

FIRST INDEPENDENT METHODIST MADISON, MS

1556 HWY 51 NORTH

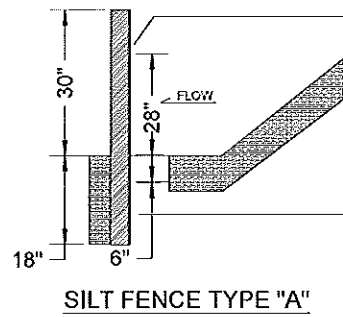
4000 SQFT ADDITION

08.13.2015

COVER SHEET
PROPERTY SURVEY
A-0 SITE PLAN
S-1 STRUCTURAL FOUNDATION PLANS
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M-0.1 GENERAL MECHANICAL NOTES
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E-1 ELECTRICAL RISER DIAGRAM
A-1 ARCHITECTURAL FLOOR PLAN
A-2 ARCHITECTURAL ELEVATIONS

BONDURANT
ARCHITECTURE PLLC

1233 WOODBERRY DR.
MADISON, MS
39110

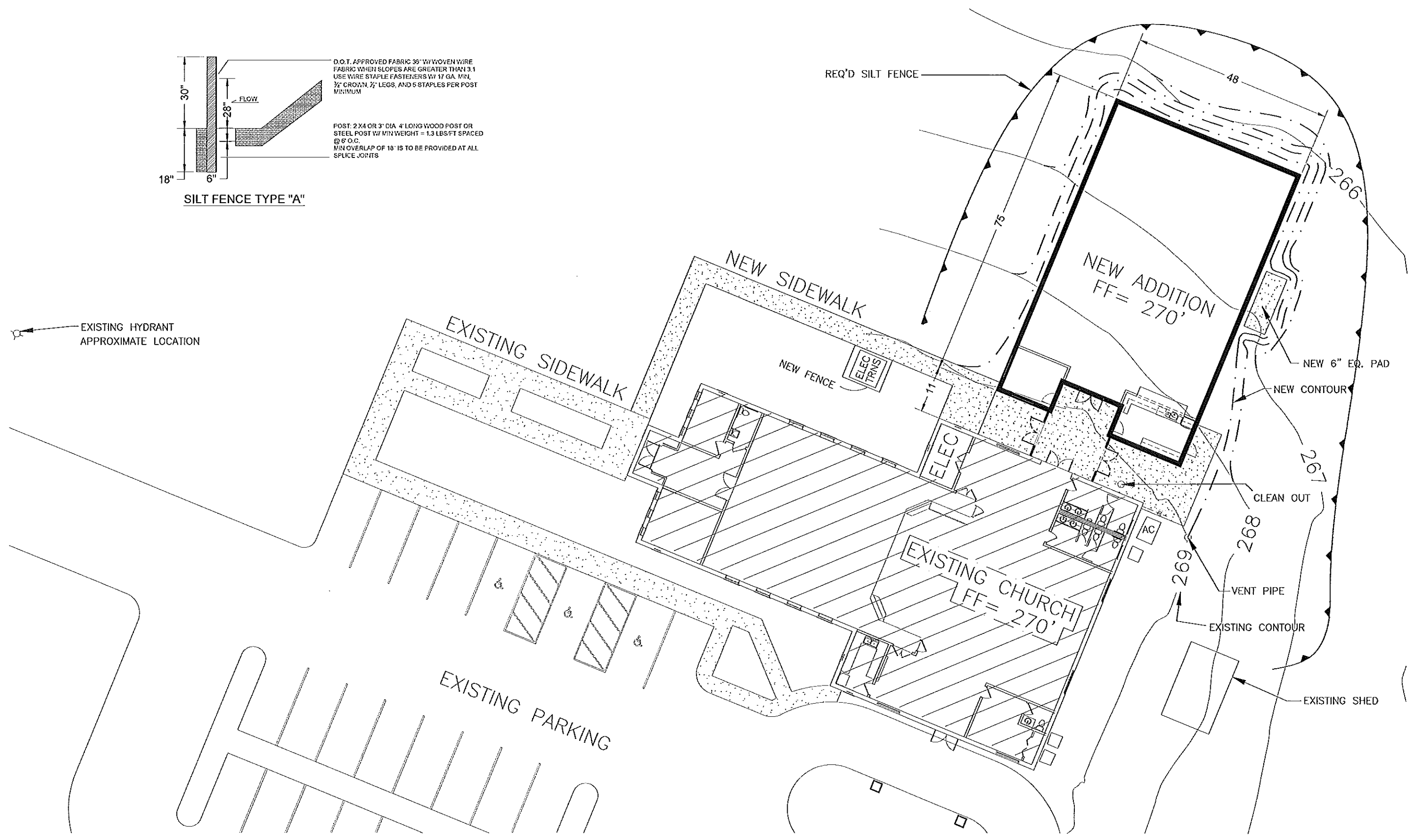


D.O.T. APPROVED FABRIC 29" W/ WOVEN WIRE FABRIC WHEN SLOPES ARE GREATER THAN 3:1 USE WIRE STAPLE FASTENERS W/ 1/4 GA. MIN. 1/2" CROWN, 1/2" LEGS, AND 6 STAPLES PER POST MINIMUM

POST: 2 X4 OR 3" DIA. 4' LONG WOOD POST OR STEEL POST W/ MIN WEIGHT = 1.3 LBS./FT SPACED @ 6' O.C. MIN OVERLAP OF 18" IS TO BE PROVIDED AT ALL SPLICE JOINTS

SILT FENCE TYPE "A"

EXISTING HYDRANT APPROXIMATE LOCATION



1 SITE PLAN LAYOUT
Scale: 1:10



JLB

BONDURANT ARCHITECTURE PLLC
1233 WOODBERRY DRIVE
MADISON, MS 39110 (601) 540-7420
John Bondurant, AIA

FIMC MADISON ADDITION
1556 HWY 51 NORTH
MADISON, MS -39110

DATE	REVISION
8.13.2015	ISSUE APPROXIMATE HYDRANT LOCATION

DRAWN BY JTB
CHECKED BY JTB
REVIEWED



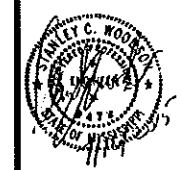
DATE	REVISION
6.29.2015	

DRAWING NUMBER

A-0

DATE	REVISION

DRAWN BY: JTB
 CHECKED BY: JTB
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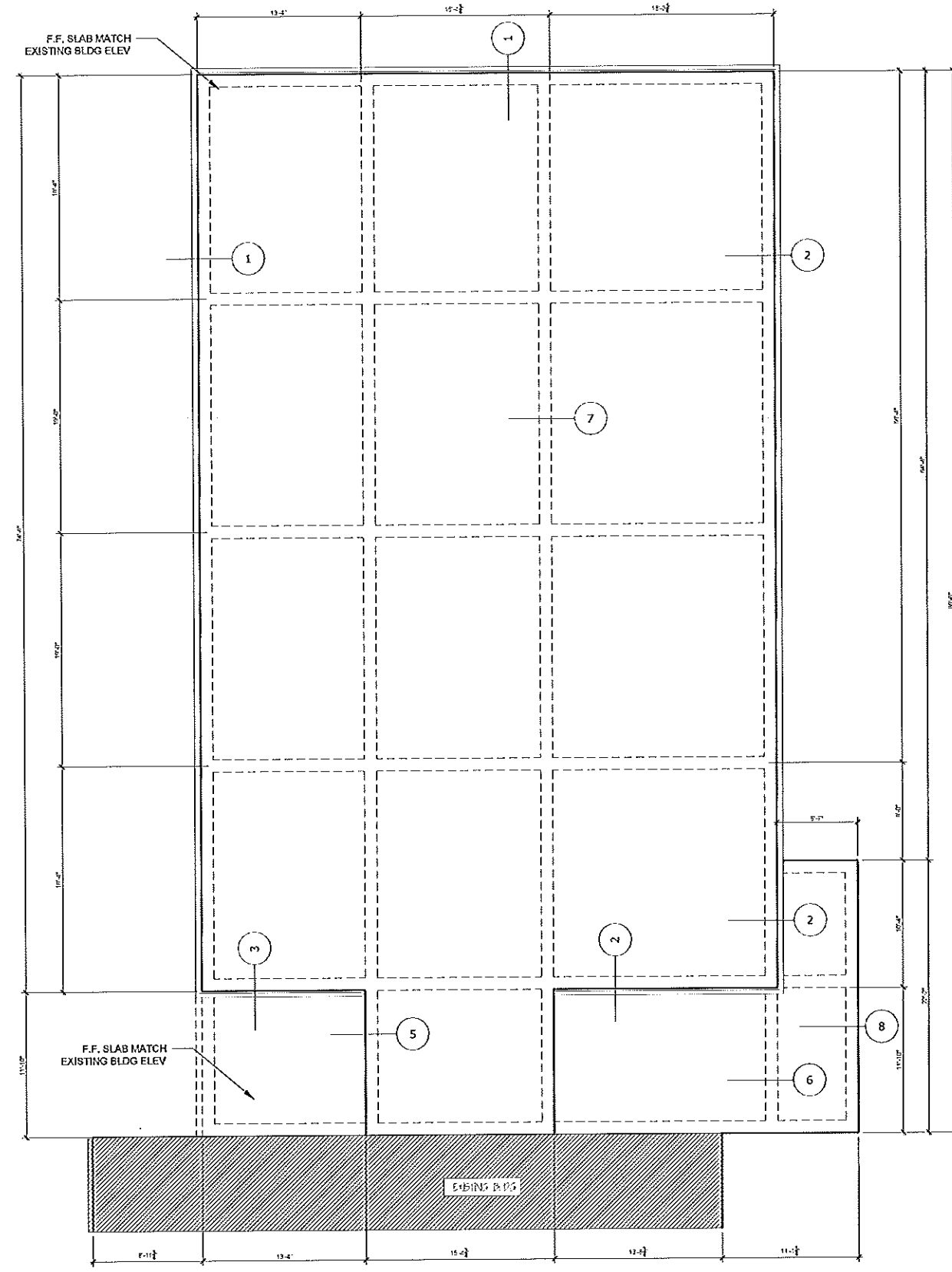


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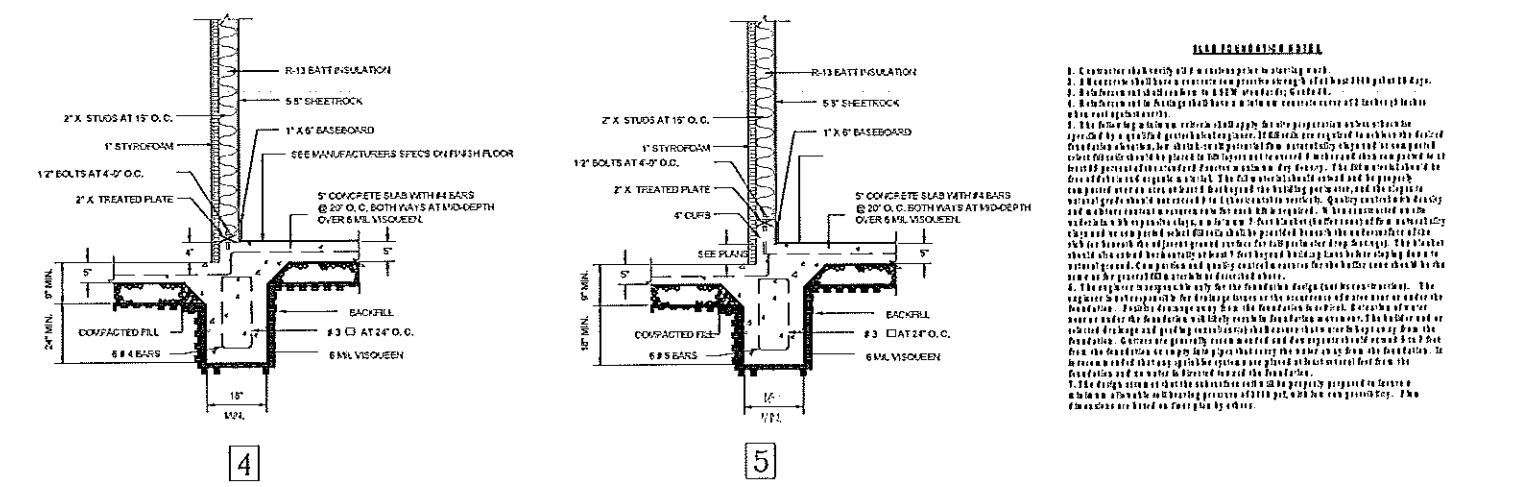
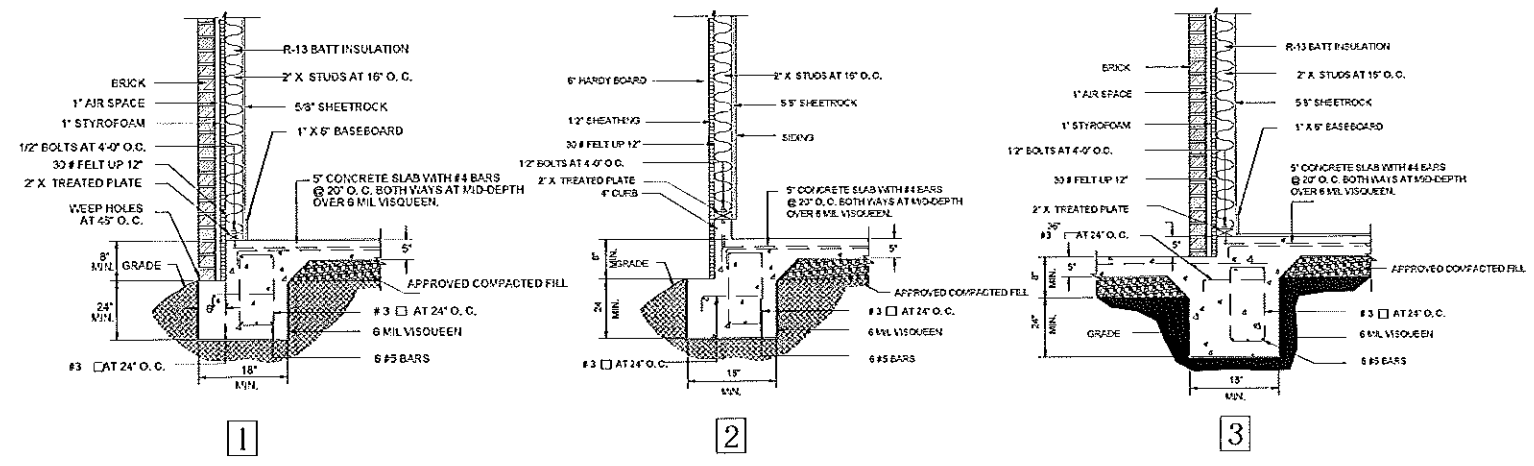
DATE	REVISION
6.25.2015	

