

BUSINESS CONDO CONVERSION

1000 Laconia Road
Sanbornton, NH 03269

Project Status
02/27/2024

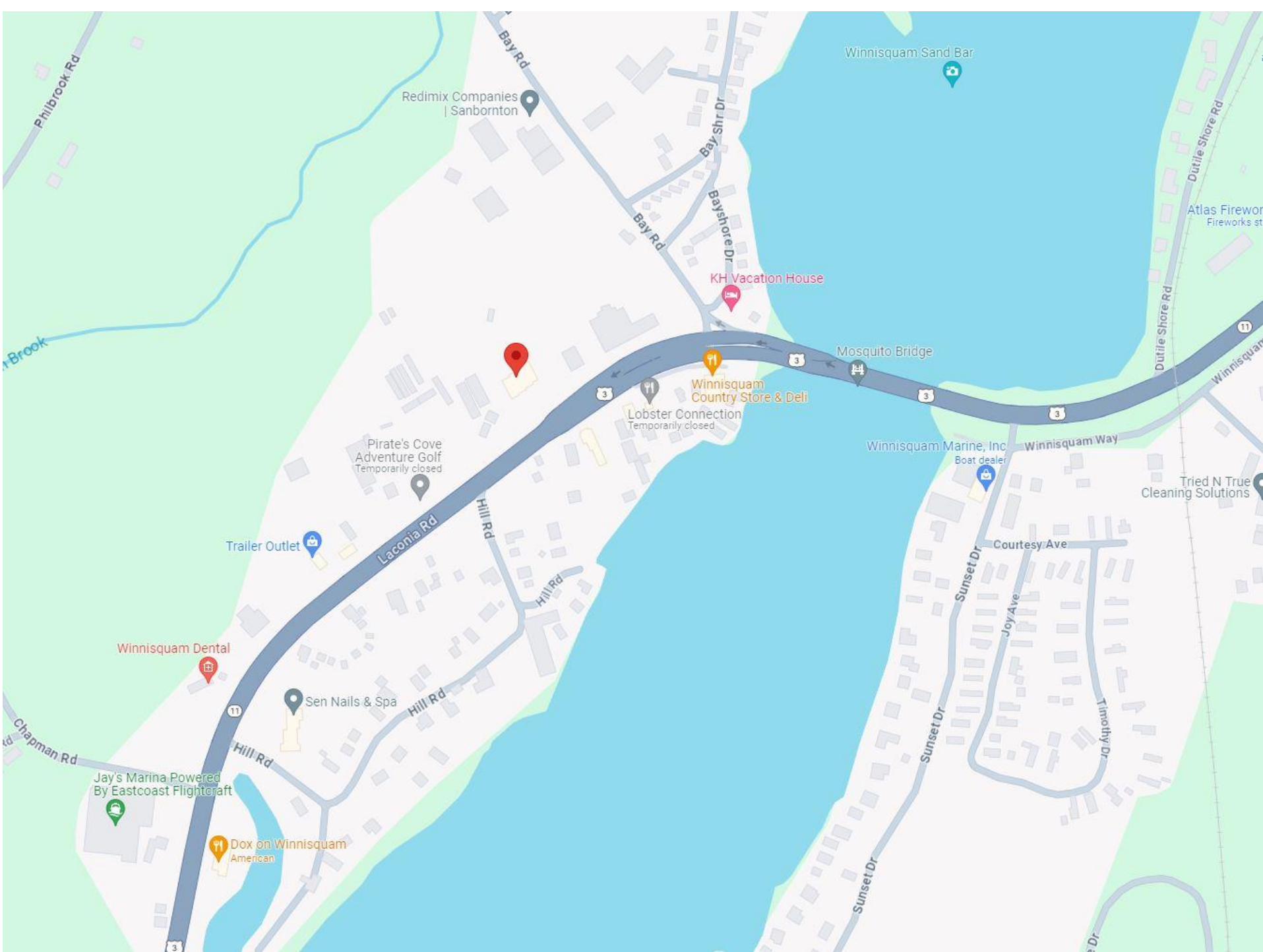
C O N S U L T A N T / D E S I G N - B U I L D T E A M L I S T

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I N D E X O F D R A W I N G S

DRAWING LIST - General		DRAWING LIST - Architectural	
	COVERSHEET	AD101	1ST & 2ND FLOOR PLANS - DEMO
G001	LEGEND AND ABBREVIATIONS	A101	1ST & 2ND FLOOR PLANS
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L O C A T I O N M A P



ABBREVIATIONS LIST:

NOT INCLUDE ALL MAY OR MAY NOT BE USED IN THE CONSTRUCTION DOCUMENTS. PROMPTLY CONTACT THE ARCHITECT IF CLARIFICATIONS OR INTERPRETATION OF THESE OR ANY ABBREVIATIONS USED IS REQUIRED.

A	-----	F	-----	P	-----
A/C	AIR CONDITION	FA	FIRE ALARM	PA	PUBLIC ADDRESS
A/C UNIT	AIR CONDITIONING UNIT	FAAP	FIRE ALARM ANNUNCIATOR PANEL	PAR	PARAPET
A/E	ARCHITECT/ENGINEER	FCO	FLOOR CLEANOUT	PAT	PATTERN
AB	ANCHOR BOLT	FD	FLOOR DRAIN	PB	PULL BOX
ABV	ABOVE	FDN	FOUNDATION	PBD	PARTICLEBOARD
ACC	ACCESSIBLE	FE	FIRE EXTINGUISHER	PCF	POUNDS PER CUBIC FOOT
ACS DR	ACCESS DOOR	FEC	FIRE EXTINGUISHER CABINET	PD	PAPER TOWEL DISPENSER
ACS PNL	ACCESS PANEL	FF	FINISH FACE	PERF	PERFORATED
ACT	ACOUSTICAL CEILING TILE	FF EL	FINISH FLOOR ELEVATION	PERIM	PERIMETER
ADA	AMERICANS WITH DISABILITIES ACT	FGL	FIBERGLASS	PH	PHASE

ADMIN	ADMINISTRATION	FIN	FINISH	PL	PLASTER
AFC	ABOVE FINISHED FLOOR	FIN BS	FINISH BOTH SIDES	PLAM	PLASTIC LAMINATE
AFF	ABOVE FINISHED FLOOR	FIN FLR	FINISH FLOOR	PLAS	PLASTER
AFG	ABOVE FINISHED GRADE	FIN GR	FINISH GRADE	PLBG	PLUMBING
AFS	ABOVE FINISHED SLAB	FIXT	FIXTURE	PLG	PILING
AGGR	AGGREGATE	FLDG	FOLDING	PLYWD	PLYWOOD
AHU	AIR HANDLING UNIT	FLX	FLEXIBLE	PNL	PANEL
AIB	AIR INFILTRATION BARRIER	FLG	FLOORING	PR	PAIR
ALT	ALTERNATE	FLMT	FLUSH MOUNT	PRCST	PRECAST
ALUM	ALUMINUM	FLR	FLOOR	PRKG	PARKING
ANOD	ANODIZE	FM	FACTORY MUTUAL	PSF	POUNDS PER SQUARE FOOT
APC	ACOUSTICAL PANEL CEILING	FOC	FACE OF CONCRETE	PSI	POUNDS PER SQUARE INCH
APPROX	APPROXIMATE	FOM	FACE OF MASONRY	PT	PRESSURE TREATED
AR	AS REQUIRED	FRG	FIBER REINFORCED GYPSUM	PTD	PAINTED
ARCH	ARCHITECT	FRMG	FRAMING	PTN	PARTITION
ASSY	ASSEMBLY	FRP	FIBERGLASS REINFORCED	PVC	POLY VINYL CHLORIDE
AVG	AVERAGE	PLASTIC	PLASTIC	PWR	POWER
AWP	ACOUSTICAL WALL PANEL	FRTW	FIRE RETARDANT TREATED WOOD	Q	-----

B	-----	G	-----	R	-----
BALC	BALCONY	GA	GAUGE	R	RADIUS
BB	BASEBOARD	GALV	GALVANIZED	RBR	RESILIENT BASE
BC	BOOKCASE	GB	GRAB BAR	RC	RUBBER
BD	BOARD	GC	GENERAL CONTRACTOR	RCB	REINFORCED CONCRETE
BDRY	BOUNDARY	GL	GLAZING	RCP	REFLECTED CEILING PLAN
BFF	BELOW FINISH FLOOR	GR FL	GROUND FLOOR	RD	ROOF DRAIN
BLDG	BUILDING	GUT	GUTTER	RDG INS	RIGID INSULATION, SOLID
BLKG	BLOCKING	GWB	GYPSUM WALL BOARD	REC	RECESSED
BLT IN	BUILT-IN	GYP PLAS	GYPSUM PLASTER	REF	REFERENCE
BN	BULLNOSE	GYP SHTG	GYPSUM SHEATHING	REM	REMOVABLE
BO	BOTTOM OF	H	-----	REPL	REPLACE
BOS	BOTTOM OF STEEL	HB	HOSE BIBB	REQ	REQUIRE
BOT	BOTTOM	HC	HANDICAPPED	REQD	REQUIRED
BP	BUILDING PAPER	HD	HAND DRYER	RESIL	RESILIENT
BRKT	BRACKET	HDW	HARDWARE	REST	RESTROOM
BSMT	BASEMENT	HWWD	HARDWOOD	RFL	RESILIENT FLOORING
BTWN	BETWEEN	HM	HOLLOW METAL	RFG	ROOFING
BUR	BUILT-UP ROOFING	HMD	HOLLOW METAL DOOR	RH	RIGHT HAND
		HORIZ	HORIZONTAL	RHR	RIGHT HAND REVERSE
		HT	HEIGHT	RL	ROOF LEADER
		HVAC	HEATING, VENTILATION AND AIR CONDITIONING	RLG	RAILING
		HYDR	HYDRAULIC	RM	ROOM
				RO	ROUGH OPENING
				RSD	ROLLING STEEL DOOR
				RV	ROOF VENT
				RVL	REVEAL

C	-----	I	-----	S	-----
C CONC	CAST CONCRETE	IBC	INTERNATIONAL BUILDING CODE	SB	SPLASH BLOCK
CAB	CABINET	ID	INSIDE DIAMETER	SCHED	SCHEDULE
CATW	CATWALK	INCL	INCLUDE (ING)	SD	SMOKE DETECTOR
CAV	CAVITY	INSUL	INSULATION	SF	SQUARE FOOT (FEET)
CBB	CEMENTITIOUS (BACKER) BOARD	INT	INTERIOR	SFTWD	SOFTWOOD
CD	CONSTRUCTION DOCUMENTS	ILO	IN LIEU OF	SGL	SINGLE
CM	CONSTRUCTION MANAGER	INV	INVERT	SHV	SHIELVING
CER	CERAMIC			SIM	SIMILAR
CF	CONTRACTOR FURNISHED			SJ	SCORED JOINT
CLG	COUNTERFLASHING			SKLT	SKYLIGHT
CFM	CUBIC FEET PER MINUTE			SLNT	SEALANT
CFMF	COLD-FORMED METAL FRAMING			SMK	SMOKE
CTS	CUBIC FEET PER SECOND			SMLS	SEAMLESS
CG	CORNER GUARD			SND	SANITARY NAPKIN DISPENSER
CH	COAT HOOK			SPD	SOAP DISPENSER
CI	CAST IRON			SP EL	SPOT ELEVATION
CIP	CAST-IN-PLACE			SPEC	SPECIFICATION
CJ	CONTROL JOINT			SQ	SQUARE
CL	CENTER LINE			SQ IN	SQUARE INCH
CLG DIFF	CEILING DIFFUSER			SQ YD	SQUARE YARD
CLG HT	CEILING HEIGHT			SS	SOLID SURFACE
CLL	COLUMN LINE			SST	STAINLESS STEEL
CLR	CLEAR			ST	STAIRS
CLR	CLOSET			STD	STANDARD
CLOR	COLOR			STL JST	STEEL JOIST
CLRM	CLASSROOM			STL RF DK	STEEL ROOF DECK
CMU	CONCRETE MASONRY UNIT			STR	STRINGERS
CNDS	CONDENSATE			STRUCT	STRUCTURAL
CDR	CARD READER			STRB/HRN	STROBE/HORN
COL	COLUMN			SUB FL	SUBFLOOR
COMM	COMMUNICATION			SUSP	SUSPENDED
CONC	CONCRETE			SV	SHEET VINYL
CONC FLR	CONCRETE FLOOR			SW	SIDEWALK
CONF	CONFERENCE				
CONT	CONTINUE				
COORD	COORDINATE				
CORR	CORRIDOR				
CP	CONCRETE PIPE				
CPT	CARPET				
CR	CONTROL ROOM				
CS	CAST STONE				
CSWK	CASEWORK				
CT	CERAMIC TILE				
TB	CERAMIC TILE BASE				
CTF	CERAMIC TILE FLOOR				
CTR	CENTER				
CU FT	CUBIC FEET				
CW	CASEMENT WINDOW				

