# **FMSD - Oak Grove Academy** Renovation 1346 AO Jones Blvd, Fort Mill, SC 29715



# ARCHITECTURAL

LS3P ASSOCIATES LTD. 701-A Lady Street Columbia, SC 29201 tel: 803-765-2418 fax: 803-765-2419



## PLUMBING, MECHANICAL, ELECTRICAL

MECA, Inc. 2330 Main Street Columbia, SC 29201 tel: 803-765-9421

# **INDEX OF SHEETS**

## GENERAL

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### ARCHITECTURAL

A-100 SITE PLAN A-101 FLOOR PLANS A-102 REFLECTED CEILING PLANS A-103 DETAILS / SCHEDULES

### PLUMBING

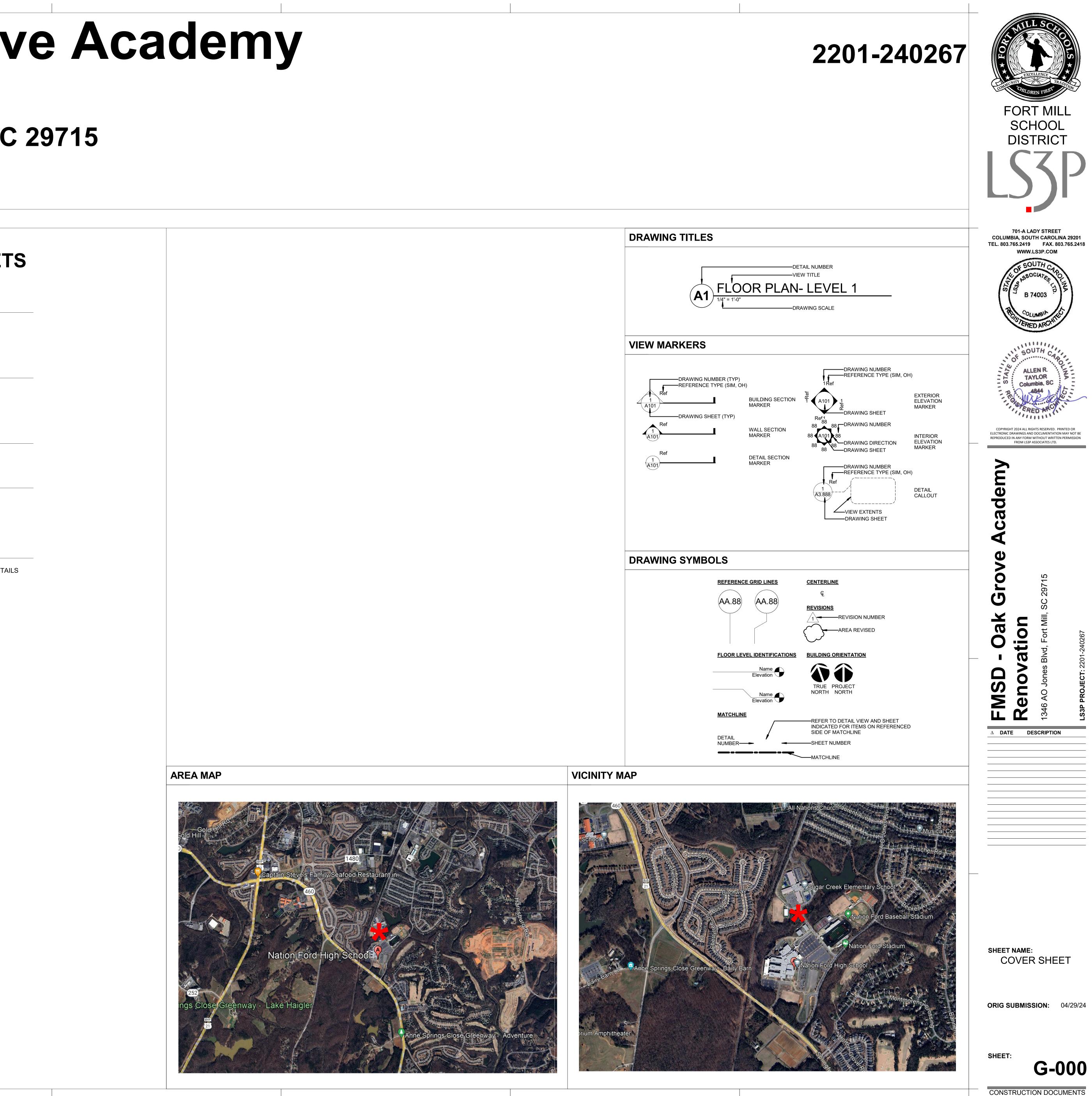
P-101 PLUMBING FIRST FLOOR PLANS

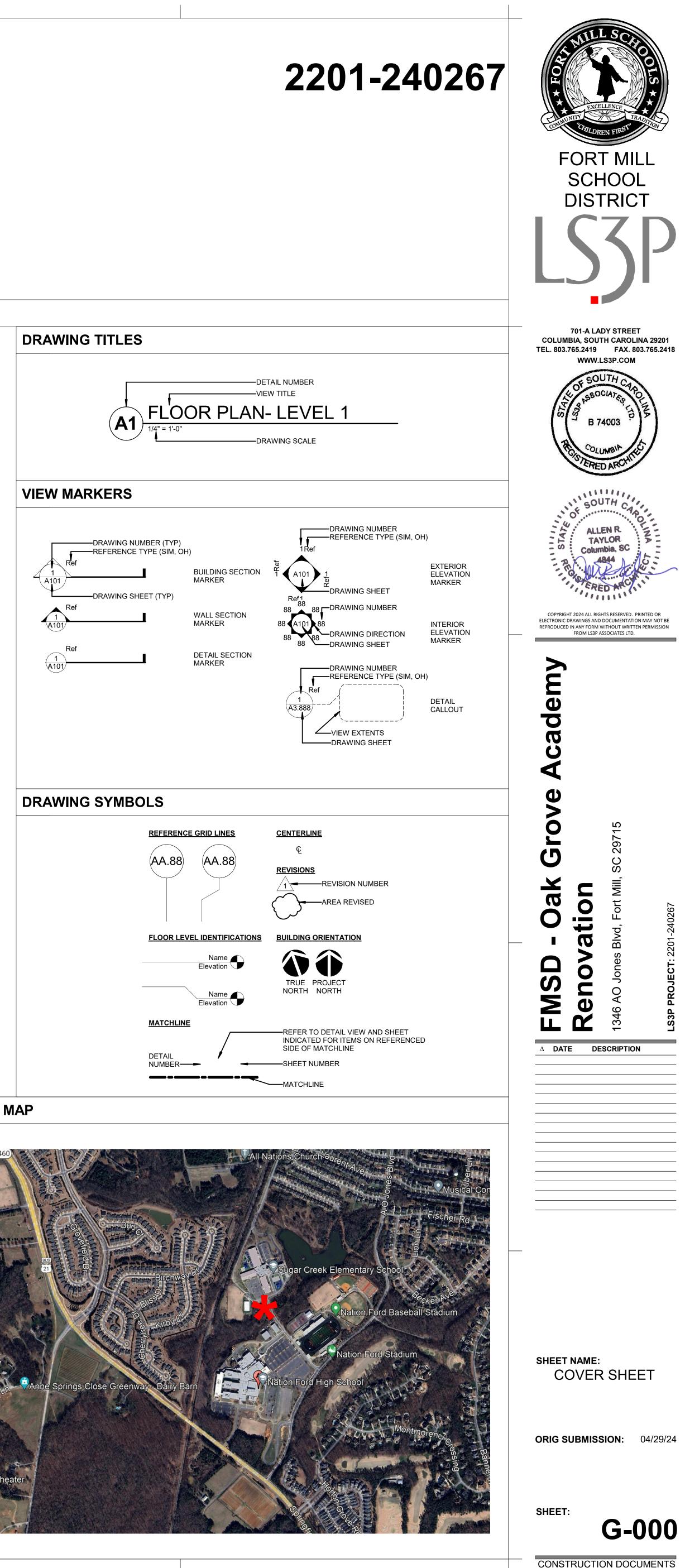
### MECHANICAL

M101 MECHANICAL DEMOLITION PLAN M102 MECHANICAL RENOVATION PLANS M201 MECHANICAL SCHEDULES

# ELECTRICAL

E001 ELECTRICAL SYMBOLS, SCHEDULES AND DETAILS E002 ELECTRICAL DETAILS AND NOTES E101 ELECTRICAL PLANS







>	63	SOUTH CAROLINA							
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT THIS SHEETS ORIGINAL PAGE SIZE		STATE DEPARTMENT OF EDUCATION		Form F	8 – Building	g Code Analy	sis		
ABOVE IS AT THIS PAGE SIL		<u>Date</u> : 04-29-2024		1 01111 1 .	Dunung				
SHOWN		SUBMITTAL:	tic	[	Design Deve	lopment		Construction D	ocument
		2021		CODE EDITION:	2021	A117.1 EDITION		OSF GUIDE EDI	
		OTHER CODES/STANDARDS & PLUMBING – 2021 SCPC, ENERGY –			G - 2021 SCFC, EI	LECTRICAL – 2020	NEC W/ SC AMI	END., MECHANICA	AL – 2021 SCMC
E		PROJECT DESCRIPTION: [Brief Interior renovation of (2) Classrooms						with Program Man	ager
					-	DE INFORMATI			
		DESIGNATED AREAS OF BUILDING	G	Building Code	Area 1	Area 2	Area 3	Area 4	Area 5
		CONSTRUCTION CLASSIFICATION T	WDF	-	SCBC	□ SCBC □ SCEBC	□ SCBC □ SCEBC	SCBC	□ SCBC □ SCEBC
		OCCUPANCY GROUP (indicate all)	ITE	Section 602 Section 302	VB E				
		MOST RESTRICTIVE OCCUPANCY G		P Tables 504.3, 504.4 & 506.2	Е				
		Does building require Incidental Use Area Separation? Does building have Accessory Occupancy		Table 509           ?         Section 508.2	$\Box$ YES $\boxtimes$ NO $\Box$ YES $\boxtimes$ NO	□ YES □ NO		$+ \times$	
		What is the aggregate square footage of th accessory occupancy (ies)?		Section 508.2	0 SF	SF	SF	SF	SF
		What percent of the story is the aggregate accessory occupancy (ies)? Mixed Occupancy	of the	Section 508.2	0 %	%	$\square$ YES $\square$ NO	% □ YES □ NO	%
				Section 508	☑ Nonseparated 1 of 21	□ Nonseparated	□ Nonseparate	ed 🗆 Nonseparate	d 🗆 Nonseparated
					1 01 21			Vers	sion April 2021
		SOUTH CAROLINA							
	(9)	SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION							
				Form F	3 – Building □ Separated	g Code Analy	SIS	□ Separated	□ Separated
D				EXISTING BUII	-		-		
		DESIGNATED AREAS OF		Area 1		Area			Area 3
		(Check only one Option and all items		ption 1: Prescriptive Co od ( <b>Ch. 3, 5</b> )		Option 1: Prescriptive (cthod (Ch. 3, 5)			criptive Compliance
		that apply under that Option.)		□ Alteration □ Addition		□ Alteration □ Addition		□ Alter □ Addit	ation tion
				□ Change of Occup □ Historic Building	-	□ Change of ( □ Historic Bu			ge of Occupancy ric Building
				otion 2: Work Area Cor od ( <b>Ch. 3, 6-12</b> )	M	Option 2: Work Area tethod (Ch. 3, 6-12)	\.	Method (Ch. 3, 6	k Area Compliance 5-12) ation Level 1
				☑ Alteration Level □ Alteration Level	2 3	□ Alteration I □ Alteration I	Level 2 Level 3	□ Alter □ Alter	ation Level 2 ation Level 3
				□ Change of Occuj □ Additions □ Historic Buildin	-	□ Change of ( □ Additions □ Historic Bu		👗 🗆 Addii	ge of Occupancy tions ric Building
				egate area of building:	7,685 SF A	ggregate area of build	- /	Aggregate area o	f building: SF
				otion 3: Performance Co	ompliance 🗆	Vork area: SF	ce Compliance	Work area:	SF ormance Compliance
				od ( <b>Ch. 3, 13)</b> IBC 2021		lethod (Ch. 3, 13)	/ .	Method (Ch. 3, 1	
		Construction: Existing Sprinkler System?		□ YES ⊠ NO	,		] NO	Y	TES INO
		Existing Fire Alarm System?		🛛 Manual 🗆 Au	ito	🗆 Manual [	] Auto	□ Ma	nual 🗆 Auto
		SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION Seismic Evaluation Required? Change of Occupancy:		□ YES ⊠ NO	)	g Code Analy			YES 🗆 NO
				☐ YES ⊠ No ing Occupancy Class(s Occupancy Classificat	): E	YES [ xisting Occupancy C] www.occupancy Class	ass(s):	Existing Occupa	YES D NO ncy-Class(s): Classification(s):
				□ YES ⊠ NO	)	□ YES □ Preservation		C Y Reservation	YES 🗆 NO
			$\Box$ R	ehabilitation estoration econstruction		] Rehabilitation ] Restoration ] Reconstruction		□ Rehabilitation □ Restoration □ Reconstructio	
				EXISTING BUI		INFORMATIO	N [SCEBC]		
		DESIGNATED AREAS OF BUILDING Method of Compliance:		Doption 1: Pressri	Area 4	Method (Ch. 3, 5)	□ Option 1: P	Area 5 rescriptive Complian	nce Method (Ch. 3, 5)
		(Check only one Option and all items that apply under that Option.)	t.	□ Alteratio □ Addition				teration Idition hange of Occupancy	
					Building			storic Building	
				□ Option 2: Work A □ Alteratio □ Alteratio	on Level 1	1ethod (Ch. 3, 6-12)		teration Level 1 teration Level 2	ce Method (Ch. 3, 6-12)
B				□ Alteratio □ Change □ Addition	of Occupancy			teration Level 3 hange of Occupancy Iditions	
				☐ Historie Aggregate area of b	Building			storic Building	SF
				Work area: S			Work area:	SF	
								Ve	rsion April 2021
		SOUTH CAROLINA							
		STATE DEPARTMENT OF EDUCATION		Form F3	– Building	Code Analys	is		
				Option 3: Performa				formance Complianc	re Method (Ch. 3, 13)
		Original Building Code and Edition Applicable at the time of Construction: Existing Sprinkler System?							
		Existing Fire Alarm System?			□ YES □ NO Manual □ Auto			□ YES □ NO □ Manual □ Au	
		Seismic Evaluation Required? Change of Occupancy:			□ YES □ NO			□ YES □ NO	
				Existing Occupancy C New Occupancy Class	□ YES □ NO lassification(s): ification(s):			□ YES □ NO ncy Classification(s) Classification(s):	
	-	Historic Building:		□ YES □ NO □ Preservatio	m		□ YES □ NO □ Prese	ervation	
				Rehabilitat     Bestoration     Reconstruct	1		□ Rest	bilitation oration onstruction	
A									
	DI	ESIGNATED AREAS OF BUILDIN		JMMARY - BUI Area 1	LDING DES	IGN OCCUPA Area 3		area 4	Area 5
		EXISTING RENOVATION		216 16					
:13 AM	Note	TOTA :: Per SC Building Code Chapter 10, list ind		232 ual spaces occupant loc	0 d on life safety pla	m. <b>Double Click t</b>	) Edit Table.	0	0
30/2024 10:53:13									
0/2024					4 of 21			Versi	on April 2021

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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

Fo	orm F3 – Bui	lding Code An	alysis		
	ALLOWABLI	E BUILDING AR	EA		
DESIGNATED AREAS OF BUILDING	Area 1	Area 2	Area 3	Area 4	Area 5
At Tabular allowable area factor (NS, S1, S13R or SM as applicable) in accordance with IBC Table 506.2	$A_t = 7,685 \text{ SF}$	A <sub>t</sub> = SF	$A_t = SF$	$A_t = SF$	$A_t = SF$
Allowable Area Increase (Equations 5-1 through 5-5, as applicable)	🗆 YES 🖾 NO		□ YES □ NO	□ YES □ NO	□ YES □ NO
IBC Section 506.3.2 Equation 5-4 where: $W = (L_1 x w_1 + L_2 x w_2 + L_3 x w_3 +) / F$	$L_n = N/A$	$L_n =$	L <sub>n</sub> =	L <sub>n</sub> =	$L_n =$
W = Width of public way or open space	$\mathbf{w}_n = \mathbf{N} / \mathbf{A}$	$\mathbf{w}_{n} =$	$\mathbf{w}_n =$	w <sub>n</sub> =	$\mathbf{w}_{n} =$
$L_n$ Length of a portion of the exterior perimeter wall.					
w <sub>n</sub> Width (>= 20 feet) of public way or open space associated with that portion of the exterior perimeter wall.	W = N/A	<b>W</b> =	<b>W</b> =	₩≠	<b>W</b> =
F Building perimeter that fronts on a public way or open space having a width of 20 feet or more	F = N/A	F =	F =	Æ=	$\mathbf{F} =$
BC Section 506.3.3 Equation 5-5 where:	$\mathbf{P} = \mathbf{N}/\mathbf{A}$	P =		P =	P =
$I_f = [F/P - 0.25] W/30$	$\mathbf{P} = \mathbf{N}/\mathbf{A}$	P =	P≠	P =	P =
$I_{\rm f}$ = Area factor increase factor due to frontage					
F Building perimeter that fronts on a public way or open space having a width of 20 feet or more.	$I_f = N/A$	I <sub>f</sub> =	$I_f =$	$I_f =$	It=
P Perimeter of entire building (feet).					
W Width of public way or open space in accordance with Equation 5-4					

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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