DRAWING NUMBER

S-1

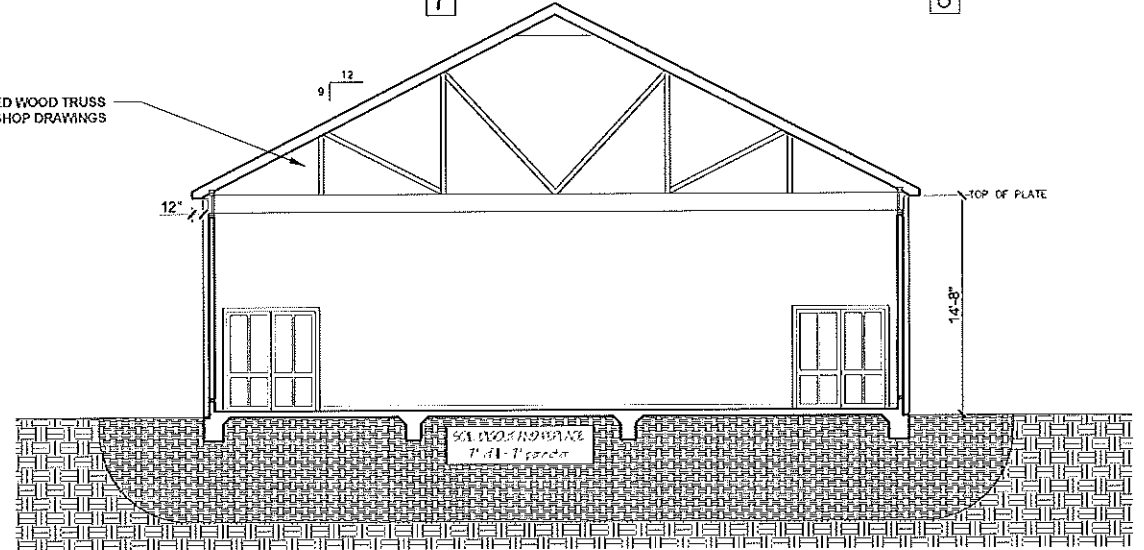
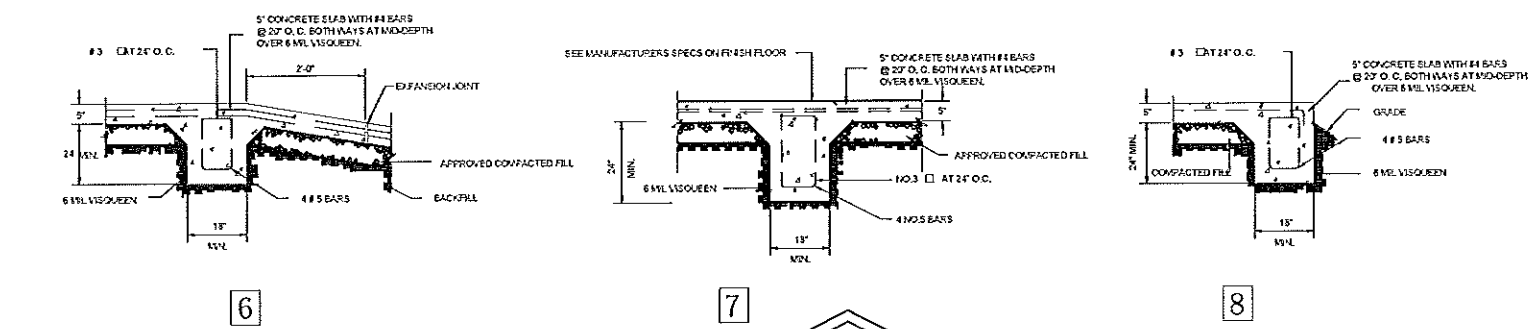


A FOUNDATION PLAN
Scale: 3/16"=1'-0"



FOUNDATION NOTES

1. Concrete shall be placed in accordance with the following:
2. Maximum slump shall be 8 inches for all concrete.
3. All concrete shall be placed in accordance with the following:
4. The contractor shall be responsible for the design and construction of the foundation.
5. The contractor shall be responsible for the design and construction of the foundation.
6. The contractor shall be responsible for the design and construction of the foundation.
7. The contractor shall be responsible for the design and construction of the foundation.
8. The contractor shall be responsible for the design and construction of the foundation.



PLUMBING LEGEND

MARK	DESCRIPTION
-----	SANITARY SOL/WASTE
-----	PLUMBING VENT
-----	DOMESTIC COLD WATER
-----	DOMESTIC HOT WATER
⊘	SHUTOFF VALVE
---DSI	DEEP SEAL TRAP
⊕	CONNECT TO EXISTING

PLUMBING ABBREVIATIONS

ABBREVIATION	DESCRIPTION
DC#	DOMESTIC COLD WATER
DH#	DOMESTIC HOT WATER
SS	SANITARY SEWER PIPING
SV	SANITARY VENT
GV	GATE VALVE

GENERAL PLUMBING NOTES:

- THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT THE SPECIFIED PLUMBING SYSTEM BE PROVIDED COMPLETE WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS AND COMPLETELY COORDINATED WITH ALL OTHER CRAFTS AND DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE IN STRICT CONFORMANCE. ANY ITEMS AND LABOR CODES, STANDARDS AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED COMPLETE AND WITHOUT ADDITIONS TO THE CONTRACT.
- PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING EQUIPMENT, FITTINGS, ETC. INSTALLATIONS AND CONNECTIONS TO PLUMBING EQUIPMENT TO PROVIDE SUITABLE, NEAT INSTALLATION THAT MAINTAINS ACCESS TO EQUIPMENT, CONNECTIONS, ETC. ROUTE ALL SANITARY, VENT, DOMESTIC WATER AND DRAIN PIPING NEATLY AWAY FROM EQUIPMENT ACCESS PANELS, ETC.
- NEATLY INSTALL PIPING HIGH HORIZONTALLY NEAR ROOF AND VERTICALLY CONCEALED IN WALLS. PIPING TO BE ROUTED CONCEALED IN FINISHED SPACES. PIPING ROUTED IN SPACES WITHOUT CEILING SHALL BE ROUTED PERPENDICULAR OR PARALLEL TO BUILDING STRUCTURE, COORDINATED WITH PROFESSIONAL.
- EACH PLUMBING FIXTURE SHALL BE PROVIDED WITH SERVICE VALVES.
- ALL ROUGH-INS TO BE MADE IN COMPLIANCE WITH ALL LOCAL CODES.
- THIS DRAWING SHOWS APPROXIMATE LOCATIONS AND PLUMBING REQUIREMENTS. COORDINATE WITH HOTEL & RESTAURANT SUPPLY AND DESIGN ALL EQUIPMENT LOCATIONS AND REQUIREMENTS BEFORE INSTALLATION.
- PLUMBING CONTRACTOR IS RESPONSIBLE FOR MOUNTING ALL FAUCETS, PPE-PSE UNITS, VACUUM BREAKERS, & LEVER WASTE PROVIDED. ALL GAS LINES, ELBOWS, SHUT-OFF VALVES, PRESSURE REDUCERS, WATER SUPPLY LINES, DRAIN LINES, "P" TRAPS, FLOOR SINK, AND OTHER ROCKET DRAINS REQUIRED TO HOOK UP THE FOOD SERVICE EQUIPMENT SHALL BE PROVIDED AND INSTALLED BY THE PLUMBING CONTRACTOR.
- IF FOR ANY REASON ROUGH-IN LOCATIONS ARE CHANGED, MUST BE NOTIFIED IN WRITING SO THAT THE CHANGES CAN BE MADE TO THE NECESSARY DOCUMENTS AND DRAWINGS AS REQUIRED.

PLUMBING SPECIFICATIONS

COMMON WORK RESULTS FOR PLUMBING

- GENERAL
 - PROVIDE A MINIMUM OF TWO (2) SETS OF OPERATION AND MAINTENANCE MANUALS, OPERATING INSTRUCTIONS AND TRAINING FOR THE OWNER AS REQUIRED FOR THIS PROJECT. OAM MANUALS SHALL BE PROPERLY LABELED AS TO CONTRACTOR, PROJECT, SECTION, ITEM, AND MANUFACTURER'S NAME, ALONG WITH CATALOG NUMBERS, FEATURES AND DIMENSIONS CLEARLY INDICATED.
 - SUBSTITUTIONS OF EQUIPMENT OTHER THAN THE TYPES AND MODELS SPECIFIED IN THE BASE DESIGN SHALL BE DONE ONLY BY WRITTEN APPROVAL, MINIMUM 10-DAYS IN ADVANCE BEFORE BID, FROM THE ENGINEER.
 - ALL MATERIALS USED AND/OR INSTALLED ON THIS PROJECT SHALL BE NEW, PREVIOUSLY UNUSED, FREE OF DEFECTS, UL LISTED OR APPLICABLE AGENCY RATED AND APPROVED FOR THE PURPOSE INTENDED, AND INSTALLED IN COMPLIANCE WITH STATE AND LOCAL CODES AND IN ACCORDANCE WITH THE MANUFACTURER'S MOST RECENTLY PUBLISHED INSTALLATION INSTRUCTIONS, IN A NEAT, PROFESSIONAL MANNER BY SKILLED TRADESMAN IN ACCORDANCE WITH RECOGNIZED STANDARD INDUSTRY PRACTICE.
 - PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES, SERVICE CHARGES AND INSPECTION FEES, AND COORDINATE ALL WORK WITH LOCAL UTILITIES AND AUTHORITIES HAVING JURISDICTION. GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, CODES, ORDINANCES, RULES, AND REGULATIONS BEARING ON THE CONDUCT AND NATURE OF THE WORK AS DRAWN AND SPECIFIED. GIVE T timely notice when the work is ready for inspection and fix a reasonable date for such inspection. IF ANY WORK SHOULD BE COVERED UP WITHOUT APPROVAL OR CONSENT OF APPROVING AGENCY, IT SHALL BE UNCOVERED FOR EXAMINATION UPON REQUEST AT THIS CONTRACTOR'S EXPENSE.
 - PROVIDE ALL WORK AND MATERIALS AS REQUIRED HEREIN AND ON THE DRAWINGS IN FULL ACCORDANCE WITH ALL FEDERAL, STATE, COUNTY AND LOCAL CODES, ORDINANCES, RULES AND/OR REGULATIONS HAVING JURISDICTION OVER THIS WORK. THIS SHALL NOT PERMIT A LOWER GRADE OF CONSTRUCTION WHERE THE DRAWINGS OR SPECIFICATIONS CALL FOR WORKMANSHIP OR MATERIALS IN EXCESS OF CODE REQUIREMENTS.
 - RESOLUTION OF A CONFLICT OR INTERPRETATION OF CODES AND STANDARDS SHALL BE BY THE GOVERNING AUTHORITY.
 - INFORMATION INDICATED ON THE DRAWINGS OR CONTAINED HEREIN REGARDING UTILITY SERVICE PRESSURE, LOCATIONS, INVERT ELEVATIONS, AND MATERIALS, HAS BEEN OBTAINED FROM A REPRESENTATIVE OF THE UTILITY. VERIFY SUCH INFORMATION PRIOR TO THE INSTALLATION OF ANY EQUIPMENT OR COMPONENTS ASSOCIATED WITH UTILITY CONNECTIONS.
 - ALL WORK, EQUIPMENT AND MATERIALS USED SHALL CONFORM TO THE MOST RECENTLY ADOPTED CODES AND STANDARDS PUBLISHED BY:
 - AMERICAN NATIONAL STANDARDS INSTITUTE
 - AMERICAN GAS ASSOCIATION
 - AMERICAN SOCIETY OF MECHANICAL ENGINEERS
 - AMERICAN SOCIETY FOR TESTING MATERIALS
 - DEPARTMENT OF HEALTH
 - NATIONAL ELECTRICAL CODE
 - NATIONAL FIRE PROTECTION ASSOCIATION
 - FEDERAL, STATE, COUNTY AND LOCAL CODES
 - CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL OF THE EXISTING CONDITIONS AND LIMITATIONS SURROUNDING THE WORK.
 - EXAMINE AREAS, SURFACES, AND CONDITIONS UNDER WHICH MECHANICAL EQUIPMENT AND MATERIAL ARE TO BE INSTALLED. DO NOT PROCEED WITH THE WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO THE INSTALLER.
 - DRAWINGS ARE SYMBOLIC AND DIAGNOSTIC AND INTEND TO SHOW ONLY THE GENERAL SCHEME, EQUIPMENT INVOLVED, AND APPROXIMATE LOCATIONS OF MATERIALS AND EQUIPMENT UNLESS SPECIFICALLY DIMENSIONED. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONSTRUCTION WILL PERMIT. COORDINATE THE WORK WITH EXISTING CONDITIONS AND OTHER TRADES TO AVOID INTERFERENCE.
 - BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED. PROVIDE ALL FITTINGS, TRAPS, VALVES, AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.
 - OBTAIN DIMENSIONS FROM THE ARCHITECTURAL DRAWINGS WHEREVER POSSIBLE INSTEAD OF SCALING THE MECHANICAL DRAWINGS. DIMENSIONS OF WORK AS INDICATED ON THE DRAWINGS ARE NOT GUARANTEED TO BE AS-BUILT DIMENSIONS. PROVIDE ADEQUATE SPACE FOR OPERATION AND MAINTENANCE OF EQUIPMENT.
 - MATERIALS AND EQUIPMENT SELECTED FOR USE ON THIS PROJECT MUST MEET THE DELIVERY REQUIREMENTS THAT WILL ALLOW INSTALLATION WITHIN THE PROJECT SCHEDULE.
 - PROVIDE PIPE HANGERS AND EQUIPMENT SUPPORTS AS REQUIRED FOR THE SPECIFIC APPLICATION TO ENSURE THAT MECHANICAL SYSTEMS EQUIPMENT, PIPING AND ACCESSORIES ARE PROPERLY SUPPORTED. PIPE HANGERS SHALL BE UL LISTED AND FM APPROVED, COMPLETE WITH NUTS, BEAM CLAMPS, BOLTS, CLIPS OR PINS, AND INSTALLED IN COMPLIANCE WITH CODE REQUIREMENTS AND STANDARD RECOGNIZED INDUSTRY PRACTICE. MECHANICAL EQUIPMENT STANES SHALL BE SPECIFICALLY DESIGNED AND FABRICATED FOR THE EQUIPMENT SERVED. PROVIDE ADEQUATE SUPPORT AND VIBRATION ISOLATION FROM ALL MECHANICAL EQUIPMENT SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS. PIPE HANGERS SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH STATE PLUMBING CODE REQUIREMENTS AND STANDARD RECOGNIZED INDUSTRY PRACTICE.
 - PROVIDE EQUIPMENT AND PIPING NAME PLATES, LABELS, VALVE TAGS, AND OTHER PERMANENT IDENTIFICATION FOR ALL MECHANICAL EQUIPMENT AND PIPING SYSTEMS INSTALLED AS PART OF THIS DIVISION. INCLUDE ON IDENTIFICATION MANUFACTURER'S NAME, MODEL, SERIAL NUMBER AND ADDRESS. PIPE MARKERS SHALL HAVE LETTERS WITH A MINIMUM 1-INCH HEIGHT.
 - PROVIDE GENERAL DAILY CLEANUP OF WASTE, DEBRIS AND RUBBISH IN THE WORK AREA, AND DISPOSE OF ALL UNUSED MATERIALS AND DEBRIS IN A PROPER MANNER, LEAVING THE PROJECT SITE AND ALL EQUIPMENT IN A CLEAN AND DUST FREE CONDITION.
 - CORRELATE THE FINISHING OF MECHANICAL WORK SO THAT ALL PARTS OF THESE SYSTEMS ARE BE ADJUSTED, CORRELATED, LUBRICATED, CLEANED, AND PLACED INTO PROPER WORKING ORDER.
 - AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE ALL PLASTER, PAINT, STOKERS, RUST, STAINS, RUBBISH, DIRT AND OTHER FOREIGN MATTER OR DISCOLORATIONS CAUSED BY HIS WORK AND SHALL THOROUGHLY CLEAN ALL MECHANICAL WORK INCLUDING EQUIPMENT, FITTINGS, PIPING, ETC., LEAVING EVERY PART IN A CONDITION ACCEPTABLE TO THE OWNER AND ARCHITECT AND READY FOR USE.
 - MAINTAIN ONE COMPLETE SET OF DRAWINGS ON THE SITE AT ALL TIMES AND MARK ALL FIELD CHANGES AND DEVIATIONS IN RED PENCIL. "RECORD" DOCUMENTS SHALL BE PROVIDED BY THE CONTRACTOR IF INSTALLATION DEVIATES FROM THE ORIGINAL LAYOUT OF EQUIPMENT.

