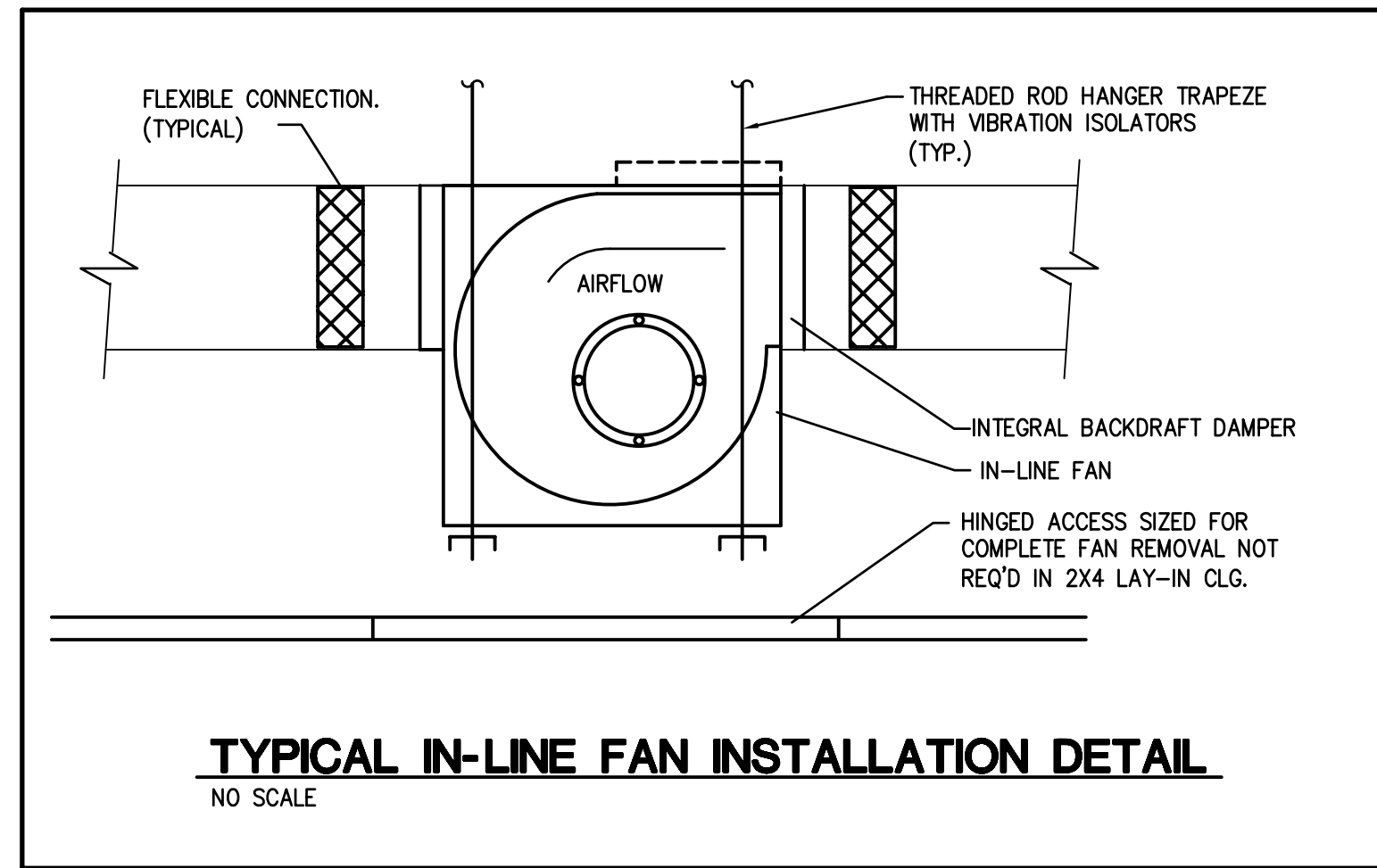


- ALL DAMPERS MUST BE INSTALLED IN STRICT ACCORDANCE WITH NFPA 90A, UL, SMACNA STANDARDS AND MANUFACTURERS RECOMMENDATIONS. SUBMIT INSTALLATION DETAILS FOR REVIEW.
- THE INSTALLER SHALL PROVIDE ALL NECESSARY POWER, TIME DELAY RELAYS, SWITCHES ETC., AND MAKE ALL NECESSARY CONNECTIONS WITH ELECTRICAL SYSTEM. COORDINATE TYPE OF SWITCH AND VOLTAGE WITH FIRE ALARM INSTALLER.
- REFERENCE SMACNA FIRE, SMOKE AND RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS - 1986 FIGURES 2 AND 13 FOR FURTHER INSTRUCTIONS OF BREAKAWAY JOINT CONSTRUCTION AND SMOKE DAMPER INSTALLATION.
- SEQUENCE OF OPERATION:
 A. FIRE DAMPER MODE: UPON HIGH TEMPERATURE MELTING OF FUSIBLE LINK, THE FIRE DAMPER SHALL CLOSE.
 B. SMOKE DAMPER MODE: UPON DETECTION OF SMOKE/HEAT THE DAMPER SHALL CLOSE DAMPER AND INITIATE AN ALARM SEQUENCE IN THE FAS.