Fo	orm F3 – Bui	lding Code Ar	nalysis		
Allowable building area per story in square feet as calculated by Equations 5-1 through 5-3. (Indicated equation used.)	N <sub>s</sub> = N/A	Ns	N <sub>s</sub> =	N <sub>s</sub> =	N <sub>s</sub> =
$\Box \text{ IBC Section 506.2.1 Equation 5-1} \\ \mathbf{A}_{a} = \mathbf{A}_{t} + (\mathbf{N}_{s} \mathbf{x} \mathbf{I}_{f})$					
$\Box \text{ IBC Section 506.2.3 Equation 5-2} \\ \mathbf{A}_{a} = [\mathbf{A}_{t} + (\mathbf{N}_{s} \times \mathbf{I}_{f})] \times \mathbf{S}_{a}$	$S_a = N/A$	$S_a =$	<b>S</b> <sub>8</sub> =	S <sub>a</sub> =	$S_a =$
$\square \text{ IBC Section 506.2.4 Equation 5-3} \\ \mathbf{A}_{\mathbf{a}} = [\mathbf{A}_{\mathbf{t}} + (\mathbf{N}_{\mathbf{s}} \times \mathbf{I}_{\mathbf{f}})]$					
N <sub>s</sub> Tabular allowable area factor in accordance with Table 506.2 for a non-sprinklered building (regardless of whether the building is sprinklered)	$A_a = N/A SF$	$A_a = SF$	$A_a = SF$	A SF	$A_a = SF$
S <sub>a</sub> Actual number of building stories above grade plane, not to exceed three (3). For buildings equipped throughout with automatic sprinkler system installed in accordance with SCBC Section 903.3.1.2, use the actual number of building stories above grade plane, not to exceed four (4).					
MAXIMUM AREA PER STORY	9,500 SF	SF	SF	SF	SF
AREA AS DESIGNED PER STORY (Repeat for each story)	7,685 SF	SF	SF	SF	SF

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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

			BUILDING	HEIGHT			
DESIGNATED AREAS OF BUILDING	Building Code	A	rea 1	Are	a 2	Ar	ea 3
HEIGHT	-	DESIGNED	ALLOWED	DESIGNED	ALLOWED	DESIGNED	ALLOWED
In Feet	Table 504.3	< 15' -0"	40' – 0''				
In Stories	Table 504.4	1	1				

		BU	JILDING HEIGHT		
DESIGNATED AREAS OF BUILDING	Building Code	A	rea 4		Area 5
HEIGHT	-	DESIGNED	ALLOWED	DESIGNED	ALLOWED
In Feet	Table 504.3				
In Stories	Table 504.4				

Note: Allowable Building Height & Number of Stories Above Grade Plane

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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

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	Form F	3 – Building	Code Analy	sis		
	GENERAL FI	RE PROTECT	ION REQUIRE	MENTS		
DESIGNATED AREAS OF BUILDING	Building Code	Area 1	Area 2	Area 3	Area 4	Area 5
SEPARATIONS	1				I	
Fire Wall Required	Section 706	🗆 YES 🖾 NO	□ YES   NO	$\Box$ YES $\Box$ NO	□ YES □ NO	□ YES □ NO
Fire Barrier Required	Section 707	🗆 YES 🖾 NO	□ YES □ NQ	□ NO □ YES	□ YES □ NO	TYES INO
Fire Partition Required	Section 708	🖾 YES 🗆 NO	□ YES □ NO	ves □ no	□ YES □ NO	□ YES □ NO
Smoke Barriers Required	Section 709	🗆 YES 🖾 NO	□ YES □ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO
Smoke Partitions Required	Section 710	🗆 YES 🖾 NO	□ YES □ NO	🗆 YES 🖵 NO	🗆 YES 🗖 NO	□ YES □ NO
Fireblocking	Section 718.2	🖾 YES 🗆 NO	□ YES □ NO	□ YES □ NQ	□ yes □ no	□ YES □ NO
Draftstopping	Sections 718.3 & 718.4	🗆 YES 🖾 NO	□ YES □ NO	□ YES □ NO	YES 🗆 NO	□ YES □ NO
Incidental Use Area One hour fire barrier Sprinkler system plus smoke resistance	Section 509.4	$\Box$ YES $\boxtimes$ NO $\Box$ YES $\boxtimes$ NO	□ YES □ NO □ YES □ NO	□ YES □ NØ □ YES □ NO	□ YES □ NO □ YES □ NO	$\Box$ YES $\Box$ NO $\Box$ YES $\Box$ NO
ALARM & DETECTION						
Fire Alarm and Detection System Fire Alarm Mass Notification Emergency voice/alarm comm.	SCFC Section 907	$\square YES \square NO$ $\square YES \square NO$ $\square YES \square NO$	□ YES □ NO □ YES □ NO □ YES □ NO	☐ YES ☐ NO □ YES □ NO □ YES □ NO	□ YES □ NO □ YES □ NO □ YES □ NO	□ YES □ NO □ YES □ NO □ YES □ NO
Emergency Alarm System Required	SCFC Section 908	$\boxtimes$ YES $\square$ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO
SUPPRESSION		1		1		
Automatic Sprinkler System Provided Required	SCFC Section 903	$\Box \text{ YES } \boxtimes \text{ NO}$ $\Box \text{ YES } \boxtimes \text{ NO}$	□ YES □ NO □ YES □ NO	$\Box YES \Box NO$ $\Box YES \Box NO$	$\Box YES \Box NO$ $\Box YES \Box NO$	□ YES □ NO □ YES □ NO

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	Form F	3 – Building	Code Analy	sis		
Alternative Automatic Fire Extinguishing Kitchen Hoods Other	SCFC Section 904	$\Box \text{ YES } \boxtimes \text{ NO}$ $\Box \text{ YES } \boxtimes \text{ NO}$	□ YES □ NO □ YES □ NO			
Standpipes Required	SCFC Section 905	🗆 YES 🖾 NO	🗆 YES 🗆 NO	🗆 YES 🗆 NO	🗆 YES 🗆 NO	🗆 YES 🗆 NO
Portable extinguishers required General Building Kitchen Labs	SCFC Section 906	$\boxtimes$ YES $\square$ NO $\square$ YES $\boxtimes$ NO $\square$ YES $\boxtimes$ NO	□ YES □ NO □ YES □ NO □ YES □ NO	□ YES □ NO □ YES □ NO □ YES □ NO	□ YES □ NO □ YES □ NO □ YES □ NO	□ YES □ NO □ YES □ NO □ YES □ NO
	OTHER FI	RE AND LIFE S	SAFETY FEAT	URES		
DESIGNATED AREAS OF BUILDING	Building Code	Area 1	Area 2	Area 3	Area 4	Area 5
Smoke Control System	Section 909	🗆 YES 🖾 NO	□ YBS □ NO	🗆 YES 🗆 NO	□ YES □ NO	□ YES 🗆 NO
Smoke & Heat Removal Required	SCFC 910	□ YES ⊠ NO	D YES DNO	□ YES □ NO	□ YES □ NO	□ yes □ no
Fire Department Connections	Section 912	□ YES ⊠ NO	□ YES □ NO	🗆 YES 🗆 NO	□ YES □ NO	YES 🗆 NO
Carbon Monoxide Detection	Section 915	□ YES ⊠ NO	□ YES □ NO	INO INO	□ YES □ NO	□ YES □ NO
Gas Detection Systems	Section 916	□ YES ⊠ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO
Emergency Responder Radio Coverage	Section 918	🖾 YES 🗆 NO	□ YES □ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO
Fire Apparatus Access and Water Line	SCFC 503 & 507	🖾 YES 🗆 NO	□ YES □ NO	□ YES □ NO	YES INO	□ YES □ NO
2-way Communication Required	Section 1009.8	□ YES ⊠ NO	□ YES □ NO	□ YES □ NØ	TXES INO	□ YES □ NO
Area of Refuge	Sections 1009.6,				T YES TNO	□ YES □ NO
(e.g. Separation, Two-Way Communication, and Instruction)	1009.9, 1009.10 & 1009.11	🗆 YES 🖾 NO	$\Box$ YES $\Box$ NO	□ YE8 □ NO		
		$\Box \text{ YES } \boxtimes \text{ NO}$ $\Box \text{ YES } \boxtimes \text{ NO}$				
and Instruction) Exterior Area for Assisted Rescue	& 1009.11 Sections 1009.7, 1009.9, 1009.10					
and Instruction) Exterior Area for Assisted Rescue (e.g. Separation, Openness, and Instruction)	& 1009.11 Sections 1009.7, 1009.9, 1009.10 & 1009.11	□ YES ⊠ NO	□ YES □ NO	□ YES □ NO	□ YES □ NO	YES 🗆 NO

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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

		Form F3 –	Building (	Code Analysi	S		
	FII	RE RESISTANCE	RATING OF	BUILDING EL	EMENTS		
	FED AREAS OF ILDING	<b>Building Code</b>	Area 1	Area 2	Area 3	Area 4	Area 5
	As Required, Hrs		0				
Primary Structural	As Designed, Hrs	Table 601	0				
Frame	Testing Agency & Design No.(UL, FM, etc)		N/A				
	Wall/Partition Key Code		N/A		$\backslash$		
Primary Structural Frame Bearing Walls, Exterior Bearing Walls, Interior	As Required, Hrs	Table 601	0				
	As Designed, Hrs		0				
	Testing Agency & Design No.(UL, FM, etc)		N/A				
	Wall/Partition Key Code		N/A			X	
	As Required, Hrs		0				
BUI Frimary Structural Frame Bearing Walls, Exterior Bearing Walls, Interior	As Designed, Hrs	Table 601	0				
Interior	Testing Agency & Design No.(UL, FM, etc)		N/A				
	Wall/Partition Key Code		N/A				
	As Required, Hrs		0				
Nonbearing Walls and Partitions,	As Designed, Hrs	Table 601	0				
	Testing Agency & Design No.(UL, FM, etc)		N/A				
	Wall/Partition Key Code		N/A				

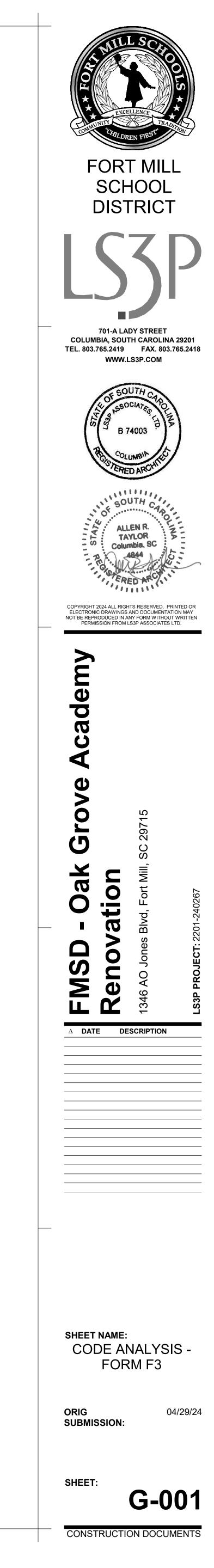
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### SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

	Form F3 – Building Code Analysis										
	FIF	RE RESISTANCE	RATING OF	BUILDING ELI	EMENTS						
	FED AREAS OF ILDING	<b>Building Code</b>	Area 1	Area 2	Area 3	Area 4	Area 5				
	As Required, Hrs		0								
Nonbearing Walls and Partitions,	As Designed, Hrs	T. 1.1. (02	0								
Exterior	Testing Agency & Design No.(UL, FM, etc)	Table 602	N/A								
Floor Construction and associated	Wall/Partition Key Code		N/A		$\backslash$						
	As Required, Hrs		0								
	As Designed, Hrs	Table 601	0								
	Testing Agency & Design No.(UL, FM, etc)		N/A								
	Wall/Partition Key Code		N/A			X					
	As Required, Hrs		0								
Roof Construction and associated	As Designed, Hrs	Table 601	0								
secondary members	Testing Agency & Design No.(UL, FM, etc)		N/A								
	Wall/Partition Key Code		N/A								
	As Required, Hrs		0								
Fire Walls	As Designed, Hrs	Section 706	0								
	Testing Agency & Design No.(UL, FM, etc)		N/A								
	Wall/Partition Key Code		N/A								

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			0	Code Analysis			
	FIF	RE RESISTANCE	RATING OF	BUILDING ELF	EMENTS		
	TED AREAS OF ILDING	<b>Building Code</b>	Area 1	Area 2	Area 3	Area 4	Area 5
	As Required, Hrs		0				
Fire Barriers	As Designed, Hrs	Section 707	0				
	Testing Agency & Design No.(UL, FM, etc)		N/A		$\backslash$	/	
	Wall/Partition Key Code		N/A		$\backslash$		
Fire Partitions	As Required, Hrs		1				
	As Designed, Hrs		1				
	Testing Agency & Design No.(UL, FM, etc)	Section 708	UL U305				
	Wall/Partition Key Code		C-T3				Area 5
	As Required, Hrs		0				
Smoke Barriers	As Designed, Hrs		0				
BU Fire Barriers	Testing Agency & Design No.(UL, FM, etc)	Section 709	N/A				\
	Wall/Partition Key Code		N/A		/		Area 5
	As Required, Hrs		0				
Smoke Partitions	As Designed, Hrs		0				
Smoke I artitions	Testing Agency & Design No.(UL, FM, etc)	Section 710	N/A				
	Wall/Partition Key Code		N/A				

# SOUTH CAROLINA STATE DEPARTMENT OF E DUCATION

		Form F3 –	Building C	ode Analysis	S		
	FII	RE RESISTANCE	RATING OF I	BUILDING ELI	EMENTS		
	TED AREAS OF ILDING	Building Code	Area 1	Area 2	Area 3	Area 4	Area 5
	As Required, Hrs		0				
Horizontal	As Designed, Hrs		0				
Assemblies	Testing Agency & Design No.(UL, FM, etc)	Section 711	N/A				
	Wall/Partition Key Code		N/A		$\backslash$	/	
	As Required, Hrs		0				
Shaft Enclosures	As Designed, Hrs		0				
	Testing Agency & Design No.(UL, FM, etc)	Sections 712 & 713	N/A				
	Wall/Partition Key Code		N/A			K	
Opening &	As Required, Hrs		20 MIN.				
Protective Listing	As Designed, Hrs		20 MIN.				
Assemblies Shaft Enclosures Opening &	Testing Agency & Design No.(UL, FM, etc)	Section 716	UL				
	Wall/Partition Key Code		SEE PLANS				
	As Required, Hrs		N/A				
(as required by	As Designed, Hrs		N/A				
Designer)	Testing Agency & Design No.(UL, FM, etc)		N/A				
	Wall/Partition Key Code		N/A				

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# SOUTH CAROLINA STATE DEPARTMENT OF E D U C A T I O N

			Form F3 – B	uilding Code Analys	is
FLOOD HAZARD INFOR	MATION and ]	FLO	OD LOADS		
FLOOD HAZARD AREA N/A	L Contraction of the second seco			ENERGY INFORMA	ΠΟΓ
Base Flood Elevation (NGVD o	r FIRM)		526 MSL	INSULATION	
Design Flood Elevation SCBC	612.3 and ASCI	E 24	MSL	Roof	С
NON HIGH-VELOCITY WAV	E ACTION			KOOI	C
Elevation of Lowest Proposed F Section 2.6.2.1)	loor (Meet ASCI	E 24	576 MSL	Walls	C
Dry flood proofing ASCE 24			🗆 no 🗆 yes	wans	C
HIGH-VELOCITY WAVE AC	ΓΙΟΝ		Underslab	·	
Elevation of bottom of Lowest H		ıral	MSL	GLAZING (each type)	
Member of lowest floor	• •				N
Flotation resistant (ASCE	2		$\Box$ no $\Box$ yes		E
Breakaway wallper (ASCE	. 24)		$\Box$ no $\Box$ yes	Window to wall ratio	S
FIRE SERVICE INFORMA	ATION (NA)				W
Service Line Size				Glass Type	
Fire Department Connection	Location	N	J/A		S
-	Location				
Backflow	Туре			Summary of data from	appro
	Date			sheets.	
Fire Hydrant Flow Test	Flow				
The Hydrant Flow Test	Residual				
	Static				

INSULATION		
	Cavity	49 R
Roof	Continuous	R
	Cavity	19 R
Walls	Continuous	R
Underslab	R	
GLAZING (each type)		
	North	%
	East	%
Window to wall ratio	South	%
	West	%
Glass Type	U Factor	
Window to wall ratio	South West	%

SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

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### Form F3 – Building Code Analysis

	(
Per IBC Chapter 16 and ASCE 7 – Structural tables may be shown on initial Structural Sheet of the drawings or on She	et with
other code information. List floor design loads on structural plans.	