GENERAL DUTY VALVES FOR PLUMBING PIPING

- PROVIDE ALL VALVES INDICATED ON THE DRAWINGS, WHERE REQUIRED BY CODE AND WHERE NECESSARY FOR PROPER AND EFFICIENT ISOLATION OF PIPING SYSTEMS. PROVIDE SHUT-OFF VALVES FOR ISOLATION OF ALL EQUIPMENT ITEMS ON BOTH THE INLET AND OUTLET. PROVIDE VALVES AT LOCATIONS REQUIRED FOR PROPER SERVICE AND DRAINAGE OF SYSTEMS. ALL VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. ALL VALVES OF THE SAME TYPE SHALL BE BY THE SAME MANUFACTURER. EACH VALVE SHALL BE STAMPED OR INSCRIBED WITH THE MANUFACTURER'S NAME AND THE RATED WORKING PRESSURE. VALVES SHALL BE BALL TYPE UNLESS INDICATED OTHERWISE.
 - ACCEPTABLE MANUFACTURERS FOR BALL VALVES INCLUDES APOLLO, NIBCO, WAITS AND WALKERLEE.
 - BALL VALVES SHALL HAVE STANDARD FORT, BRONZE BODY, CHROMIUM PLATED BALL, REINFORCED NYLON SEATS, BLOWOUT PROOF STEM, THREADED OR SOLDED ENDS, RATED FOR 150 PSI WOG. ONLY NON-FERROUS MATERIALS SHALL BE INSTALLED.

PLUMBING INSULATION

- GENERAL
 - ALL INSULATION SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84, NFPA 225 AND UL/723 NOT EXCEEDING FLAME SPREAD 25 AND SMOKE DEVELOPED 50.
- PLUMBING PIPING
 - DOMESTIC COLD WATER AND HOT WATER PIPING SHALL HAVE 1-INCH THICK FIBERGLASS PIPE INSULATION WITH AN AVERAGE THERMAL CONDUCTIVITY NOT EXCEEDING 0.23 BTU-IN/ SQFT-DEGREE F-HR. AT A MEAN TEMPERATURE OF 75 DEGREES F. COVER PIPING WITH PREVULCANIZED FIBERGLASS INSULATION, HAVING AN ALL-PURPOSE VAPOR BARRIER JACKET, COVER FITTINGS, VALVES AND FLANGES WITH PERFORMED RIGID SECTIONAL FIBERGLASS INSULATION. FILL JOINTS WITH INSULATING CEMENT AND COVER INSULATION WITH 1/8 INCH THICK LAYER OF FINISHING CEMENT AND VAPOR BARRIER MASTIC. VALVES AND FITTINGS 2" & 1/8 INCH SIZE AND SMALLER MAY BE COVERED WITH INSULATING CEMENT BUILT UP IN 1/2 INCH LAYERS TO THICKNESS OF INSULATION ON PIPING AND FINISHED WITH FINISHING CEMENT AND MASTIC. AT CONTRACTOR'S OPTION, INSTALL PVC COVERS, EQUAL TO 25/50 TEST, OVER INSULATED FIBERGLASS INSULATION FOR COLD PIPING. PROVIDE VAPOR BARRIER PROTECTION FOR ALL INSULATION. OWNERS CORNING AND KNAUF ARE APPROVED MANUFACTURERS.
 - PROVIDE EQUIPMENT AND PIPING NAME PLATES, LABELS, VALVE TAGS, AND OTHER PERMANENT IDENTIFICATION FOR ALL MECHANICAL EQUIPMENT AND PIPING SYSTEMS INSTALLED AS PART OF THIS DIVISION. INCLUDE ON IDENTIFICATION MANUFACTURER'S NAME, MODEL, SERIAL NUMBER AND ADDRESS. PIPE MARKERS SHALL HAVE LETTERS WITH A MINIMUM 1-INCH HEIGHT.
 - PROVIDE GENERAL DAILY CLEANUP OF WASTE, DEBRIS AND RUBBISH IN THE WORK AREA, AND DISPOSE OF ALL UNUSED MATERIALS AND DEBRIS IN A PROPER MANNER, LEAVING THE PROJECT SITE AND ALL EQUIPMENT IN A CLEAN AND DUST FREE CONDITION.
 - CORRELATE THE FINISHING OF MECHANICAL WORK SO THAT ALL PARTS OF THESE SYSTEMS ARE BE ADJUSTED, CORRELATED, LUBRICATED, CLEANED, AND PLACED INTO PROPER WORKING ORDER.
 - AT THE COMPLETION OF THE WORK, CONTRACTOR SHALL REMOVE ALL PLASTER, PAINT, STOKERS, RUST, STAINS, RUBBISH, DIRT AND OTHER FOREIGN MATTER OR DISCOLORATIONS CAUSED BY HIS WORK AND SHALL THOROUGHLY CLEAN ALL MECHANICAL WORK INCLUDING EQUIPMENT, FITTINGS, PIPING, ETC., LEAVING EVERY PART IN A CONDITION ACCEPTABLE TO THE OWNER AND ARCHITECT AND READY FOR USE.
 - MAINTAIN ONE COMPLETE SET OF DRAWINGS ON THE SITE AT ALL TIMES AND MARK ALL FIELD CHANGES AND DEVIATIONS IN RED PENCIL. "RECORD" DOCUMENTS SHALL BE PROVIDED BY THE CONTRACTOR IF INSTALLATION DEVIATES FROM THE ORIGINAL LAYOUT OF EQUIPMENT.

PLUMBING FIXTURES AND TRIM

- GENERAL
 - PROVIDE COMPLETE PLUMBING SYSTEMS IN ACCORDANCE WITH THE REQUIREMENTS OF STATE AND LOCAL CODES, AUTHORITIES HAVING JURISDICTION AND THE DEPARTMENT OF HEALTH.
 - PROVIDE SHOCK ABSORBERS AS REQUIRED TO PREVENT WATER HAMMER WITHIN THE DOMESTIC WATER SYSTEMS.
 - PROVIDE VACUUM BREAKERS AND BACKFLOW PREVENTION WHERE REQUIRED BY AND IN COMPLIANCE WITH CODE REQUIREMENTS.
 - PROVIDE PLUMBING ROUGH-IN AND MAKE CONNECTIONS TO ALL EQUIPMENT REQUIRING PLUMBING SERVICES WHETHER OR NOT SUCH EQUIPMENT IS PROVIDED UNDER THIS DIVISION.
 - PROVIDE ELECTRIC FITTINGS AT ALL CONNECTIONS OF COPPER AND GALVANIZED STEEL PIPING AND STEEL EQUIPMENT.
 - PROVIDE PUMPED CIRCULATING HOT WATER LINES TO ALL FIXTURES REQUIRING HOT WATER SERVICE.
 - PROVIDE CLEANOUTS FOR SANITARY DRAINAGE SYSTEMS IN COMPLIANCE WITH CODE REQUIREMENTS.
- INSTALL PLUMBING FIXTURES AND SYSTEMS INCLUDING EQUIPMENT, PIPING, SPECIALTIES AND ACCESSORIES IN COMPLIANCE WITH THE MISSISSIPPI PLUMBING CODE, OTHER CODES HAVING JURISDICTION, THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS, AND RECOGNIZED STANDARD INDUSTRY PRACTICES.
- ACCEPTABLE MANUFACTURERS
 - STAINLESS STEEL SINKS: ELKAY
- DISINFECT THE DOMESTIC WATER SUPPLY SYSTEM IN COMPLIANCE WITH THE MISSISSIPPI PLUMBING CODE AND THE REQUIREMENTS OF THE MISSISSIPPI DEPARTMENT OF HEALTH. CLEAN ALL PLUMBING FIXTURES TO THE SATISFACTION OF THE OWNER.

DOMESTIC WATER PIPING

- GENERAL
 - ALL PIPING MATERIALS, METHODS OF INSTALLATION AND WORKMANSHIP SHALL BE PROVIDED IN COMPLIANCE WITH THE REQUIREMENTS OF STATE AND LOCAL CODES AND REGULATIONS IN ADDITION TO RECOGNIZED STANDARD INDUSTRY PRACTICES. PIPING SHALL BE CLEANED, SANITIZED, INSPECTED, TESTED AND APPROVED IN COMPLIANCE WITH STATE AND LOCAL CODES AND REGULATIONS. IN GENERAL, PIPING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH STATE PLUMBING CODE REQUIREMENTS, BUT TO NOT LESS THAN 150% OF THE DESIGN OPERATING PRESSURE FOR THE SPECIFIC SYSTEM. EQUIPMENT SHALL BE ISOLATED FROM PIPING SYSTEMS WHEN SYSTEMS ARE TESTED. ANY DEFECTS DETECTED IN PIPING SYSTEMS SHALL BE PROPERLY CORRECTED AND THE SYSTEM RETESTED. SANITIZE DOMESTIC WATER PIPING IN ACCORDANCE WITH STATE AND LOCAL CODE REQUIREMENTS PRIOR TO PLACING IT IN SERVICE.
 - WATER SUPPLY SERVICES PIPING INSIDE BUILDING, ABOVE GRADE, PIPE 3" AND SMALLER SHALL BE SEAMLESS TYPE "L" HARD COPPER, ASTM B-88-88 FITTINGS SHALL BE SEAMLESS MESSAGING COPPER BRAZED WITH #55-9 SOLDER AND #59 FLUX. PIPE 4" AND LARGER SHALL BE SCHEDULE 40 GALVANIZED STEEL, ASTM A-53 FITTINGS SHALL BE GALVANIZED SCREWED, AND #16.3. PRESS TYPE FITTINGS ARE NOT PERMITTED WITHOUT EXPRESS WRITTEN PERMISSION FROM THE OWNER.
 - PROVIDE ALL NECESSARY PIPING RELATED SPECIALTIES INCLUDING UNIONS AND FLANGES, ELECTRIC CONNECTIONS, COUPLINGS AND ESCUTCHIONS. ELECTRIC CONNECTIONS SHALL BE PROVIDED WHEREVER COPPER PIPE IS CONNECTED TO STEEL PIPE OR STEEL EQUIPMENT TO PREVENT GALVANIC ACTION AND SUBSEQUENT CORROSION. PIPE ESCUTCHIONS SHALL BE CHROME FINISH AND PROVIDED AT PIPING PENETRATIONS OF WALLS AND FLOORS IN FINISHED SPACES.

SANITARY PIPING

- GENERAL
 - ALL PIPING MATERIALS, METHODS OF INSTALLATION AND WORKMANSHIP SHALL BE PROVIDED IN COMPLIANCE WITH THE REQUIREMENTS OF STATE AND LOCAL CODES AND REGULATIONS IN ADDITION TO RECOGNIZED STANDARD INDUSTRY PRACTICES. PIPING AND FITTINGS EXPOSED TO THE WEATHER SHALL BE PAINTED OR GALVANIZED. PIPING SHALL BE CLEANED, SANITIZED, INSPECTED, TESTED AND APPROVED IN COMPLIANCE WITH STATE AND LOCAL CODES AND REGULATIONS. IN GENERAL, PIPING SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH STATE PLUMBING CODE REQUIREMENTS. EQUIPMENT SHALL BE ISOLATED FROM PIPING SYSTEMS WHEN SYSTEMS ARE TESTED. ANY DEFECTS DETECTED IN PIPING SYSTEMS SHALL BE PROPERLY CORRECTED AND THE SYSTEM RETESTED.
 - SANITARY WASTE AND VENT, INSIDE BUILDING, ABOVE GRADE, SHALL BE CHLORINATED POLYVINYL CHLORIDE (CPVC) COMPOUND SCHEDULE 40 AND SCHEDULE 80 PIPE MANUFACTURED FROM A TYPE IV, GRADE I CPVC COMPOUND WITH A MINIMUM CELL CLASSIFICATION OF 23447 PER ASTM D1724. THE PIPE SHALL BE MANUFACTURED IN STRICT COMPLIANCE TO ASTM F441, CONSISTENTLY MEETING THE QUALITY ASSURANCE TEST REQUIREMENTS OF THIS STANDARD WITH REGARD TO MATERIAL, WORKMANSHIP, BURST PRESSURE, FLATTENING, AND EXTRUSION QUALITY. THE PIPE SHALL BE PRODUCED IN THE USA USING DOMESTIC MATERIALS, BY AN ISO 9001 CERTIFIED MANUFACTURER, AND SHALL BE STORED INDOORS AFTER PRODUCTION, AT THE MANUFACTURING SITE, UNTIL SHIPPED FROM FACTORY. THE PIPE SHALL HAVE A FLAME SPREAD RATING < 25 AND A SMOKE DEVELOPMENT RATING < 50 WHEN TESTED AND LISTED FOR SURFACE BURNING CHARACTERISTICS IN ACCORDANCE WITH CAN/ULC-5102-2-4688 OR EQUIVALENT. PIPING TO BE HARDEL PLASTICS, INC. OR 10-DAY PRIOR APPROVAL FOR SUBSTITUTIONS.
 - PROVIDE ALL NECESSARY PIPING RELATED SPECIALTIES INCLUDING UNIONS AND FLANGES, ELECTRIC CONNECTIONS, COUPLINGS AND ESCUTCHIONS. ELECTRIC CONNECTIONS SHALL BE PROVIDED WHEREVER COPPER PIPE IS CONNECTED TO STEEL PIPE OR STEEL EQUIPMENT TO PREVENT GALVANIC ACTION AND SUBSEQUENT CORROSION. PIPE ESCUTCHIONS SHALL BE CHROME FINISH AND PROVIDED AT PIPING PENETRATIONS OF WALLS AND FLOORS IN FINISHED SPACES.