AUTOMATIC SMOKE AND FIRE DAMPER DETAIL
NO SCALE



TYPICAL IN-LINE FAN INSTALLATION DETAIL
NO SCALE

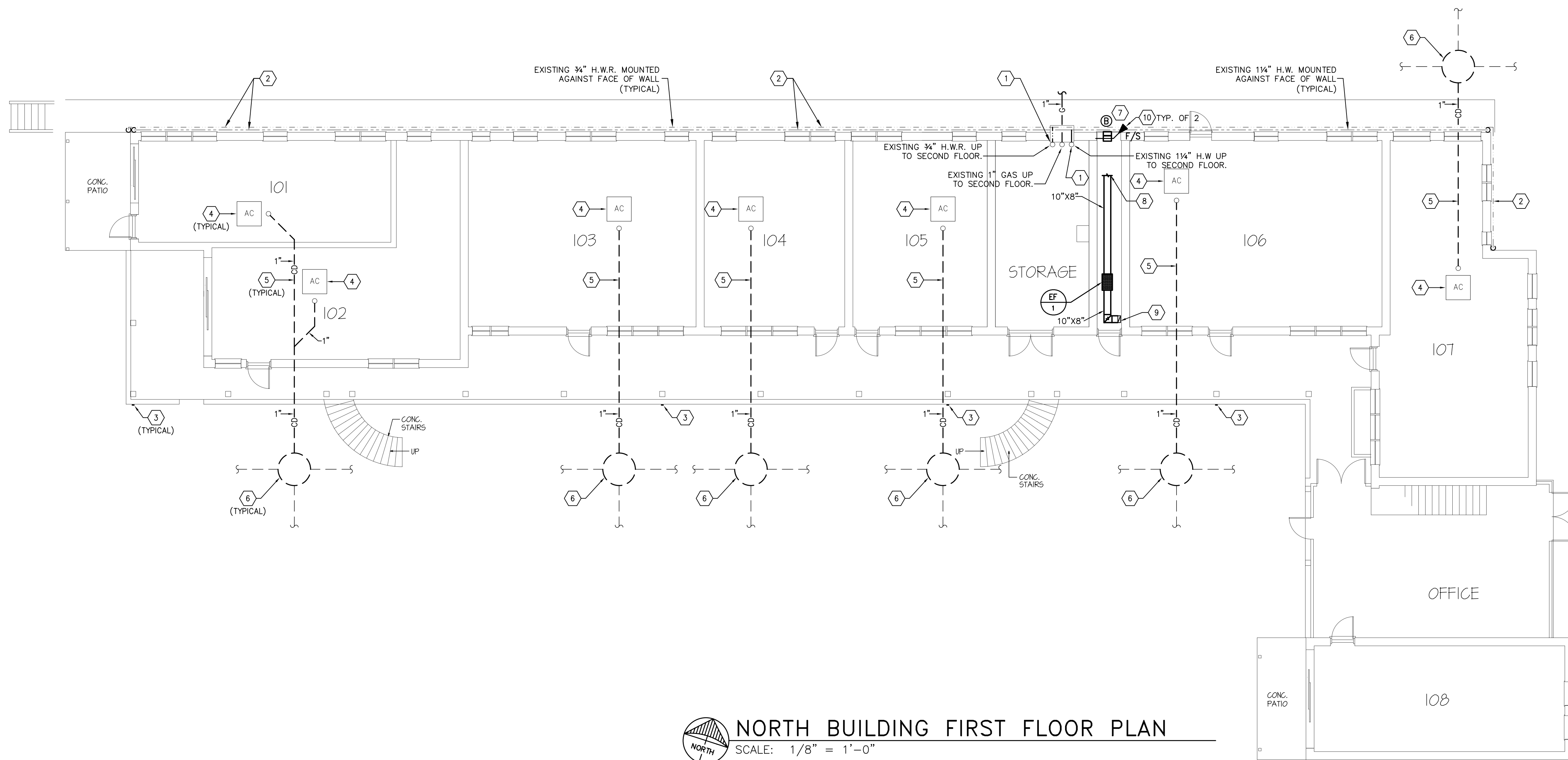
FAN SCHEDULE

MARK	-	EF-1	EF-2
MANUFACTURER	-	GREENHECK	GREENHECK
MODEL NUMBER	-	BSQ-70-4	BSQ-90-4
SERVICE	-	EXHAUST	EXHAUST
AIR QUANTITY	CFM	100	300
EXT. STATIC PRESSURE	IN H ₂ O	.40"	.40"
FAN TYPE	-	BI	BI
DRIVE TYPE	-	BELT	BELT
MAXIMUM GENERATED NOISE	SONES	7.8	7.2
MAXIMUM FAN SPEED	RPM	1162	1084
MOTOR SIZE	HP	1/4	1/4
CONTROLS	-	RUN CONTINUOUS	RUN CONTINUOUS
LOCATION	-	-	STORAGE CEILING
ELECTRICAL CHARACTERISTICS	V/ø/HZ	120/1/60	120/1/60
NOTES	-	①②③④	①②③④