STRUCTURAL DESIGN INFORMATION, AREA (Existing)

14 of 21

		Building Code	Area 1	Area 2	Area 3	Area 4	Area 5
OCCUPANCY CATEGORY		Table 1604.5	II	-	-	-	-
	Floor Live Load, F11		PSF	PSF	PSF	PSF	PSF
LIVE LOAD FOR EACH CCUPANCY TYPE	Roof Live Load, R11	Figure 1608.2 or ASCE 7	PSF	PSF	PSP	PSF	PSF
	Ground Snow Load, pg		PSF	PSF	PSF	PSF	PSF
MISCELLANEOUS LA AREA (ARCHITECTU DATA CENTER, ETC.)		ASCE 7	N/A PSF	PSF	PSF	PSF	PSF

2

	Form F3 – Bu	uilding Cod	e Analysis			
SOILS & SITE (Existing)		STR	UCTURAL DESIGN INFORMATION,	BUILDING		
SOILS INVESTIGATION REQUIRED? (IBC 1803.2)	🗆 no 🗆 yes		Analysis Procedure (ASCE 7 or SCBC 1609.6)			
SOILS CLASSIFICATION			Basic design Wind Speed, MPH (3 sec gust IBC Fig 1609.3)			
Seismic Site Class (SCBC Section 1613.3.2)	D	WIND	Exposure Category	С		
Classes Soil of Materials (UCS System) (SCBC 1803.5.1)		LOADS	Wind Importance Factor (ASCE 7 Table 1.5-2)			
Allowable Footing Bearing Pressure	e Footing Bearing Pressure		Internal Pressure Coefficient (ASCE 7)			
MINIMUM DESIGN SOIL BEARING LOAD (SCBC Table 1806.2)			External Pressure Coefficient (ASCE 7)			
COMPACTION			Seismic Importance Factor (ASCE 7)	1.25 = I		
Subgrade (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)			Site Class (SCBC Section 1613.3.2)	D		
Base (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)			Mapped Spectral Response Accelerations			
Other (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)			Design Spectral Response Acceleration Parameters			
MINIMUM DESIGN SOIL LATERAL LOAD (SCBC 1610.1)		SEISMIC				
FOOTINGS		LOADS/E arthquake	Seismic Use Group (ASCE 7 and Seismic Occupancy Category IBC)	III		
Undisturbed footings	🗆 no 🗆 yes	artiquake	Seismic Design Category	С		
Compacted Fill Material (SCBC Section 1804.6)	🗆 no 🗆 yes		SCBC Tables 1613.3.5(1) & 1613.3.5(2) Basic Seismic Force Resisting System			
ELEVATIONS						
Elevation of Water Table	(N/A) MSL		Design Base Shear			
Elevation of lowest footing	MSL		Seismic Response Coefficient(s) ASCE 7			
Elevation of lowest floor or basement	MSL		Response Modification Factor(s) ASCE 7			

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### Form F3 – Building Code Analysis The Designer(s) of Record shall determine the material and/or work on the project requiring Special Inspections. The Special Inspection requirements shall be based on Section 1704 & Section 1705 of the 2021 South Carolina Building Code. Any deviations

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from the requirements of Section 1704 and/or Section 1705 must be approved by OSF. Per SCBC Chapter 16 and ASCE 7 – This information may be shown on initial Structural Sheet of the drawings or on Sheet with other code information. List floor design loads on structural plans.

STATEMENT OF SPECI	AL INSPECTIONS		SEE SPECS			
MATERIAL	TYPE OF INSPECTION	FREQUENCY	SPECIFICATION REFERENCE	INSPECTION BY		

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# SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

Form F3 – Building Code Analysis

Provide a table for each structure.	. (Existing)			
PLUMBING INFORMA Drawii		nbing	Y OF FIXTURES (SCPC Section 403 Male-Required	3 & Table 403.1) 3
WATER SYSTEM			Male WC -Provided	4
Service Line Size	2"	Water Close	ets Male Urinal -Provided	2
Distribution Design Criteria			Female-Required	5
(SCPC Table 604.3)			Female-Provided	6
Maximum Flow Rate (SCPC Table 604.4)			Male-Required	4
Backflow	Location	Lavatories	Male-Provided	5
	Туре	Lavatories	Female-Required	4
			Female-Provided	5
Test Pressure	(Existing) ps			/ .
SANITARY SEWER SYSTEM	[		Male-Provided	N/A
Service Line Size		Showers		
Drainage Design Criteria (SCPC Tables 709.1 and 709.2)			Female-Provided	N/A
Maximum Flow Rate		Drinking Fo	Required	3
Slope (SCPC Table 704.1)			Provided	3
Slope (SCI C Table 704.1)		Family or A	ssisted- Required	N/A
		Use Toilet	Provided	1
		Sorrigo Sint	Required	1

Others (list) 18 of 21

Service Sink

Provided

Required

Provided

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1

N/A

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		Form F3 – Build	ling Code Analysis				
		00 1 P	ELECTRICAL INFORMATION (See Electrical Drawings)				
Summary of data from approve sheets.	ed ASHRAE	90.1 compliance		□ By Utility			
MECHANICAL INFORMAT	ГІОN (See I	Mechanical Drawings)	SERVICE TRANSFORMER		KVA Primary		
GENERAL INFORMATION	1			□ By District	Voltage/Phase		
Building Location	Fort Mill,	SC	ELECTRICALSERVICE	INFORMATION	6		
Climate Zone	3A		Service Voltage/Phase		Amperes		
	Summer		Service Entrance Conductors Size		Qty per Phase		
Outdoor Design Temperature			Total Connected Load		KVA		
	Winter		Estimated Maximum Den	nand	KVA		
	Summer		Available Fault Current in Amperes				
Indoor Design Temperature			Interrupting Capacity of S Overcurrent Device				
indoor Design Temperature			Grounding electrode syste (NEC 250)				
			EMERGENCY SERVICE INFORMATION				
OUTSIDE AIR	- <u>1</u>				KVA		
Occupied Minimum Outside Air			Emergency Generator	□ no □ yes	Voltage/Phase		
CO2 Demand Management		$\boxtimes$ no $\square$ yes		Fuel			
Supervised Control System		⊠ no □ yes	Exit/Emergency Lights B	ackup Power	□ Integral Battery		
MECHANCIAL SYSTEMS, SH	ERVICE SY	2			□ Generator		
EQUIPMENT				☐ Manual	□ Addressable		
Briefly describe mechanical sys	tem:		Fire Alarm System		□ Class A		
Wall mounted heat pumps	Wall mounted heat pumps			□ Automatic	□ Class B		
			LIGHTNING PROTECTION PROVIDED 🗆 no 🗆 yes				

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# SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

	Form F3 – Building Code Analysis										
Occupancy Load and Fixture Count Worksheet (Provide this table for new construction and addition/renovations with multiple occupancies)											
Room Classification/Description Room Are				Number of Occupants	Male			Female		Drinking Fountain	Service Sink
				1	WC	UR	LAV	WC	LAV		
100 100A 100B 100C 102 102A 102A 102B 102C 102D	RECEPTION PRINCIPAL CONFERENCE IT/DATA THERAPEUTIC ROOM MENTAL HEALTH NURSE SUITE NURSE TOILET	121 141 133 107 52 107 136 90 57	150 gross 150 gross 15 150 gross 150 gross 150 gross 150 gross 150 gross 0	$\frac{1}{0}$		isiness: 1 To 2 Total S	ilet only rec taff Toilets	uired with le and 2 Lav's	ess than 25 c provided	ccupants	2902.2
CRM 101 CRM 103 CRM 104 CRM 105 CRM 106 CRM 107	Education Education Education Education	705 705 704 704 705 704	20 20 20 20 20 20 20	36 36 36 36 36 36 36	0.72 0.72 0.72 0.72 0.72 0.72 0.72		0.36 0.36 0.36 0.36 0.36 0.36	0.72 0.72 0.72 0.72 0.72 0.72 0.72	0.36 0.36 0.36 0.36 0.36 0.36	0.36 0.36 0.36 0.36 0.36 0.36	<b></b>
			Total:	232	4.32	0	2.16	4.32	2.16	2.16	1
		Te	otal Fixture	es Provided:	3	2	4	5	4	3	1
	20 of 21 Version April 2021										

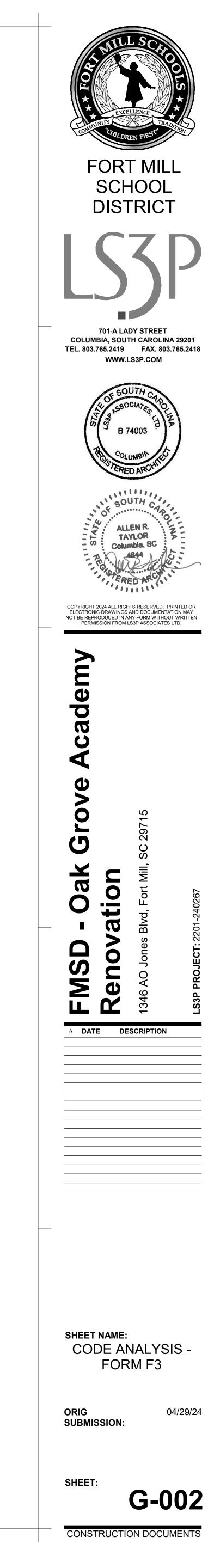
SOUTH CAROLINA STATE DEPARTMENT OF EDUCATION

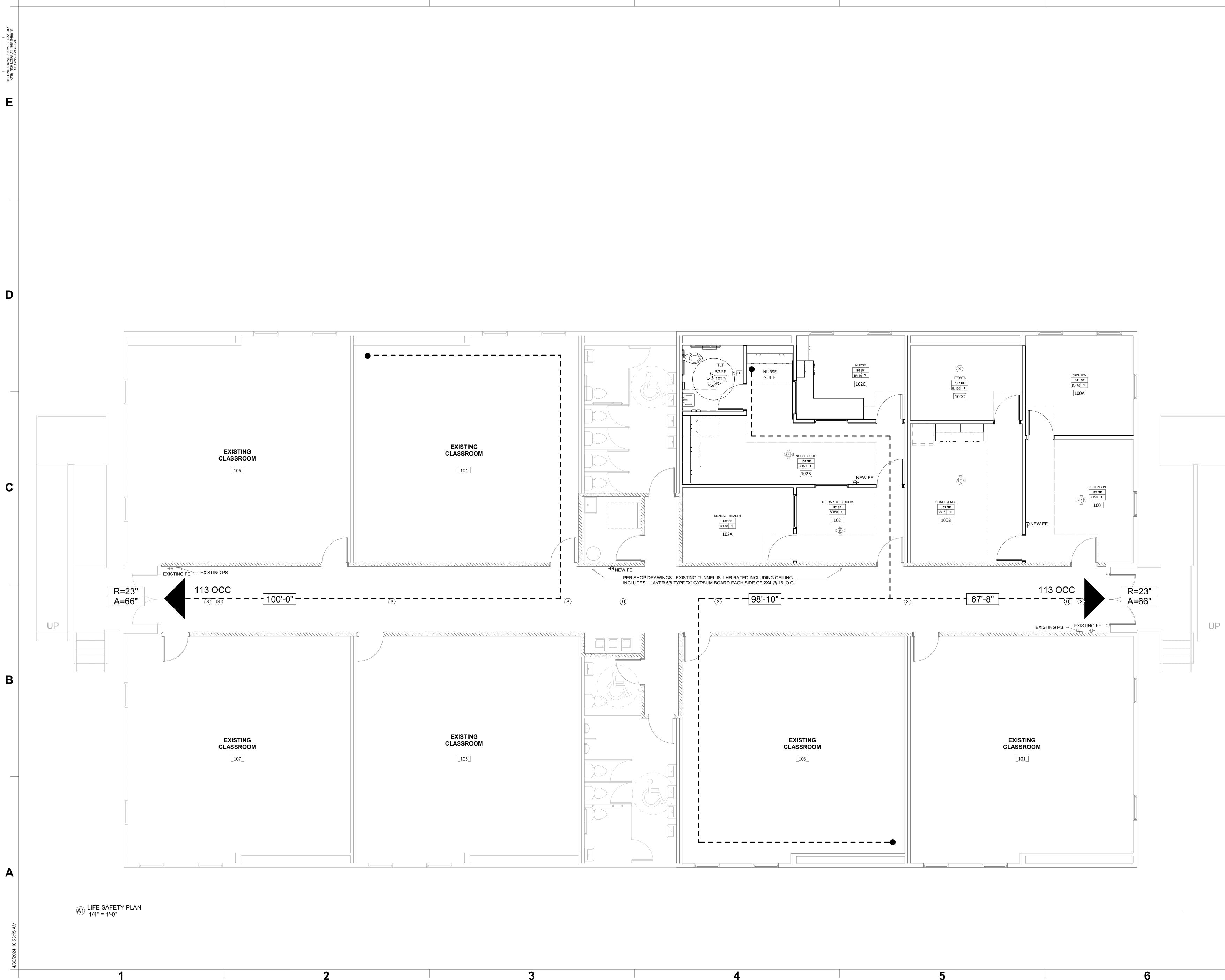
5

Form F3 – Building Code Analysis

Note: Expand as Needed. Double Click to Edit & Change.

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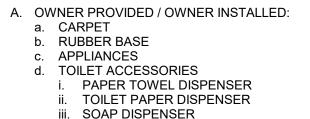


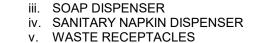






### PROJECT GENERAL NOTES





- v. WASTE RECEPTACLES
  e. ALL OTHER TOILET ACCESORIES PROVIDED BY GC.
  f. NEW FIRE EXSTINGUISHERS PROVIDED BY AND INSTALLED BY FMSD.
  B. OWNER PROVIDED / GENERAL CONTRACTOR INSTALLED ITEMS:

  a. DOOR FRAMES, DOORS AND DOOR HARDWARE

  C. SEE SHEET A-103 FOR:

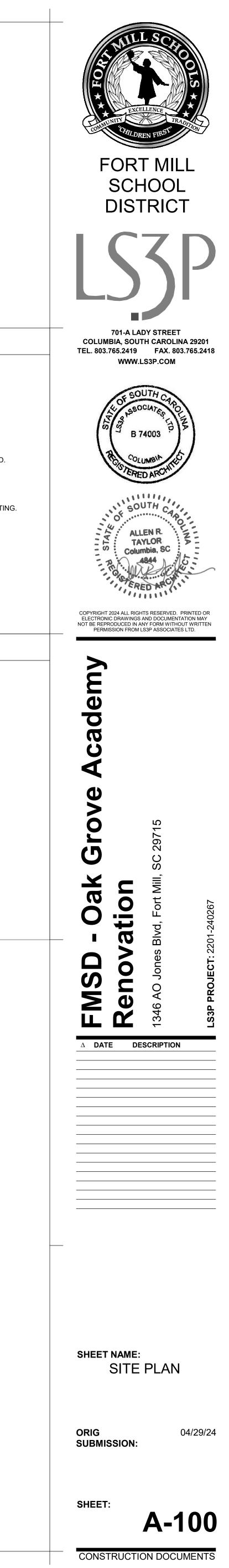
  a. DOOR AND WINDOW SCHEDULE, AND ADDITIONAL INFORMATION
  b. TOILET ACCESSORY DESCRIPTIONS AND MOUNTING HEIGHTS.

  D. GYPSUM WALL BOARD SHALL BE VINYL COATED (VCG) TO MATCH EXISTING.

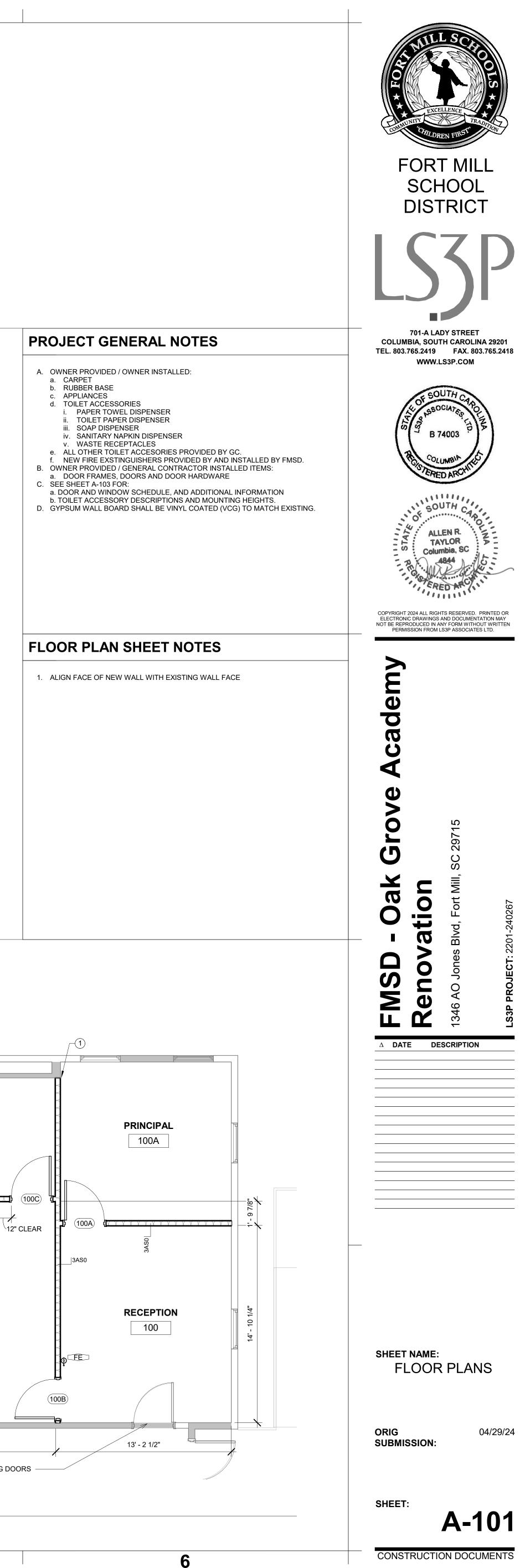
FMSD TO RESERVE THE IDENTIFIED
 PARKING SPACES FOR OGA.