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Revisions

No.	Description

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
Madison, MS

Project No.: #1505
 Date: 14 JULY 15
 Drawn by: JCG
 Checked: JCG

P0.1



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Revisions

No.	Description

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
 Madison, MS

Project No.: #1506
 Date: 14 JULY 15
 Drawn by: JCG
 Checked: JCG

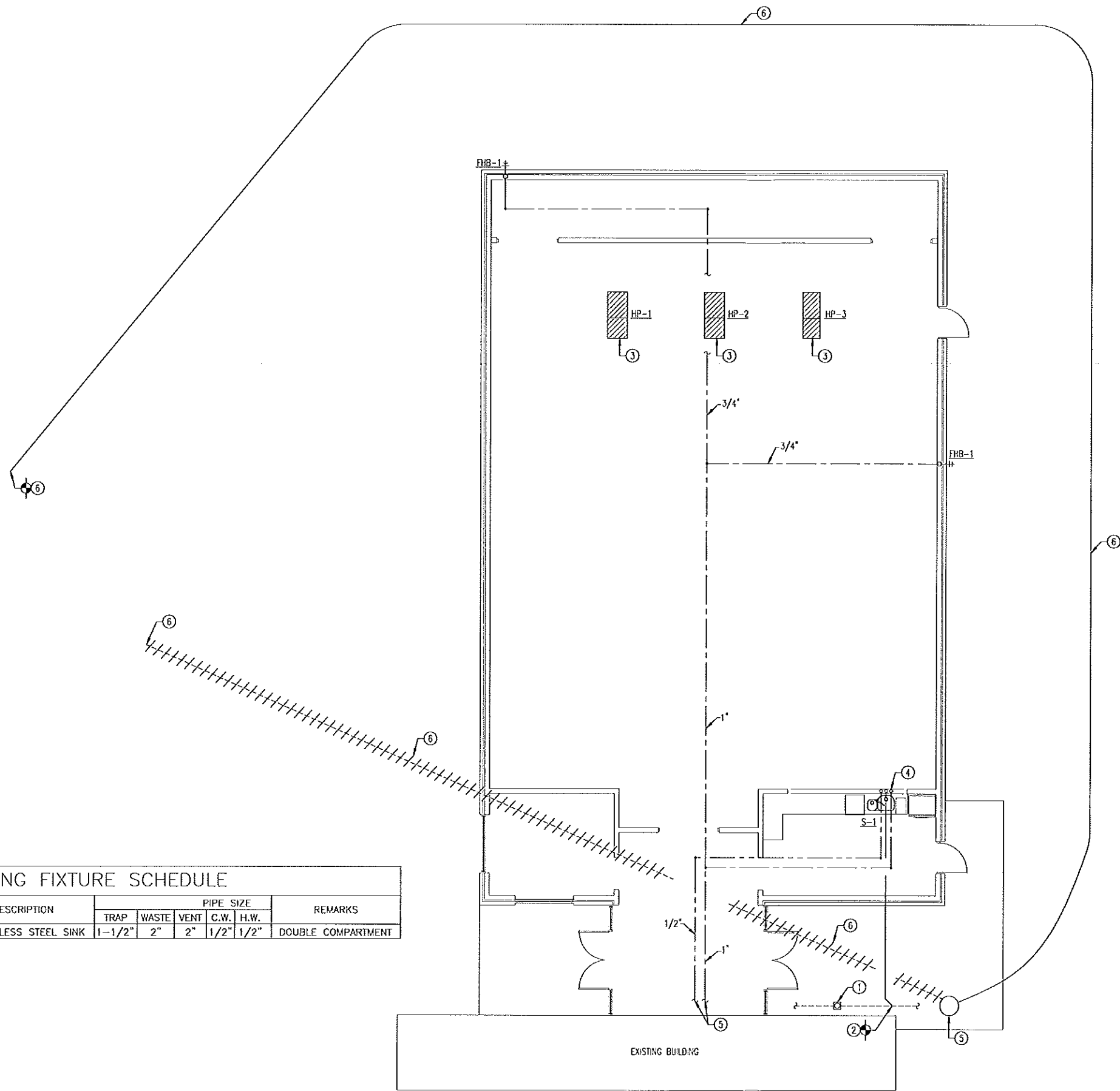
P2.1

GENERAL NOTES:

- (A) DRAWINGS ARE DIAGRAMMATIC. FINAL LAYOUT AND INSTALLATION SHALL BE PER THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE.
- (B) PROVIDE SHOCK ABSORBERS AS REQUIRED ON ALL PIPING TO PREVENT WATER HAMMER WITHIN THE DOMESTIC WATER SYSTEM.

PLAN NOTES:

- (1) EXISTING CLEANOUT TO BE RAISED FOR NEW CONCRETE. PROVIDE AND INSTALL NEW COVER AND CLEANOUT AT REQUIRED. FIELD VERIFY EXACT LOCATION.
- (2) CONNECT NEW 2" SANITARY SEWER TO EXISTING DRAIN LINE AND ROUTE TO EXISTING SUMP PUMP. FIELD VERIFY EXACT LOCATION OF DRAIN LINE. IF EXISTING SEWER LINE CANNOT BE LOCATED, ROUTE NEW SANITARY SEWER TO EXISTING SUMP PUMP AND CONNECT.
- (3) ROUTE CONDENSATE DRAIN TO EXTERIOR WALL AND DROP TO 12" A.F.F. AND TURN ELBOW DOWN. PROVIDE AND INSTALL DEEP SEAL TRAP IN CONDENSATE DRAIN LINE.
- (4) PROVIDE AND INSTALL VALVED CONNECTION FOR ICE MAKER AND DISHWASHER AS REQUIRED.
- (5) ROUTE DOWN AND DRYW PIPING TO EXISTING DOWN AND DRYW PIPING IN EXISTING BUILDING AND CONNECT. FIELD VERIFY EXACT LOCATION OF EXISTING PIPING.
- (6) REMOVE EXISTING PRESSURIZED SEWER LINE AS SHOWN. SEWER LINE TO BE REMOVED TO POINT TO WHERE NEW CONNECTION IS MADE. FIELD VERIFY EXACT POINT TO WHERE NEW SEWER LINE IS TO BE CONNECTED. COORDINATE WITH BEAR CREEK WATER ON EXACT LOCATIONS. NEW PRESSURIZED SEWER LINE TO BE A MINIMUM OF 15' FROM NEW BUILDING. FIELD VERIFY EXACT LOCATION.



PLUMBING FIXTURE SCHEDULE							
MARK	DESCRIPTION	PIPE SIZE				REMARKS	
		TRAP	WASTE	VENT	C.W.	H.W.	
S-1	STAINLESS STEEL SINK	1-1/2"	2"	2"	1/2"	1/2"	DOUBLE COMPARTMENT

1 HVAC FLOOR PLAN
 SCALE: 3/16" = 1'-0"

MECHANICAL LEGEND

MARK	DESCRIPTION
	TYPICAL NEW SUPPLY AIR DIFFUSER (SHADING INDICATES BLANKED OFF SECTION)
	TYPICAL NEW RETURN OR EXHAUST AIR REGISTER
	DIFFUSER TYPE/TAG AND AIRFLOW (CFM)
	TYPICAL ROUND SUPPLY/RETURN AIR DUCTWORK
	TYPICAL ROUND SUPPLY/RETURN AIR DUCTWORK IN SECTION
	TYPICAL RECTANGULAR SUPPLY/RETURN AIR DUCTWORK
	TYPICAL RECTANGULAR SUPPLY AIR DUCTWORK IN SECTION
	TYPICAL RECTANGULAR RETURN AIR DUCTWORK IN SECTION
	TYPICAL NEW MECHANICAL EQUIPMENT WITH TAG
	VOLUME DAMPER

MECHANICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION
CFM	CUBIC FEET PER MINUTE
CONN.	CONNECTION
DEF'L	DEFLECTION
E.A.T.	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ENT.	ENTERING
FLA	FULL LOAD AMPS
HP	HORSEPOWER
KWH	KILOWATT
MAN.F.	MANUFACTURER
MCA	MINIMUM CURVE HEIGHT
OA	OUTSIDE AIR
WS	WET BULB

GENERAL MECHANICAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL SEQUENCE AND COORDINATE HIS WORK WITH SEQUENCE OF THE GENERAL CONTRACTOR AND THE PROGRESSION OF THE OVERALL WORK OF THIS PHASE OF THE PROJECT. THE WORK BELOW FLOOR SHALL BE COORDINATED IN SEQUENCE WITH OTHER WORK WITH STRUCTURE, SLAB, ETC. AND ASSOCIATED SLEEVES THROUGH SAME. THE PIPING TO BE ROUTED WITHIN AND SUSPENDED FROM THE FLOOR STRUCTURE SYSTEM SHALL BE COORDINATED WITH THE PROGRESS OF THE Ongoing WORK IN THAT SAME AREA.
2. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT THE SPECIFIED HVAC SYSTEM BE PROVIDED COMPLETE WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS AND COMPLETELY COORDINATED WITH ALL OTHER CRAFTS AND DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE IN STRICT CONFORMANCE. ANY ITEMS AND LABOR CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE FULFILLED COMPLETE AND WITHOUT ADDITIONS TO THE CONTRACT.
3. FLEXIBLE DUCT RUN OUTS TO SUPPLY AND RETURN AIR DISTRIBUTION DEVICES AND AIR TERMINAL UNITS SHALL BE INSTALLED FREE OF KINKS AND SAGS AND SHALL BE A MAXIMUM LENGTH NOT TO EXCEED FIVE (5) FEET. UTILIZE AN ELASTOMERIC SEALANT ON WALE DUCT AND AIR DISTRIBUTION DEVICE ATTACHMENTS.
4. VERIFY AVAILABLE SPACE ABOVE CEILINGS AND STRUCTURAL RESTRICTIONS PRIOR TO CONSTRUCTING DUCTWORK OR INSTALLING CONCEALED EQUIPMENT. DUCTWORK SIZE MAY BE ALTERED TO CONFORM TO THESE REQUIREMENTS PROVIDING SIMILAR AIR DELIVERY CHARACTERISTICS AS DEFINED AND APPROVED BY PROFESSIONAL. ALL SUPPLY AND RETURN AIR DUCTS THAT ARE SHOWN TO BE ROUTED CONCEALED ABOVE CEILINGS SHALL BE ROUTED TO ADD TO THE BUILDING STRUCTURE AND COORDINATED WITH THE LIGHT FIXTURES, COUPOUT PIPING, ETC. IT IS ESSENTIAL THAT THE CONTRACTOR VERIFY AVAILABLE SPACE AND COORDINATE THE SIZE AND ROUTING OF ALL DUCTWORK. IT IS INTENDED THAT DUCTWORK HAVE THE "RIGHT-OF-WAY" ABOVE MOST OTHER CRAFTS AND INSTALLATIONS.
5. THE LOCATION OF ALL AIR DISTRIBUTION DEVICES TO BE COORDINATED WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. ROUTE AND SUPPORT NEW DUCTWORK CONCEALED ABOVE CEILING AS INDICATED AND COORDINATE LOCATION OF DUCTWORK IN ALL AREAS TO MATCH CEILING GRID/LIGHT FIXTURES TO MAXIMIZE CEILING HEIGHT SCHEDULED ON ARCHITECTURAL PLANS.
6. THESE DRAWINGS INDICATE THE MOST KNOWN REQUIREMENTS FOR DUCT PENETRATIONS OF FIRE, SMOKE, AND FIRE/SMOKE WALLS AND CEILINGS. THIS CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE APPLICABLE CODES PERTAINING TO DUCTWORK PENETRATIONS TO THESE RATED WALLS/CEILINGS AND PROVIDE THE APPROPRIATE U.L. APPROVED DUCT DAMPER AND ACCESS DOOR FOR EACH REQUIRED INSTALLATION. DUCTWORK HAVING A CROSS CROSS-SECTIONAL AREA LESS THAN 100 SQ. INCHES, PASSING THROUGH A ONE-HOUR FIRE WALL/FLOOR, AND EXTENDING 3'-0" BOTH SIDES OF SAME WITH PROTECTIVE METAL DUCT OF A MINIMUM 28 GAUGE, NEED NOT INCLUDE A FIRE DAMPER. LARGER DUCTS AND/OR DUCTS NOT MEETING THIS CRITERIA AND PASSING THROUGH A FIREWALL SHALL INCLUDE A U.L. APPROVED FIRE DAMPER AND ACCESS DOOR. THE CONTRACTOR SHALL REVIEW ARCHITECT'S DRAWINGS AND PROVIDE FIRE AND/OR SMOKE DAMPERS, WITH DUCT ACCESS DOORS, IN ALL RATED WALLS AT APPROPRIATE DUCTWORK PENETRATIONS. SOME OF THESE DAMPERS MAY NOT BE SPECIFICALLY INDICATED ON MECHANICAL DRAWINGS.
7. ALL BRANCH DUCT OUTLETS TO SUPPLY AND RETURN AIR DISTRIBUTION GRILLES, REGISTERS, AND DIFFUSERS SHALL INCLUDE VOLUME DAMPER AND TYPE BRANCH DUCT ADAPTER/OUTLET INDICATED. ROUND TAPS TO RECTANGULAR TRUNK DUCTS SHALL BE BELLOWMOUTH OR LATERAL TYPE. NO DOWNTEE FIELD CONNECTIONS ALLOWED.
8. DUCT SIZES INDICATED ARE ACTUAL INSIDE NET DIMENSIONS. ALL RECTANGULAR SUPPLY, RETURN, AND OUTSIDE AIR DUCT SIZES ARE INSIDE CLEAR DIMENSIONS INSIDE ACOUSTICAL LINER, WHERE APPLICABLE.
9. MECHANICAL CONTRACTOR SHALL COORDINATE HVAC UNIT, DUCTWORK, ETC. INSTALLATIONS AND CONNECTIONS TO MECHANICAL EQUIPMENT TO PROVIDE SUITABLE, NEAT INSTALLATION THAT MAXIMIZES ACCESS TO EQUIPMENT, CONNECTIONS, AIR FILTERS, ETC. ROUTE ALL HVAC, REFRIGERANT AND CONDENSATE DRAIN PIPING NEARLY AWAY FROM EQUIPMENT ACCESS PANELS, ETC.
10. GRILLE PLAYOUTS TO BE THE SAME SIZE AS NECK OF GRILLE. PROVIDE AND INSTALL VOLUME DAMPERS AS SHOWN ON PLANS.
11. NEATLY INSTALL PIPING HIGH HORIZONTALLY NEAR ROOF AND VERTICALLY CONCEALED IN WALLS. PIPING TO BE ROUTED CONCEALED IN FINISHED SPACES. PIPING ROUTED IN SPACES WITHOUT CEILING SHALL BE ROUTED PERPENDICULAR OR PARALLEL TO BUILDING STRUCTURE, COORDINATED WITH PROFESSIONAL.

MECHANICAL SPECIFICATIONS

OWNER OPERATING & MAINTENANCE INSTRUCTIONS

1. IT IS THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO SETUP AND TRAIN THE OWNER/OWNERS PERSONAL IN THE PROPER OPERATION AND MAINTENANCE OF ALL MECHANICAL EQUIPMENT PROVIDED AND/OR INSTALLED WITH THIS PROJECT. THE SAFE OPERATION OF ALL HVAC SYSTEMS SHALL BE ADEQUATELY COVERED TO PERTINENT OWNER PERSONNEL.
2. SUBMIT TWO (2) COPIES OF HARDBOUND BROCHURES, INDEXED AND LABELED FOR EACH PIECE OF EQUIPMENT. THE MANUALS SHALL BE TRANSMITTED TO THE OWNER AT THE COMPLETION OF THE PROJECT.
3. INCLUDE IN THESE BROCHURES WRITTEN SUBMITTAL DATA, MANUFACTURER'S OPERATION AND MAINTENANCE PROCEDURES AND RECOMMENDATIONS, SPARE PARTS LISTS AND INFORMATION LISTED HEREIN IS TO BE BOUND IN THE FOLLOWING ORDER:
 1. COVER TO LIST PROJECT NAME, LOCATION AND DATE COMPLETED.
 2. FIRST SHEET TO LIST ARCHITECT, ENGINEER, CONTRACTOR AND SUBCONTRACTORS WITH ADDRESSES FOR EACH.
 3. SECOND SHEET TO LIST TYPE OF EQUIPMENT WITH SEQUENTIAL NUMBER, THE MANUFACTURER, MAKE, MODEL AND SERIAL NUMBER OF THE ACTUAL EQUIPMENT NAMEPLATE DATA, RATED HORSEPOWER, FULL LOAD RATED AMPS, VOLTAGE AND PHASE.
 4. INCLUDE ACTUAL COPY OF APPROVED SUBMITTAL DATA INCLUDING ALL MANUFACTURER'S PUBLISHED INFORMATION ON CAPACITIES, CAPACITY CURVES OR TABLES, ACCESSORY AND CONTROL ITEM LISTS, AND OTHER PERTINENT INFORMATION AS REQUESTED BY ENGINEER. CROSS REFERENCE ALL EQUIPMENT TO CONTRACT DOCUMENTS.
4. SCHEDULES INDICATE BASIS OF DESIGN FOR EACH PIECE OF EQUIPMENT. NO SUBSTITUTIONS ARE ACCEPTED WITHOUT 10-DAY PRIOR APPROVAL FROM THE MECHANICAL ENGINEER.

