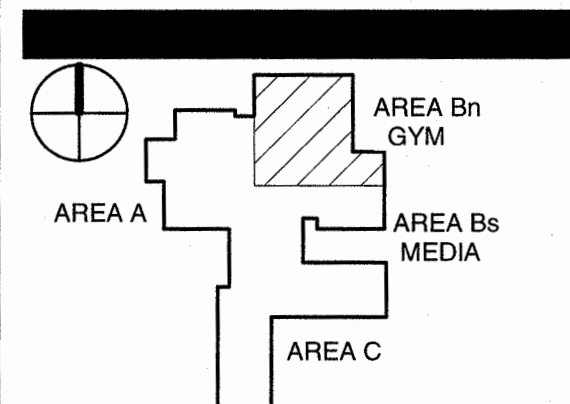


# TOWN CREEK MIDDLE SCHOOL

6370 LAKE PARK DRIVE  
SE  
WINNABOW, NC 28479

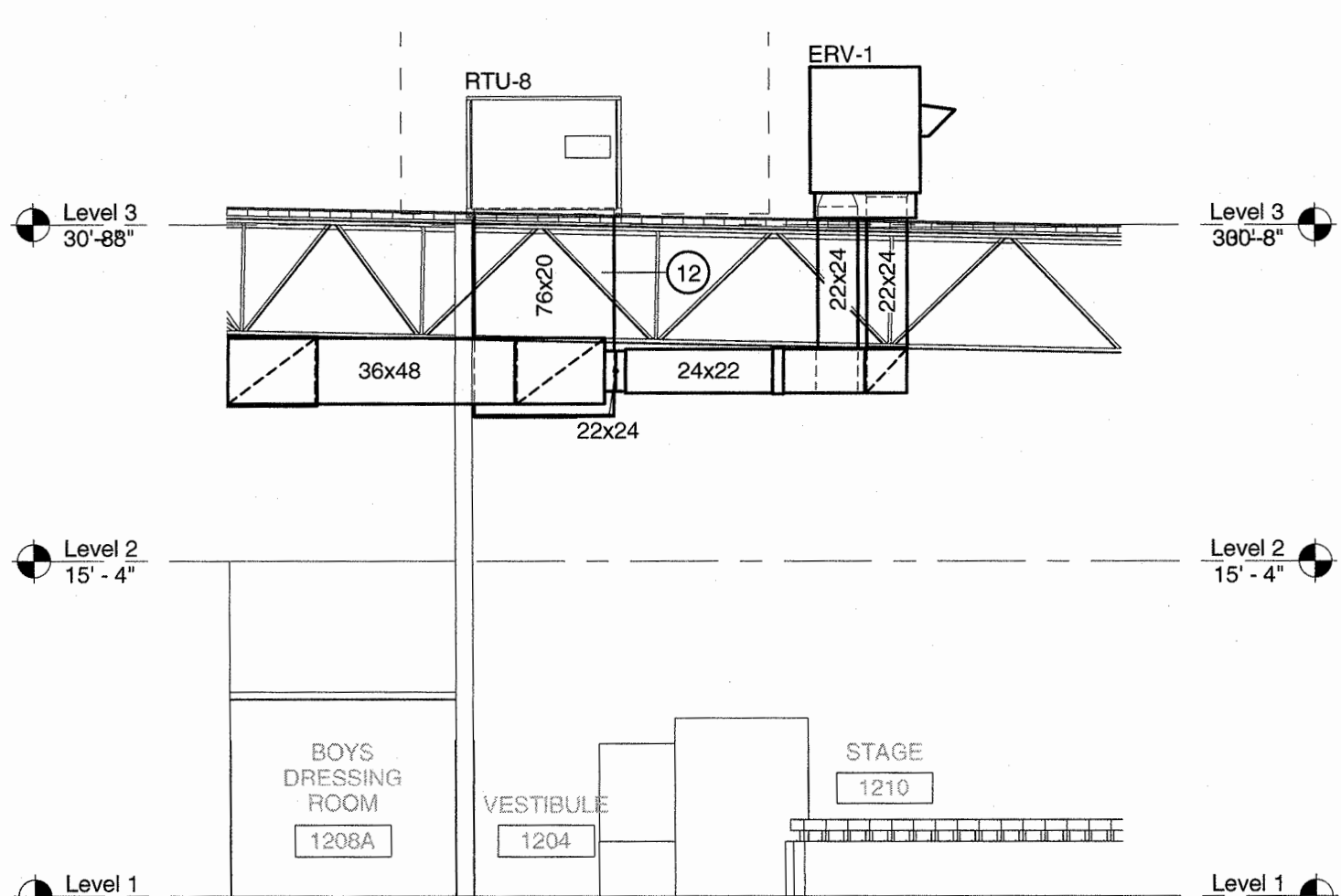


REVISIONS

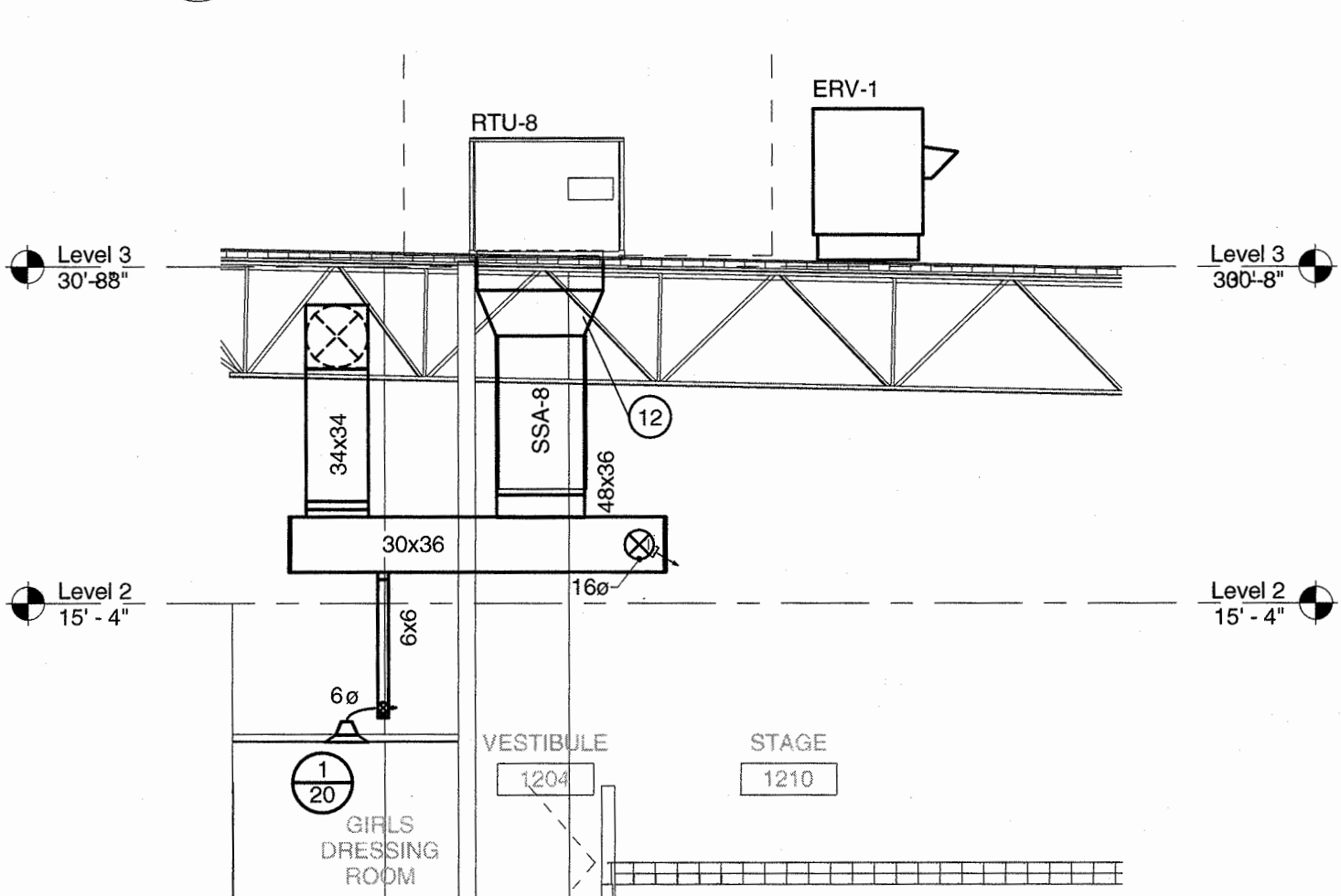
No.	Description	Date
2	ADDENDUM 2	6/18/2018