# FLOOR PLAN SHEET NOTES

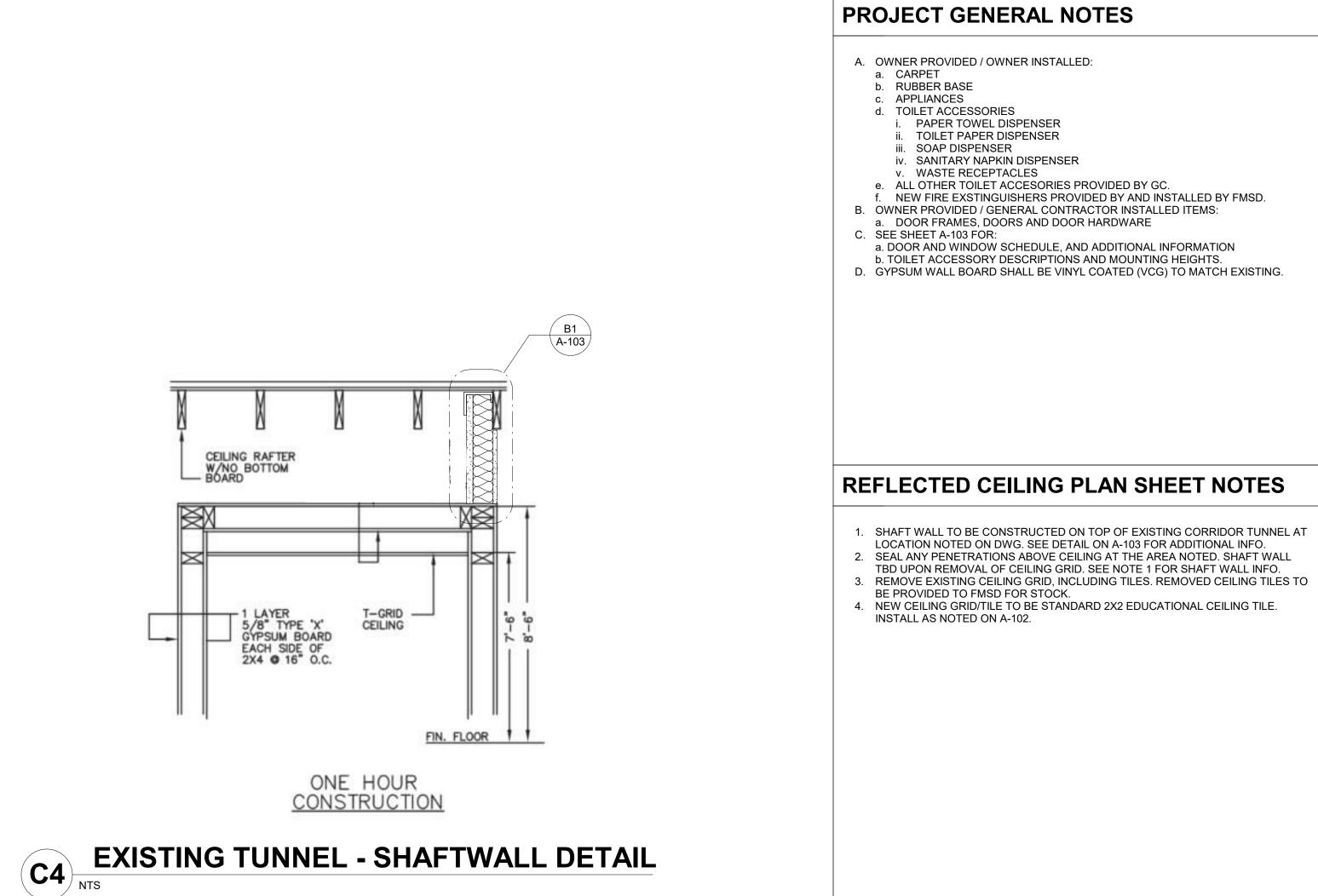
1. ALIGN FACE OF NEW WALL WITH EXISTING WALL FACE



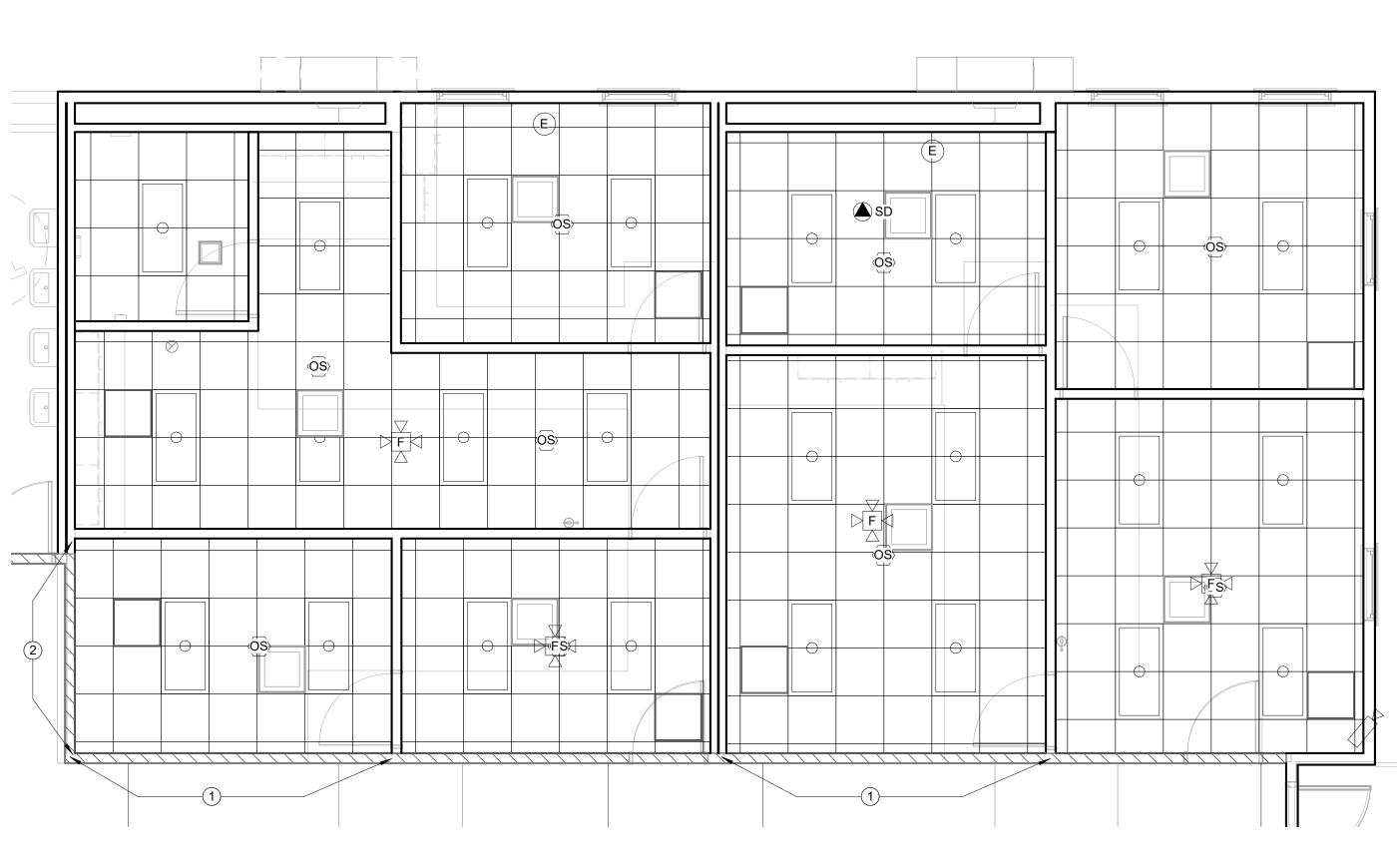






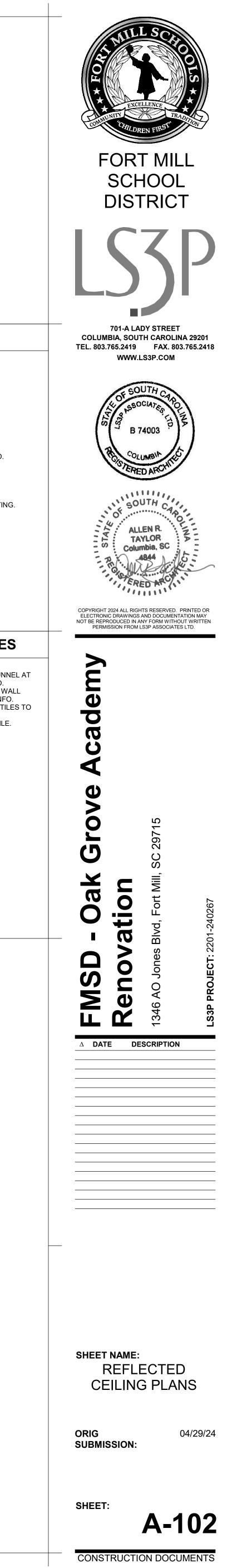


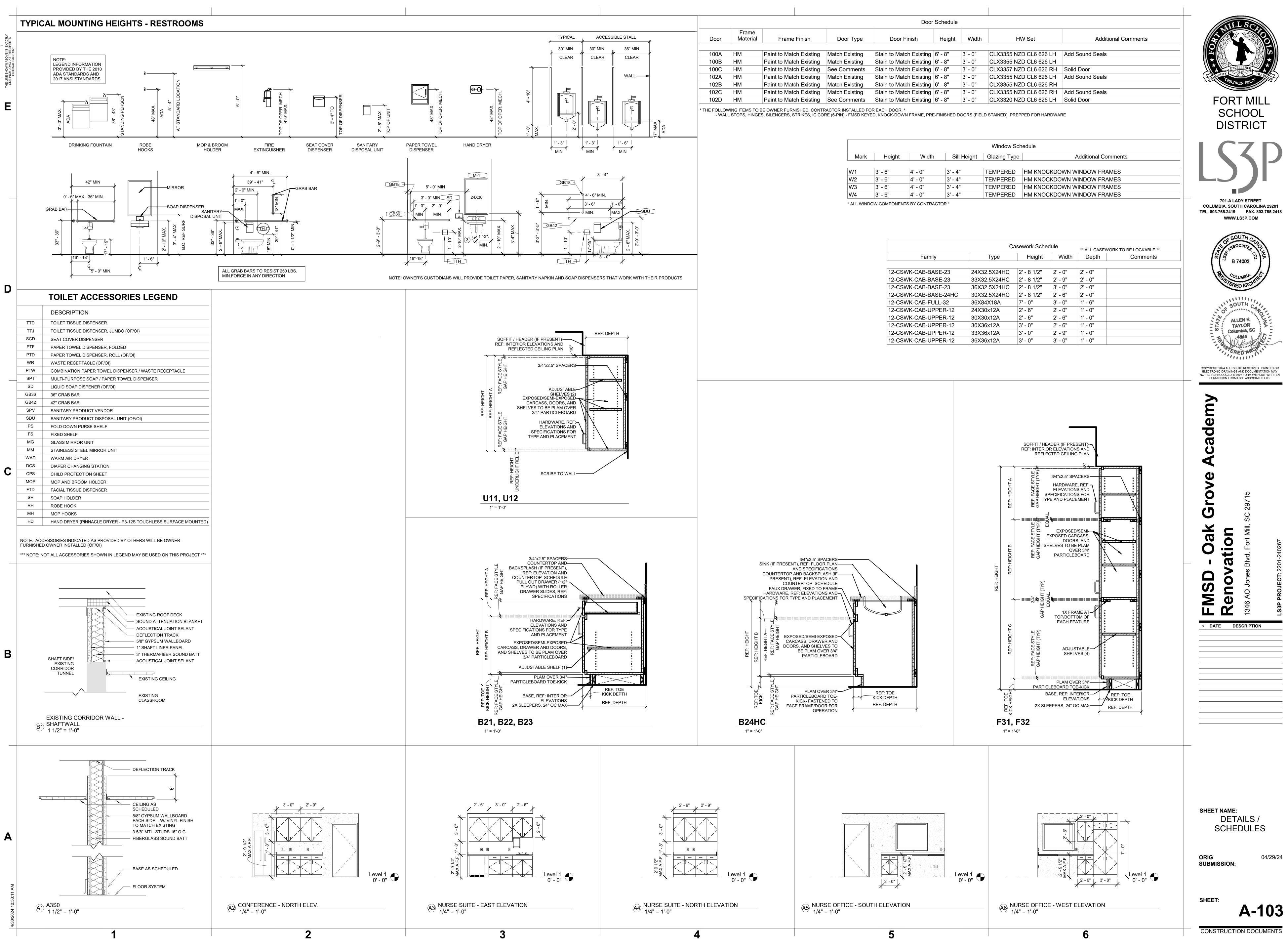




(A4) 1/4" = 1'-0

# ENLARGED REFLECTED CEILING PLAN

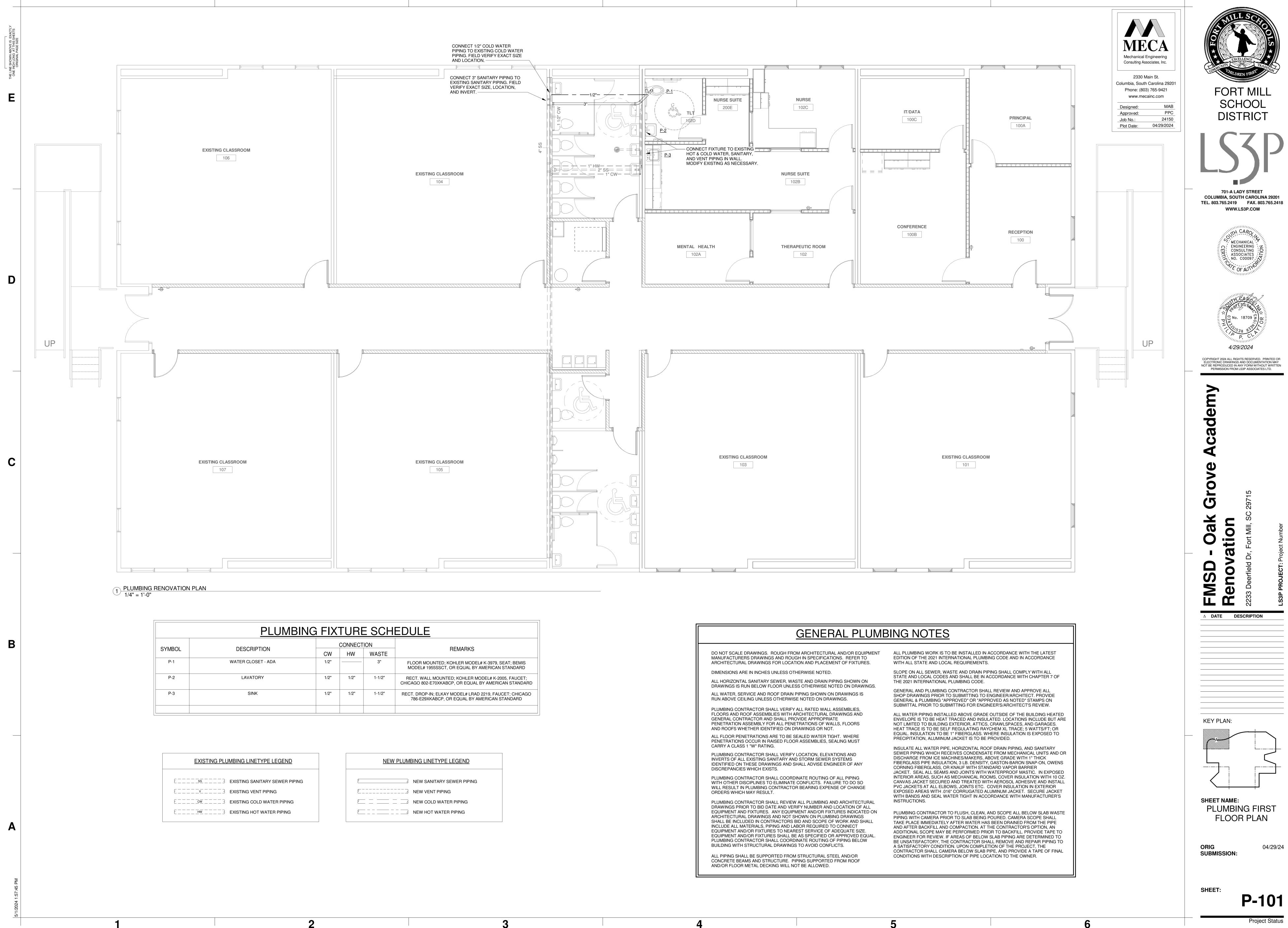




	Door Schedule										
e al	Frame Finish	Door Type	Door Finish	Height	Width	HW Set	Additional Comments				
	-	-			_						
	Paint to Match Existing	Match Existing	Stain to Match Existing	6' - 8"	3' - 0"	CLX3355 NZD CL6 626 LH	Add Sound Seals				
	Paint to Match Existing	Match Existing	Stain to Match Existing	6' - 8"	3' - 0"	CLX3355 NZD CL6 626 LH					
	Paint to Match Existing	See Comments	Stain to Match Existing	6' - 8"	3' - 0"	CLX3357 NZD CL6 626 RH	Solid Door				
	Paint to Match Existing	Match Existing	Stain to Match Existing	6' - 8"	3' - 0"	CLX3355 NZD CL6 626 LH	Add Sound Seals				
	Paint to Match Existing	Match Existing	Stain to Match Existing	6' - 8"	3' - 0"	CLX3355 NZD CL6 626 RH					
	Paint to Match Existing	Match Existing	Stain to Match Existing	6' - 8"	3' - 0"	CLX3355 NZD CL6 626 RH	Add Sound Seals				
	Paint to Match Existing	See Comments	Stain to Match Existing	6' - 8"	3' - 0"	CLX3320 NZD CL6 626 LH	Solid Door				
							•				