D	-----	N	-----	U	-----
DBL	DEPTH	N	NORTH	U	UNDERCUT
DEMO	DEMOLITION	NA	NOT APPLICABLE	UNO	UNLESS OTHERWISE NOTED
DEPT	DEPARTMENT	NAFPA	NATIONAL FIRE PROTECTION ASSOCIATION		
DET	DETAIL				
DIA	DIAMETER				
DIM	DIMENSION				
DIR	DIRECTION				
DIST	DISTANCE				
DIV	DIVISION				
DN	DOWN				
DOC	DOCUMENT				
DR	DOWNSPOUT				
DS	DIAPER CHANGING STATION				
D/W	DISHWASHER				
DWG	DRAWING				
DF	DRINKING FOUNTAIN				

E	-----	O	-----	W	-----
EA	EACH	OC	ON CENTER	W	WITH
EF	EACH FACE	OD	OUTSIDE DIAMETER	W/O	WITHOUT
EIFS	EXTERIOR INSULATION & FINISH SYSTEM	OFD	OVERFLOW DRAIN	WBF	WATER BOTTLE FILLER
		OGL	OBSCURE GLASS	WC	WATER CLOSET
		O/O	OUTSIDE TO OUTSIDE	WD	WOOD
		OPH	OPPOSITE HAND	WR	WASTE RECEPTACLE
		OPN	OPENING		
		OPT	OPTIMIZED		
		OPQ	OPAQUE		
		OPR	OPERABLE		
		ORD	OVERFLOW ROOF DRAIN		
		ORIG	ORIGINAL		

F	-----	P	-----	Q	-----
FA	FIRE ALARM	PA	PUBLIC ADDRESS	QT	QUARRY TILE
FAAP	FIRE ALARM ANNUNCIATOR PANEL	PAR	PARAPET	QTY	QUANTITY
FCO	FLOOR CLEANOUT	PAT	PATTERN		
FD	FLOOR DRAIN	PB	PULL BOX		
FDN	FOUNDATION	PBD	PARTICLEBOARD		
FE	FIRE EXTINGUISHER	PCF	POUNDS PER CUBIC FOOT		
FEC	FIRE EXTINGUISHER CABINET	PD	PAPER TOWEL DISPENSER		
FF	FINISH FACE	PERF	PERFORATED		
FF EL	FINISH FLOOR ELEVATION	PERIM	PERIMETER		
FGL	FIBERGLASS	PH	PHASE		
FHP	FULL HEIGHT PARTITION	PIL	PIASTER		
FIN	FINISH	PL	PLASTER		
FIN BS	FINISH BOTH SIDES	PLAM	PLASTIC LAMINATE		
FIN FLR	FINISH FLOOR	PLAS	PLASTER		
FIN GR	FINISH GRADE	PLBG	PLUMBING		
FIXT	FIXTURE	PLG	PILING		
FLDG	FOLDING	PLYWD	PLYWOOD		
FLX	FLEXIBLE	PNL	PANEL		
FLG	FLOORING	PR	PAIR		
FLMT	FLUSH MOUNT	PRCST	PRECAST		
FLR	FLOOR	PRKG	PARKING		
FM	FACTORY MUTUAL	PSF	POUNDS PER SQUARE FOOT		
FOC	FACE OF CONCRETE	PSI	POUNDS PER SQUARE INCH		
FOM	FACE OF MASONRY	PT	PRESSURE TREATED		
FRG	FIBER REINFORCED GYPSUM	PTD	PAINTED		
FRMG	FRAMING	PTN	PARTITION		
FRP	FIBERGLASS REINFORCED	PVC	POLY VINYL CHLORIDE		
PLASTIC	PLASTIC	PWR	POWER		
FRTW	FIRE RETARDANT TREATED WOOD				
FSTNR	FASTENER				
FT	FEET				
FTG	FOOTING				

G	-----	R	-----	Q	-----
GA	GAUGE	R	RADIUS	QT	QUARRY TILE
GALV	GALVANIZED	RBR	RESILIENT BASE	QTY	QUANTITY
GB	GRAB BAR	RC	RUBBER		
GC	GENERAL CONTRACTOR	RCB	REINFORCED CONCRETE		
GL	GLAZING	RCP	REFLECTED CEILING PLAN		
GR FL	GROUND FLOOR	RD	ROOF DRAIN		
GUT	GUTTER	RDG INS	RIGID INSULATION, SOLID		
GWB	GYPSUM WALL BOARD	REC	RECESSED		
GYP PLAS	GYPSUM PLASTER	REF	REFERENCE		
GYP SHTG	GYPSUM SHEATHING	REM	REMOVABLE		

H	-----	R	-----	Q	-----
HB	HOSE BIBB	R	RADIUS	QT	QUARRY TILE
HC	HANDICAPPED	RBR	RESILIENT BASE	QTY	QUANTITY
HD	HAND DRYER	RC	RUBBER		
HDW	HARDWARE	RCB	REINFORCED CONCRETE		
HWWD	HARDWOOD	RCP	REFLECTED CEILING PLAN		
HM	HOLLOW METAL	RD	ROOF DRAIN		
HMD	HOLLOW METAL DOOR	RDG INS	RIGID INSULATION, SOLID		
HORIZ	HORIZONTAL	REC	RECESSED		
HT	HEIGHT	REF	REFERENCE		
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	REM	REMOVABLE		
HYDR	HYDRAULIC	REPL	REPLACE		

I	-----	R	-----	Q	-----
IBC	INTERNATIONAL BUILDING CODE	R	RADIUS	QT	QUARRY TILE
ID	INSIDE DIAMETER	RBR	RESILIENT BASE	QTY	QUANTITY
INCL	INCLUDE (ING)	RC	RUBBER		
INSUL	INSULATION	RCB	REINFORCED CONCRETE		
INT	INTERIOR	RCP	REFLECTED CEILING PLAN		
ILO	IN LIEU OF	RD	ROOF DRAIN		
INV	INVERT	RDG INS	RIGID INSULATION, SOLID		

J	-----	R	-----	Q	-----
JAN	JANITOR	R	RADIUS	QT	QUARRY TILE
		RBR	RESILIENT BASE	QTY	QUANTITY
		RC	RUBBER		
		RCB	REINFORCED CONCRETE		
		RCP	REFLECTED CEILING PLAN		
		RD	ROOF DRAIN		
		RDG INS	RIGID INSULATION, SOLID		
		REC	RECESSED		
		REF	REFERENCE		
		REM	REMOVABLE		
		REPL	REPLACE		
		REQ	REQUIRE		
		REQD	REQUIRED		
		RESIL	RESILIENT		
		REST	RESTROOM		
		RFL	RESILIENT FLOORING		
		RFG	ROOFING		
		RH	RIGHT HAND		
		RHR	RIGHT HAND REVERSE		
		RL	ROOF LEADER		
		RLG	RAILING		
		RM	ROOM		
		RO	ROUGH OPENING		
		RSD	ROLLING STEEL DOOR		
		RV	ROOF VENT		
		RVL	REVEAL		

K	-----	R	-----	Q	-----
KIT	KITCHEN	R	RADIUS	QT	QUARRY TILE
KO	KNOCK OUT	RBR	RESILIENT BASE	QTY	QUANTITY
KPD	KEYPAD	RC	RUBBER		
KPL	KICKPLATE	RCB	REINFORCED CONCRETE		

L	-----	R	-----	Q	-----
LAM	LAMINATE	R	RADIUS	QT	QUARRY TILE
LAV	LAVATORY	RBR	RESILIENT BASE	QTY	QUANTITY
LBS	POUND	RC	RUBBER		
LDG	LANDING	RCB	REINFORCED CONCRETE		
LF	LINEAR FEET (FOOT)	RCP	REFLECTED CEILING PLAN		
LH	LEFT HAND	RD	ROOF DRAIN		
LIN	LINEAR	RDG INS	RIGID INSULATION, SOLID		
LKR	LOCKER	REC	RECESSED		
LOC	LOCATION	REF	REFERENCE		
LGT	LIGHT	REM	REMOVABLE		
LVR	LOUVER DOOR	REPL	REPLACE		

M	-----	R	-----	Q	-----
MACH RM	MACHINE ROOM	R	RADIUS	QT	QUARRY TILE
MANUF	MANUFACTURER	RBR	RESILIENT BASE	QTY	QUANTITY
MATL	MATERIAL	RC	RUBBER		
MAX	MAXIMUM	RCB	REINFORCED CONCRETE		
MECH	MECHANICAL	RCP	REFLECTED CEILING PLAN		
MECH RM	MECHANICAL ROOM	RD	ROOF DRAIN		
MEMB	MEMBRANE	RDG INS	RIGID INSULATION, SOLID		
MF	MILL FINISH	REC	RECESSED		
MFR	MANUFACTURER	REF	REFERENCE		
MH	MOP HOLDER	REM	REMOVABLE		
MID	MIDDLE	REPL	REPLACE		
MIN	MINIMUM, MINUTE	REQ	REQUIRE		
MIRR	MIRROR	REQD	REQUIRED		
MISC	MISCELLANEOUS	RESIL	RESILIENT		
MLDG	MOLDING (MOULDING)	REST	RESTROOM		
MOD	MODIFY	RFL	RESILIENT FLOORING		
MOD	MODIFY	RFG	ROOFING		
MTG	MOUNTING	RH	RIGHT HAND		
MTL	METAL	RHR	RIGHT HAND REVERSE		
MVB	MOVABLE	RL	ROOF LEADER		
MWP	MEMBRANE WATERPROOFING	RLG	RAILING		

Q	-----	R	-----	Q	-----
QT		RB	RADIUS	QT	QUARRY TILE
QTY		RBR	RESILIENT BASE	QTY	QUANTITY
		RC	RUBBER		
		RCB	REINFORCED CONCRETE		
		RCP	REFLECTED CEILING PLAN		
		RD	ROOF DRAIN		
		RDG INS	RIGID INSULATION, SOLID		
		REC	RECESSED		
		REF	REFERENCE		
		REM	REMOVABLE		