ISSUED: CONSTRUCTION DOCUMENTS  
DATE: 05/24/2018  
SCALE: 1/8" = 1'-0"  
SHEET NAME:  
DUCTWORK FLOOR PLAN - LEVEL 1 - AREA B GYM

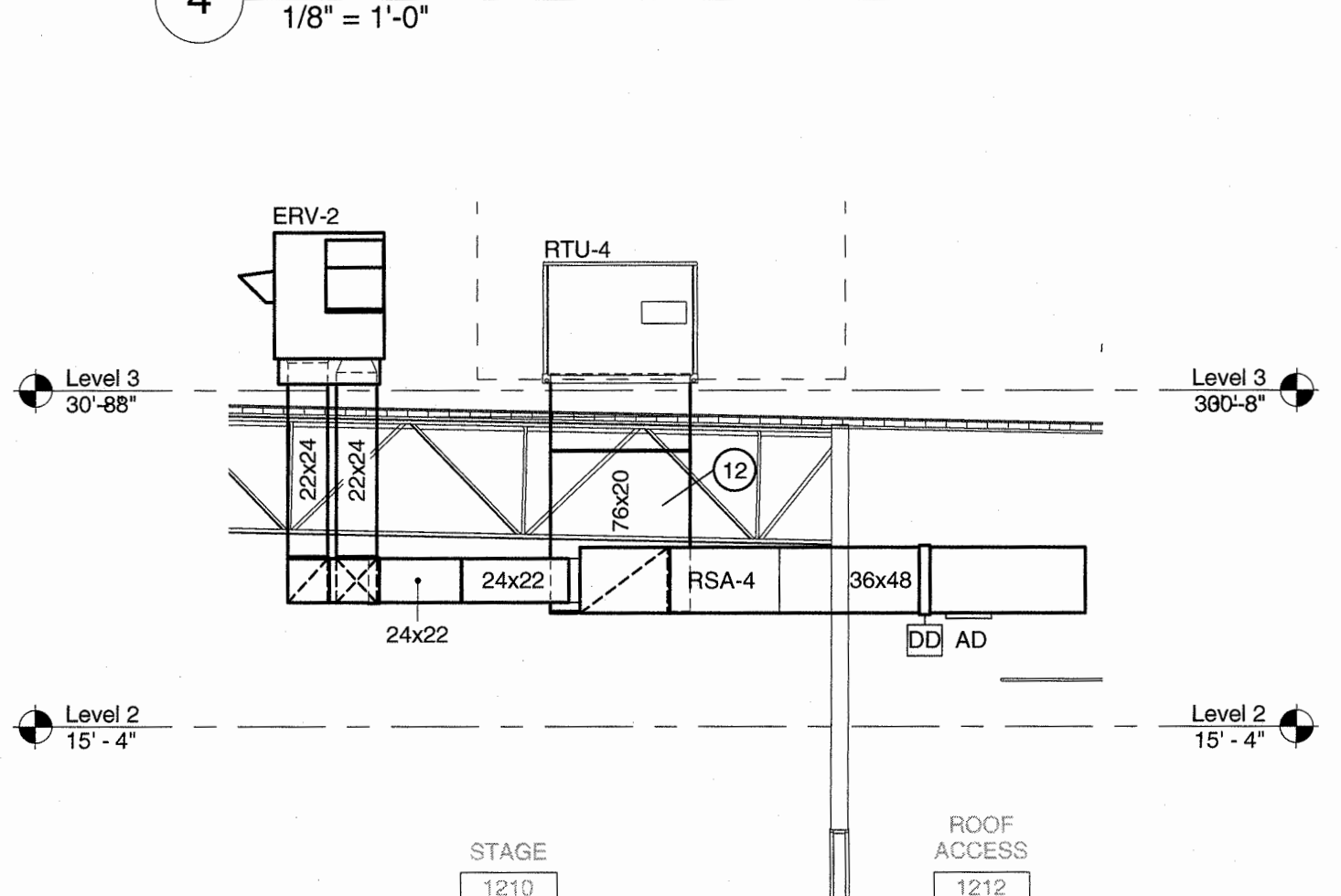
SHEET NUMBER:  
**M-101Bn**



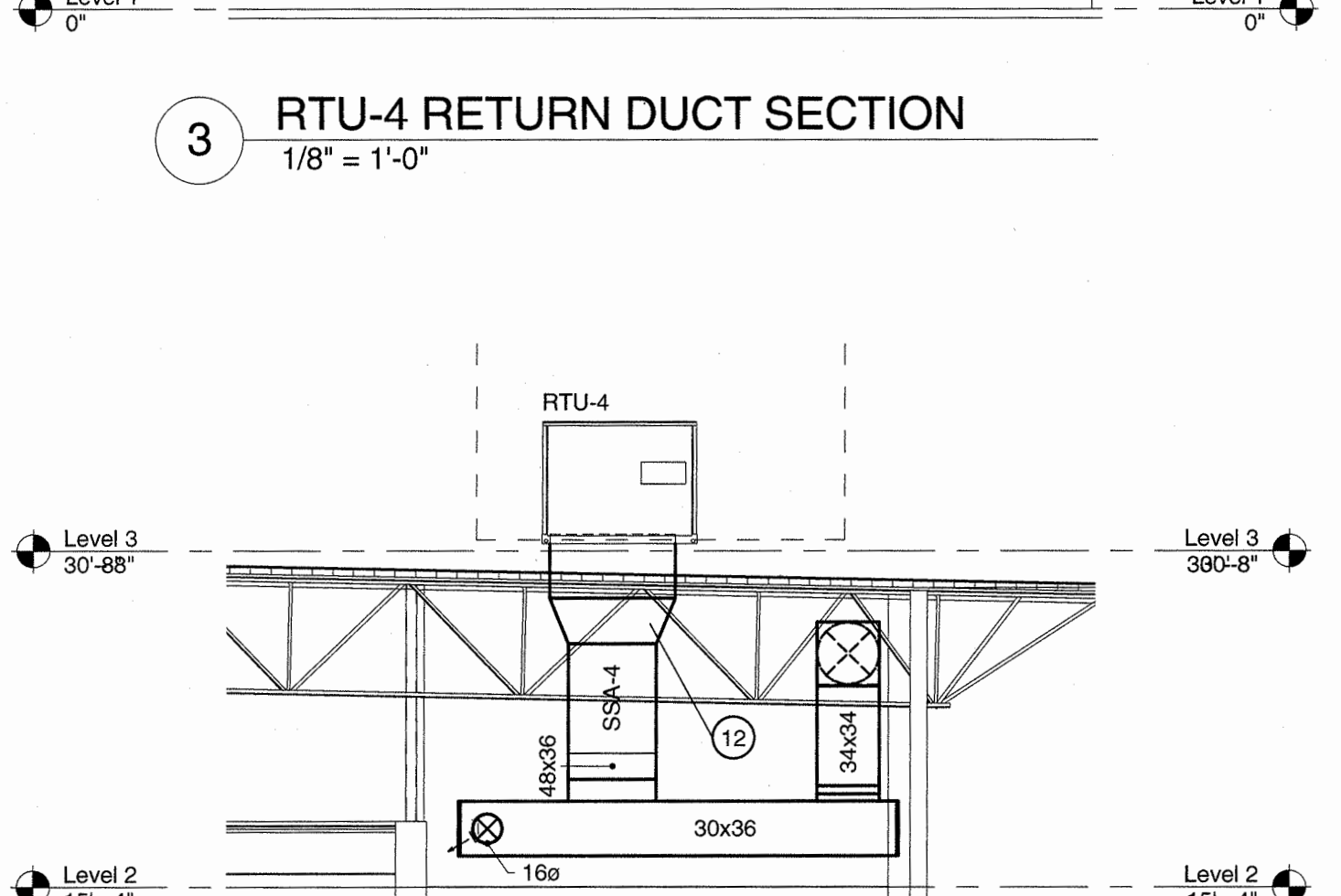
5 RTU-8 RETURN DUCT SECTION  
1/8" = 1'-0"



