABLES, AND/OR OTHER ELECTRICAL ITEMS AS REQUIRED TO MEET THE SUPPORT REQUIREMENTS OF THE PRESENT
- PROVIDE NEW, OR REWORK EXISTING, FIRE STOPPING AT ALL THROUGH-PENETRATIONS OF CONDUIT OR OTHER ELECTRICAL ITEMS THAT WILL REMAIN AT THE CONCLUSION OF THE PROJECT. FIRE STOPPING PROVIDED FOR EXISTING ITEMS MUST MEET THE REQUIREMENTS OF THE PRESENT PROJECT.
- WHERE EXISTING FIXTURES ARE TO BE REUSED, USE MILD DETERGENT AND CLEAN ALL INTERIOR AND EXTERIOR SURFACES, REPLACE LAMPS AND BALLAST'S AND ANY MISSING OR BROKEN ELECTRICAL PARTS, ALL FLUORESCENT LAMPS ARE TO BE COOL WHITE.
- 10 PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING ALL
- 11 CIRCUIT NUMBERING IN PARENTHESIS ( ) ARE BASED ON PREVIOUS PROJECT DOCUMENTATION ARE PROVIDED IN GOOD FAITH AND ARE BELIEVED TO BE ACCURATE. CONTRACTOR IS TO VERIFY EXISTING CIRCUITING AND
- CONSULT ENGINEER IF SERIOUS DISCREPENSIES EXIST.

#### **APPENDIX B 2018 BUILDING CODE SUMMARY** FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN

ELECTRICAL SUMMARY

**ELECTRICAL SYSTEM AND EQUIPMENT** 

Method of Compliance: Energy Code: Prescriptive Performance

ASHRAE 90.1: Prescriptive Performance Lighting schedule (each fixture type)

lamp type required in fixture See fixture Schedule number of lamps in fixture

ballast type used in the fixture \rightarrow on Drawing Sheet number of ballasts in fixture total wattage per fixture

total interior wattage specified vs. allowed: (whole building or space by space)

total exterior wattage specified vs. allowed: Additional Efficiency Package Options

(When using the 2018 NCECC; not required for ASHRAE 90.1) ☑ C406.2 More Efficient Mechanical Equipment C406.3 Reduced Lighting Power Density

C406.4 Enhanced Digital Lighting Controls C406.5 On-Site Renewable Energy C406.6 Dedicated Outdoor Air System

C406.7 Reduced Energy Use in Service Water Heating

08/29/2023

SHEET TITLE STANDARDS, SYMBOLS &

**ABBREVIATIONS** 

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503 OBERLIN ROAD | SUITE 300

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) Salas O'Brier

SEALS



DKA JOB NUMBER

2023-02457

REVISIONS

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DATE ISSUED

CONSTRUCTION DOCUMENTS

# **DAVIS KANE**

ARCHITECTS, PA 503 OBERLIN ROAD | SUITE 300

RALEIGH, NC 27605 919.833.3737 www.daviskane.com

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SEALS

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08/29/2023 SHEET TITLE 1ST FLOOR VIDEO & PHOTO LAB -

POWER PLAN

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SHEET TITLE 1ST FLOOR VIDEO & PHOTO LAB -

LIGHTING PLAN

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ICON

COMMENTS

PROVIDE 90 MIN. BATTERY BACKUP

LITHONIA #LHQM-R-HO RO PROVIDE 90 MIN. BATTERY BACKUP

FIXTURE SCHEDULE NOTES:

DESCRIPTION

A1E ARCHITECTURAL 2x2 LAYIN RECESSED 4000

B1 FLAT PANEL 2x2 LAYIN RECESSED LIGHT 4000

EX EMERGENCY EXIT SIGN

ARCHITECTURAL 2x2 LAYIN RECESSED 4000

MARK

1. THIS FIXTURE SCHEDULE IDENTIFIES A FIXTURE THAT MEETS THE SPECIFIED PERFORMANCE REQUIREMENTS AND A LEVEL OF QUALITY REQUIRED FOR THE PROJECT. MANUFACTURER'S NAMES AND FIXTURE SERIES/MODELS IN SCHEDULE ARE NOT A BRAND NAME SPECIFICATION. EQUIVALENT FIXTURES BY MANUFACTURERS OTHER THAN THOSE LISTED MAY BE SUBMITTED FOR THIS PROJECT.