BUILDING CODE SUMMARY:											
1. APPLICABLE CODES INCLUDING, BUT NOT LIMITED TO:											
<div><div>- INTERNATIONAL BUILDING CODE (IBC) - 2018 EDITION WITH NH AMENDMENTS</div><div>- INTERNATIONAL PLUMBING CODE (IPC) - 2018 EDITION WITH NH AMENDMENTS</div><div>- INTERNATIONAL MECHANICAL CODE (IMC) - 2018 EDITION WITH NH AMENDMENTS</div><div>- INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - 2018 EDITION WITH NH AMENDMENTS</div><div>- NATIONAL ELECTRIC CODE (NFPA 70) - 2020 EDITION WITH NH AMENDMENTS</div><div>- NEW HAMPSHIRE STATE FIRE CODE (NFPA 1) AS AMENDED BY SAF-C 6000</div><div>- LIFE SAFETY CODE (NFPA 101) AS AMENDED BY SAF-C 6000</div><div>- ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010 EDITION</div></div>											
2. OCCUPANCY CLASSIFICATION											
<div><div>- THE BUILDING IS MIXED OCCUPANCY (508.1) SEPARATED OCCUPANCIES (508.4).</div><div>- INCIDENTAL ACCESSORY OCCUPANCIES (509, TABLE 509.1)</div></div>											
ROOM OR AREA						SEPARATION AND/OR PROTECTION					
N/A	- FURNACE ROOM WHERE ANY PIECE OF EQUIPMENT IS OVER 400,000 Btu PER HOUR INPUT					- 1 HOUR OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- ROOMS WITH BOILERS WHERE THE LARGEST PIECE OF EQUIPMENT IS OVER 15 PSI AND 10 HORSEPOWER					- 1 HOUR OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- REFRIGERANT MACHINERY ROOM					- 1 HOUR OR PROVIDE AUTOMATIC SPRINKLER SYSTEM					
N/A	- HYDROGEN CUTOFF ROOMS, NOT CLASSIFIED AS GROUP H					- 1 HOUR IN GROUP B, F, M, S AND U OCCUPANCIES; 2 HOURS IN GROUP A, E, I AND R OCCUPANCIES					
N/A	- INCINERATOR ROOMS					- 2 HOURS AND AUTOMATIC SPRINKLER SYSTEM					
N/A	- PAINT SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN OCCUPANCIES OTHER THAN GROUP F					- 2 HOURS; OR 1 HOUR AND PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- LABORATORIES AND VOCATIONAL SHOPS, NOT CLASSIFIED AS GROUP H, LOCATED IN A GROUP E OR I-2 OCCUPANCY					- 1 HOUR OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- LAUNDRY ROOMS OVER 100 SQUARE FEET					- 1 HOUR OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- GROUP I-3 CELLS EQUIPPED WITH PADDED SURFACES					- 1 HOUR					
N/A	- GROUP I-2 WASTE AND LINEN COLLECTION ROOMS					- 1 HOUR					
N/A	- WASTE AND LINEN COLLECTION ROOMS OVER 100 SQUARE FEET.					- 1 HOUR OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM					
N/A	- STATIONARY STORAGE BATTERY SYSTEMS HAVING LIQUID ELECTROLYTE CAPACITY OF MORE THAN 50 GALLONS, OR A LITHIUM-ION CAPACITY OF 1,000 POUNDS USED FOR FACILITY STANDBY POWER, EMERGENCY POWER OR UNINTERRUPTED POWER SUPPLIES.					- 1 HOUR IN GROUP B, F, M, S AND U OCCUPANCIES; 2 HOURS IN GROUP A, E, I AND R OCCUPANCIES					
N/A	- ROOMS CONTAINING FIRE PUMPS IN NONHIGH-RISE BUILDINGS					- 2 HOURS; OR 1 HOUR AND PROVIDE AUTOMATIC SPRINKLER SYSTEM THROUGHOUT THE BUILDING					
N/A	- ROOMS CONTAINING FIRE PUMPS IN HIGH-RISE BUILDINGS					- 2 HOURS					
3. BUILDING AREA AND HEIGHT:											
FRONTAGE (506.3): NORTH: 100 FT EAST: 0 FT SOUTH: 100 FT WEST: 60 FT TOTAL FRONTAGE (F): 260 FT PERIMETER (P): 320 FT WIDTH OF OPEN SPACE (W): = 30 AREA INCREASE FACTOR DUE TO FRONTAGE, Lf (506.3) = 56%											
ACTUAL BUILDING AREA: 11,952 SF ACTUAL BUILDING HEIGHT: 30 FT 2 STORIES											
TYPE OF CONSTRUCTION ASSUMED FOR REVIEW (602.1): VB											
INDIVIDUAL UNIT											
Story	Group	Actual floor area	Tabular allowance area (A _t)	Tabular allowance area for nonsprinklered buildings (NS)	Allowable floor area*	Area ratio**	Actual height		Allowable height		
1	B	268 ft ²	9,000 ft ²	9000 ft ²	14040 ft ²	0.02	30 ft	2 stories	40 ft	2 stories	
1	R2	1,140 ft ²	7,000 ft ²	7000 ft ²	10920 ft ²	0.10	30 ft	2 stories	40 ft	2 stories	
1	S-1	147 ft ²	9,000 ft ²	9000 ft ²	14040 ft ²	0.01	10 ft	1 stories	40 ft	1 stories	
						Sum of ratios =	0.13	≤ 1.0 OK			
Story	Group	Actual floor area	Tabular allowance area (A _t)	Tabular allowance area for nonsprinklered buildings (NS)	Allowable floor area*	Area ratio**	Actual height		Allowable height		
1	R2	1,555 ft ²	9,000 ft ²	9000 ft ²	14040 ft ²	0.11	30 ft	stories	40 ft	2 stories	
						Sum of ratios =	0.11	≤ 1.0 OK			
*Allowable floor area = At + (NS x If) If = 0.56 **Area ratio = $\frac{\text{Actual floor area}}{\text{Allowable floor area}}$											
4. OCCUPANCY/USE GROUPS:											
B, R-2 AND S-1 OCCUPANCY SPECIAL REQUIREMENTS AS REQUIRED PER IBC SECTION 420											
5. FIRE RESISTIVE RATING REQUIREMENTS:											
ELEMENT		RATING (HOURS)									
STRUCTURAL FRAME:		0									
BEARING WALLS - EXTERIOR:		0									
BEARING WALLS - INTERIOR:		0									
NON-BEARING WALLS - EXTERIOR:		SEE BELOW									
NON-BEARING WALLS - INTERIOR:		0									
FLOOR CONSTRUCTION:		0									
ROOF CONSTRUCTION:		0									
FIRE WALLS:		N/A									
FIRE BARRIERS (BETWEEN FIRE AREAS):		2									
SHAFT ENCLOSURE:		N/A									
≥ 4 STORIES											
≥ 3 STORIES											
EXIT ENCLOSURE/EXIT PASSAGEWAY:		N/A									
≥ 4 STORIES											
≤ 3 STORIES											
SLEEPING UNIT SEPARATION:		1									
FIRE PARTITIONS											
HORIZONTAL ASSEMBLIES		1									
FIRE PARTITION:											
CORRIDOR		0 (OCCUPANT LOAD NOT GREATER THAN 10 / 30 FOR R-2 AND B RESPECTIVELY)									
SMOKE BARRIER:		1									
SMOKE PARTITION:		1									
HORIZONTAL ASSEMBLIES		1									
COMBUSTABILITY (602.2, 602.3, 602.4, 602.5, 603) - NC (NONCOMBUSTIBLE CONSTRUCTION REQUIRED) NR (NOT REQUIRED)											
NR EXTERIOR WALLS NR INTERIOR ELEMENTS NR ROOF											
EXTERIOR WALLS (507, TABLE 602, 705, 707.4)											
FIRE SEPERATION DISTANCE:		NORTH: X ≥ 30		EAST: X ≥ 30		SOUTH: X ≥ 30		WEST: X ≥ 30			
BEARING:		NORTH: 0		EAST: 0		SOUTH: 0		WEST: 0			
NON-BEARING:		NORTH: 0		EAST: 0		SOUTH: 0		WEST: 0			

6. INTERIOR FINISHES			
INTERIOR FINISH REQUIREMENTS (TABLE 803.11)			
USE GROUP	VERTICAL EXITS AND EXIT PASSAGEWAYS	EXIT ACCESS CORRIDORS AND OTHER EXITWAYS	ROOMS AND ENCLOSED SPACES
R2	B	C	C
WALL AND CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E 84 OR UL 723. INTERIOR WALL OR CEILING FINISHES, OTHER THAN TEXTILES AND EXPANDED VINYL, SHALL BE PERMITTED TO BE TESTED IN ACCORDANCE WITH METHOD B PROTOCOL OF NFPA 265. (803.1.1, 803.11, TABLE 803.11) CLASS A: FLAME SPREAD 0-25; SMOKE-DEVELOPMENT 0-450 CLASS B: FLAME SPREAD 26-75; SMOKE-DEVELOPMENT 0-450 CLASS C: FLAME SPREAD 76-200; SMOKE-DEVELOPMENT 0-450			
NOTE: INTERIOR FLOOR FINISH AND FLOOR COVERING MATERIALS IN EXIT ENCLOSURES, EXIT PASSAGEWAYS AND CORRIDORS SHALL NOT BE LESS THAN CLASS II AND COMPLY WITH THE DOC FF-1 "PILL TEST" (CPSC 16 CFR, PART 1630). (804.4.1)			
DECORATIVE MATERIALS SHALL MEET THE FLAME PROPAGATION PERFORMANCE CRITERIA OF NFPA 701 IN ACCORDANCE WITH SECTION 806.3 OR BE NONCOMBUSTIBLE. (806.2)			
INTERIOR TRIM, OTHER THAN FOAM PLASTIC, SHALL HAVE A MINIMUM CLASS C FLAME SPREAD AND SMOKE-DEVELOPMENT. COMBUSTIBLE TRIM, EXCLUDING HANDRAILS AND GUARDRAILS, SHALL NOT EXCEED 10% OF THE SPECIFIC WALL OR CEILING AREA IN WHICH IT IS ATTACHED. (806.7)			
INTERIOR FLOOR-WALL BASE THAT IS 6" OR LESS IN HEIGHT SHALL BE TESTED IN ACCORDANCE WITH SECTION 804.2 AND NOT BE LESS THAN CLASS II, OR CLASS I WHERE CLASS I FLOOR FINISH IS REQUIRED. (806.8)			
7. ACCESSIBILITY:			
THE COMMON AREAS OF THE PROPOSED RENOVATIONS ARE DESIGNED TO BE ACCESSIBLE TO PERSONS WITH PHYSICAL DISABILITIES.			
DWELLING UNITS ARE DESIGNED IN ACCORDANCE WITH SECTION 1107.6.2. INDIVIDUAL DWELLING UNITS ON THE FIRST FLOOR ARE DESIGNED TO BE TYPE B PER 2017 ICC A117.1. INDIVIDUAL DWELLING UNITS ON THE SECOND FLOOR ARE NOT REQUIRED TO BE TYPE B PER SECTION 1107.7.1.			
ACCESSIBLE SIGNAGE REQUIRED IS TO BE PROVIDED BY OWNER.			
8. FIRE DOOR AND FIRE SHUTTER FIRE PROTECTION RATINGS (TABLE 716.5):			
TYPE OF ASSEMBLY	REQUIRED ASSEMBLY RATING (HOURS)	MINIMUM FIRE DOOR AND FIRE SHUTTER ASSEMBLY RATING (HOURS)	
	4 HOURS	3 HOURS	
FIRE WALLS AND FIRE BARRIERS HAVING A REQ'D FIRE-RESISTANCE RATING GREATER THAN 1 HOUR	3 HOURS	3 ³ HOURS	
	2 HOURS	1-1/2 HOURS	
	1-1/2 HOURS	1-1/2 HOURS	
FIRE BARRIERS HAVING A REQ'D FIRE-RESISTANCE RATING OF 1 HOUR: SHAFT, EXIT ENCLOSURE AND EXIT PASSAGEWAY WALLS	1 HOUR	1 HOUR	
	OTHER FIRE BARRIERS	3/4 HOUR	
FIRE PARTITIONS: CORRIDOR WALLS	1 HOUR	1/3 ³ HOUR	
	1/2 HOUR	1/3 ³ HOUR	
OTHER FIRE PARTITIONS	1 HOUR	3/4 HOUR	
	1/2 HOUR	1/3 HOUR	
	3 HOUR	1-1/2 HOUR	
EXTERIOR WALLS	2 HOUR	1-1/2 HOUR	
	1 HOUR	3/4 HOUR	
	1 HOUR	1/3 ³ HOUR	
SMOKE BARRIERS			
a. TWO DOORS, EACH WITH A FIRE PROTECTION RATING OF 1-1/2 HOURS, INSTALLED ON OPPOSITE SIDES OF THE SAME OPENING IN A FIRE WALL, SHALL BE DEEMED EQUIVALENT IN FIRE PROTECTION RATING TO ONE 3-HOUR FIRE DOOR.			
b. FOR TESTING REQUIREMENTS, SEE SECTION 715.4.3			
9. FIRE PROTECTION:			
A FULLY AUTOMATIC SPRINKLER SYSTEMS SHALL BE PROVIDED IN ACCORANCE WITH NFPA 13R.			
PORTABLE FIRE EXTINGUISHERS SHALL BE SELECTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH NFPA 10. CLASS A MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER SHALL BE 75 CLASS B MAXIMUM TRAVEL DISTANCE TO EXTINGUISHER SHALL BE PER IBC LABEL 906.3(2).			
FIRE ALARM AND DETECTION SYSTEMS SHALL BE PROVIDE IN ACCORDANCE WITH THE MOST RESTRICTIVE REQUIREMENTS IBC 907 FOR EACH INDIVIDUAL USE GROUP.			