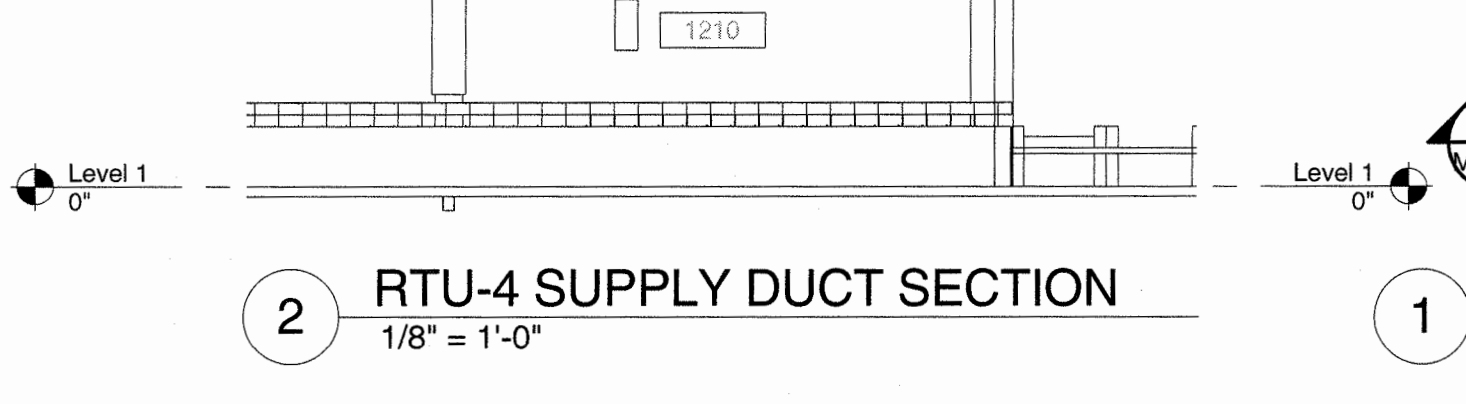
4 RTU-8 SUPPLY DUCT SECTION  
1/8" = 1'-0"