KEYED NOTES:

- VIBRATION ISOLATION: PROVIDE FLEXIBLE CONNECTORS AT DUCT CONNECTIONS TO FAN AND PROVIDE SPRING HANGING ISOLATORS AND BRACKETS.
- PROVIDE WITH GRAVITY DAMPER, SPARE BELT, AND MOTOR COVER.
- CORROSION PROTECTION: PROVIDE WITH FACTORY APPLIED HI-PRO POLYESTER COATING ON ENTIRE FAN AND ACCESSORIES INCLUDING THE GRAVITY DAMPER AND MOTOR COVER. PROVIDE STAINLESS STEEL FASTENERS, STAINLESS STEEL SHAFT.
- PROVIDE WITH FACTORY MOUNTED DISCONNECT SWITCH.

- KEYED NOTES**
- PROVIDE NEW PIPING INSULATION FOR DOMESTIC HOT WATER AND RECIRCULATION WATER FROM THIS POINT ALL THE WAY UP TO CONNECTION TO HOT WATER STORAGE TANK ON SECOND FLOOR ABOVE.
 - PROVIDE NEW PIPING INSULATION FOR ALL EXISTING EXPOSED AND BURIED HOT WATER SUPPLY PIPING AND HOT WATER RECIRCULATING PIPING.
 - EXISTING GUTTER DOWNSPOUT TO REMAIN.
 - EXISTING AC UNIT TO REMAIN.
 - 1" PVC CONDENSATE DRAIN PIPING. CONTRACTOR SHALL CUT AND PATCH EXISTING CONCRETE SLAB AND SIDEWALK AS REQUIRED TO INSTALL NEW CONDENSATE DRAIN PIPING BELOW GRADE.
 - PROVIDE CONDENSATE DRYWELL. REFER TO DETAIL FOR ADDITIONAL INFORMATION.
 - PROVIDE TWO LOUVERS IN EXTERIOR WALL. EACH LOUVER SHALL HAVE A MINIMUM OF 24 SQUARE INCHES OF FREE AREA. PROVIDE ONE LOUVER WITHIN 12" PF TOP OF ROOM AND ONE LOUVER WITHIN 12" OF BOTTOM OF ROOM. BOTTOM LOUVER SHALL BE UNDUCTED. TOP LOUVER SHALL BE CONNECTED TO 10"X8" DUCT SERVING EF-1. COORDINATE INSTALLATIONS OF LOUVERS WITH NEW ELECTRICAL EQUIPMENT TO BE MOUNTED ON EXTERIOR WALL.
 - CONTINUE DUCT TO TOP LOUVER.
 - DROP 10"X8" DUCT DOWN TO 12" ABOVE FINISHED FLOOR. TERMINATE OPEN ENDED DUCT WITH HARDWARE CLOTH.
 - PROVIDE OUT OF WALL COMBINATION FIRE/SMOKE DAMPER AND SLEEVE REQUIRED TO MAINTAIN 1 HOUR RATED WALL CONDITION. FOR EACH LOUVER PENETRATION FIRE SMOKE DAMPERS SHALL HAVE 120 VOLT SINGLE PHASE ACTUATOR AND SHALL BE CONNECTED TO CENTRAL FIRE ALARM SYSTEM TO CLOSE UPON ACTIVATION OF SMOKE DETECTOR WITHIN ROOM.



NORTH BUILDING FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

NO.	DATE	REVISIONS	COMMENTS

RENOVATION/RESTORATION PROJECT

MARINER BEACH CLUB
4220 GULF BOULEVARD
ST. PETERSBURG BEACH, FLORIDA 33706

billerreinhardt
STRUCTURAL GROUP, INC.
4014 gulf highway suite 248, tampa, florida 33618
telephone : 813.908.7203 fax : 813.908.7203
email : info@billerreinhardt.com
State of Florida Certificate of Authorization No. 9149

USE THE BEST OF THE AVAILABLE MANUFACTURER'S PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE NATIONAL BUILDING CODES

NORTH BUILDING FIRST FLOOR PLUMBING PLAN

DATE: 02-23-09 DRAWN BY: CSR
JOB NO: 08-132 DESIGN BY: OFB

SHEET NO.

MP2.1

ENGINEERING MATRIX, INC.
CONSULTING ENGINEERS
2860 SCHERER DRIVE, SUITE 640
ST. PETERSBURG, FLORIDA 33716
(727) 573-6656 FAX:(727) 573-3902 EMAIL: email@engmtx.com
CERT. OF AUTHORIZATION NO. 4288 EMI JOB NO. 08-1320
© 2009 Engineering Matrix, Inc.