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130 Derry Court
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www.intertek.com/building

January 23, 2024

Mr. Donald Blajda, AIA, LEED AP BD+
KOAL, pllc
42 Gifford East Dr.
Suite 4
Gilford, NH 03249

RE: **Engineering Judgment – Evaluation and Upgrade of Existing Interior Walls**
Business Condominium Building Conversion
1000 Laconia Road
Sanbornton, Belknap County, New Hampshire

Dear Mr. Blajda:

Intertek¹ Building Science Solutions has been requested to provide a project-specific Engineering Judgment (EJ) opining on the minimum fire resistance rating (FRR) of an existing wall system(s) where additional materials (predominantly gypsum board) will be provided to increase the fire resistance of the existing wall system. A minimum 2-hour fire resistance rating (FRR) is required. Documents we reviewed include the Progress Set from KOAL, pllc

GENERAL REQUIREMENTS

1. THE CONTRACT DOCUMENTS ARE TO DEFINE DESIGN INTENT, PROJECT SCOPE AND THE CONSTRUCTION CONTRACT. THEY ARE NOT AN INSTRUCTION MANUAL OF HOW TO ASSEMBLE THE BUILDING.
2. ATTENTION TO USE OF THESE DRAWINGS, GENERAL CONTRACTORS, SUB CONTRACTORS, MANUFACTURERS, SUPPLIERS: CAREFULLY AND THOROUGHLY REVIEW THESE GENERAL NOTES. IT IS YOUR RESPONSIBILITY TO KNOW AND ADHERE TO THESE REQUIREMENTS. REPETITIVE FEATURES ARE NOT DRAWN IN THEIR ENTIRETY AND SHALL BE COORDINATED WITH YOUR SUBCONTRACTOR'S DRAFTER.
3. DO PRESUME THAT YOUR SCOPE OF WORK IS SINGULARLY DEFINED THROUGHOUT THE ENTIRE SET OF DRAWINGS AND SPECIFICATIONS AND IS NOT CONTAINED IN JUST ONE SERIES OF DRAWINGS OR DIVISION OF SPECIFICATIONS. YOU MUST REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS TO DETERMINE YOUR SCOPE OF WORK.
4. MECHANICAL AND ELECTRICAL DESIGN ARE BY OTHERS. THE GENERAL CONTRACTOR IS TO COORDINATE THE LOCATIONS OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT WITH RESPECT TO THE ARCHITECTURAL AND STRUCTURAL DETAILING OF SHAFTS, CHASES, AND SUCH. COORDINATE WITH OWNER.
5. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH SITE CONDITIONS AS THEY MAY AFFECT CARRYING OUT THE WORK AS DESCRIBED IN THESE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT, THE ARCHITECT'S AND AIA'S CONDITIONS THAT REQUIRE MODIFICATION BEFORE PROCEEDING WITH THE WORK.
6. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES NECESSARY TO COMPLETE THE WORK.
7. ALL PERSONS DIRECTLY OR INDIRECTLY ASSOCIATED WITH THE PROJECT SHALL BE FAMILIAR WITH THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AND IMPLEMENT THOSE RULES AS THEY APPLY TO THIS PROJECT.
8. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE BUILDING CODES AS NOTED ON CODE SHEETS.
9. ALL SUBCONTRACTORS SHALL SUBMIT SHOP DRAWINGS AS REQUIRED FOR APPROVAL PRIOR TO COMMENCING ANY WORK.
10. FIELD VERIFY ALL DIMENSIONS PRIOR TO CASEWORK FABRICATION.
11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES AND THE PREVENTION OF CLASH BETWEEN ALL TRADES.
12. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITY LINES. LOCATIONS SHOWN ARE APPROXIMATE. REPAIR ALL DAMAGE TO UTILITY LINES, EXISTING PAVEMENT, FENCE, AND LANDSCAPE CAUSED BY CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
13. PRIOR TO BEGINNING ANY WORK, THE CONTRACTOR SHALL CONTACT A PROFESSIONAL ENGINEER WITH THE OWNER AND THE ARCHITECT AND AN ENGINEER DETERMINE IN WRITING THE CONDITION OF THE WORK ALREADY IN PLACE. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EQUIPMENT PRESENTLY IN PLACE THAT IS DAMAGED DURING CONSTRUCTION.
14. THE GENERAL CONTRACTOR SHALL FIELD VERIFY ALL PATCH AND REPAIR REQUIREMENTS OF EXISTING SURFACES TO RECEIVE NEW FINISHES. THE COST FOR ALL SUCH WORK IS TO BE COVERED BY THE BID.

THE CONTRACT DOCUMENT DRAWINGS HAVE BEEN PREPARED BY THE ARCHITECT USING A MICROSOFT WINDOWS ENVIRONMENT. BUILDING INFORMATION MODEL (BIM) WAS DEVELOPED SOLELY TO COMMUNICATE THE DESIGN TO THE OWNER AND IS NOT SUITABLE FOR ANY OTHER PURPOSE. FOR EXAMPLE THE REVIT MODEL IS NOT SUITABLE FOR COST ESTIMATING, SYSTEMS PERFORMANCE, COORDINATION, SCHEDULING, OR FACILITIES MANAGEMENT.

2. THESE DOCUMENTS WERE PRODUCED USING THE CONSTRUCTION SPECIFICATIONS INSTITUTE'S UNIFORM DRAWING SYSTEM AND THE NATIONAL CAD STANDARD AS GUIDES.

3. THE LOCATION OF PROJECT LIMITS OR LINES OF DEMARCATION ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, AND ARE NOT TO BE TAKEN LITERALLY. ACTUAL CONTRACT LIMITS ARE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER BEFORE ACTUAL CONSTRUCTION BEGINNING.

4. DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF SPECIFIC MANUFACTURERS. DIMENSIONS AND DETAILS FOR SPECIFIC PRODUCTS MAY CHANGE BEFORE THEY ARE ACTUALLY INCORPORATED INTO THE WORK, AND PRODUCTS BY OTHER MANUFACTURERS MAY ALSO BE USED. THEREFORE, THE CONTRACTOR SHALL VERIFY DETAILS AND DIMENSIONS MAY DIFFER FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY INSTALLATION REQUIREMENTS FOR ALL PRODUCTS TO BE INCORPORATED IN THE WORK (INCLUDING PARTITION THICKNESS FOR RECESSED OR SEMI-RECESSED CASES), AND, WHERE NECESSARY, MAKE ACCOMMODATING AND COORDINATING CHANGES TO OTHER MATERIALS OR PRODUCTS THAT ARE NECESSARY BECAUSE OF THESE DIFFERENCES.

5. THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR THE CONVENIENCE OF REFERENCE BY THE ADMINISTRATOR AND THE CONTRACTOR. THE PARAPHRASES USED HEREIN ARE USED ONLY FOR THE PURPOSES OF CONVENIENCE AND REFERENCE AND IN NO WAY DO THEY DEFINE OR LIMIT THE SCOPE OR INTENT OF ANY PART OF THE DRAWINGS, OR OF THE DRAWINGS AND SPECIFICATIONS AS A WHOLE. THE FACT THAT THE WORD "AND/OR" APPEARS IN ANY ONE PLACE REQUESTS THAT THE WORK IS NOT TO BE CONSTRUCTED AS A COMPLETE, INTEGRATED AND UNIFIED WHOLE.

6. THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES (SUCH AS CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC.) ARE COMPLEMENTARY. ITEMS SHOWN IN ANY ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT, THE GENERAL CONTRACTOR SHALL CLARIFY SUCH AN INTERPRETATION FROM THE CONTRACT ADMINISTRATOR PRIOR TO BIDDING, AND WHERE THE ACTUAL SOLUTION OR INTENT CANNOT BE REASONABLY INFERRRED, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK.

7. USE OF THE WORD "VERIFY" POINTS OUT A SITUATION WHICH MUST BE CONFIRMED PRIOR TO PROCEEDING WITH THE WORK, FABRICATION OF EQUIPMENT, OR ORDERING MATERIAL. NOTIFY THE CONTRACT ADMINISTRATOR OF ANY DISCREPANCY.

8. THE FIRE ALARM AND SMOKE DETECTOR SHALL BE DESIGNED BY THE GENERAL CONTRACTOR WITH THE COORDINATE GENERAL CONTRACTOR SHALL OBTAIN CLEARANCE, CLEARANCES, AND LOCATION OF HEAD HEIGHTS WITH THE STRUCTURE, MECHANICAL DUCTWORK, ELECTRICAL LIGHTING, DRAINAGE PIPING, AND THE ARCHITECTURAL REFLECTED CEILING PLANS. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE PROVISIONS OF ALL ENGINEERING AND ARCHITECTURAL DOCUMENTS AND SHOULD NOT RELY SOLELY ON ONE SERIES OF DRAWINGS OR ONE DISCIPLINE. CORING STRUCTURAL BEAMS MAY BE NECESSARY TO ACHIEVE MAXIMUM HEAD CLEARANCE OR ADEQUATE SPACING OF DUCTWORK. CORING SHALL BE INCLUDED IN THE BASE BID.

9. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INSTALLING THEIR RESPECTIVE EQUIPMENT IN THE CEILING PLUNGERS. MECHANICAL, ELECTRICAL, STRUCTURAL, AND FIRE SPRINKLER SHALL SHARE THE SAME SPACE. EACH SUB CONTRACTOR IS TO REVIEW THE REQUIREMENTS OF THEIR WORK WITH THE AWARENESS OF THE OTHER TRADES THAT NEED TO SHARE THESE SPACES AND MUST NOT ASSUME THAT THEIR INSTALLATION HAS BEEN CONSIDERED IN THE DESIGN AND SHOP DRAWINGS OF THE OTHER TRADES.

10. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES BE FOUND IN THE DRAWINGS AND SPECIFICATIONS.

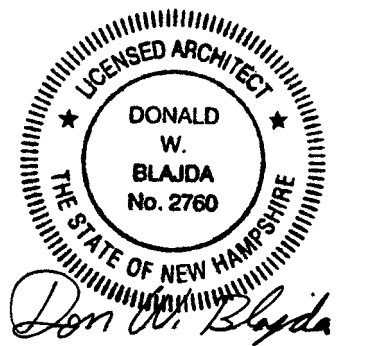
11. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD CONDITIONS AND DIMENSIONS PRIOR TO THE PROJECT START. SHOULD DISCREPANCIES EXIST BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS NOTIFY THE CONTRACT ADMINISTRATOR PRIOR TO PROCEEDING WITH THE WORK.

12. DO NOT SCALE THE DRAWINGS. DRAWING SCALES AND DIMENSIONS ARE GIVEN ONLY AND ARE NOT INTENDED TO ACCURATELY PREDICT ACTUAL OR DESIGNATED CONDITIONS. WRITTEN DIMENSIONS SHALL GOVERN.