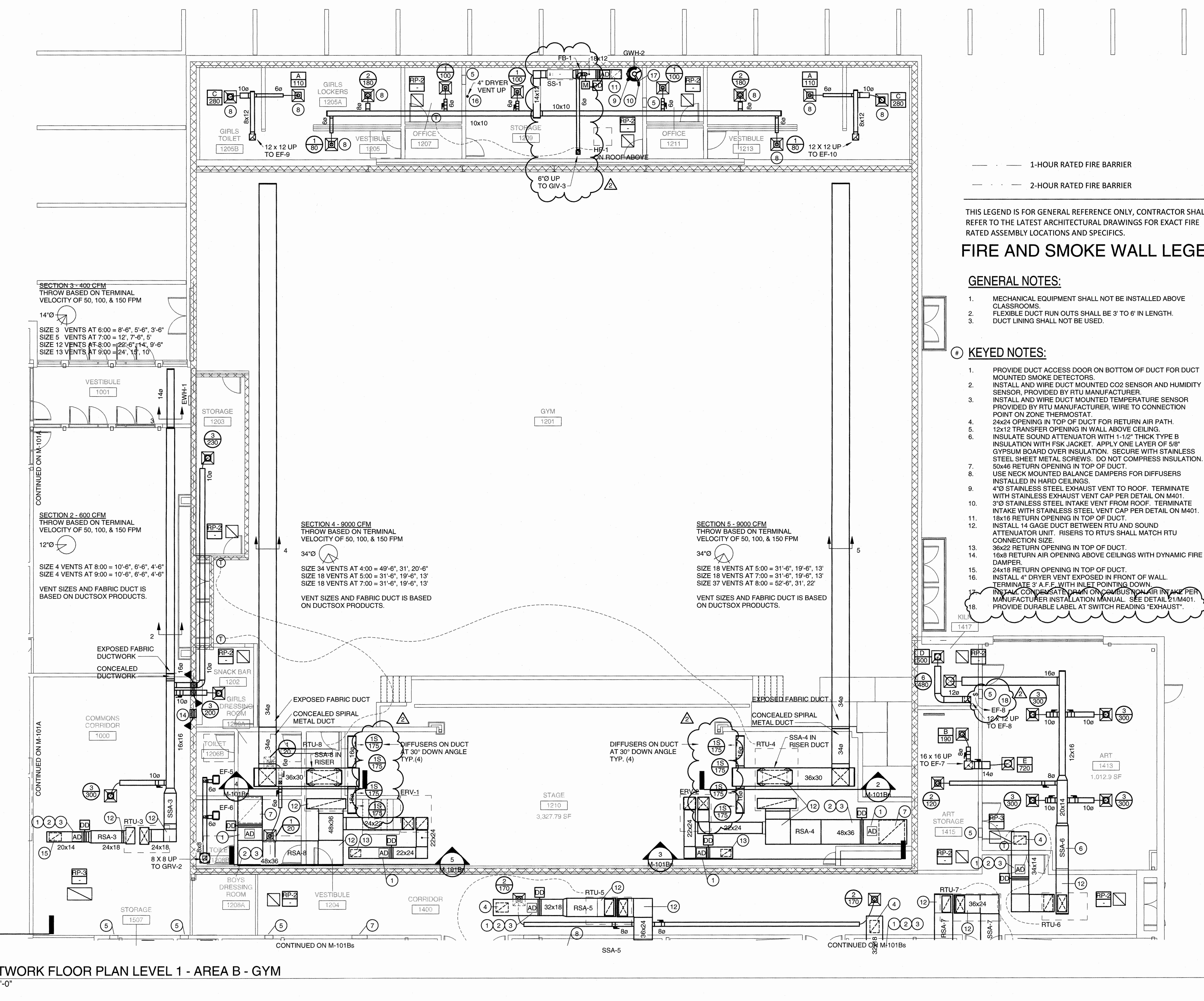
3 RTU-4 RETURN DUCT SECTION  
1/8" = 1'-0"



2 RTU-4 SUPPLY DUCT SECTION  
1/8" = 1'-0"



1 DUCTWORK FLOOR PLAN LEVEL 1 - AREA B - GYM  
1/8" = 1'-0"



- 1-HOUR RATED FIRE BARRIER
- 2-HOUR RATED FIRE BARRIER

THIS LEGEND IS FOR GENERAL REFERENCE ONLY, CONTRACTOR SHALL REFER TO THE LATEST ARCHITECTURAL DRAWINGS FOR EXACT FIRE RATED ASSEMBLY LOCATIONS AND SPECIFICS.

### FIRE AND SMOKE WALL LEGEND

#### GENERAL NOTES:

- MECHANICAL EQUIPMENT SHALL NOT BE INSTALLED ABOVE CLASSROOMS.
- FLEXIBLE DUCT RUN OUTS SHALL BE 3' TO 6' IN LENGTH. DUCT LINING SHALL NOT BE USED.