2000

RECESSED

RECESSED

SURFACE

2000 RECESSED

- 2. PROVIDE LED DRIVERS SUITABLE FOR FULL RANGE DIMMING, INTEGRAL SURGE PROTECTION, CURRENT TOTAL HARMONIC DISTORTION (THD) OF <20% AND A POWER FACTOR >0.90. IN ADDITION, DRIVERS MUST BE RF SUPPRESSED FOR MINIMUM INJECTION OF FEEDBACK INTO SUPPLY LINES. MAXIMUM CURRENT THD AND MINIMUM POWER FACTOR MUST BE SUBMITTED AS A PART OF THE FIXTURE SUBMITTAL DATA.
- 3. UNLESS OTHERWISE INDICATED, PROVIDE SINGLE DRIVER PER FIXTURE.
- 4. PROVIDE MOUNTING FRAME AND RELATED ACCESSORIES FOR ALL FIXTURES AS REQUIRED TO MATCH CEILING CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT CEILING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF FIXTURE SCHEDULE MANUFACTURER'S PART NUMBERS FOR PURPOSES OF MATCHING CEILING CONSTRUCTION.
- 5. PROVIDE DIMMING DRIVERS WHERE DIMMING CONTROLS ARE INDICATED ON THE PLANS.
- 6. ALL FIXTURES TO HAVE A COLOR TEMPERATURE OF 4000K UNLESS NOTED OTHERWISE.
- 7. UNLESS NOTED OTHERWISE, ALL FIXTURES SHALL INCLUDE INTEGRAL DRIVER.
- 8. ALL FIXTURES SHALL BE UL OR THIRD PARTY LISTED AS COMPLETE ASSEMBLY.
- 9. FOR LIGHT FIXTURES HAVING LINEAR VISUAL FEATURES (IE: CENTER BASKET, LOUVERS, ETC), COORDINATE AND ALIGN COMPONENTS IN A SIMILAR DIRECTION CONSISTENTLY ACROSS THE BUILDING SPACES.

SW DETAIL: IN0011 LED

LIGHTING FIXTURE SCHEDULE

14 VA 0-10V

277 14 VA 0-10V

LUMENS MOUNTING VOLTAGE WATTAGE CONTROL

277

277

277

FIXTURE MEETING

SPECIFICATION ML

CREE: CR22

CREE: CR22

LITHONIA: 2RTL2

LITHONIA: 2RTL2 DAY-BRITE: 2DLG34L840

CREE: C-TR-CFP22

LITHONIA: CPX

DAY-BRITE: FPZ

DUAL-LITE CHLORIDE BEGHELLI MULE

DAY-BRITE: 2DLG34L840

PANEL ID:	2PA		VOLTAGE:			208Y/120		SERVICE EQUIP:							MOUNTING: Surface				
SOURCE:		AN	AMPS:		225 : 10,000		M	MAIN: APPROX. DIM:		MLO						TYPE: EXISTING			
LOCATION	MECH 137	PA					Α			20"W x 5.75"D									
LOAD	N O T E	Phase, Neu, Grd Size	Р				<b>A</b>		В		С		BKR L	P O L E	Phase, Neu, Grd Size	CONE	N O T E	LOAD	
SPARE			2	60	1	0	0	0	0			2	50	2				SPARE	
SPARE			1	20	5			U	U	0	0	6					+		
CDADE			1		7	0	0					8	30	2				SPARE	
SPARE			2	20	9			0	360			10	20	1	1-#12, 1-#12, 1-#12			REC VIDEO ROOM (NOTE 2)	
EXISTING			1	20	11					0	540	12	20	1	1-#12, 1-#12, 1-#12			REC PHOTO ROOM (NOTE 2)	
EXISTING			1	20	13	0	360					14	20	1	1-#12, 1-#12, 1-#12			REC PHOTO ROOM (NOTE 2)	
EXISTING			1	20	15			0	180			16	20	1	1-#12, 1-#12, 1-#12			REC VIDEO RM LTG (NOTE 2	
EXISTING			1	20	17					0	180	18	20	1	1-#12, 1-#12, 1-#12			REC VIDEO RM LTG (NOTE 2	
SPACE			1		19		180					20	20	1	1-#12, 1-#12, 1-#12			REC VIDEO RM LTG (NOTE 2	
SPACE			1		21				720			22	20	1	1-#12, 1-#12, 1-#12			REC STORAGE (NOTE 2)	
SPACE			1		23							24		1				SPACE	
SPACE			1		25							26		1				SPACE	
SPACE			1		27							28		1				SPACE	
SPACE			1		29							30		1				SPACE	
SPACE			1		31							32		1				SPACE	
SPACE			1		33							34		1				SPACE	
SPACE			1		35							36		1				SPACE	
SPACE			1		37							38		1				SPACE	
SPACE			1		39							40		1				SPACE	
SPACE			1		41							42		1				SPACE	
							VA A		0 VA I A		0 VA 6 A								
Load Classification				Connected Load			t	Demand Factor			Estimated Demand				Panel Tota			Totals	
Power					0	VA			0.00%		0	VA							
REC						0 VA			00.00%			20 VA			CONNECTE	D LOA	D :	2520 VA	
															DEMAN	D LOA	D :	2520 VA	
														AVG. CONNECTED CURRENT			IT :	7 A	
															AVG. DEMAND C	JRREN	IT :	7 A	
NOTES:																			
1. EXISTING PANEL IS S 2. PROVIDE NEW 20A, 1																			

DATE ISSUED CONSTRUCTION DOCUMENTS 08/29/2023 SHEET TITLE **DETAILS &** 

SCHEDULES