15. THE TERM "ALIGN" REFERS TO LOCATING DIFFERENT COMPONENTS OF CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE.
16. CONTRACTOR SHALL LAY OUT ALL PARTITIONS PER THE DIMENSIONS SHOWN ON THE PLAN. VERIFY PARTITION LAYOUT WITH STRUCTURAL, WINDOW OPENINGS, COLUMNS, DOORS, EQUIPMENT AND CEILING SYSTEMS. NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.

1. ALL VERTICAL AND HORIZONTAL PIPES, CONDUITS, DUCTS, ETC. IN FINISHED ROOMS OR AREAS THROUGHOUT THE BUILDING SHALL BE FURRED IN TO MATCH THE ROOM FINISH, UNLESS NOTED OTHERWISE.
2. PROVIDE 2"x4" ACCESS PANELS IN PARTITIONS WHERE REQUIRED FOR MECHANICAL AND PLUMBING ACCESS EXCEPT WHERE SIZES ARE OTHERWISE NOTED.
3. PROVIDE BLOCKING WITHIN PARTITIONS AT ALL LOCATIONS WHERE ITEMS WILL BE MOUNTED ON PARTITIONS.
4. WALL CEILING, BASE, AND FLOOR FINISHES ARE TO BE PROVIDED IN EVERY ROOM AND TO BE SELECTED BY OWNER. COORDINATE WITH OWNER.
5. WHERE MECHANICAL WORK PENETRATES ANY COMPONENT OF THE FIRE-RATED ASSEMBLY, PROVIDE THE APPROPRIATE FIRE AND/OR SMOKE DAMPERS. IF IT IS NOT CLEAR WHETHER DUCTWORK PENETRATES A PORTION OF THE RATED ASSEMBLY, OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO BIDDING.
6. PROVIDE SEALANT AT ALL JOINTS OR CRACKS WHICH OCCUR WHERE DISSIMILAR MATERIALS INTERSECT PERPENDICULAR TO EACH OTHER, AND THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
7. PROVIDE CONTINUOUS WEATHERBARRIER BUILDING WEATHERBARRIER AND INSULATION AT ALL EXTERIOR WALLS AND ROOFS.
8. ALL MATERIAL COLORS TO BE SELECTED BY OWNER, UNLESS NOTED OTHERWISE.

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BUSINESS CONDO CONVERSION

1000 Laconia Road
Sanbornton, NH 03269

David Longval

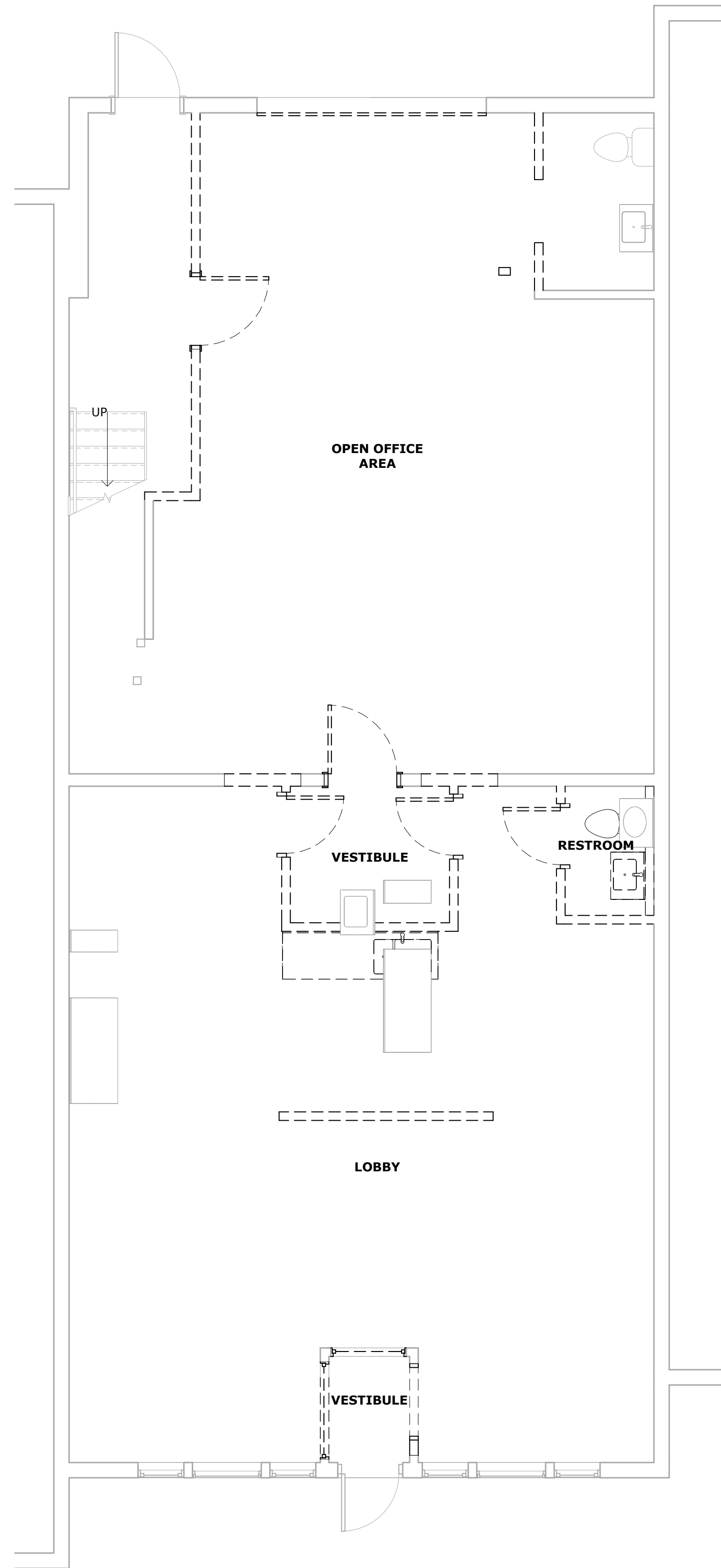
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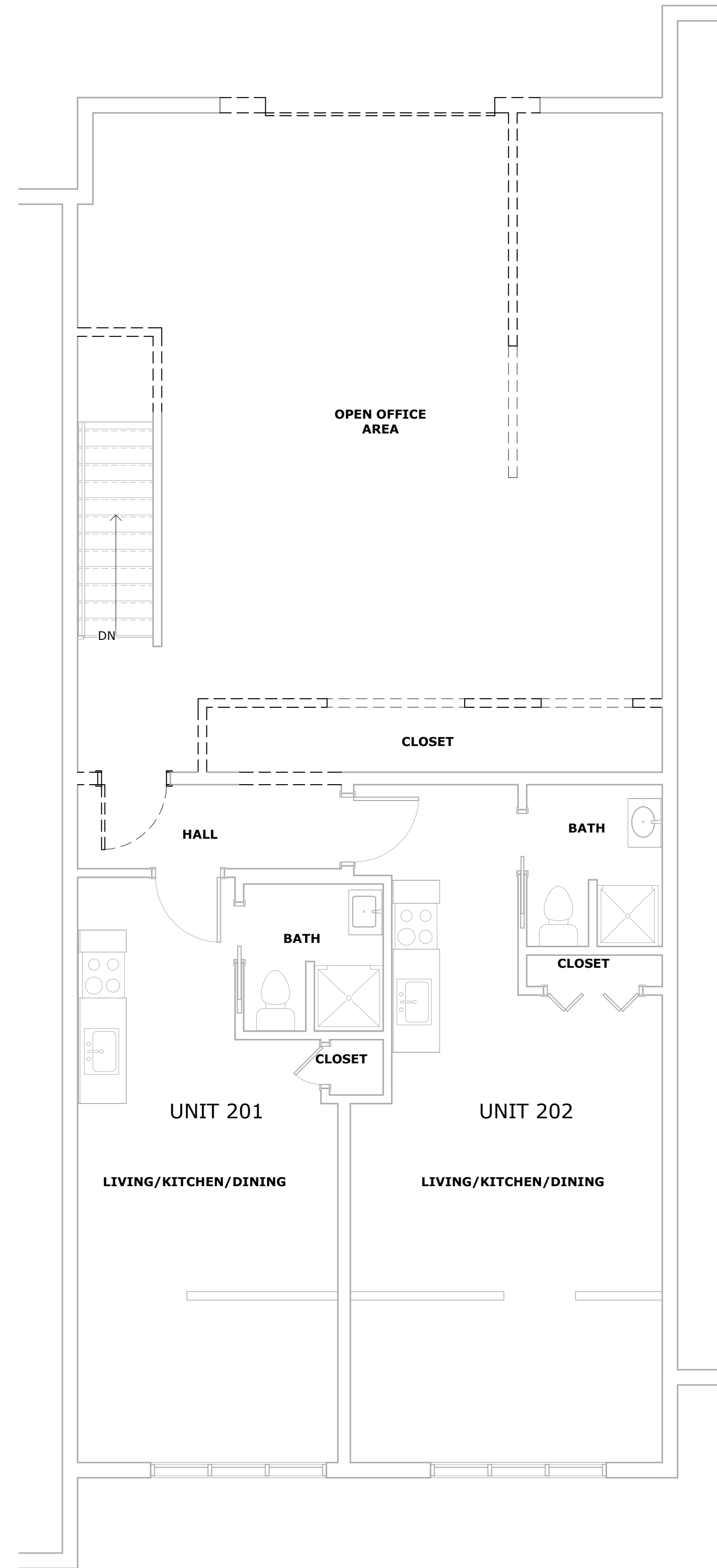
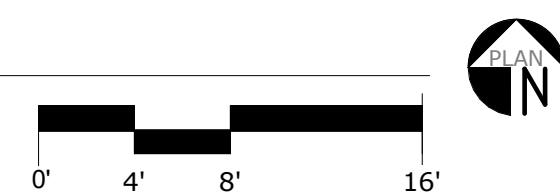
Issue Date:	02/27/2024
Project Number:	2023-009
Drawn By:	DWB/CRG
Checked By:	DWB
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1ST & 2ND FLOOR PLANS - DEMO

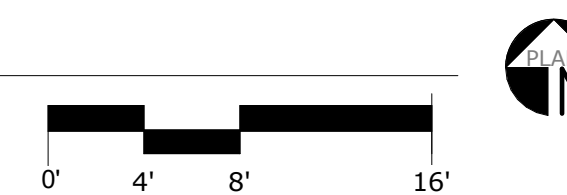
AD101



1 1ST FLOOR PLAN - DEMO
1/4" = 1'-0"



2 2ND FLOOR PLAN - DEMO
1/4" = 1'-0"





FIRE BARRIER FIRE RESISTANCE DESIGN APPROACH

SECTION 722.6 WOOD ASSEMBLIES CONTAINS PROCEDURES BY WHICH THE FIRE-RESISTANCE RATINGS OF WOOD ASSEMBLIES MAY BE ESTABLISHED BY CALCULATION. HOWEVER, THE MAXIMUM FIRE-RESISTANCE RATING CALCULATED USING THIS METHOD IS LIMITED TO NOT MORE THAN ONE HOUR. IT IS PROPOSED THAT AN ENGINEERING JUDGEMENT BASED ON THE FOLLOWING FACTORS BE USED TO ESTABLISH RATINGS SHOWN BELOW AND THE TESTED ASSEMBLY NO WP 173 IT CAN BE CONSIDERED TO HAVE A FIRE-RESISTANCE RATING OF 120 MINUTES. THE FOLLOWING FACTORS ARE: THE EXISTING THAT THE ADDITION OF THREE LAYERS OF 5/8" TYPE X GYPSUM WALLBOARD TO THE EXISTING WALL ASSEMBLY WOULD PROVIDE A FIRE RABR WITH A MINIMUM FIRE-RESISTANCE RATING OF 120 MINUTES TO COMPLY WITH TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES.