GRILLES, REGISTERS AND DIFFUSERS

1. MANUFACTURER'S
 - A. PRICE
 - B. TITUS
- 1.1 CEILING MOUNTED SUPPLY AIR DIFFUSERS
 - A. MODEL: SPD
 - B. MATERIAL: STEEL
 - C. FINISH: WHITE POWDER COAT
 - D. FACE SIZE: AS INDICATED ON PLANS
 - E. FACE STYLE: PLANOUE
 - F. MOUNTING: TYPE 31 FOR T-BAR CEILING
- 1.2 CEILING MOUNTED SUPPLY AIR VAV DIFFUSERS
 - A. MODEL: VPD-HC
 - B. MATERIAL: STEEL
 - C. FINISH: WHITE POWDER COAT
 - D. FACE SIZE: AS INDICATED ON PLANS
 - E. FACE STYLE: PLANOUE
 - F. MOUNTING: TYPE 3 FOR T-BAR CEILING
- 1.3 CEILING MOUNTED RETURN AIR GRILLES
 - A. MODEL: BR
 - B. MATERIAL: ALUMINUM
 - C. FINISH: WHITE POWDER COAT
 - D. FACE SIZE: AS INDICATED ON PLANS
 - E. FACE STYLE: EDGEGRATE CORE
 - F. MOUNTING: TYPE TB FOR T-BAR CEILING

DUCTWORK

1. GENERAL
 1. PROVIDE ALL SUPPLY, RETURN, OUTSIDE AIR, EXHAUST AND OTHER DUCTWORK AS INDICATED AND AS REQUIRED FOR THE AC SYSTEM, INCLUDING WANS, BRANCHES, FLOUANS, MIXING BOXES, FITTING, ACCESSORIES AND OTHER RELATED SHEET METAL WORK.
 2. CONSTRUCT ALL RECTANGULAR DUCTWORK WITH APPROVED NEW PRIME G-60 OR BETTER GALVANIZED STEEL SHEET ASTM 533 (170) WITH CHEMICAL TREATMENT OR AS SPECIFIED WITH CAREFUL, NEAT AND ACCURATE WORKMANSHIP AND WITH ALL JOINTS AND SEAMS AIR TIGHT.
 3. PROVIDE U.L. APPROVED FIRE RETARDANT NEOPRENE TYPE FLEXIBLE CONNECTORS PROPERLY CLAMPED TO DUCTWORK AND EQUIPMENT AT EACH DUCTWORK CONNECTION TO EACH PIECE OF EQUIPMENT HAVING ROTATING OR VIBRATING PARTS AND AT OTHER LOCATIONS INDICATED. FLEXIBLE CONNECTORS ON THE OUTSIDE UNIT CONNECTIONS SHALL BE SEALED AIRTIGHT AND INSTALLED TO SHED WATER.
 4. THE RECTANGULAR DUCT SIZES AS INDICATED ON THE DRAWINGS ARE INSIDE DIMENSIONS, OR NET FREE AREA. ALL NECESSARY ALLOWANCES SHOULD BE MADE IN THE SIZES SHOWN ON THE DRAWINGS TO ACCOMMODATE INTERNAL INSULATION OR ACOUSTIC LINING. THE DUCT DIMENSIONS SHOWN ARE INTERNAL MEASUREMENTS AFTER SPECIFIED INTERIOR INSULATION LINER.
 5. ALL DUCTWORK SEAMS, JOINTS AND CONNECTIONS SHALL BE SEALED AIR TIGHT.
2. ROUND DUCTWORK: (LOW PRESSURE)
 1. NON-EXPOSED DUCTWORK SHALL BE CONSTRUCTED WITH SNAWNA MINIMUM PRESSURE CLASSIFICATION OF 1" W.G.. SNAP-LOCK PIPE IS ACCEPTABLE AS LONG AS ALL LONGITUDINAL AND CIRCUMFERENTIAL SEAMS ARE SEALED AND SCREWS ARE UTILIZED EVERY 18" O.C. ALONG LONGITUDINAL SEAMS AND MAXIMUM 6" FROM END CONNECTIONS.
 2. EXPOSED DUCTWORK SHALL BE SINGLE WALL ROUND SPIRAL DUCT AND FITTINGS. DUCT TO BE CONSTRUCTED OF PAINT GRP STEEL FOR FIELD PAINTING. SPIRAL TO BE 1995 SNAWNA 2" W.G..
 3. SHEET METAL GAUGES FOR ROUND DUCTWORK SHALL BE:
 - ROUND DUCTS, DIAMETER 13" AND SMALLER = 26 GAUGE
 - ROUND DUCTS, DIAMETER 14" TO 20" = 24 GAUGE
 4. ALL ELBOWS AND FITTINGS SHALL BE FACTORY-FABRICATED ITEMS BY THE SAME MANUFACTURER AS DUCTWORK. WYE AND LATERALS AT DIFFUSERS TAKE-OFFS SHALL BE FACTORY FABRICATED.
 5. TAPS TO RECTANGULAR DUCTWORK ARE TO BE CONICAL BELLOWMOUTH TYPE AND INCLUDE EXTENSIVELY ADJUSTABLE VOLUME DAMPER. TAPS SHALL INCLUDE NYLON BUSHINGS, 3/8" SQUARE SHAFT, 2" BUILT OUT WITH LOCKING QUADRANT HANDLE. TAPS SHALL BE CONICAL SHAPE EQUAL TO FLEDMASTER CDD-803.
 6. ALL JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED AIRTIGHT. SEALANT SHALL BE VISIBLY SEALED ON THE EXTERIOR OF DUCT, INCLUDING ALL FACTORY FITTINGS, ALL CONNECTIONS, BOTH LONGITUDINAL AND CIRCUMFERENTIAL.

DUCTWORK (CONTINUED)

1. FLEXIBLE AIR DUCT CONNECTORS
 1. GENERALFACTORY FABRICATED, COVERING WITH NFPA 95A FOR CONNECTORS UP TO 5 FEET MAXIMUM EXTENDED LENGTH AND NOT PASSING THROUGH FLOORS OR WALLS OF BUILDINGS. FLEXIBLE DUCTS SHALL NOT PENETRATE ANY FIRE OR SMOKE BARRIERS.
 2. FLEXIBLE DUCT SHALL BE EQUAL TO FLEDMASTER TYPE 1M ACOUSTICAL INSULATED FLEX LINER TO BE A PE (POLYETHYLENE) INNER FILM, MECHANICAL LOCKED WITHOUT ADHESIVES. FLEXIBLE DUCT SHALL HAVE A FIRE RETARDANT REINFORCED VAPOR BARRIER AND A FACTORY WRAPPED FIBERGLASS INSULATION BLANKET.
 3. FLEXIBLE DUCTS SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC., COMPLYING WITH UL 181. FLEXIBLE DUCT SHALL HAVE A WORKING PRESSURE OF 10" W.G. POSITIVE AND 10" W.G. NEGATIVE THRU 12" DIAMETER, 5" NEGATIVE, 14" & 16" DIAMETER, AND 1" W.G. NEGATIVE 18" AND 20" DIAMETER.

SPLIT SYSTEM HEAT PUMP AIR-CONDITIONING SYSTEM

1. MANUFACTURER'S
 - A. YORK
- 1.1 SPLIT SYSTEM HEAT PUMP OUTDOOR UNIT
 - A. PROVIDE WITH R-410A REFRIGERANT.
 - B. CABINET SHALL BE CONSTRUCTED OF G90 GALVANIZED STEEL WITH POWDER COAT FINISH.
 - C. PROVIDE UNIT WITH SINGLE STAGE, RECIPROCATING COMPRESSOR.
 - D. COILS SHALL BE CONSTRUCTED OF COPPER TUBING WITH ALUMINUM FINS.
 - E. COILS SHALL BE PROTECTED FROM DAMAGE BY A SLOTTED, STAMPED COIL GUARD.
 - F. COMPRESSOR SHALL BE PROTECTED INTERNALLY BY HIGH PRESSURE RELIEF VALVE AND TEMPERATURE SENSOR. PROVIDE WITH FACTORY INSTALLED LIQUID LINE FILTER-DRYER FOR ADDITIONAL PROTECTION AGAINST MOISTURE AND DEBRIS.
 - G. PROVIDE WITH ONE-YEAR LIMITED PARTS WARRANTY AND FIVE-YEAR LIMITED COMPRESSOR WARRANTY.
- 1.2 SPLIT SYSTEM INDOOR UNIT WITH ELECTRIC HEAT
 - A. MODULAR VARIABLE SPEED AIR HANDLER
 1. CONSTRUCTED OF PRE-PAINTED STEEL.
 2. DIRECT DRIVE BLOWER WITH VARIABLE SPEED ECM MOTOR.
 3. CABINET SHALL BE INSULATED WITH 1" FIBER GLASS INSULATION (MINIMUM OF R-4.2).
 4. PROVIDE WITH EXTERNAL 2" FILTER PACK.
 5. PROVIDE WITH FIVE YEAR LIMITED PARTS WARRANTY.
 - B. EVAPORATOR COIL
 1. COIL CASING SHALL BE CONSTRUCTED OF PRE-PAINTED STEEL WITH ALL INTERNAL METAL BEING MADE OF G90 GALVANIZED STEEL.
 2. PROVIDE WITH REPLED COPPER TUBES AND ALUMINUM FINS.
 3. CABINET SHALL BE INSULATED WITH 3/4" POL. FACE INSULATION.
 4. PROVIDE WITH FIVE YEAR LIMITED PARTS WARRANTY.
 - C. ELECTRIC HEATER
 1. HEATER ELEMENTS SHALL BE MADE OF NICKEL-CHROMIUM.
 2. PROVIDE WITH FIVE YEAR LIMITED PARTS WARRANTY.
 - D. PROVIDE INDOOR UNIT WITH SINGLE POINT POWER CONNECTION. REFER TO SCHEDULES FOR ELECTRICAL RATINGS.

ELECTRIC UNIT HEATERS

1. MANUFACTURER'S
 - A. MARVEL
 - B. QUARK
- 1.1 CABINET SHALL BE 18 GAUGE WELDED STEEL WITH STAMPED COVERED INLET GRILLE AND FINISHED WITH DURABLE POWDER COATED PAINT. UNIT SHALL INCLUDE CONTROL COMPARTMENT WITH HINGED ACCESS DOOR.
- 1.2 ELEMENTS SHALL BE STEEL TUBES WITH EMBEDDED NICKEL-CHROMIUM RESISTANCE WIRE AND STEEL HELICAL FINS FOR TRANSFER OF HEAT.
- 1.3 THE MOTOR SHALL BE TOTALLY ENCLOSED, WITH VOLTAGE RATING SAME AS HEATER VOLTAGE RATING.
- 1.4 HEATER SHALL BE DESIGNED FOR A SINGLE CIRCUIT WITH ELEMENTS, MOTOR AND CONTROL CIRCUITS WIRED IN ACCORDANCE WITH LATEST NATIONAL ELECTRIC CODE AND UL, INC. STANDARD 2021. ALL THREE-PHASE HEATERS HAVE BALANCED PHASES.
- 1.5 HEATER SHALL BE CONTROLLED WITH UNIT MOUNTED THERMOSTAT.



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Revisions

NO.	DATE	DESCRIPTION

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
 Madison, MS

Project No.: #1506
 Date: 14 JULY 15
 Drawn by: JCG
 Checked: JCG

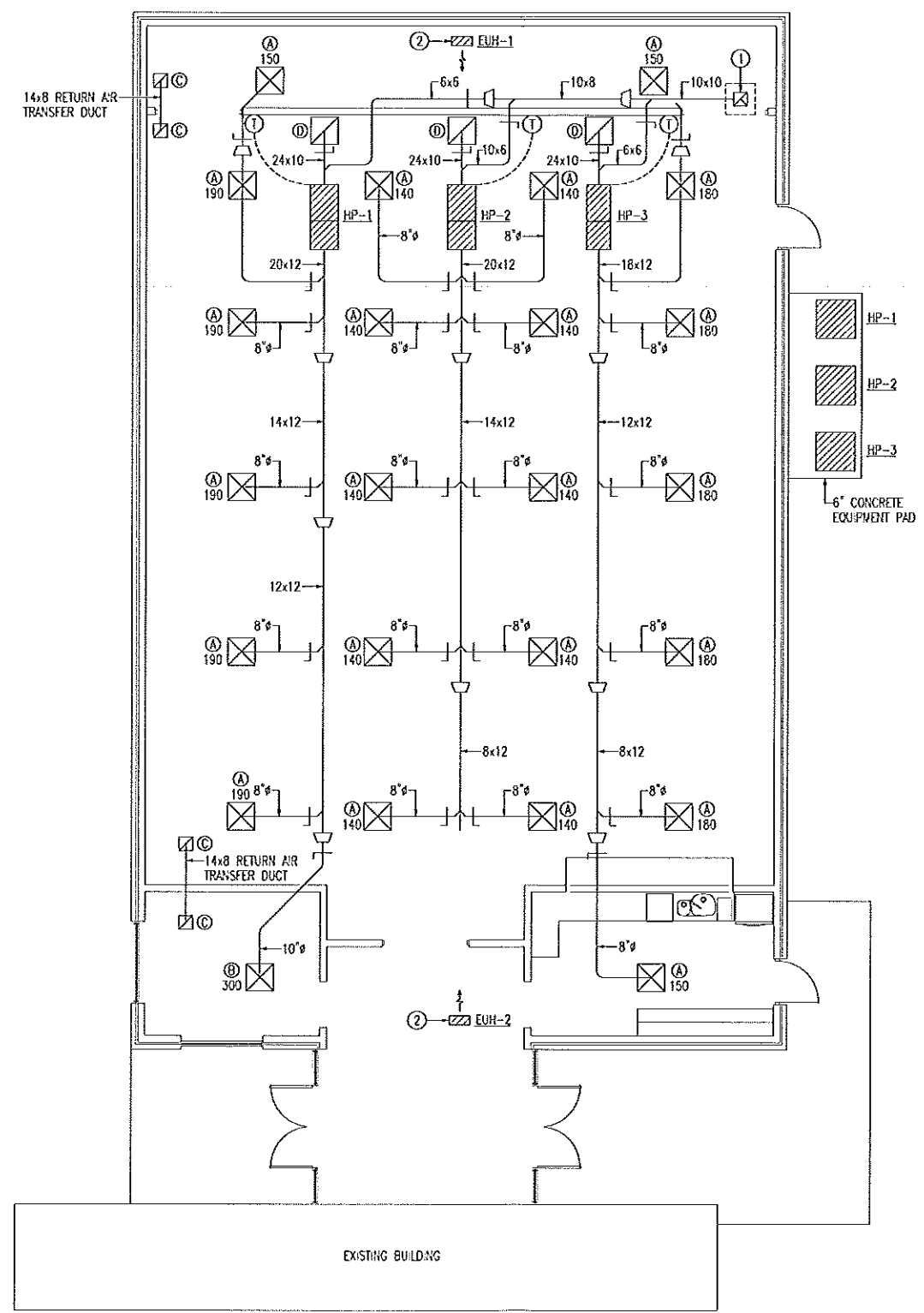
M0.1



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Revisions

No.	Description



GENERAL NOTES:

- (A) SIZE AND ROUTE REFRIGERANT PIPING PER MANUFACTURER RECOMMENDATIONS.
- (B) DRAWINGS ARE DIAGRAMMATIC. FINAL LAYOUT AND INSTALLATION SHALL BE PER THE LATEST EDITION OF THE INTERNATIONAL MECHANICAL CODE.