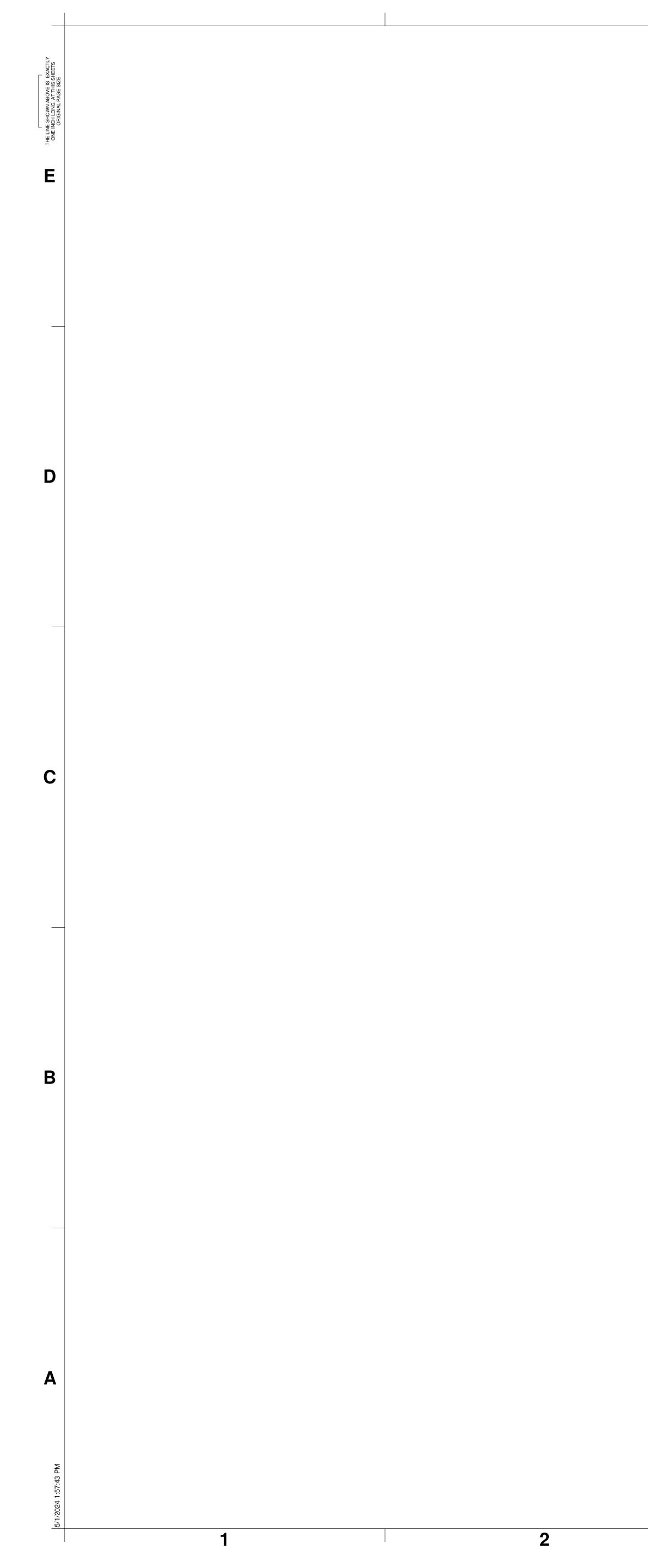
	Window Schedule								
Mark	Height	Width	Sill Height	Glazing Type	Additional Comments				
W1	3' - 6"	4' - 0"	3' - 4"	TEMPERED	HM KNOCKDOWN WINDOW FRAMES				
W2	3' - 6"	4' - 0"	3' - 4"	TEMPERED	HM KNOCKDOWN WINDOW FRAMES				
W3	3' - 6"	4' - 0"	3' - 4"	TEMPERED	HM KNOCKDOWN WINDOW FRAMES				
W4	3' - 6"	4' - 0"	3' - 4"	TEMPERED	HM KNOCKDOWN WINDOW FRAMES				
·				•					

	** ALL CASEWORK TO BE LOCKABLE				
Family	Туре	Height	Width	Depth	Comments
			·		
12-CSWK-CAB-BASE-23	24X32.5X24HC	2' - 8 1/2"	2' - 0"	2' - 0"	
12-CSWK-CAB-BASE-23	33X32.5X24HC	2' - 8 1/2"	2' - 9"	2' - 0"	
12-CSWK-CAB-BASE-23	36X32.5X24HC	2' - 8 1/2"	3' - 0"	2' - 0"	
12-CSWK-CAB-BASE-24HC	30X32.5X24HC	2' - 8 1/2"	2' - 6"	2' - 0"	
12-CSWK-CAB-FULL-32	36X84X18A	7' - 0"	3' - 0"	1' - 6"	
12-CSWK-CAB-UPPER-12	24X30x12A	2' - 6"	2' - 0"	1' - 0"	
12-CSWK-CAB-UPPER-12	30X30x12A	2' - 6"	2' - 6"	1' - 0"	
12-CSWK-CAB-UPPER-12	30X36x12A	3' - 0"	2' - 6"	1' - 0"	
12-CSWK-CAB-UPPER-12	33X36x12A	3' - 0"	2' - 9"	1' - 0"	
12-CSWK-CAB-UPPER-12	36X36x12A	3' - 0"	3' - 0"	1' - 0"	



<u>E SCHEDULE</u>									
ION WASTE	REMARKS								
3"	FLOOR MOUNTED; KOHLER MODEL# K-3979, SEAT; BEMIS MODEL# 1955SSCT, OR EQUAL BY AMERICAN STANDARD								
1-1/2"	RECT. WALL MOUNTED; KOHLER MODEL# K-2005, FAUCET; CHICAGO 802-E70XKABCP, OR EQUAL BY AMERICAN STANDARD								
1-1/2"	RECT. DROP-IN; ELKAY MODEL# LRAD 2219, FAUCET; CHICAGO 786-E29XKABCP, OR EQUAL BY AMERICAN STANDARD								

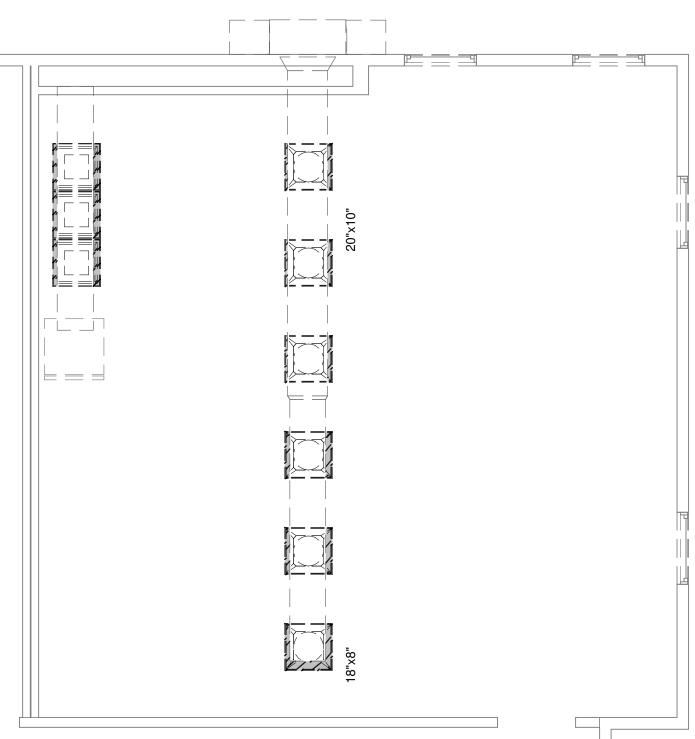
NEW PLUME	BING LINETYPE LEGEND
3	NEW SANITARY SEWER PIPING
3	NEW VENT PIPING
	NEW COLD WATER PIPING
	NEW HOT WATER PIPING

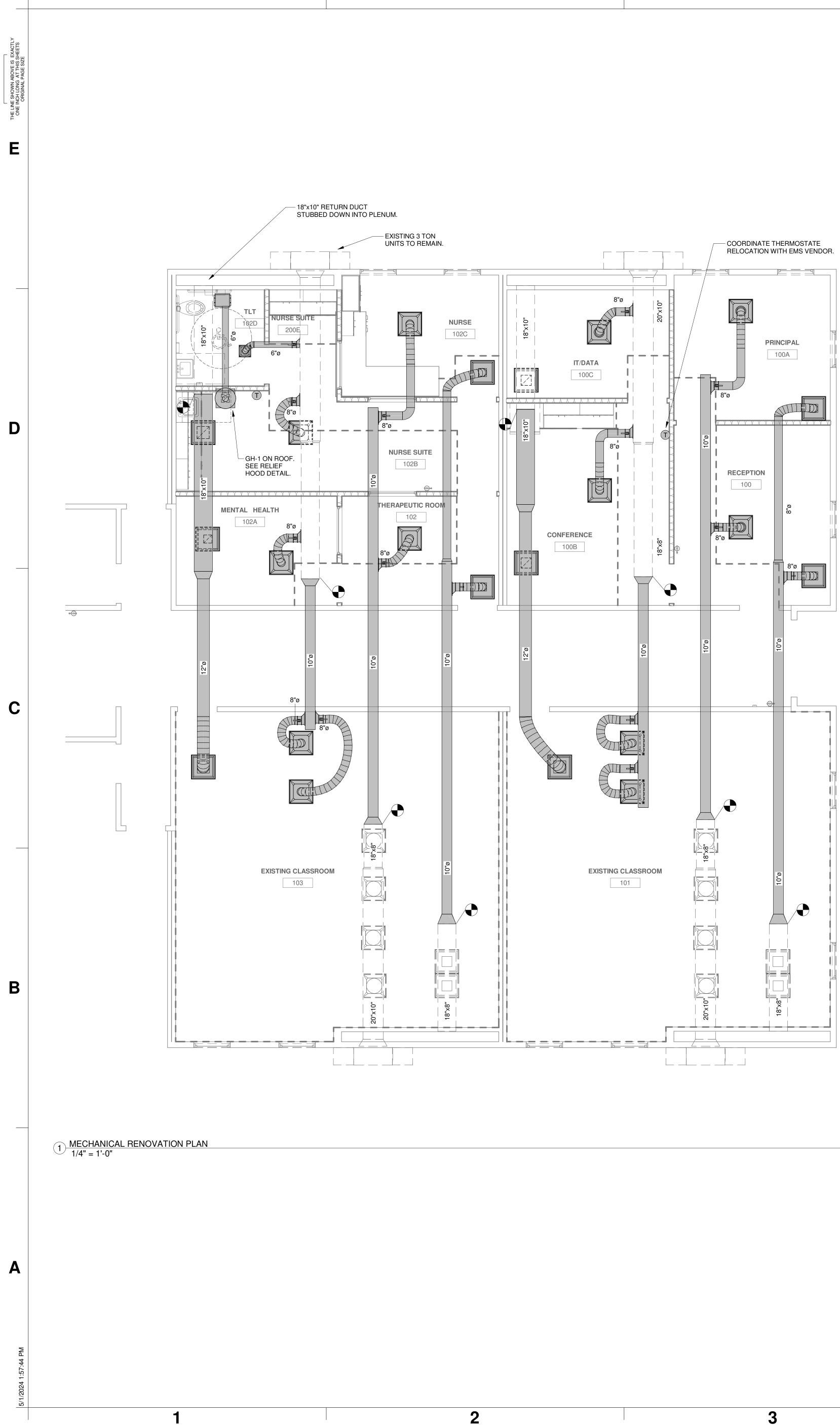


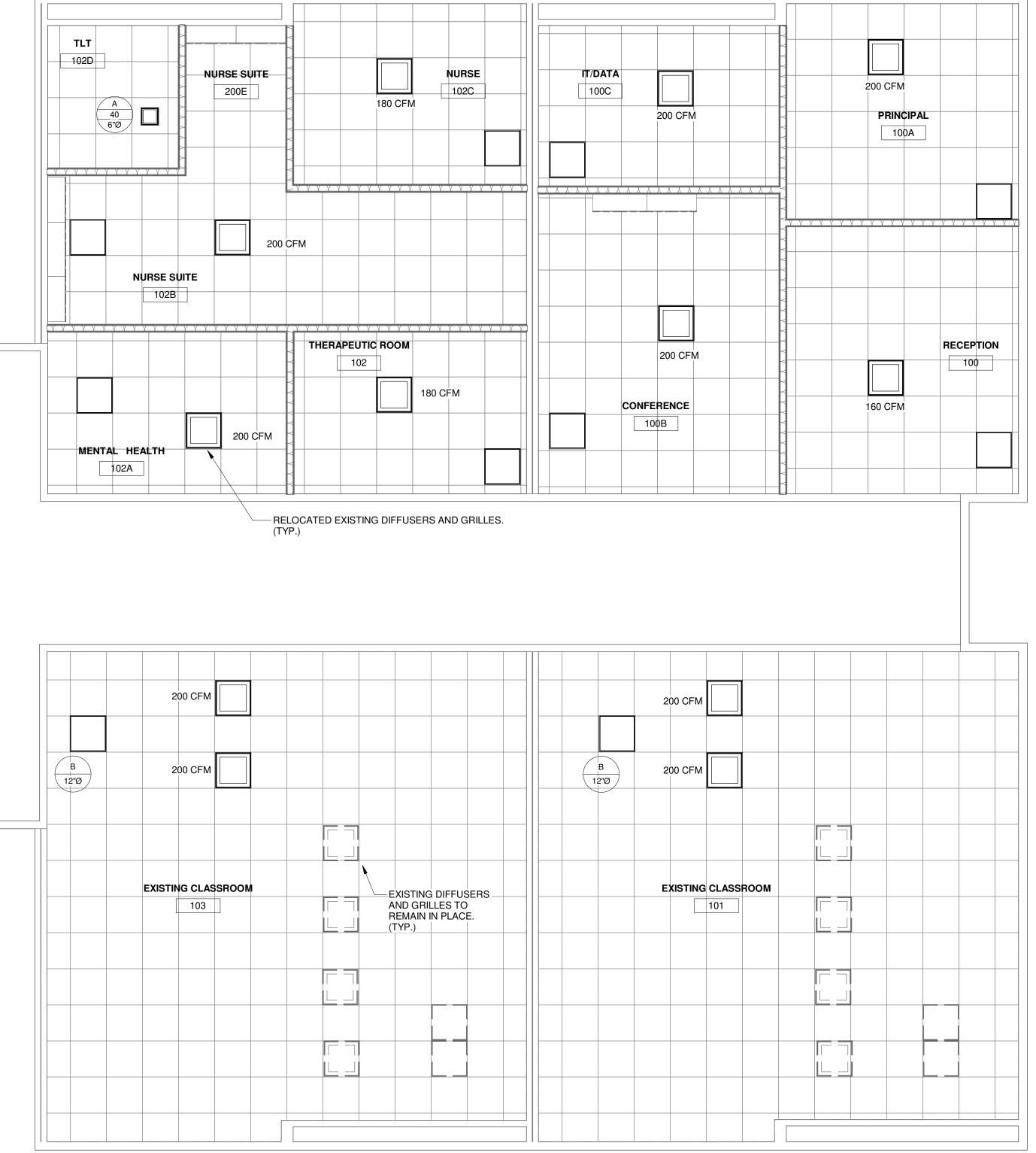


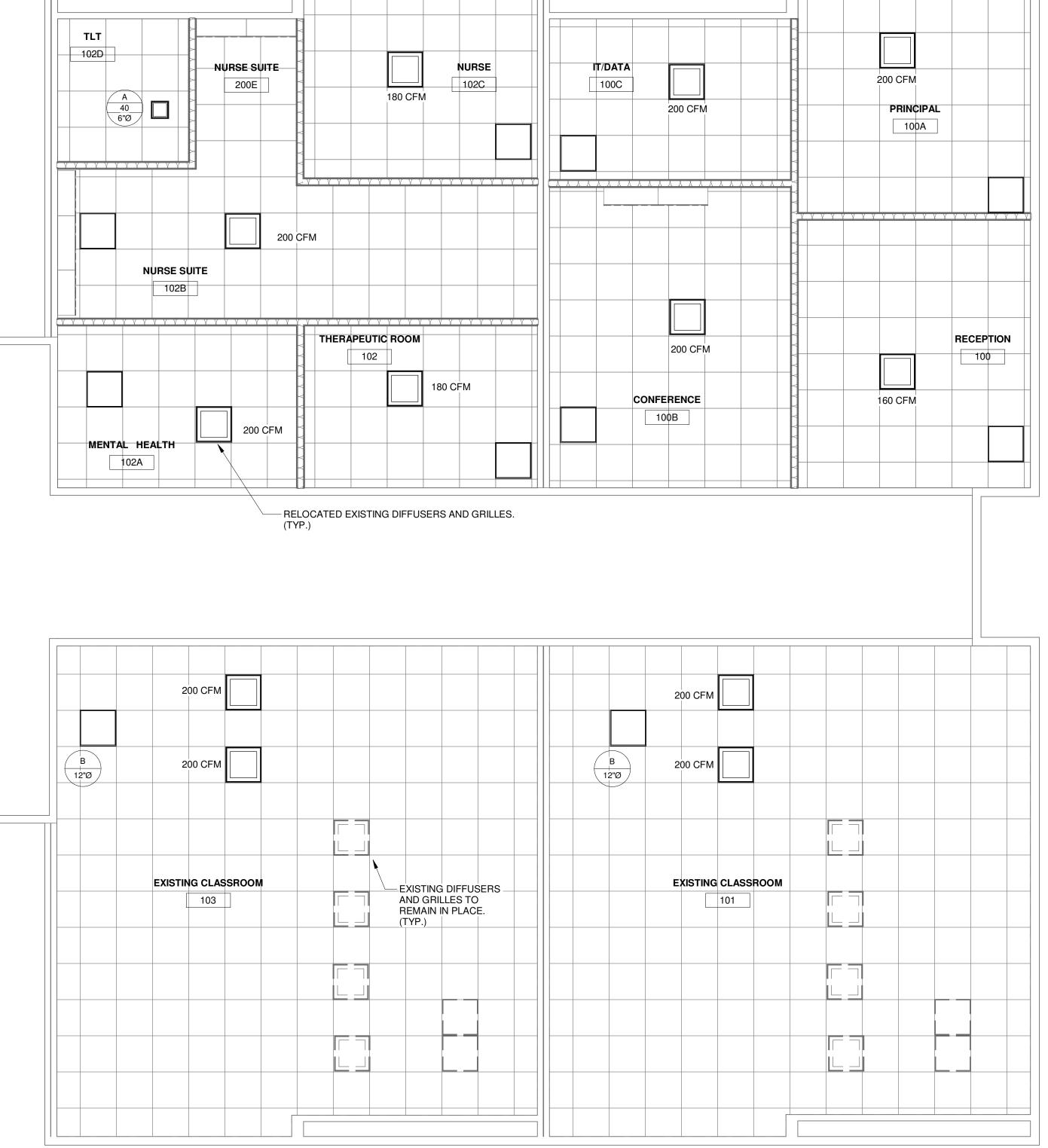
 $1 \frac{\text{MECHANICAL DEMOLITION PLAN}}{1/4" = 1'-0"}$ 