TABLE 722.6.2(1) TIME ASSIGNED TO WALLBOARD MEMBRANES	
1/2 INCH GYPSUM WALLBOARD	15 MINUTES
5/8 INCH GYPSUM WALLBOARD	40 MINUTES

WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE		2 HOUR FIRE	40 to 44 STC SOUND
GA FILE NO. WP 1713	PROPRIETARY*		

GYPSUM WALLBOARD, STEEL STUDS

Fire Design:

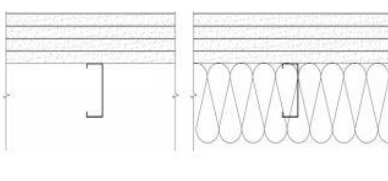
Base layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles to ONE SIDE of a 2'-1 1/2", 18 mil steel studs 24" o.c. with 1" Type S screws 24" o.c.

Second layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles with 1-5/8" Type S screws 24" o.c. **Third layer 5/8"** proprietary type X gypsum wallboard applied parallel or at right angles with 2-1/4" Type S screws 12" o.c. **Face layer 5/8"** proprietary type X gypsum wallboard applied parallel or at right angle with studs with 2-7/8" Type S screws 12" o.c.

Vertical joints offset 24" between layers; horizontal joints offset 16" between layers. (NLS)

Sound Design:

Sound tested with 3-5/8" glass fiber insulation in the cavity.



Thickness: 5" (Fire and Sound)

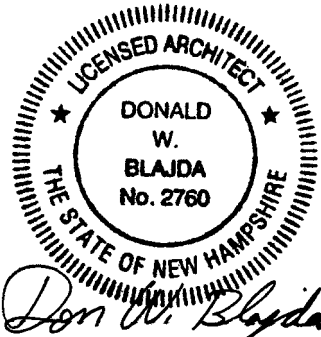
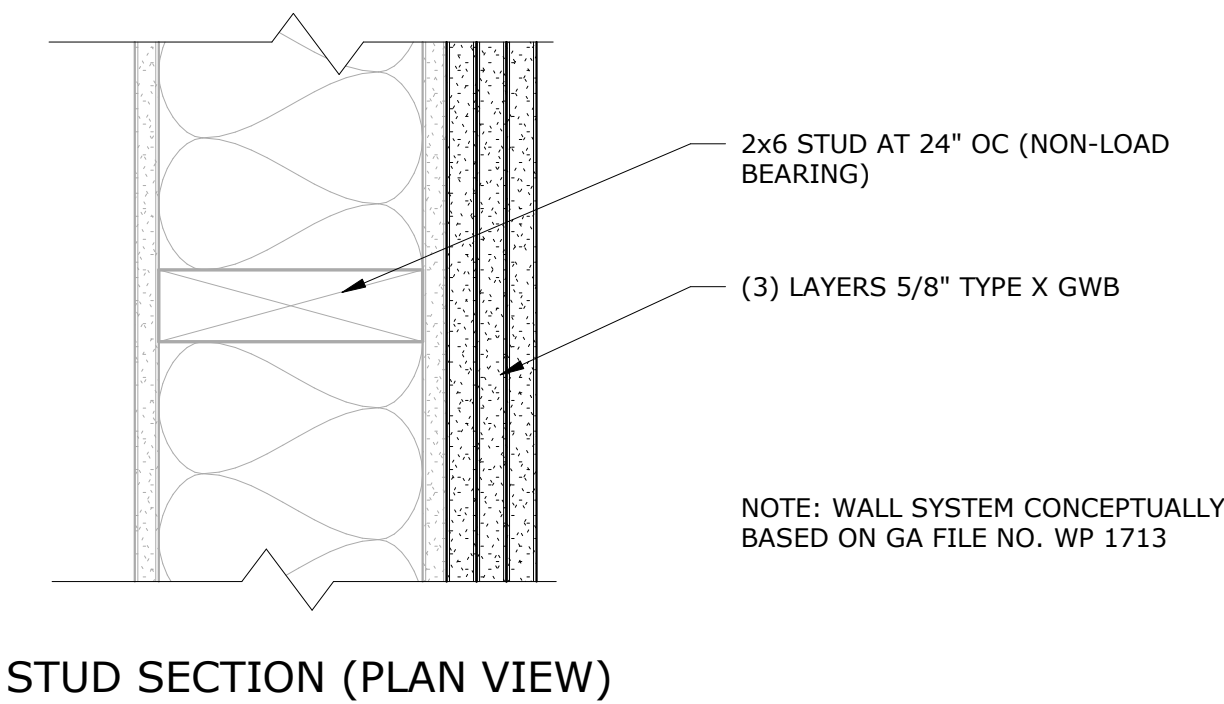
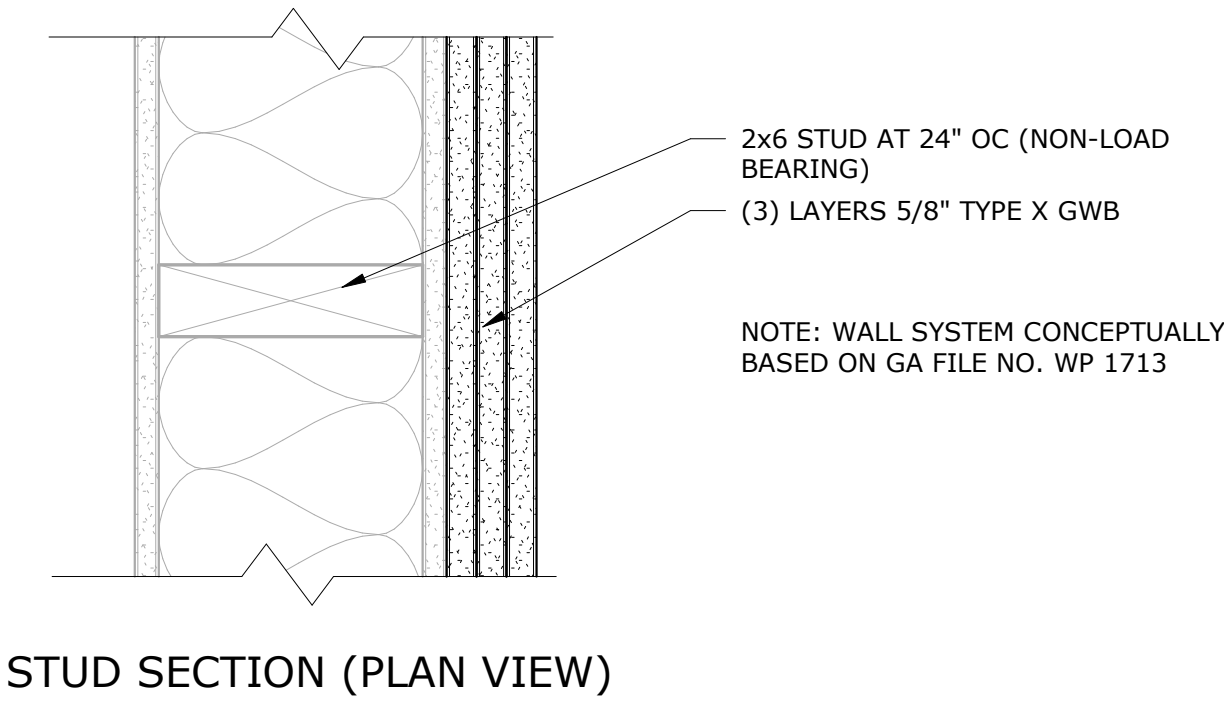
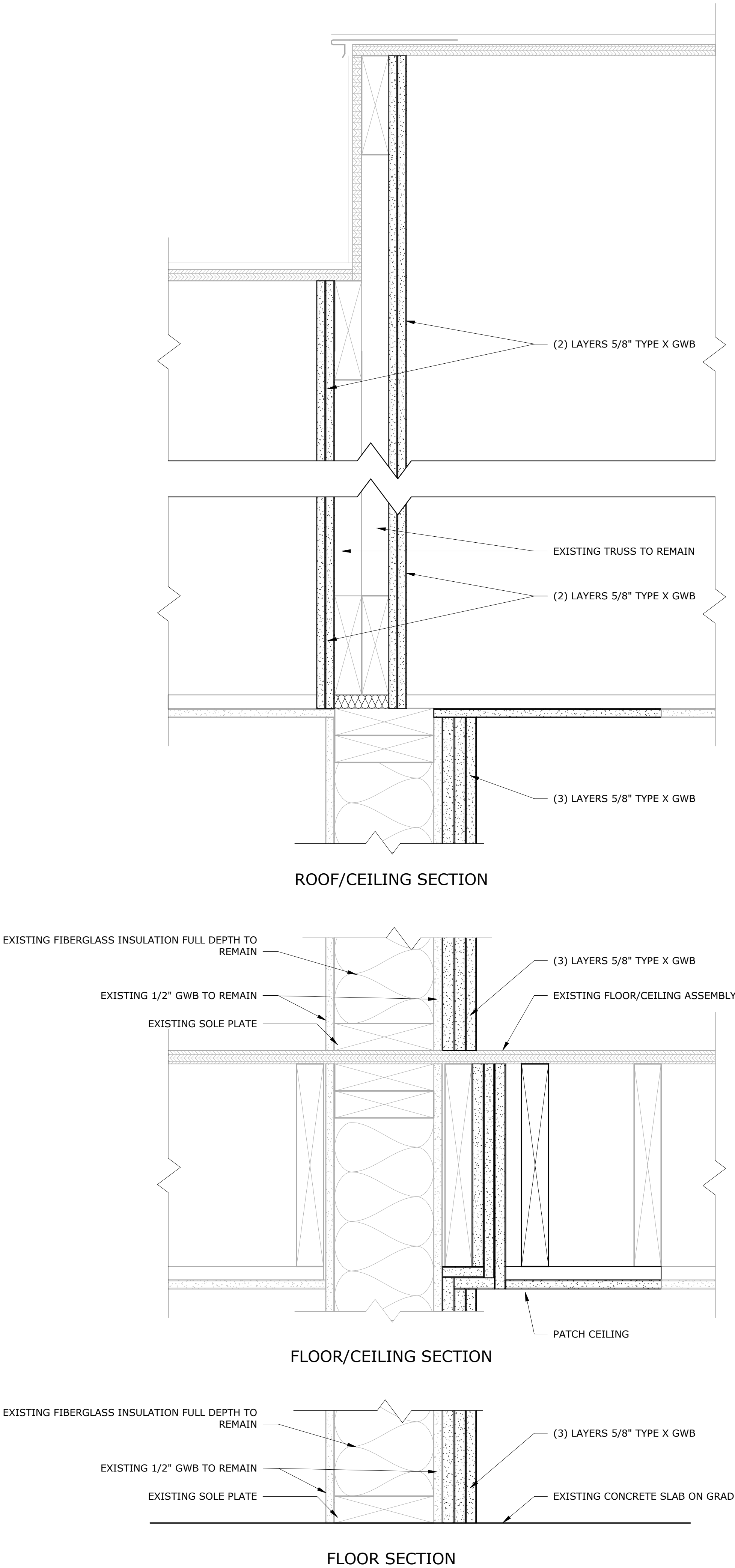
Approx. Weight: 10 pcf (Fire and Sound)

Fire Test: UL R1416, 12CA52786, 10-4-12, UL-Design W415

Sound Test: RAL T14-260, 7-17-14

PROPRIETARY GYPSUM BOARD

American Gypsum Company LLC 5/8" FireBloc® Type X Gypsum Board



BUSINESS CONDO CONVERSION

1000 Laconia Road
Sanbornton, NH 03269

David Longval

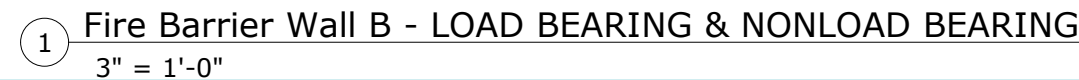
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Issue Date:	02/27/2024
Project Number:	2023-009
Drawn By:	dwb
Checked By:	dwb
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INTERIOR DETAILS