PLAN NOTES:

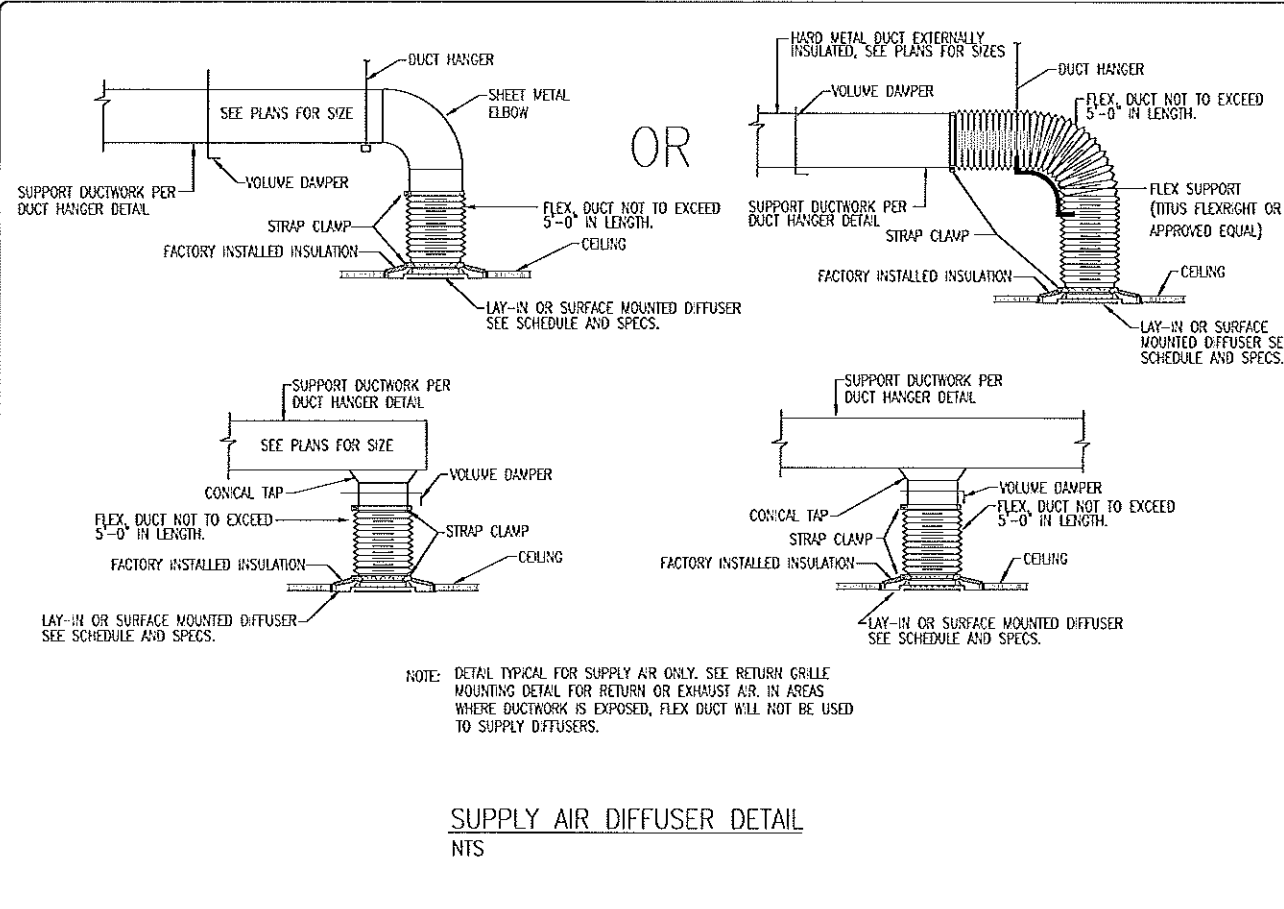
- (1) ROUTE 10x10 OUTSIDE AIR DUCT UP TO INTAKE CAP (12x12 THROAT AREA) AND CONNECT. SEAL CONNECTION AIR TIGHT. INTAKE CAP SHALL BE EQUAL TO GREENHECK MODEL F01.
- (2) MOUNT ELECTRIC UNIT HEATER IN ATTIC SPACE WITH THERMOSTAT FOR FREEZE PROTECTION. REFER TO MANUFACTURER RECOMMENDATIONS FOR MOUNTING HEIGHT ABOVE CEILING.

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
 Madison, MS

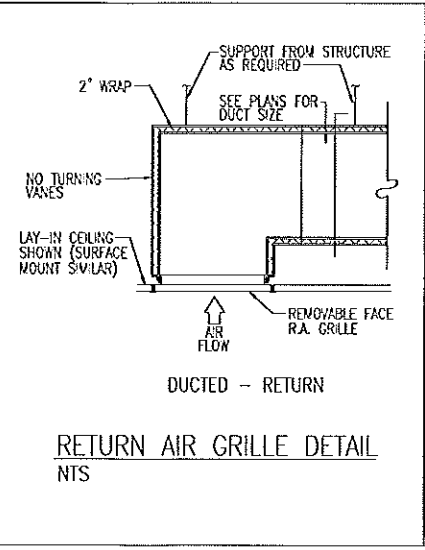
Project No.: #1506
 Date: 14 JULY 15
 Drawn by: JCG
 Checked: JCG

1 HVAC FLOOR PLAN
 SCALE: 3/16" = 1'-0"

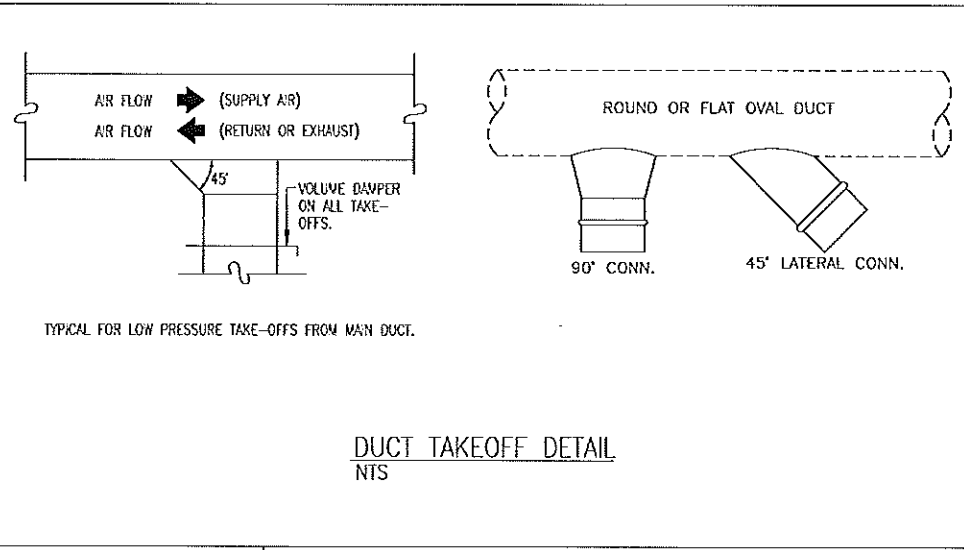
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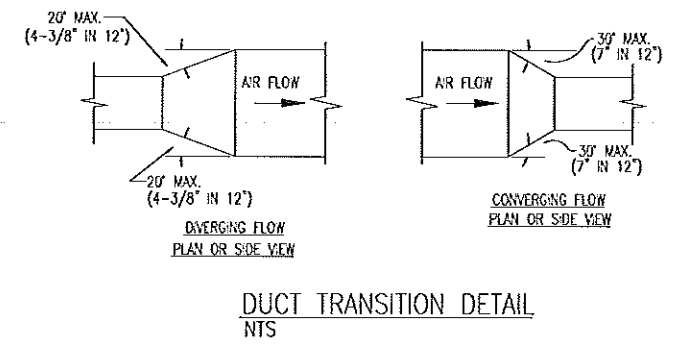
SUPPLY AIR DIFFUSER DETAIL
NTS



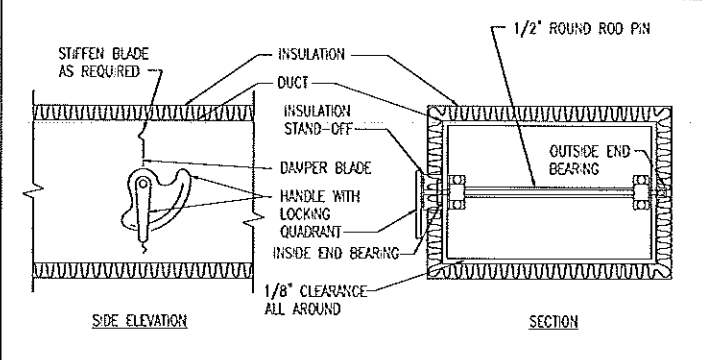
RETURN AIR GRILLE DETAIL
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DUCT TAKEOFF DETAIL
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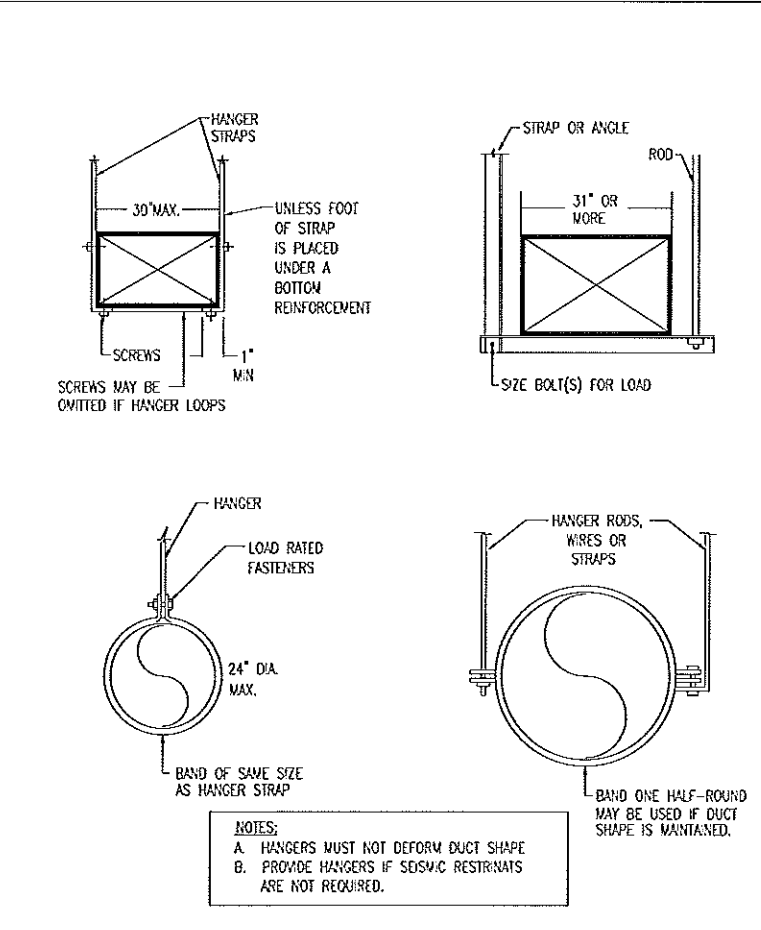


DUCT TRANSITION DETAIL
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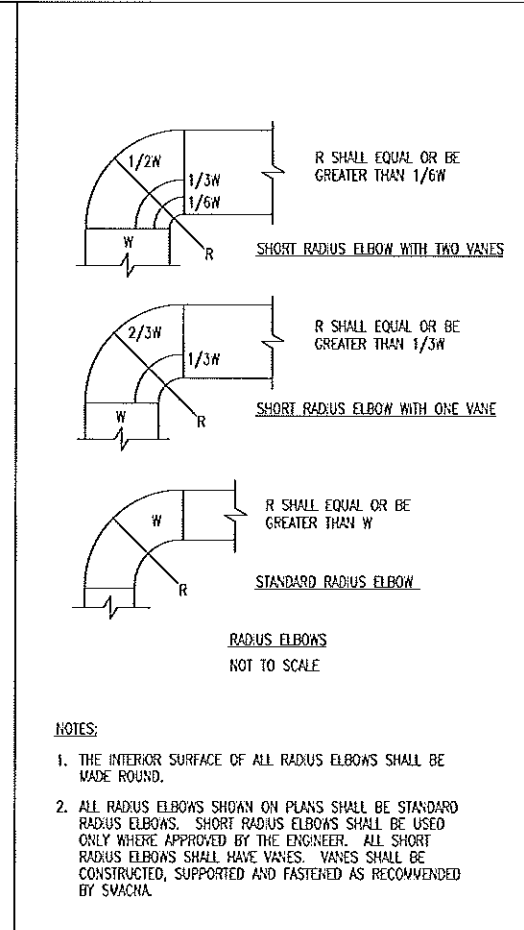


VOLUME DAMPER DETAIL
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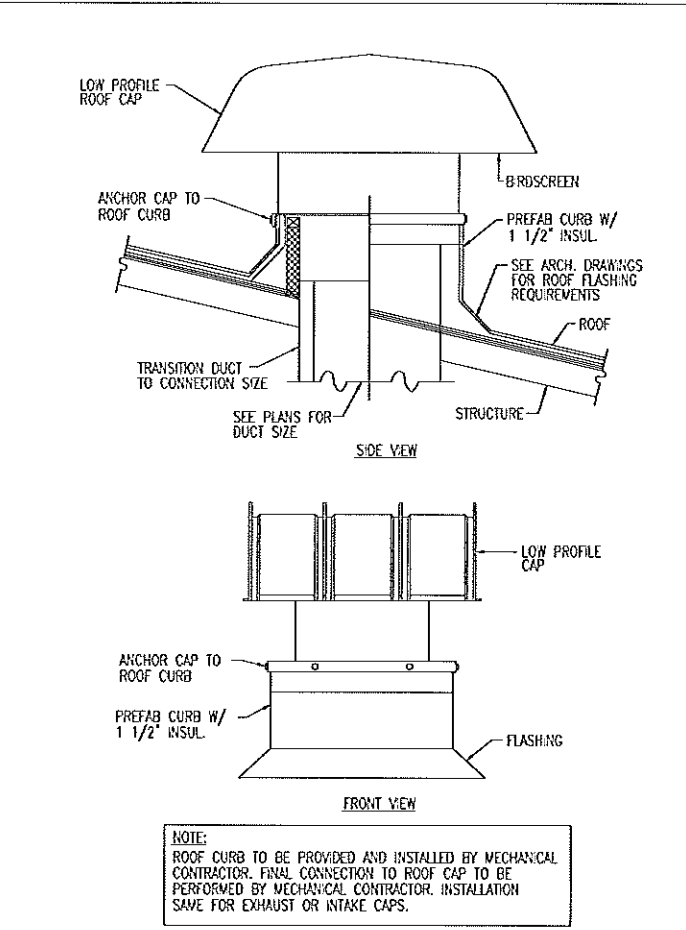
- NOTE:
- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
 - DETAIL SHOWS SINGLE BLADE DAMPER, DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.