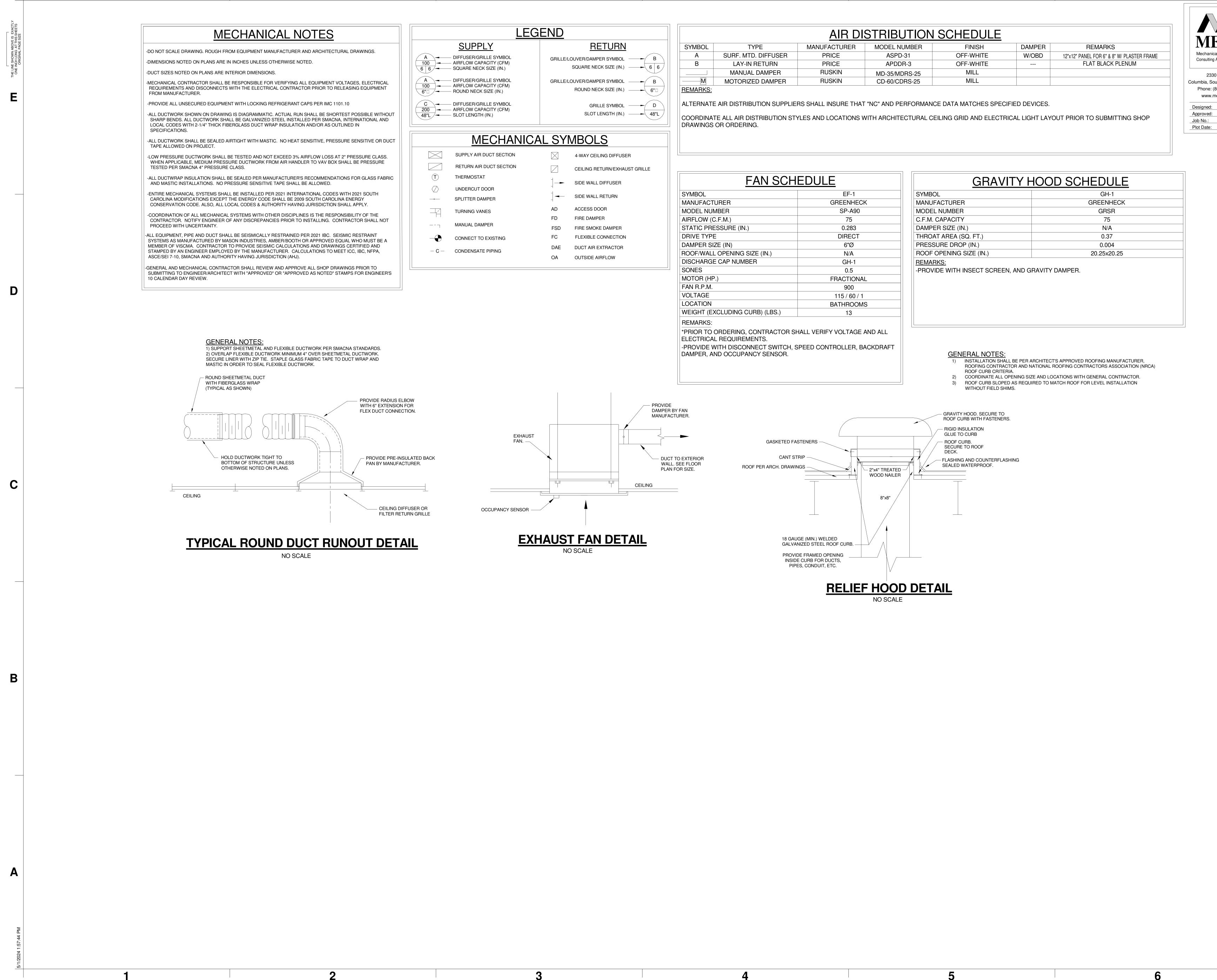




2 MECHANICAL REFLECTED CEILING PLAN 1/4" = 1'-0"

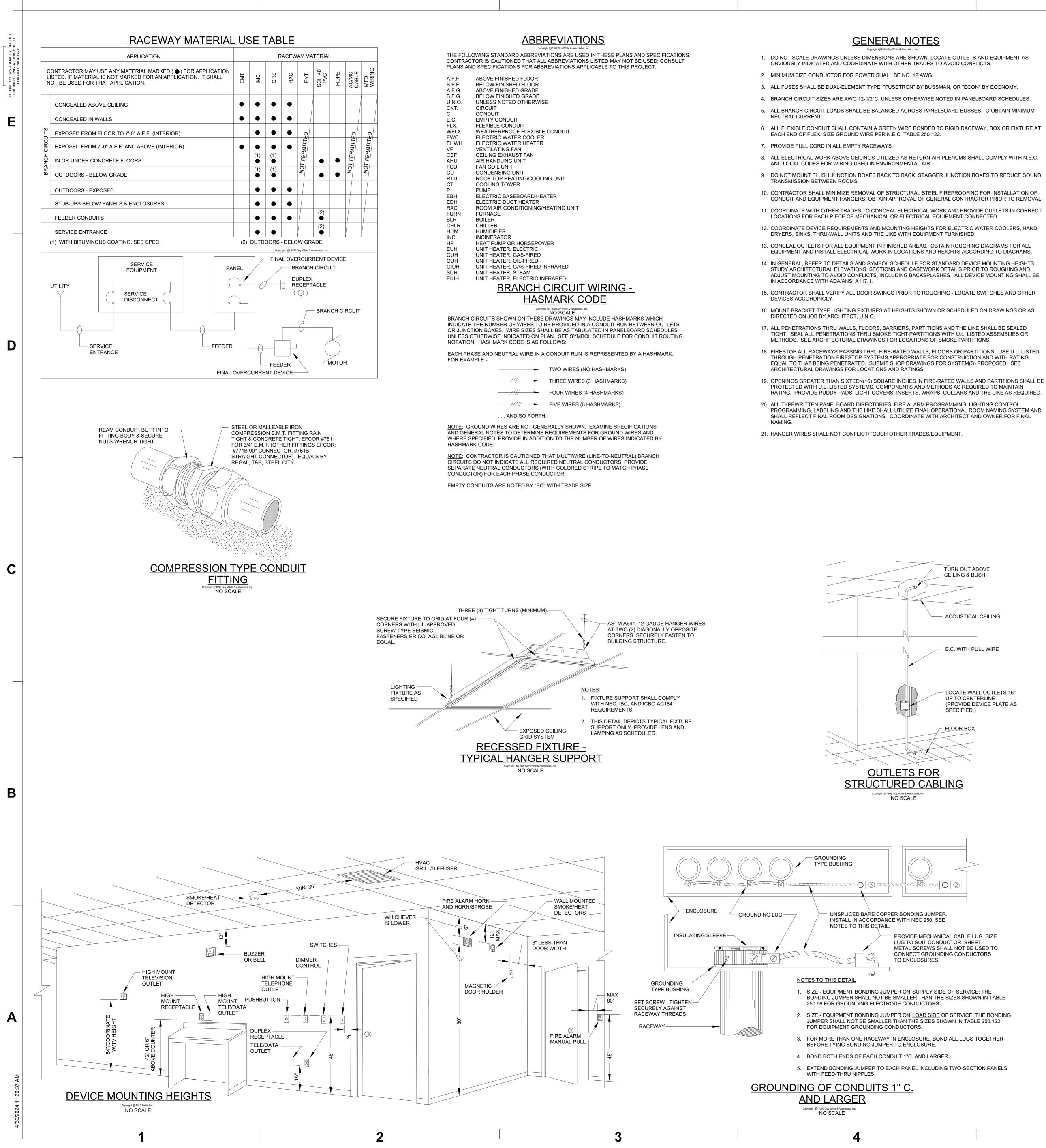


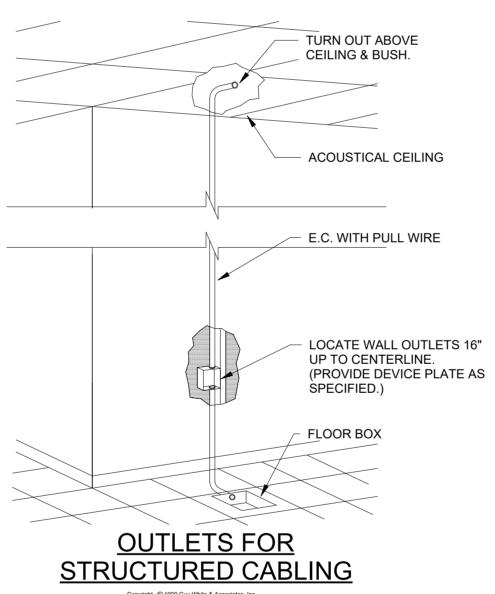
Designed:	
Approved:	
Job No.:	
Diet Dete:	

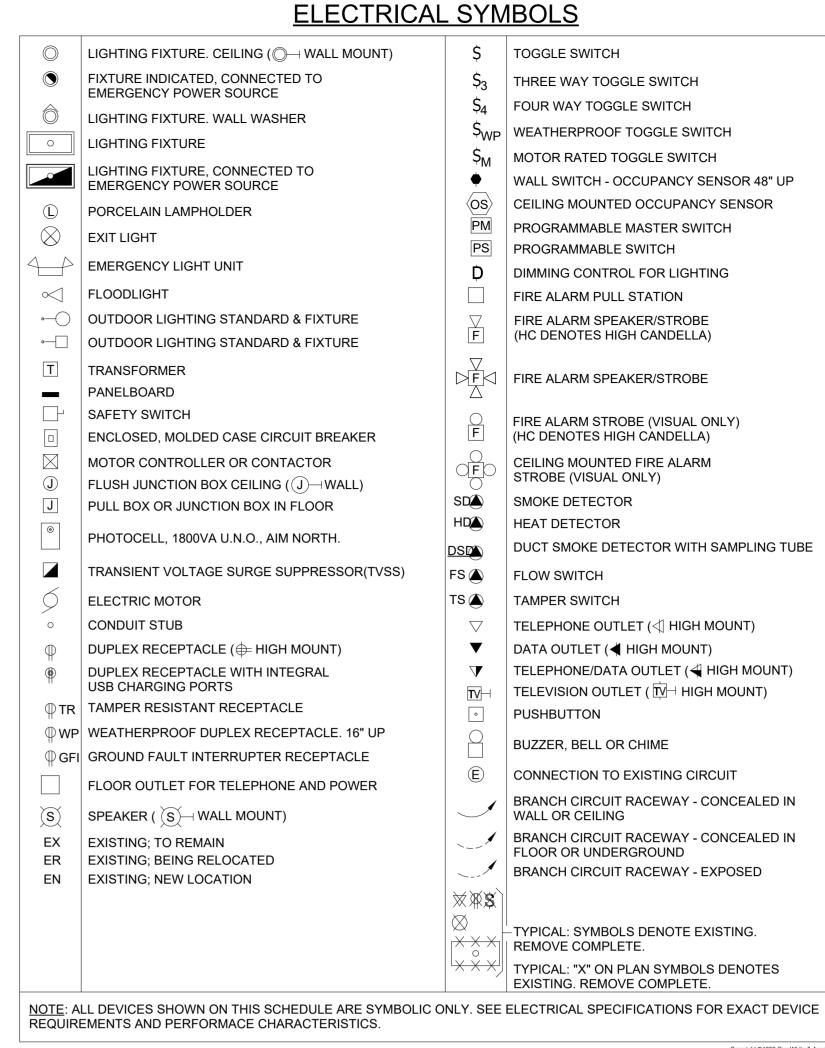


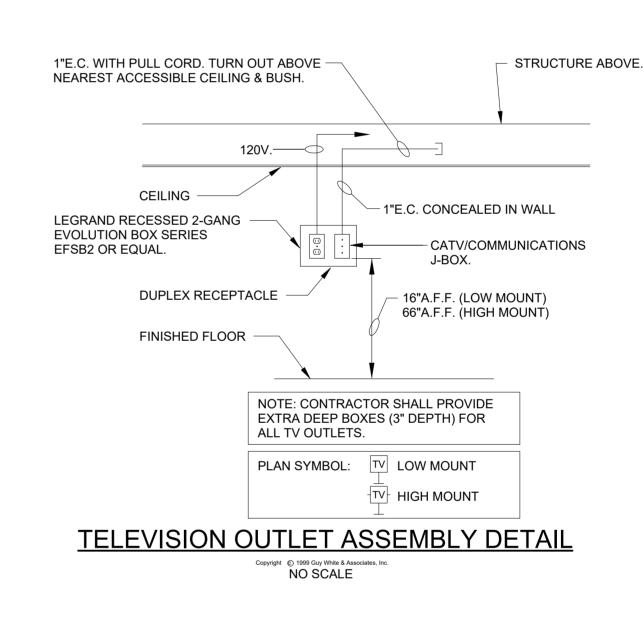
<u>AIR DI</u>	STRIBUTION	SCHEDULE		
MANUFACTURER	MODEL NUMBER	FINISH	DAMPER	REMARKS
PRICE	ASPD-31	OFF-WHITE	W/OBD	12"x12" PANEL FOR 6" & 8" W/ PLASTER FRAME
PRICE	APDDR-3	OFF-WHITE		FLAT BLACK PLENUM
RUSKIN	MD-35/MDRS-25	MILL		
RUSKIN	CD-60/CDRS-25	MILL		









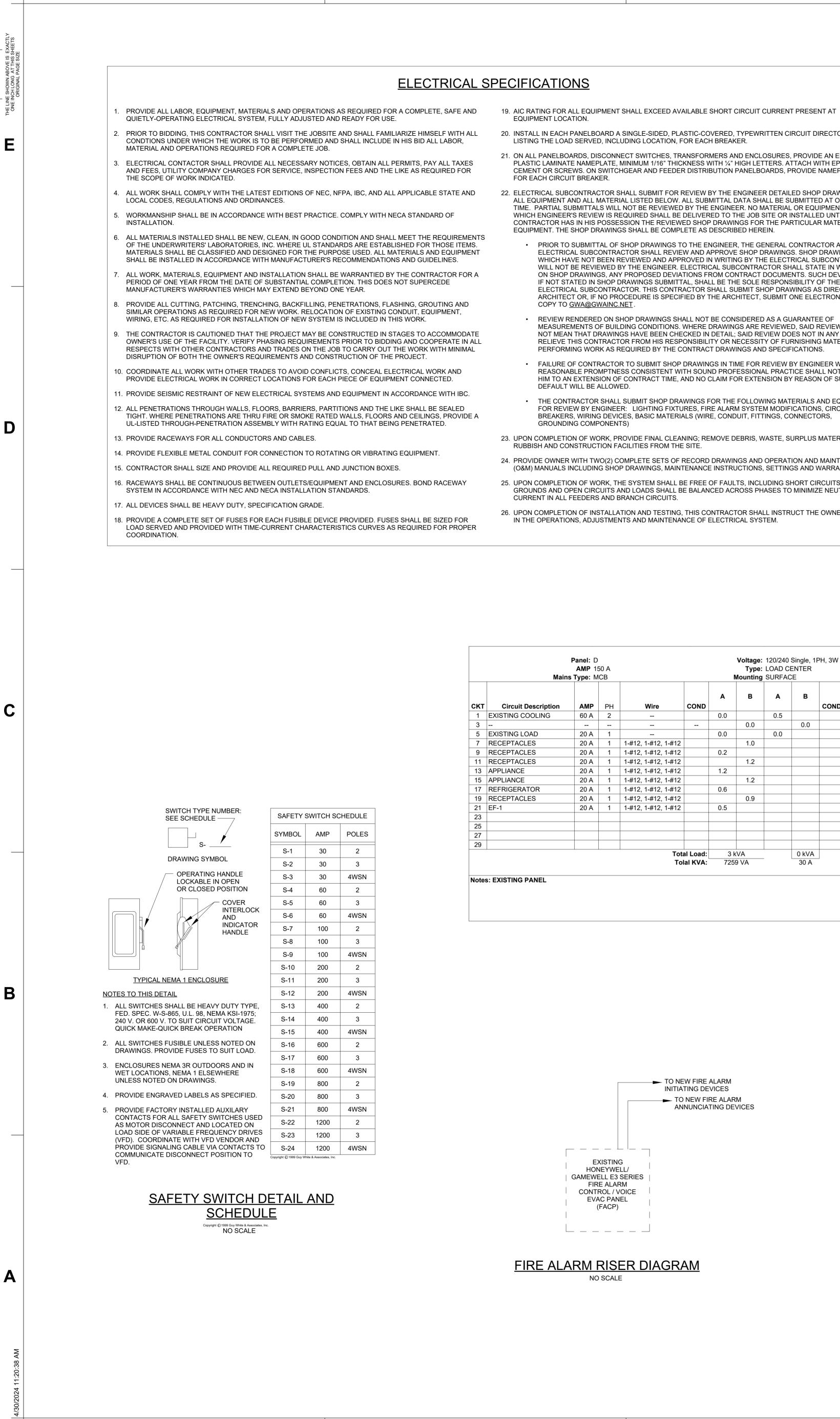




168 Laurelhurst Avenue Columbia, SC 29210 (803)252-6919 Fax (803)799-5494

gwa@gwainc.net http://www.gwainc.net





20. INSTALL IN EACH PANELBOARD A SINGLE-SIDED, PLASTIC-COVERED, TYPEWRITTEN CIRCUIT DIRECTORY

21. ON ALL PANELBOARDS, DISCONNECT SWITCHES, TRANSFORMERS AND ENCLOSURES, PROVIDE AN ENGRAVED PLASTIC LAMINATE NAMEPLATE, MINIMUM 1/16" THICKNESS WITH ¼" HIGH LETTERS. ATTACH WITH EPOXY CEMENT OR SCREWS. ON SWITCHGEAR AND FEEDER DISTRIBUTION PANELBOARDS, PROVIDE NAMEPLATE