A501



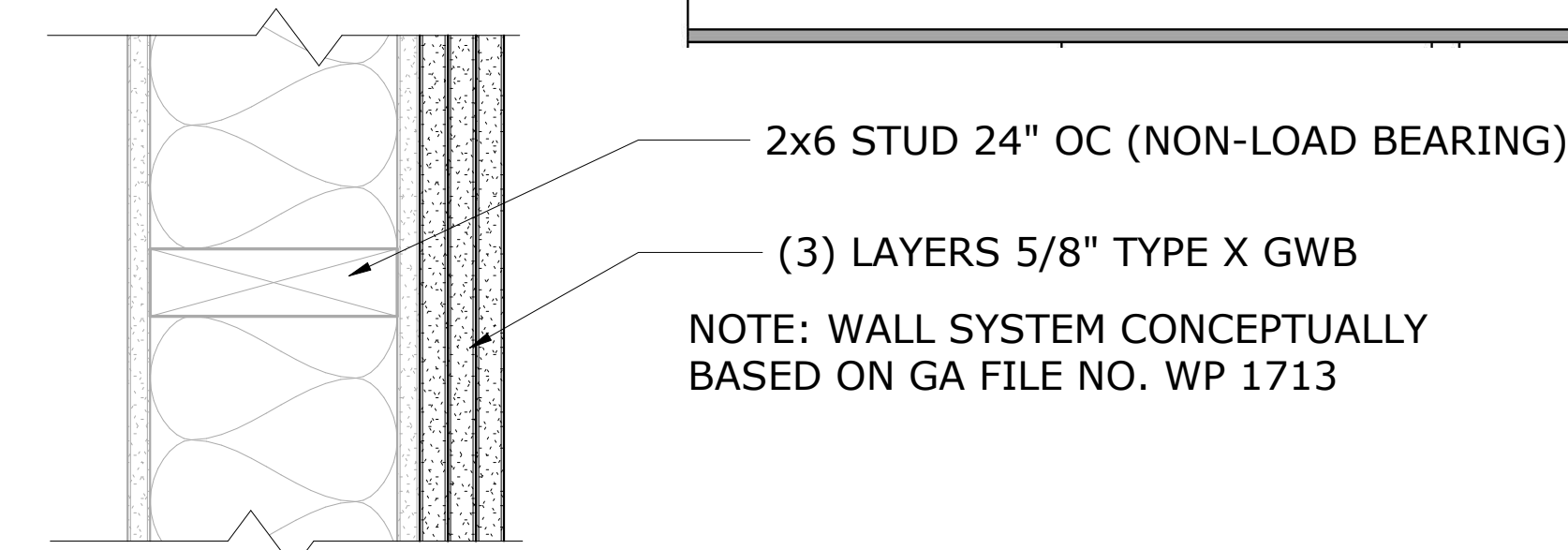
SECTION 722.6 WOOD ASSEMBLIES CONTAINS PROCEDURES BY WHICH THE FIRE-RESISTANCE RATINGS OF WOOD ASSEMBLIES MAY BE ESTABLISHED BY CALCULATION. HOWEVER, THE MAXIMUM FIRE-RESISTANCE RATING CALCULATED USING THIS METHOD IS LIMITED TO NOT MORE THAN ONE HOUR. IT IS PROPOSED THAT AN ENGINEERING JUDGEMENT BASED ON THE FOLLOWING FACTORS BE APPLIED TO SHOW THAT THE TESTED ASSEMBLY CAN BE GRANTED A 1.5-HR. RATING. AT THE ADDITION OF THREE LAYERS OF 5/8" TYPE X GYPSUM WALLBOARD TO THE EXISTING WALL ASSEMBLY WOULD PROVIDE A FIRE RABRER WITH A MINIMUM FIRE-RESISTANCE RATING OF 120 MINUTES TO COMPLY WITH TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES .

TABLE 722.6.2(1) TIME ASSIGNED TO WALLBOARD MEMBRANES	
1/2 INCH GYPSUM WALLBOARD	15 MINUTES
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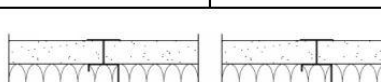
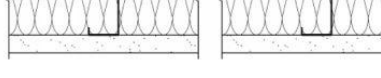
THE DESIGN APPROACH IS TO UTILIZE 1" GYPSUM PANELS AND MINIERAL WOOL TO PROTECT THE EXISITING STUDS FOR THE MINIMUM FIRE RESISTANCE REQUIRED BASED ON ASSEMBLY GA WP 7053. THE 2x6 STUD WILL PROVIDE THE MINIMUM DEPTH OF 2.6 INCHES AS INDICATED IN TABLE 16.2.1A TO ACHIEVE 2 HOUR FIRE RESISTANCE.

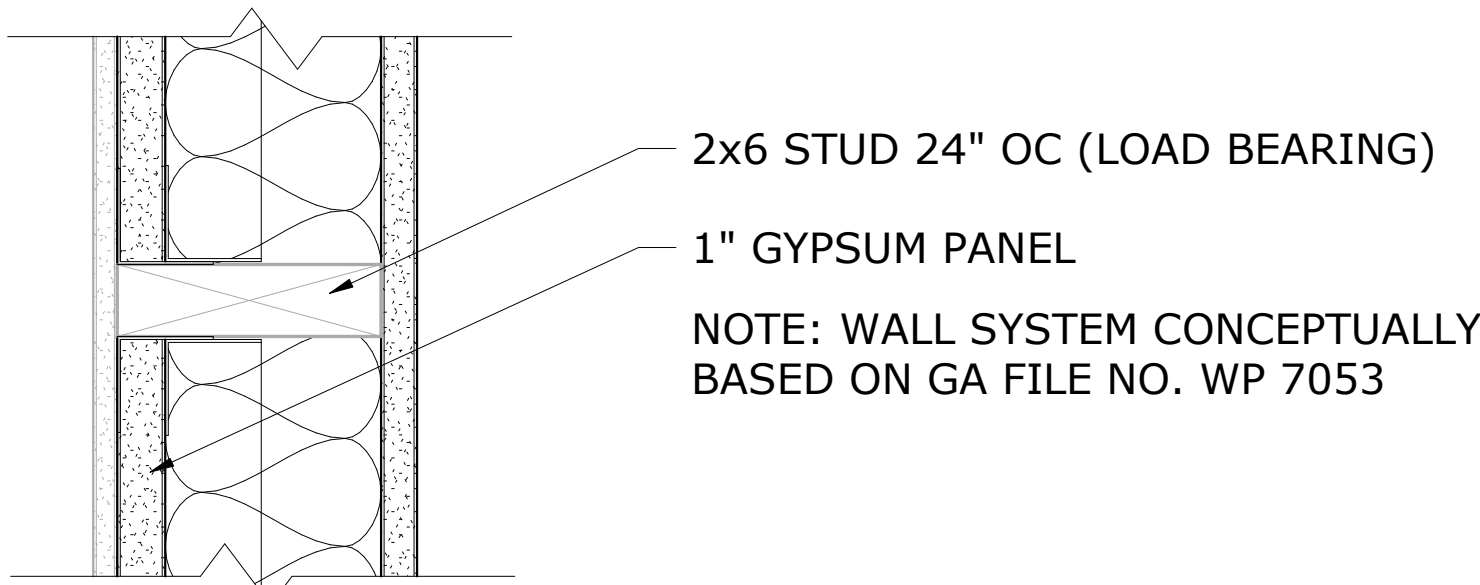
Required Fire Resistance (hr.)	Char Depth, a_{char} (in.)	Effective Char Depth, a_{eff} (in.)
1-Hour	1.5	1.8
1½-Hour	2.1	2.5
2-Hour	2.6	3.2

WALLS AND INTERIOR PARTITIONS, NONCOMBUSTIBLE				
GA FILE NO. WP 1713	PROPRIETARY*		2 HOUR FIRE	40 to 44 STC SOUND
GYPSUM WALLBOARD, STEEL STUDS				
Fire Design: Base layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles to one SIDE of a 2-1/2" x 18 mil steel studs 24" o.c. with 1" Type S screws 24" o.c. Second layer 1-5/8" proprietary type X gypsum wallboard applied parallel or at right angles with 1-5/8" Type S screws 24" o.c. Third layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles with 2-1/4" Type S screws 12" o.c. Face layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles to studs with 2-7/8" Type S screws 12" o.c. Vertical joints offset 24" between layers; horizontal joints offset 16" between layers. (N.B.)				
Sound Design: Sound tested with 3-5/8" glass fiber insulation in the cavity.			Thickness: Approx. Weight: Fire Test: 5" (Fire and Sound) 10 pcf (Fire and Sound) UL R-15/90, 12CA5/2760, 10-4-12, UL Design W-915 Sound Test: RAL TL 14-260, 7-17-14	
PROPRIETARY GYPSUM BOARD American Gypsum Company LLC 5/8" FireBloc® Type X Gypsum Board				

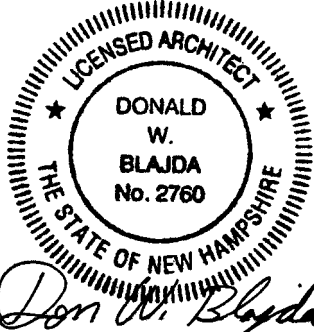


STUD SECTION (PLAN VIEW)

GA FILE NO. WP 7053	PROPRIETARY*	2 HOUR FIRE	50 to 54 FSTC SOUND
GYPSUM PANELS, STEEL C-H STUDS, MINERAL FIBER INSULATION			
Fire Design:			
<p>One layer 1" x 24" proprietary type X gypsum liner panels installed between 4" floor and ceiling 3 runs with H section of 4" proprietary vented C-channel studs between panels, 3" proprietary mineral fiber insulation, 2.0 pcf. in stud space. When wall height exceeds liner panel length, liner panels are butted to extend the full height of the wall. Horizontal joints need not be backed by steel framing.</p>			
<p>OPPOSITE SIDE: One layer 3/4" proprietary type X gypsum panel applied parallel or at right angles to studs with 1-1/4" Type S screws 8" o.c. at vertical edges and 12" o.c. at intermediate studs when installed parallel to studs or 8" o.c. at vertical end joints and intermediate studs when applied at right angles to studs.</p>		<p>Thickness: 4-3/4" (Fire and Sound) Approx. Weight: 8 psf (Fire and Sound) Fire Test: UL R1319, 97NK3240, 11-20-97 UL Design: UL1913, System C</p>	
<p>Horizontal joints need not be backed by steel framing. (NLB)</p>		<p>Field Sound Test: AS4-01913, 9-12-91</p>	
Sound Design:			
<p>Sound tested as constructed for fire.</p>			
PROPRIETARY GYPSUM PANEL			
<p>United States Gypsum Company.....3/4" Sheetrock® Brand Ultralite® Core Gypsum Panels 1" Sheetrock® Brand Gypsum Liner Panels</p>			



STUD SECTION (PLAN VIEW)



BUSINESS CONDO CONVERSION

1000 Laconia Road
Sanbornton, NH 03269

David Longval

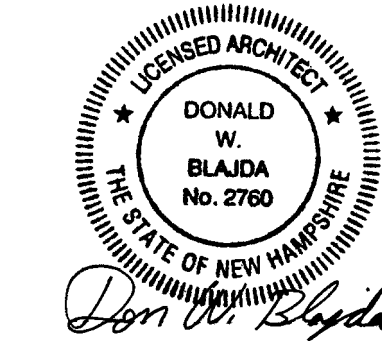
Concept Communications
1000 Laconia Road
Sanbornton, NH 03269

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Issue Date:	02/27/2024
Project Number:	2023-009
Drawn By:	dwb
Checked By:	dwb
Copyright: KOAL, PLLC	2023