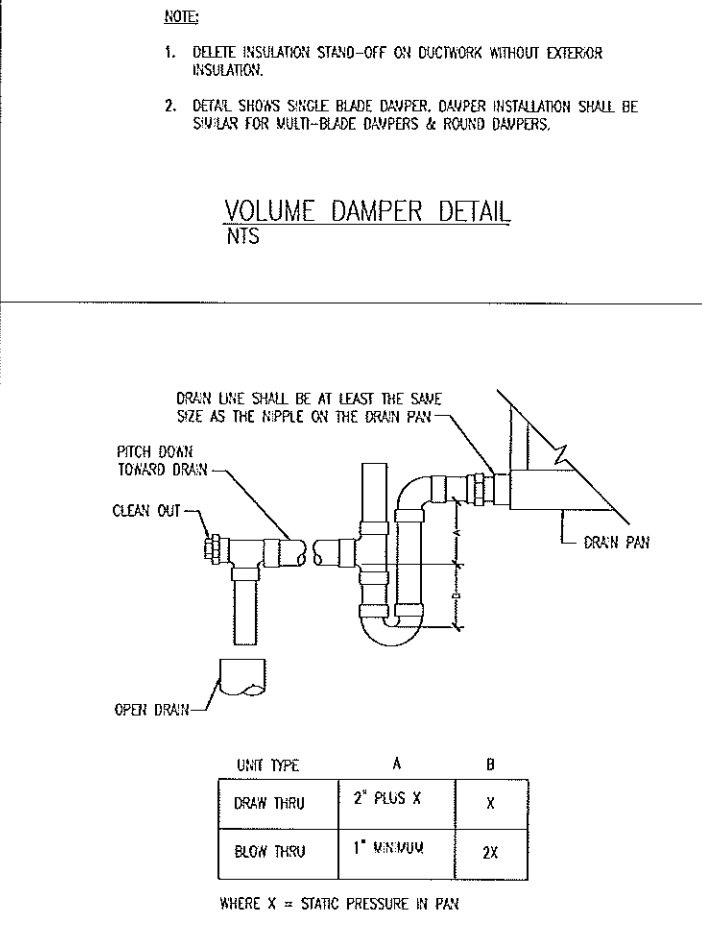
DUCT HANGER DETAIL
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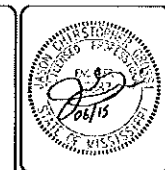
RADIUS ELBOW DETAIL
NTS



ROOF MOUNTED CAP DETAIL
NTS



CONDENSATE TRAP DETAIL
NTS



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Revisions

No.	Description

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
Madison, MS

Project No.: #1509
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Drawn by: JCG
Checked: JCG

M5.1

SPLIT SYSTEM HEAT PUMP UNITS (INDOOR SECTION)

MARK	TOTAL CFM	O.A. CFM	FAN DATA		AUX. ELECTRIC HEAT		HEAT PUMP CYCLE			COOLING CAPACITY				ELECTRICAL DATA		MANUFACTURER AND MODEL		REMARKS	
			MOTOR HP	E.S.P. IN. W.G.	KW	# STEPS	AMBIENT TEMP	EAT (DEG F)	TOTAL MBH	AMBIENT TEMP	TOTAL MBH	SENSIBLE MBH	EAT (DEG F)	EAT (DEG F)	V-PH	MCA/MOCP	AIR HANDLER		COIL
HP-1	1400	120	1	0.7	5.6	1	21	60	36.8	95.9	43.7	32.8	78.8/64.3	55.1/53.7	208-1	41.5/45	YORK MV20DN2	YORK MC60D	1,2,3,4,5
HP-2	1300	210	1	0.7	5.6	1	21	60	36.8	95.9	44.4	33.5	78.1/65.2	56.0/54.6	208-1	41.5/45	YORK MV20DN2	YORK MC60D	1,2,3,4,5
HP-3	1100	120	3/4	0.7	5.6	1	21	60	25.9	95.9	35.7	27.9	77.1/63.7	55.6/53.5	208-1	41.5/45	YORK MV16CNZ	YORK MC48C	1,2,3,4,5

- REMARKS:
1. PROVIDE WITH SINGLE POINT POWER CONNECTION.
 2. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT.
 3. UNIT TO BE MOUNTED IN HORIZONTAL CONFIGURATION.
 4. PROVIDE UNIT WITH 2" FILTER RACK.
 5. DISCONNECT BY ELECTRICAL.

SPLIT SYSTEM HEAT PUMP UNITS (OUTDOOR SECTION)

MARK	HEAT PUMP CYCLE		COOLING CAPACITY			ELECTRICAL DATA		SEER	MANUFACTURER AND MODEL	REMARKS
	AMBIENT TEMP	TOTAL MBH	AMBIENT TEMP	TOTAL MBH	SENSIBLE MBH	V-PH	MCA/MOCP			
HP-1	21	36.8	95.9	43.7	32.8	208-3	15.5/25	13.00	YORK YHJ48S43	1,2
HP-2	21	36.8	95.9	44.4	33.5	208-3	15.5/25	13.00	YORK YHJ48S43	1,2
HP-3	21	25.9	95.9	35.7	27.9	208-3	12.9/20	13.50	YORK YHJ42S43	1,2

- REMARKS:
1. DISCONNECT BY ELECTRICAL.
 2. SIZE AND ROUTE REFRIGERANT PIPING PER MANUFACTURER RECOMMENDATIONS.

GRILLES, REGISTERS AND DIFFUSERS

MARK	USE			CFM RANGE	NECK SIZE	FACE SIZE	DEF'L	CEILING TYPE	BORDER TYPE	MANUF. AND MODEL	COMMENTS
	S	R	E								
A	X			126-250	8"	24x24"	4-WAY	L.A.T.		PRICE SPD	1
B	X			251-350	10"	24x24"	4-WAY	L.A.T.		PRICE VPD-HC	1
C		X	X	0-500	10x10"	12x12"	----	L.A.T.		PRICE SERIES 80	2
D		X	X	1001-2000	22x22"	24x24"	----	L.A.T.		PRICE SERIES 80	

- REMARKS:
1. FACTORY-INSULATED TOP FOR AIR DISTRIBUTION DEVICE.
 2. PROVIDE WITH WHITE METAL FILTER PANEL FOR LAT SIZE.

ELECTRIC UNIT HEATERS

MARK	WATTS	CFM	MOUNTING	ELEC. V-PH	ACCESSORIES	MANUFACTURER AND MODEL	LOCATION
EUH-1	3300	400	HORIZONTAL	208-3	1,2,3	MARKEL 5100 SERIES	ATTIC
EUH-2	3300	400	HORIZONTAL	208-3	1,2,3	MARKEL 5100 SERIES	ATTIC

- REMARKS:
1. FACTORY MOUNTED DISCONNECT SWITCH.
 2. FACTORY MOUNTED THERMOSTAT.
 3. SET THERMOSTAT TO MAINTAIN SPACE AT 40 DEG F (ADJUSTABLE).



JCG CONSULTING ENGINEER
 105 Silvertree Crossing
 Madison, MS 39110
 P: 662.276.1111
 E: jgengler@jcgmail.com

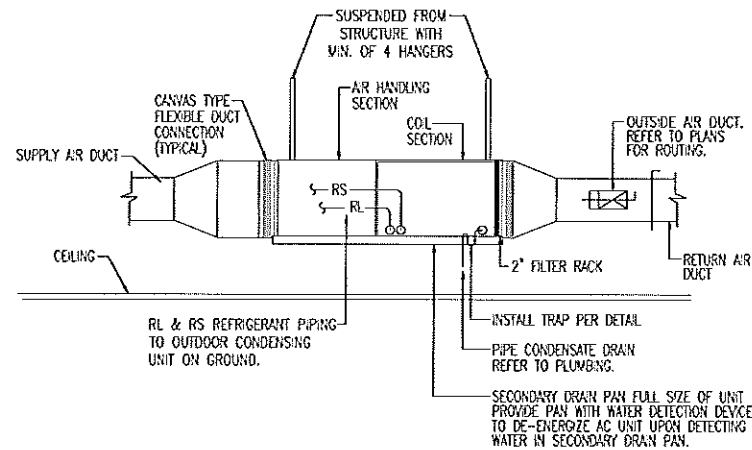
Revisions

No.	Description

FIRST INDEPENDENT METHODIST CHURCH
ADDITION 01
 Madison, MS

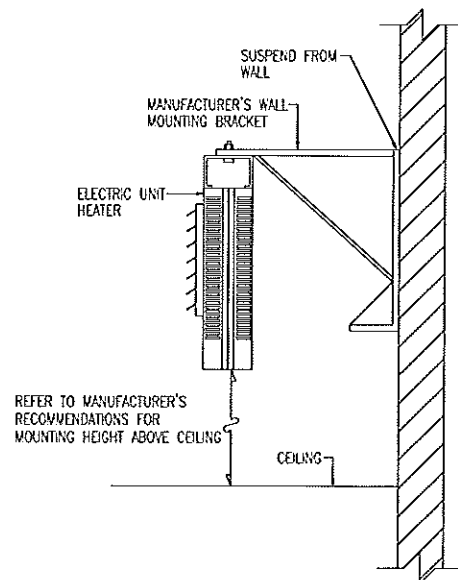
Project No.: #1506
 Date: 14 JULY 15
 Drawn by: JCG
 Checked: JCG

M6.1

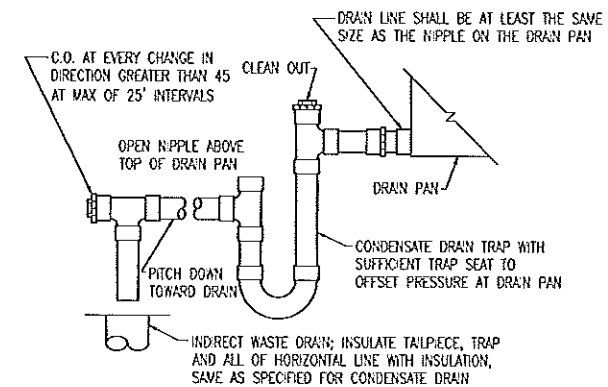


- NOTES:
- A) REFER TO PLUMBING FLOOR PLANS FOR CONDENSATE DRAIN SIZE.
 - B) REFER TO HVAC FLOOR PLANS FOR DUCT SIZES AND ROUTING.
 - C) REFRIGERANT PIPING TO BE SIZED PER MANUFACTURER'S RECOMMENDATIONS.

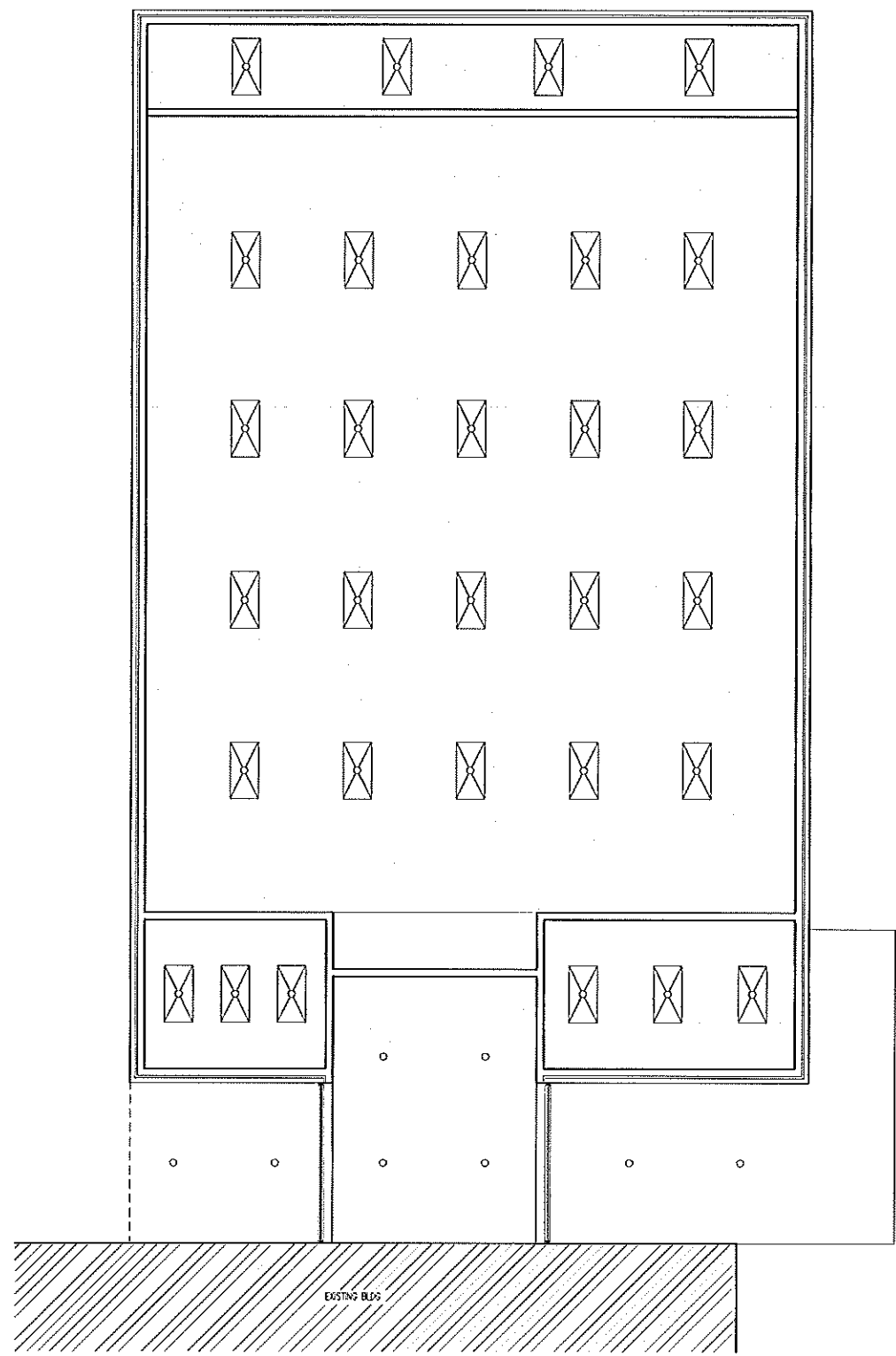
1 HORIZONTAL SPLIT SYSTEM HEAT PUMP DETAIL
 M6.1 NO SCALE



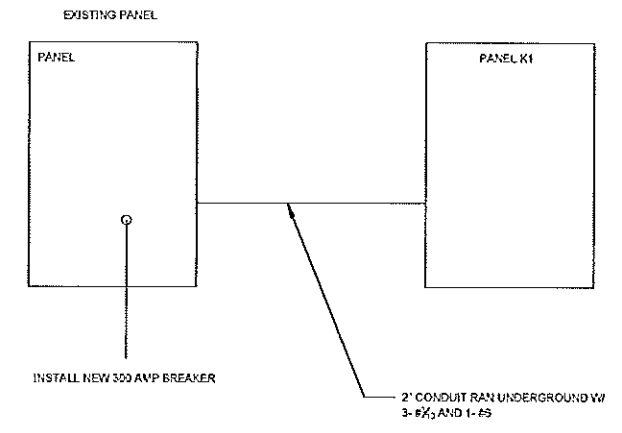
2 ELECTRIC UNIT HEATER DETAIL
 M6.1 NO SCALE