22. ELECTRICAL SUBCONTRACTOR SHALL SUBMIT FOR REVIEW BY THE ENGINEER DETAILED SHOP DRAWINGS OF ALL EQUIPMENT AND ALL MATERIAL LISTED BELOW. ALL SUBMITTAL DATA SHALL BE SUBMITTED AT ONE TIME. PARTIAL SUBMITTALS WILL NOT BE REVIEWED BY THE ENGINEER. NO MATERIAL OR EQUIPMENT FOR WHICH ENGINEER'S REVIEW IS REQUIRED SHALL BE DELIVERED TO THE JOB SITE OR INSTALLED UNTIL THIS CONTRACTOR HAS IN HIS POSSESSION THE REVIEWED SHOP DRAWINGS FOR THE PARTICULAR MATERIAL OR

 PRIOR TO SUBMITTAL OF SHOP DRAWINGS TO THE ENGINEER, THE GENERAL CONTRACTOR AND THE ELECTRICAL SUBCONTRACTOR SHALL REVIEW AND APPROVE SHOP DRAWINGS. SHOP DRAWINGS WHICH HAVE NOT BEEN REVIEWED AND APPROVED IN WRITING BY THE ELECTRICAL SUBCONTRACTOR WILL NOT BE REVIEWED BY THE ENGINEER. ELECTRICAL SUBCONTRACTOR SHALL STATE IN WRITING ON SHOP DRAWINGS, ANY PROPOSED DEVIATIONS FROM CONTRACT DOCUMENTS. SUCH DEVIATIONS, IF NOT STATED IN SHOP DRAWINGS SUBMITTAL, SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR. THIS CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AS DIRECTED BY ARCHITECT OR, IF NO PROCEDURE IS SPECIFIED BY THE ARCHITECT, SUBMIT ONE ELECTRONIC .PDF

 REVIEW RENDERED ON SHOP DRAWINGS SHALL NOT BE CONSIDERED AS A GUARANTEE OF MEASUREMENTS OF BUILDING CONDITIONS. WHERE DRAWINGS ARE REVIEWED, SAID REVIEW DOES NOT MEAN THAT DRAWINGS HAVE BEEN CHECKED IN DETAIL; SAID REVIEW DOES NOT IN ANY WAY RELIEVE THIS CONTRACTOR FROM HIS RESPONSIBILITY OR NECESSITY OF FURNISHING MATERIAL OR PERFORMING WORK AS REQUIRED BY THE CONTRACT DRAWINGS AND SPECIFICATIONS. FAILURE OF CONTRACTOR TO SUBMIT SHOP DRAWINGS IN TIME FOR REVIEW BY ENGINEER WITH

REASONABLE PROMPTNESS CONSISTENT WITH SOUND PROFESSIONAL PRACTICE SHALL NOT ENTITLE HIM TO AN EXTENSION OF CONTRACT TIME, AND NO CLAIM FOR EXTENSION BY REASON OF SUCH

 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE FOLLOWING MATERIALS AND EQUIPMENT FOR REVIEW BY ENGINEER: LIGHTING FIXTURES, FIRE ALARM SYSTEM MODIFICATIONS, CIRCUIT BREAKERS, WIRING DEVICES, BASIC MATERIALS (WIRE, CONDUIT, FITTINGS, CONNECTORS,

23. UPON COMPLETION OF WORK, PROVIDE FINAL CLEANING; REMOVE DEBRIS, WASTE, SURPLUS MATERIALS,

24. PROVIDE OWNER WITH TWO(2) COMPLETE SETS OF RECORD DRAWINGS AND OPERATION AND MAINTENANCE (O&M) MANUALS INCLUDING SHOP DRAWINGS, MAINTENANCE INSTRUCTIONS, SETTINGS AND WARRANTIES. 25. UPON COMPLETION OF WORK, THE SYSTEM SHALL BE FREE OF FAULTS, INCLUDING SHORT CIRCUITS, GROUNDS AND OPEN CIRCUITS AND LOADS SHALL BE BALANCED ACROSS PHASES TO MINIMIZE NEUTRAL

26. UPON COMPLETION OF INSTALLATION AND TESTING, THIS CONTRACTOR SHALL INSTRUCT THE OWNER FULLY

SYMBOL	DESCRIPTION
	1
EM	EMERGENCY LED EXIT SIGN
EN	EXISTING LED 2X4 NEW LOCATION
MH	EMERGENCY LIGHTING UNIT
	1
1. LO	CATE ALL FIXTURES IN STRIC
	R ALL FIXTURES INDICATED W QUIRED. COMPLY WITH NEC 7
	ENSOR LOCATIONS ARE SCHE PE OF SENSOR AS REQUIRED
	L LAYOUTS AND INSTALLATION STALLATION INSTRUCTIONS.
3. AT	CONTRACTOR'S OPTION, SY
	ESTROOMS, STORAGE ROOMS CCUPANCY SETTING). ALL O

	Panel: E AMP 150 A Mains Type: MCB							Voltage: 120/240 Single, 1PH, 3W Type: LOAD CENTER Mounting SURFACE				Feed-Th	. Ratin Iru Luç Space				
с	кт	скт	Circuit Description	AMP	PH	Wire	COND	Α	в	A	в	COND	Wire	РН	АМР	Circuit Description	ск
	2	1	EXISTING COOLING	60 A	2			0.0		0.5			1-#12, 1-#12, 1-#12	1	20 A	EXISTING LIGHTING	2
	4	3							0.0		0.0			1	20 A	EXISTING LOAD	4
	6	5	EXISTING LOAD	20 A	1			0.0		0.0				1	20 A	EXISTING LOAD	6
	8	7	EXISTING DATA RECEPT.	20 A	1				0.0		0.5		1-#12, 1-#12, 1-#12	1	20 A	RECEPTACLES	8
-	0	9	APPLIANCE	20 A	1	1-#12, 1-#12, 1-#12		0.2									10
-	2	11	APPLIANCE	20 A	1	1-#12, 1-#12, 1-#12			0.2								12
-	4	13	REFRIGERATOR	20 A	1	1-#12, 1-#12, 1-#12		0.6									14
	6	15	FLOOR OUTLET	20 A	1	1-#12, 1-#12, 1-#12			0.6								16
	8	17															18
2	20	19															20
	22	21															22
	24	23															24
	26	25															26
	28	27															28
	30	29															30
							al Load:		κVA	-	0 kVA						
						То	lal KVA:	253	9 VA		11 A						
		Note	es: EXISTING PANEL														

	Panel: D AMP 1	50 A				Type:	LOAD C		11, 011	Feed-T	hru Lug			
lains	Type: M	ICB			P	Mounting	SURFAC	CE		Tota	I Spac	<b>es</b> 30		
n	AMP	PH	Wire	COND	А	в	A	В	COND	Wire	РН	AMP	Circuit Description	ск
	60 A	2		COND	0.0		0.5		COND	1-#12, 1-#12, 1-#12	1	20 A	EXISTING LIGHTING	2
					0.0	0.0	0.5	0.0			1	20 A	EXISTING LOAD	4
	20 A	1			0.0	0.0	0.0	0.0			1	20 A	EXISTING LOAD	6
	20 A	1	1-#12, 1-#12, 1-#12		0.0	1.0	0.0				•	2077		8
	20 A	1	1-#12, 1-#12, 1-#12		0.2									10
	20 A	1	1-#12, 1-#12, 1-#12			1.2								12
	20 A	1	1-#12, 1-#12, 1-#12		1.2									14
	20 A	1	1-#12, 1-#12, 1-#12			1.2								16
	20 A	1	1-#12, 1-#12, 1-#12		0.6									18
	20 A	1	1-#12, 1-#12, 1-#12			0.9								20
	20 A	1	1-#12, 1-#12, 1-#12		0.5									22
														24
														26
														28
														30
				al Load:		κVA	_	0 kVA						
			То	lal KVA:	725	9 VA		30 A						

1. ALL WORK SHALL BE IN ACCORDANCE WITH IBC (2021), IFC (2021), NFPA 70 (2020), NFPA 72 (2019), NFPA 101 (2018), ADA (2010) AND ICC/ANSI A117.1 (2017) AND ALL LOCAL CODES AND REGULATIONS. 2. SYSTEM SHALL BE MULTIPLEX TYPE. ALL DEVICES AND SYSTEM COMPONENTS SHALL BE UL LISTED FOR APPLICATION.

ALL STROBES SHALL BE SYNCHRONIZED. 4. ALL CONDUCTORS SHALL BE INSTALLED IN RACEWAYS. RACEWAYS SHALL BE METALLIC CONDUIT, MINIMUM 3/4 " SIZE.

5. FIRESTOP ALL PENETRATIONS THRU RATED PARTITIONS AND FLOORS. USE UL LISTED THROUGH-PENETRATION FIRESTOP SYSTEMS APPROPRIATE FOR CONSTRUCTION TYPE AND WITH RATING

EQUAL TO THAT BEING PENETRATED.

6. FIELD ADJUST SMOKE DETECTOR SPACING IN CORRIDORS AS REQUIRED TO MAINTAIN MIN. 3'-0" SEPARATION FROM AIR REGISTERS. MAINTAIN MAXIMUM 30'-0" SPACING BETWEEN DETECTORS AND 3'-0" FROM DOOR HOLD OPEN DEVICES.

7. CONTRACTOR SHALL FIELD VERIFY TRANSPONDER, EXTENDER PANEL AND FIRE ALARM J-BOX LOCATIONS AND COORDINATE FINAL LOCATIONS WITH OWNER PRIOR TO ROUGHING. PROVIDE SMOKE DETECTORS AT ALL NEW CONTROL PANELS IN ACCORDANCE WITH NPFA 72.

8. CONTRACTOR SHALL COORDINATE FIRE ALARM DEVICE LOCATIONS TO AVOID CONFLICT WITH CONDITIONS SUCH AS LOCKERS, ARTWORK, BULLETIN BOARDS, CASEWORK, STRUCTURAL

COMPONENTS, BULKHEADS AND THE LIKE. ADJUST AS REQUIRED, MAINTAINING COMPLIANCE WITH NFPA 72.

9. INSTALL ALL STROBE AND COMBINATION DEVICES WITHIN 15' FROM THE END OF CORRIDORS IN ACCORDANCE WITH NFPA 72. 10. REFER TO MECHANICAL DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR FOR FIRE/SMOKE DAMPERS, MECHANICAL UNIT TYPES AND CHARACTERISTICS, LOCATIONS, QUANTITIES AND FUNCTIONS. PROVIDE DUCT AND AREA DETECTORS IN COMPLIANCE WITH LOCAL CODES. MOUNTING IN DUCTS SHALL BE IN ACCORDANCE WITH CODES AND MANUFACTURER GUIDELINES. PROVIDE DETECTORS AT CONNECTIONS TO VERTICAL RETURN AIR SHAFTS PER IBC. CONNECT COMPLETE FOR AIR HANDLER SHUTDOWN IN ACCORDANCE WITH LOCAL CODES.

INTERNATIONAL FIRE CODE IN RATING, TYPE, SURVIVABILITY AND INSTALLATION.

11. LABEL FIRE ALARM ANNUNCIATION DEVICES AS DIRECTED BY A.H.J.

OPERATING SEQUENCE SHALL MATCH EXISTING.

PROVIDE TO THE ENGINEER A CERTIFICATE OF OPERATION FOR THE FIRE ALARM SYSTEM.

3

	<ul> <li>TO NEW FIRE ALARM INITIATING DEVICES</li> <li>TO NEW FIRE ALA ANNUNCIATING E</li> </ul>
EXISTING HONEYWELL/ IEWELL E3 SERIES FIRE ALARM ONTROL / VOICE EVAC PANEL (FACP)	

LIGHTING FIXTURE SCHEDULE											
DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	WATTAGE	NOTES						
GENCY LED EXIT SIGN	LITHONIA	LE-S-1/2-R-120/277-ELNSD	120		EMERGENCY EXIT SIGN, MINIMUM 90-MINUTE RATING. PROVIDE FACES, ARROWS, AND MOUNTING PER PLANS.						
ING LED 2X4 NEW	EXISTING	EXISTING	120	37	RECESSED-CEILING.						
GENCY LIGHTING UNIT	LITHONIA	ELM2L	120		EMERGENCY LIGHTS, MINIMUM 90-MINUTE RATING. PROVIDE MOUNTING PER PLANS.						

### NOTES TO LIGHTING FIXTURE SCHEDULE

ALL FIXTURES IN STRICT ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLAN.

FIXTURES INDICATED WITH DIMMING CONTROL, PROVIDE WALL-BOX DIMMER TO SUIT FIXTURE FURNISHED. PROVIDE LOW VOLTAGE CONTROL WIRING WITH 600V RATING AS ED. COMPLY WITH NEC 735.136.

### NOTES TO OCCUPANCY SENSORS

OS CEILING MOUNTED 360' OCCUPANCY SENSOR, INTERCONNECTION NOT SHOWN FOR CLARITY.

COCATIONS ARE SCHEMATIC ONLY AND LOCATIONS SHOWN ARE INTENDED TO INDICATE AREA TO BE CONTROLLED BY SENSORS. PROVIDE ACTUAL QUANTITY, LOCATION AND SENSOR AS REQUIRED TO PROVIDE FULL COVERAGE FOR EACH SPACE INDICATED. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS. OUTS AND INSTALLATION SHALL BE BASED ON APPROVED VENDOR SHOP DRAWINGS. ROUGH ONLY FROM THESE SHOP DRAWINGS AND COMPLY WITH ALL MANUFACTURER

TRACTOR'S OPTION, SYSTEM MAY BE DIGITAL OR LOW VOLTAGE TYPE AND MAY UTILIZE SELF-CONTAINED DEVICES OR SEPARATE POWER PACKS/RELAYS.

DOMS, STORAGE ROOMS, JANITOR CLOSETS, EQUIPMENT ROOMS AND SIMILAR SPACES SHALL BE CONFIGURED AS AUTOMATIC ON/OFF WITH MANUAL OVERRIDE FUNCTION ANCY SETTING). ALL OTHER SPACES SHALL BE CONFIGURED AS MANUAL ON, AUTOMATIC OFF WITH MANUAL OVERRIDE FUNCTION (VACANCY SETTING). 5. ROOMS INDICATED WITH BOTH OCCUPANCY SENSORS AND MULTI-LEVEL SWITCHING OR DIMMING SHALL MAINTAIN FULL MANUAL CONTROL ABILITY FOR ADJUSTING LIGHTING LEVELS.

6. SENSORS MOUNTED OVER DOORWAYS SHALL BE PLACED A MINIMUM OF ONE FOOT INSIDE THRESHOLD.

7. ULTRASONIC SENSORS SHALL BE LOCATED A MINIMUM OF SIX(6) FEET FROM HVAC SUPPLY/RETURN, CEILING FANS AND OTHER AIR MOVEMENT DEVICES.

8. DJUST SENSOR LOCATIONS IN FIELD AS REQUIRED TO AVOID LINE-OF-SIGHT CONFLICTS WITH STRUCTURE, SUSPENDED LIGHTING, MECHANICAL DUCTWORK, CASEWORK, BULKHEADS AND OTHER ARCHITECTURAL OR BUILDING FEATURES. SENSORS SHALL NOT FALSE TRIGGER FROM ADJACENT SPACES. 9. SENSORS INSTALLED IN DAMP OR WET LOCATIONS SHALL BE UL LISTED FOR USE IN RESPECTIVE AREA.

10. CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS FOR NON-ADAPTIVE PRODUCTS.

11. IF MULTIPLE CIRCUITS ARE TO BE CONTROLLED BY A SINGLE SENSOR OR GROUP OF SENSORS, AUXILIARY RELAYS MAY BE UTILIZED IN CONJUNCTION WITH POWER PACKS.

### FLOOR BOX SCHEDULE - POKE-THRU TYPE

UNLESS NOTED OTHERWISE, FLOOR BOXES SHALL BE WIREMOLD/LEGRAND EVOLUTION SERIES WITH RECESSED DEVICES AND SPRING-LOADED DIE-CAST ALUMINUM COVER ASSEMBLY TO SUIT FLOOR FINISH IN AREA INSTALLED. COVER ASSEMBLY FINISH SHALL BE AS DIRECTED BY ARCHITECT. COORDINATE WITH FLOOR INSTALLER/FINISHER FOR INSTALLATION OF COVER ASSEMBLY. FLOOR BOXES SHALL MEET UL SCRUB WATER EXCLUSION REQUIREMENTS FOR FLOOR SURFACE INSTALLED AND SHALL COMPLY WITH ALL ADA ACCESSIBILITY GUIDELINES. ALL FLOOR BOXES SHALL HAVE 2-HOUR FIRE RATING. PROVIDE POWER AND COMMUNICATION SERVICES FOR EACH TYPE AS SCHEDULED BELOW.

MARK DESCRIPTION

> POWER AND COMMUNICATIONS. U.N.O., PROVIDE DUPLEX RECEPTACLE AND DATA/TELE/AV BRACKET FOR OWNER'S JACK DEVICES. WIREMOLD/LEGRAND 6AT SERIES.