INTERIOR DETAILS

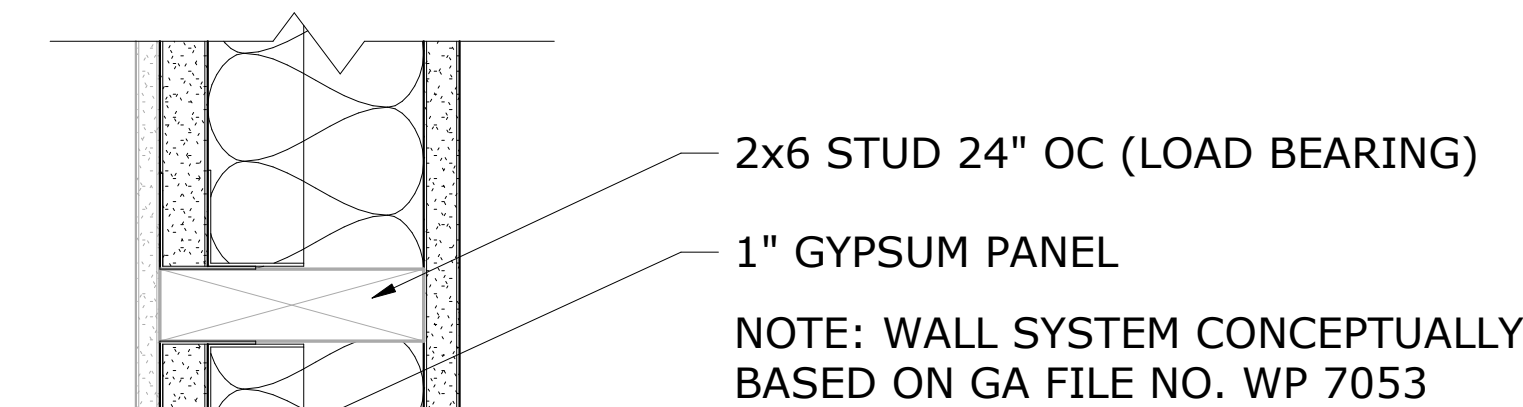
A502

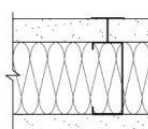
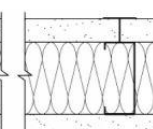


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A503



<p>GA FILE NO. WP 7053</p> <p>PROPRIETARY</p>	<p>2 HOUR FIRE</p> <p>50 to 54 FSTC SOUND</p>
<p>GYPSUM PANELS, STEEL C-H STUDS, MINERAL FIBER INSULATION</p> <p>Fire Design:</p> <p>One layer 1" x 24" proprietary type X gypsum liner panels installed between 4" floor and ceiling runners with 1" section of 4" proprietary vented C-H steel studs between panels. 3" proprietary mineral fiber insulation, 2.0 pcf., in stud space. When wall height exceeds liner panel length, liner panels are butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing.</p> <p>OPPOSITE SIDE: One layer 3/4" proprietary type X gypsum panel applied parallel or at right angles to studs with 1"-14" Type S screws 8" o.c. at vertical edges and 12" o.c. at intermediate studs when installed parallel to studs or 8" o.c. at vertical ends and intermediate studs when applied at right angles to studs.</p> <p>Horizontal joints need not be backed by steel framing. (NLB)</p>	<div style="display: flex; justify-content: space-around;">   </div> <p>Thickness: 4-3/4" (Fire and Sound) Approx. Weight: 8 pcf. (Fire and Sound) Fire Test: UL R1319, 97NK3240, 11-20-97 UL Design: U415, System C Field Sound Test: SA-910913, 9-12-91</p>
<p>Sound Design:</p> <p>Sound tested as constructed for fire.</p>	
<p>PROPRIETARY GYPSUM PANEL</p>	
<p>United States Gypsum Company..... 3/4" Sheetrock® Brand Ultralock® Core Gypsum Panels 1" Sheetrock® Brand Gypsum Liner Panels</p>	

BUSINESS CONDO CONVERSION

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David Longval

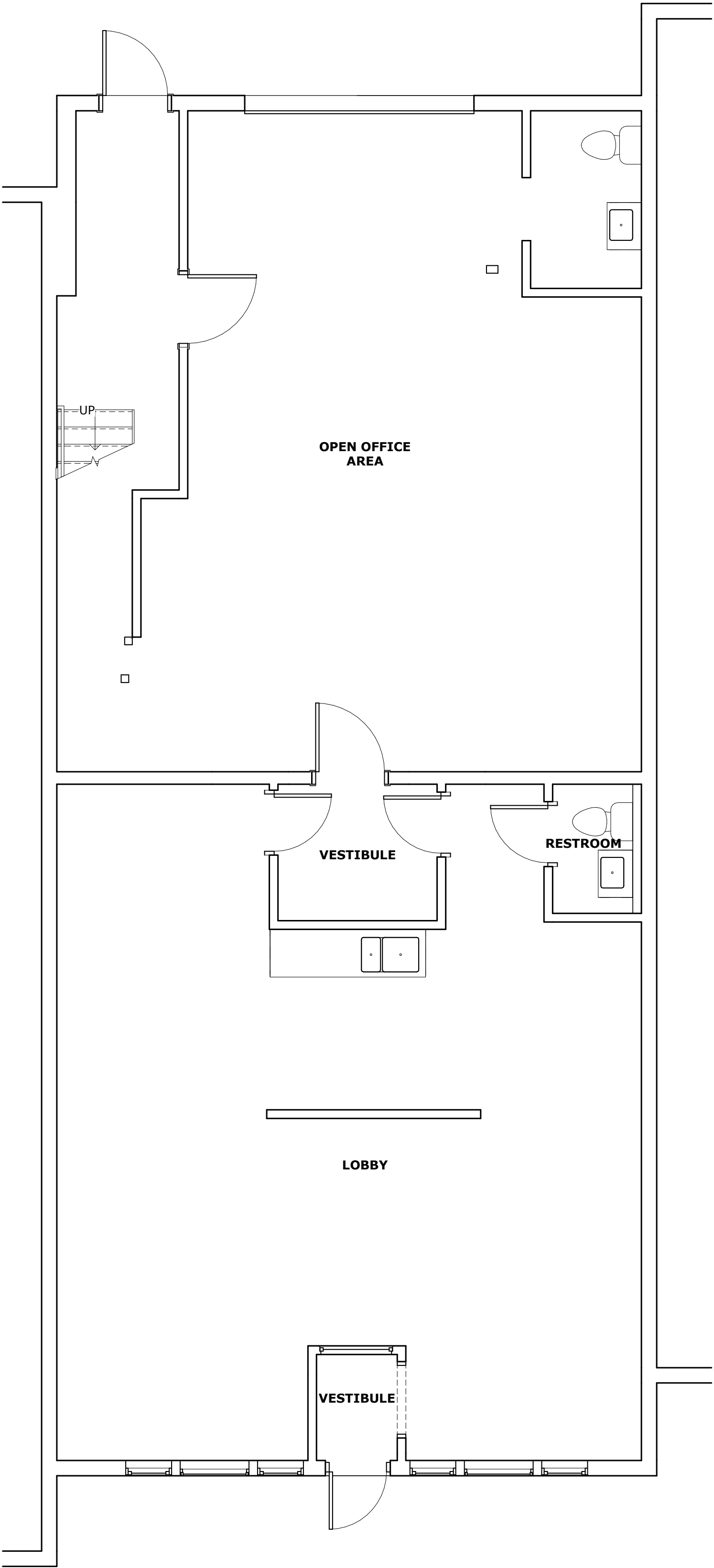
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Sanbornton, NH 03269

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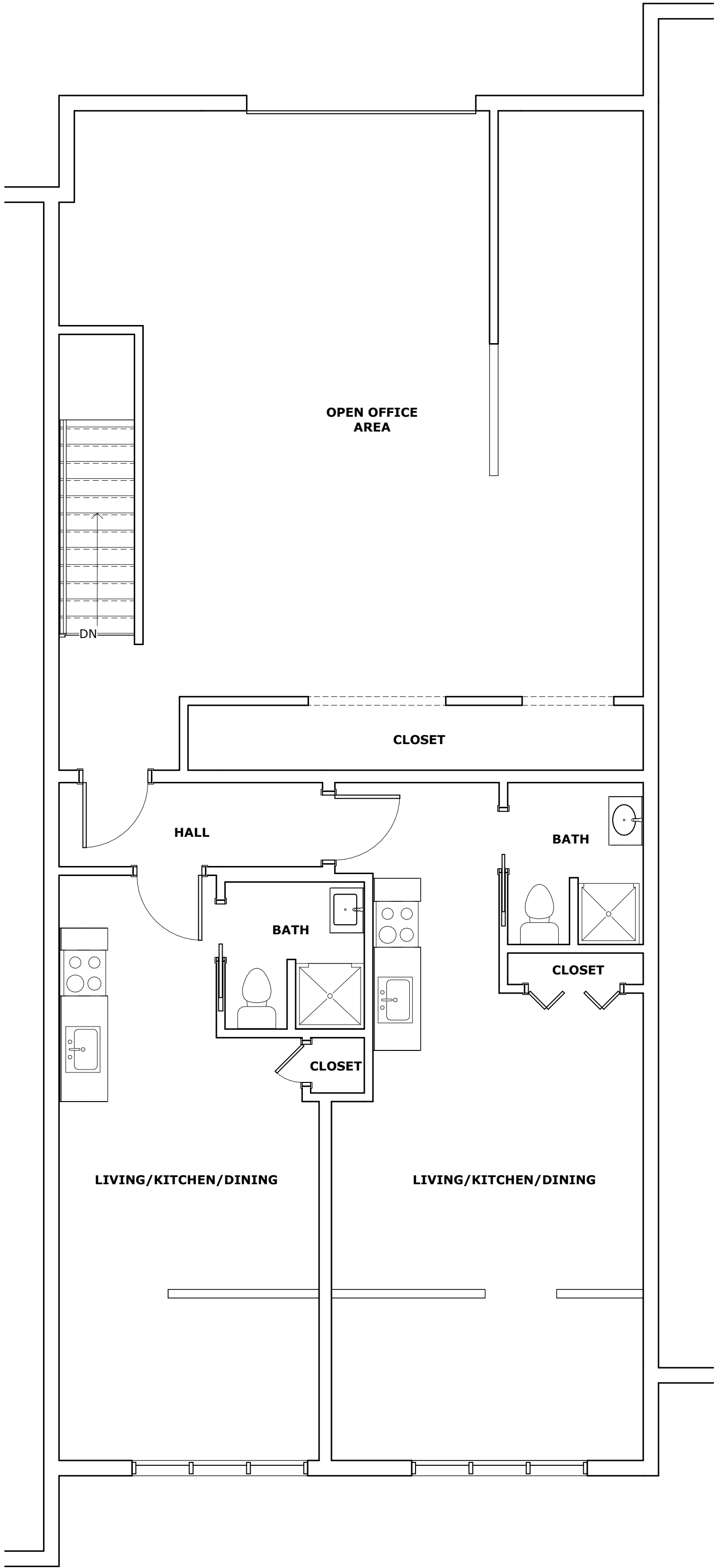
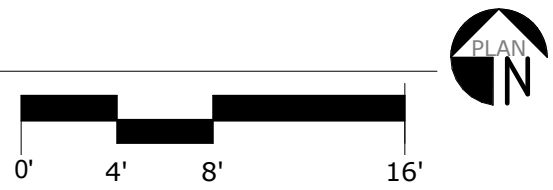
Due Date:	02/27/2024
Project Number:	2023-009
Drawn By:	DWB/CRG
Checked By:	DWB
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EXISTING FLOOR PLANS

RA101



1 1ST FLOOR PLAN - EXIST
1/4" = 1'-0"



2ND FLOOR PLAN - EXIST
1/4" = 1'-0"