#### KEYED NOTES:

- PROVIDE DUCT ACCESS DOOR ON BOTTOM OF DUCT FOR DUCT MOUNTED SMOKE DETECTORS.
- INSTALL AND WIRE DUCT MOUNTED CO2 SENSOR AND HUMIDITY SENSOR, PROVIDED BY RTU MANUFACTURER.
- INSTALL AND WIRE DUCT MOUNTED TEMPERATURE SENSOR PROVIDED BY RTU MANUFACTURER, WIRE TO CONNECTION POINT ON ZONE THERMOSTAT.
- 24x24 OPENING IN TOP OF DUCT FOR RETURN AIR PATH.
- 12x12 TRANSFER OPENING IN WALL ABOVE CEILING.
- INSULATE SOUND ATTENUATOR WITH 1-1/2" THICK TYPE B INSULATION WITH FSK JACKET. APPLY ONE LAYER OF 5/8" GYPSUM BOARD OVER INSULATION. SECURE WITH STAINLESS STEEL SHEET METAL SCREWS. DO NOT COMPRESS INSULATION.
- 50x46 RETURN OPENING IN TOP OF DUCT.
- USE NECK MOUNTED BALANCE DAMPERS FOR DIFFUSERS INSTALLED IN HARD CEILINGS.
- 4"Ø STAINLESS STEEL EXHAUST VENT TO ROOF. TERMINATE WITH STAINLESS EXHAUST VENT CAP PER DETAIL ON M401.
- 3"Ø STAINLESS STEEL INTAKE VENT FROM ROOF. TERMINATE INTAKE WITH STAINLESS STEEL VENT CAP PER DETAIL ON M401.
- 18x16 RETURN OPENING IN TOP OF DUCT.
- INSTALL 14 GAUGE DUCT BETWEEN RTU AND SOUND ATTENUATOR UNIT. RISERS TO RTU'S SHALL MATCH RTU CONNECTION SIZE.
- 30x25 RETURN OPENING IN TOP OF DUCT.
- 16x8 RETURN AIR OPENING ABOVE CEILINGS WITH DYNAMIC FIRE DAMPER.
- 34x18 RETURN OPENING IN TOP OF DUCT.
- INSTALL 4" DRYER VENT EXPOSED IN FRONT OF WALL. TERMINATE 3" A.F.F. WITH INLET POINTING DOWN.
- INSTALL CONDENSATE PANS ON CONDENSATION AIR IN ALL PER MANUFACTURER INSTALLATION MANUAL. SEE DETAIL M1401.
- PROVIDE DURABLE LABEL AT SWITCH READING 'EXHAUST'.

SECTION 3 - 800 CFM  
THROW BASED ON TERMINAL VELOCITY OF 50, 100, & 150 FPM  
SIZE 3 VENTS AT 6:00 = 8'-6", 5'-6", 3'-6"  
SIZE 5 VENTS AT 7:00 = 12'-7", 9'-6", 5'  
SIZE 12 VENTS AT 8:00 = 22'-6", 14'-9", 9'-6"  
SIZE 13 VENTS AT 9:00 = 24'-1", 10'

SECTION 2 - 600 CFM  
THROW BASED ON TERMINAL VELOCITY OF 50, 100, & 150 FPM  
SIZE 4 VENTS AT 8:00 = 10'-6", 6'-6", 4'-6"  
SIZE 4 VENTS AT 9:00 = 10'-6", 6'-6", 4'-6"  
VENT SIZES AND FABRIC DUCT IS BASED ON DUCTSOX PRODUCTS.

SECTION 4 - 8000 CFM  
THROW BASED ON TERMINAL VELOCITY OF 50, 100, & 150 FPM  
34'Ø  
SIZE 34 VENTS AT 4:00 = 49'-6", 31'-6", 20'-6"  
SIZE 18 VENTS AT 5:00 = 31'-6", 19'-6", 13'  
SIZE 18 VENTS AT 7:00 = 31'-6", 19'-6", 13'  
VENT SIZES AND FABRIC DUCT IS BASED ON DUCTSOX PRODUCTS.

SECTION 5 - 8000 CFM  
THROW BASED ON TERMINAL VELOCITY OF 50, 100, & 150 FPM  
34'Ø  
SIZE 18 VENTS AT 5:00 = 31'-6", 19'-6", 13'  
SIZE 18 VENTS AT 7:00 = 31'-6", 19'-6", 13'  
SIZE 37 VENTS AT 8:00 = 52'-6", 31'-22"  
VENT SIZES AND FABRIC DUCT IS BASED ON DUCTSOX PRODUCTS.

CONTINUED ON M-101A  
CONTINUED ON M-101A  
CONTINUED ON M-101A  
CONTINUED ON M-101Bs

EXPOSED FABRIC DUCTWORK  
CONCEALED DUCTWORK  
EXPOSED FABRIC DUCT  
CONCEALED SPIRAL METAL DUCT  
DIFFUSERS ON DUCT AT 30° DOWN ANGLE TYP. (4)

GYM 1201  
STAGE 1210  
STAGE 1210  
STAGE 1210  
STAGE 1210

STAGE 1210  
STAGE 1210  
STAGE 1210  
STAGE 1210

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STAGE 1210  
STAGE 1210  
STAGE 1210

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1  
P N M L K J H G F E D C B A

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1  
P N M L K J H G F E D C B A