### NOTES TO FIRE ALARM RISER DIAGRAM

12. PROVIDE COMPLETE AND OPERABLE MODIFICATIONS AND EXPANSION OF EXISTING FIRE ALARM/EMERGENCY VOICE NOTIFICATION SYSTEM AS REQUIRED TO SUIT NEW USE OF SPACE. SYSTEM

13. PROVIDE QUANTITY, TYPE AND LOCATION OF SPEAKER ASSEMBLIES AS REQUIRED TO SUIT EXISTING CONDITIONS IN AREA TO BE COVERED. INCLUDE IN PRICE ALL REQUIRED ACOUSTIC MEASUREMENTS, ROOM TESTING, DESIGN, DRAWINGS AND EQUIPMENT SUBMITTALS NECESSARY TO DEFINE THE SYSTEM AND THE WORK TO BE PROVIDED. 14. PROVIDE SHOP DRAWINGS FOR FIRE ALARM SYSTEM MODIFICATIONS AND EXPANSION. COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS IN THE "DOCUMENTATION" CHAPTER IN NFPA 72. INCLUDE VOLTAGE DROP CALCULATIONS FOR NOTIFICATIONS/APPLIANCE CIRCUITS AND BATTERY CALCULATIONS.

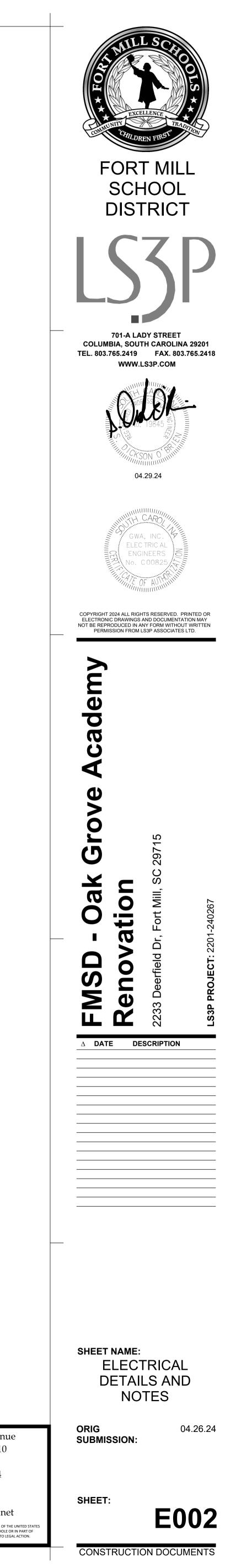
15. ALL CONDUCTORS AND CABLES SHALL BE AS REQUIRED BY SYSTEM MANUFACTURER FOR FUNCTIONS SPECIFIED AND SHALL COMPLY WITH UL, NFPA, NATIONAL ELECTRICAL CODE AND

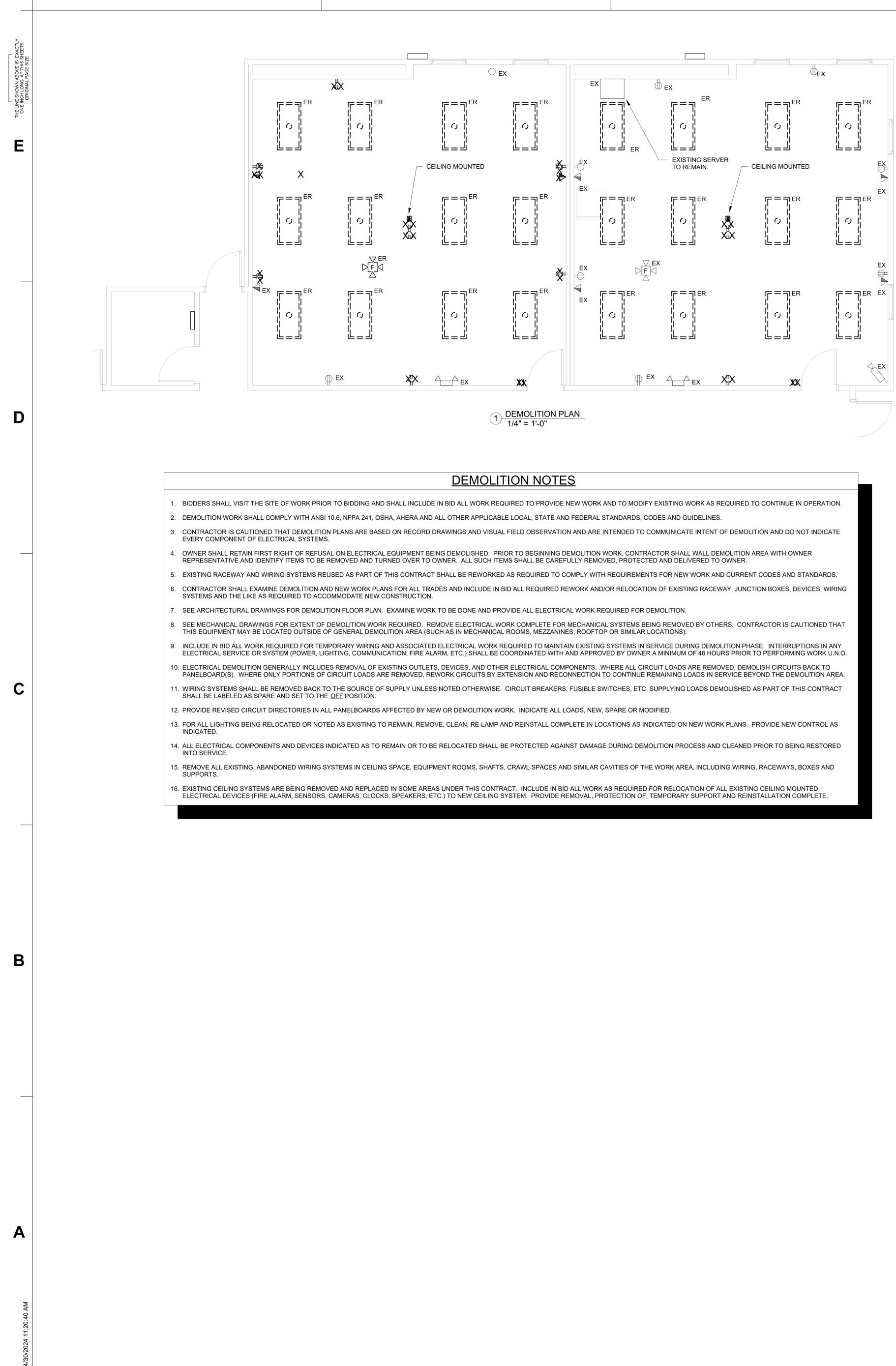
16. SYSTEM TESTING: COMPLY WITH THE "TEST METHODS" TABLE IN THE "TESTING" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NEPA 72, PREPARE TEST AND INSPECTION REPORTS UPON SUCCESSFUL COMPLETION OF TESTING. AT THE TIME OF SUBSTANTIAL COMPLETION, BEFORE ENGINEER MAKES SUBSTANTIAL COMPLETION INSPECTION, THE CONTRACTOR SHALL

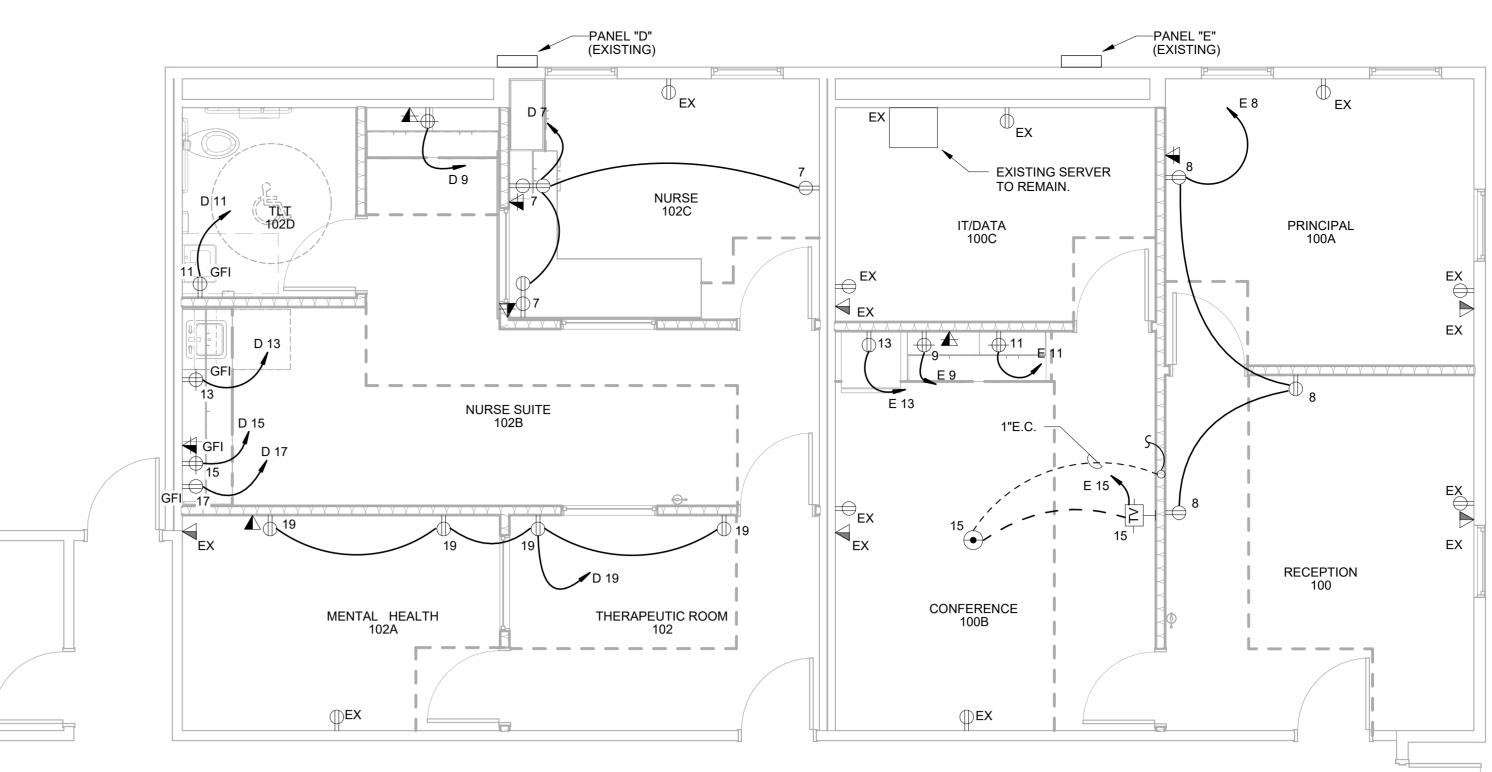


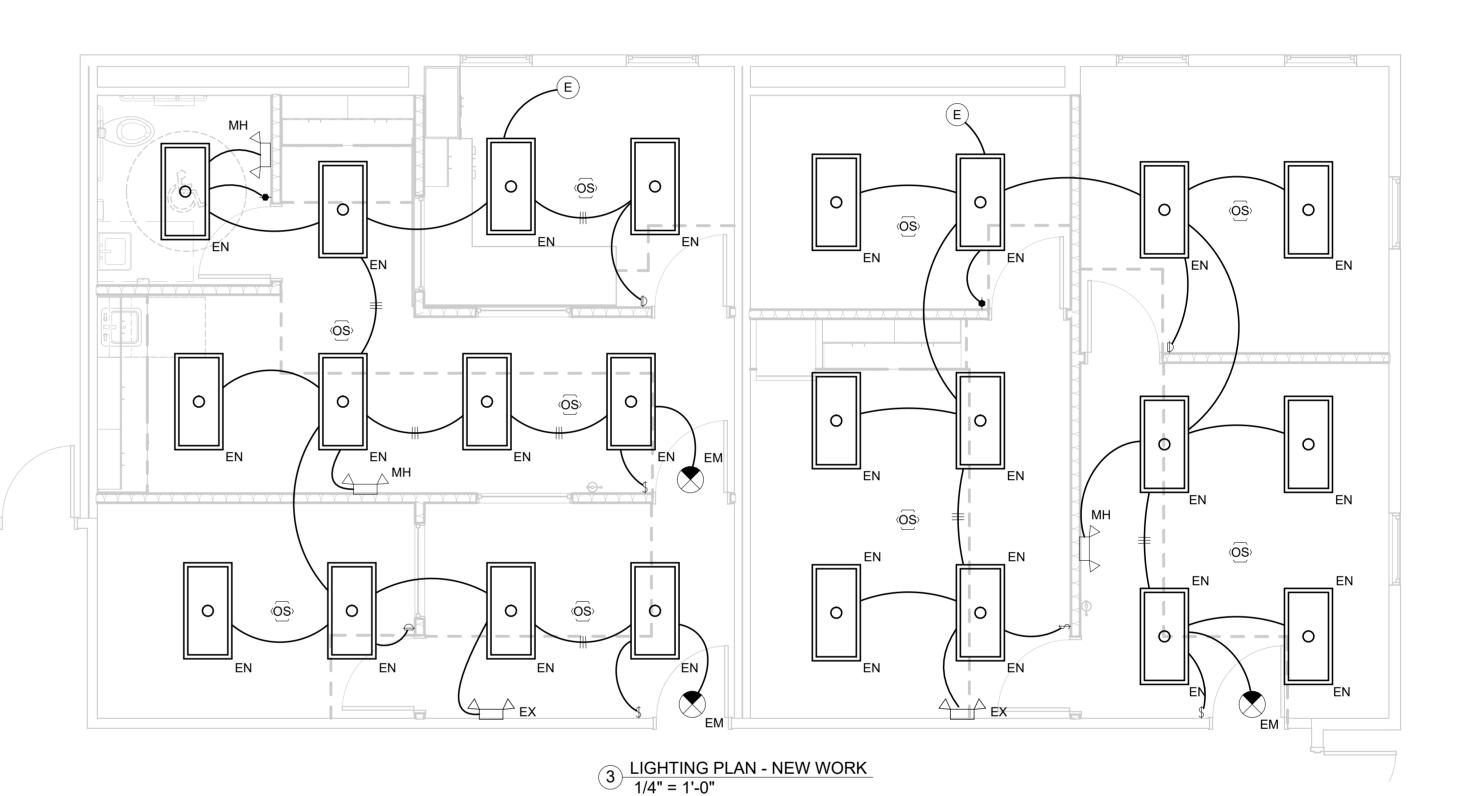
168 Laurelhurst Avenue Columbia, SC 29210 (803)252-6919 Fax (803)799-5494

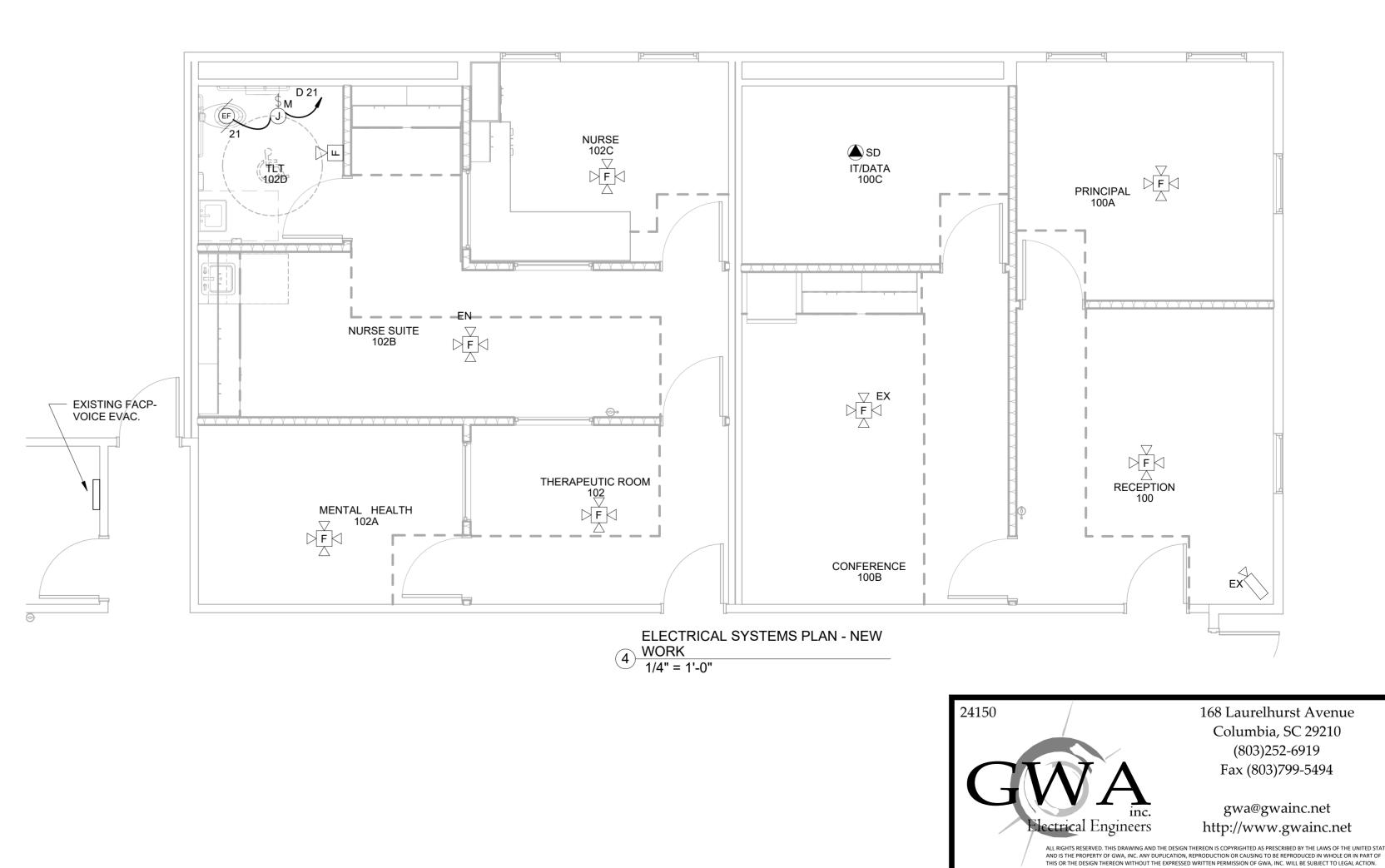
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2 ELECTRICAL PLAN - NEW WORK 1/4" = 1'-0"