3 CONDENSATE DRAIN TRAP
 M6.1 NO SCALE



- S LIGHT SWITCH
- T THERMOSTAT
- ⊠ SMOKE DETECTOR
- ⚡ EMERGENCY COMBO EXIT LIGHT W/ BATTERY PACK
- ⬆ EMERGENCY LIGHT
- ⊠ FIRE ALARM W/ STROBE LIGHT
- ⊠ 2x4 FLOURESCENT LIGHT FIXTURE
- 6 INCH RECESSED CAN LIGHT
- ▽ DATA
- ⊕ WALL MOUNT RECEPT
- ⊕ ABOVE COUNTER GFCI
- ⊕ WALL MOUNT GFCI
- ⊕ ABOVE COUNTER OUTLET
- ⊠ DOOR IDEN
- ⊠ WINDOW TAG
- ⚠ FIRE EXTINGUISHER (2A10BC)
- ⊠ WALL TYPE



NEW 200 AMP 3P PANEL MLO
 42 CT INSTALL IN OFFICE 102

1 RCP
 Scale: 3/16"=1'-0"
 NORTH

DATE	REVISION

DRAWN BY JTB
 CHECKED BY JTB
 REVIEWED



DATE	REVISION
7.15.2015	

DRAWING NUMBER

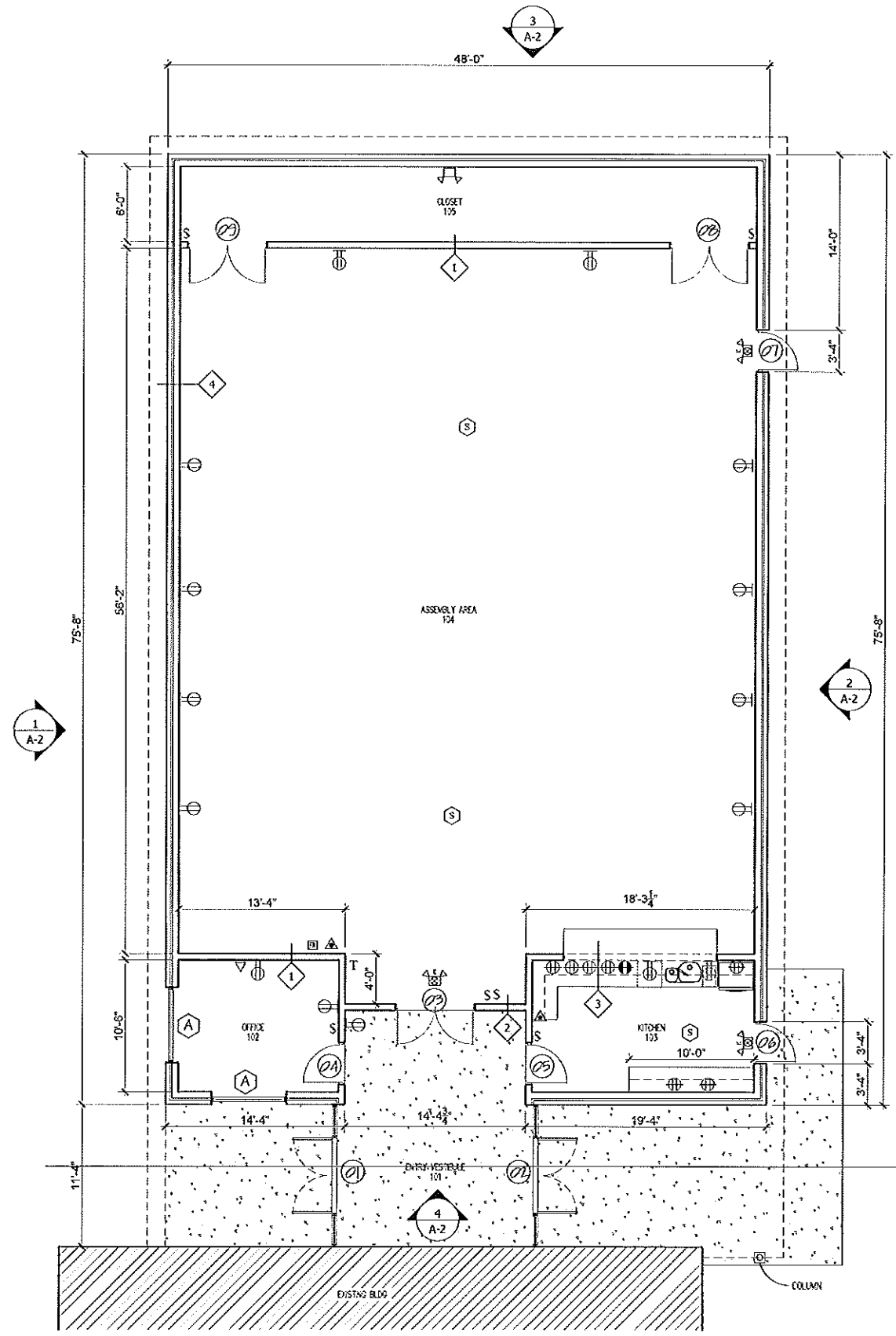
DATE	REVISION



PLAN

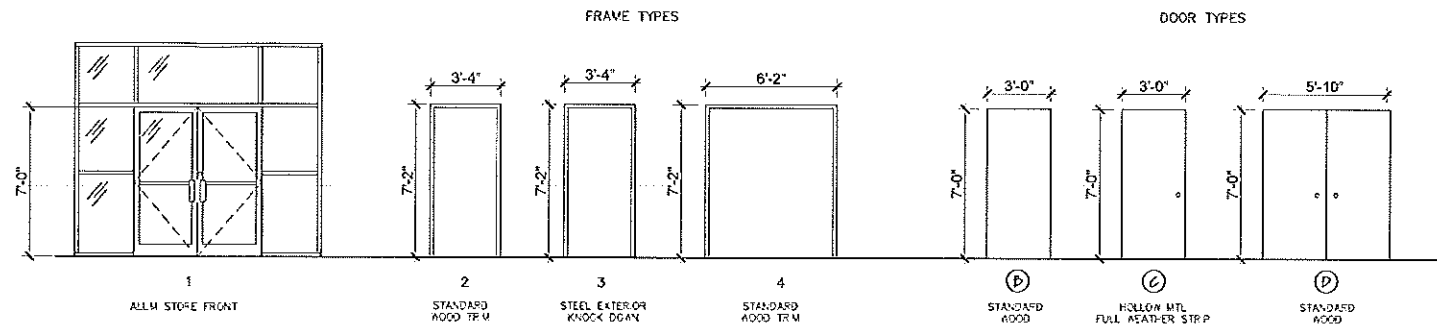
DATE	REVISION
7.15.2015	

DRAWING NUMBER



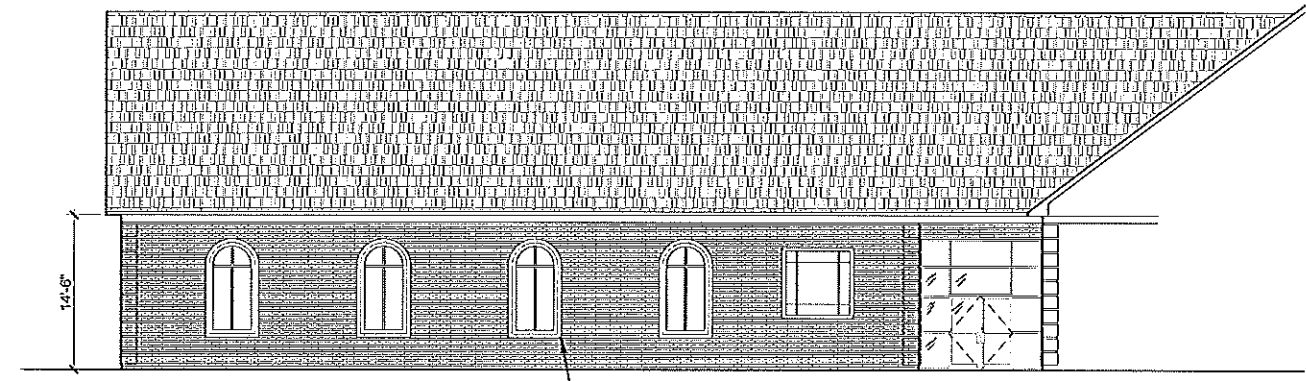
1 FLOOR PLAN
 Scale: 3/16"=1'-0"
 NORTH

- S LIGHT SWITCH
- T THERMOSTAT
- SD SMOKE DETECTOR
- ALA EMERGENCY COMBO EXIT LIGHT W/ BATTERY PACK
- EL EMERGENCY LIGHT
- FAL FIRE ALARM W/ STROBE LIGHT
- DATA
- WMR WALL MOUNT RECEPT
- ACG ABOVE COUNTER GFCI
- WMC WALL MOUNT GFCI
- ACO ABOVE COUNTER OUTLET
- DI DOOR IDENT
- WT WINDOW TAG
- FE FIRE EXTINGUISHER (2A10BC)
- WV WALL TYPE

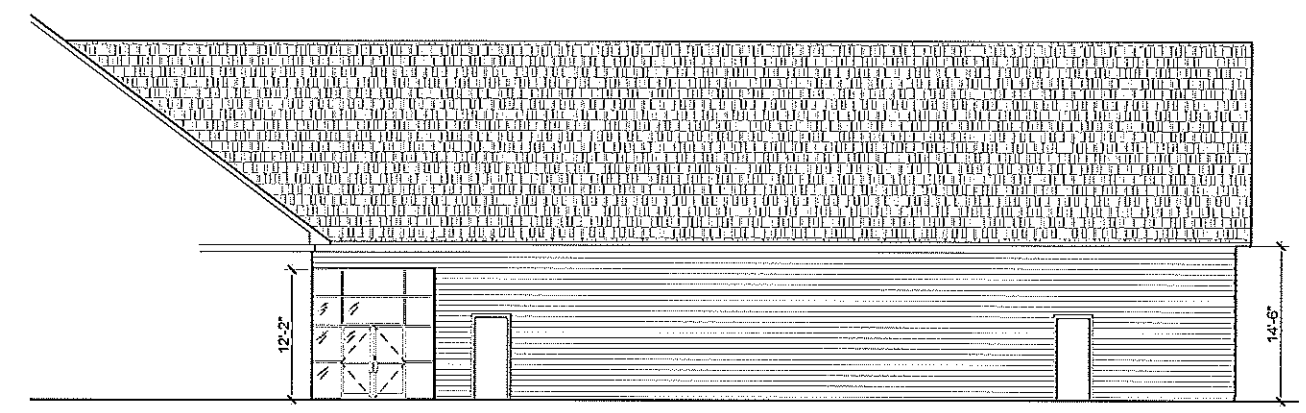


ROOM #	FINISH FLOOR	BASE	FINISH WALL	CEILING	DOOR #	TYPE	FRAME	HARDWARE
ENTRY 101					01,02	A	1	PANIC BARS w/ KEYED LOCK
OFFICE 102	VCT	4" RUBBER	PANDED GYP	PANDED GYP	04	P	2	KEYED LOCK
KITCHEN 103	VCT	4" RUBBER	PANDED GYP	PANDED GYP	05	P	2	STANDARD PUSH BUTTON LOCK SET
					06	C	3	SECURITY KEYED LOCK SET PANIC BARS & CLOSURE
ASSEMBLY 104	VCT	4" RUBBER	PANDED GYP	PANDED GYP	03	A	1	KEYED LOCK w/ CLOSURE
					07	C	3	SECURITY KEYED LOCK SET PANIC BARS & CLOSURE
CLOSET 105	VCT	4" RUBBER	PANDED GYP	PANDED GYP	08,09	P	4	KEYED LOCK

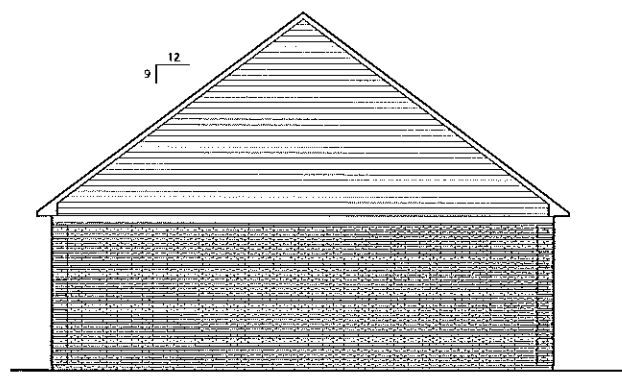
GENERAL NOTE: STOREFRONT SYSTEM
 COLOR WHITE, MEDIUM STYLE, CVR EXIT DEVICE,
 STANDARD PULLS, CONT HINGES, SURFACE
 CLOSERS, 1" SOLARBAN 60 GRAY (LOW E) GLAZING



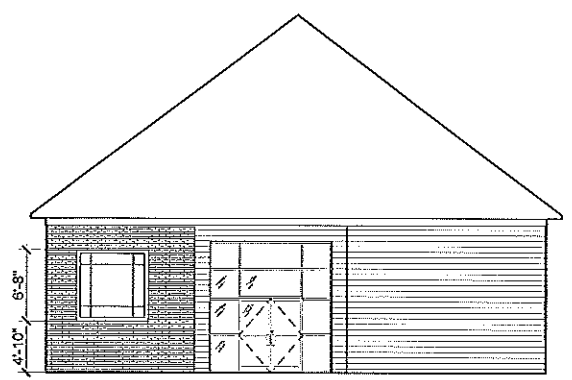
1 ELEV WEST
Scale: 1/8"=1'-0"



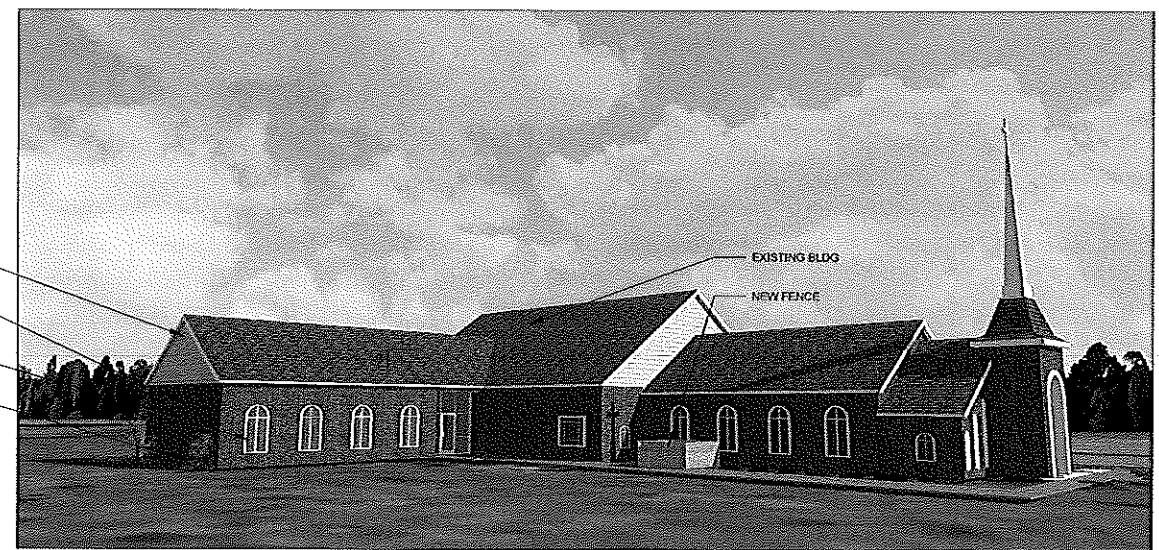
2 ELEV EAST
Scale: 1/8"=1'-0"



3 ELEV NORTH
Scale: 1/8"=1'-0"



4 ELEV ENTRY CORRIDOR
Scale: 1/8"=1'-0"



DATE	REVISION

DRAWN BY JTB
CHECKED BY JTB
REVIEWED



ELEVATION	
DATE	REVISION
7.15.2015	

DRAWING NUMBER