LEGEND AND SYMBOLS

(ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)

- SUPPLY AIR DIFFUSER WITH TYPE/DESIGNATION & AIRFLOW CFM SHOWN. ARROWS INDICATE PATTERN SHOWN EQUALS 2-WAY.
- RETURN AIR GRILLE WITH TYPE/DESIGNATION SHOWN.
- EF-# EXHAUST FAN WITH DESIGNATION SHOWN.
- 24 / 12 RETURN AIR SOUND BAFFLE, 24X12 SIZE SHOWN.
- 12"ø ROUND DUCTWORK. DIAMETER INDICATED IN INCHES
- 20/12 RECTANGULAR DUCTWORK. SIZE INDICATED IN INCHES, FIRST NUMBER IS SIDE SHOWN
- EXISTING DUCTWORK IS SHOWN DASHED
- FLEXIBLE DUCT
- SUPPLY OR OUTSIDE AIR DUCT
- RETURN AIR DUCT
- 90 DEGREE DUCTWORK ELBOW W/ TURNING VANES
- RADIUS DUCTWORK ELBOW - ROUND OR RECTANGULAR.
- RECTANGULAR DUCTWORK BRANCH TAKE-OFF WITH 45 DEGREE BRANCH INLET
- FLARED SPIN-IN WITH DAMPER AND FLEX DUCT (DIFFUSER CONNECTION)
- ROUND DUCT BRANCH TAKE-OFF FROM RECTANGULAR MAIN WITH CONICAL TAP
- DUCTWORK SIZE TRANSITION
- SUPPLY OR OUTSIDE AIR DUCT UP
- SUPPLY OR OUTSIDE AIR DUCT DOWN
- RETURN AIR DUCT UP
- RETURN AIR DUCT DOWN
- IN-LINE 90 DEGREE DROP (RISE) IN DUCT
- INCLINED RISE IN DUCT
- INCLINED DROP IN DUCT
- DUCT EXTRACTOR
- SPLITTER DAMPER
- MANUAL VOLUME DAMPER.
- DAMPER TYPE:
  - 3 - 3 HOUR LABELED FIRE DAMPER.
  - SD - SMOKE DAMPER
  - FSD - COMBINATION FIRE/SMOKE DAMPER
  - FD - FIRE DAMPER
- (MD) MOTORIZED DAMPER
- (T) THERMOSTAT
- (C) CO2 SENSOR
- (H) HUMIDISTAT
- H HUMIDITY SENSOR
- (F) FIRESTAT
- (SD) DUCT SMOKE DETECTOR
- PNEUMATIC TUBING OR CONTROL WIRING
- (01) DRAWING NOTE REFERENCE
- ROUND
- OVAL OR FLAT OVAL
- (N) NEW ITEM
- (E) EXISTING ITEM
- (R) RELOCATED ITEM
- (OL) ORIGINAL LOCATION OF RELOCATED ITEM

- ELBOW UP
- ELBOW DOWN
- VALVE IN DROP
- VALVE IN CENTER DROP
- VALVE IN RISE
- DIRECTION OF FLOW
- TEE OUTLET UP
- TEE OUTLET DOWN
- UNION
- EXPANSION JOINT
- STRAINER WITH BLOWDOWN VALVE
- GATE VALVE
- GLOBE VALVE
- BALL VALVE
- BALANCING VALVE W/DIFFERENTIAL PRESSURE TAPS
- OS&Y VALVE
- CHECK VALVE
- PRESSURE REDUCING VALVE
- BUTTERFLY VALVE
- 3 WAY CONTROL VALVE
- 2 WAY CONTROL VALVE
- GAUGE COCK
- SHOCK ARRESTOR
- PIPE GUIDE
- CAP ON END LINE
- FS FLOW SWITCH
- PS PRESSURE SWITCH
- GAS VALVE
- MANUAL AIR VENT
- AUTOMATIC AIR VENT
- T&P RELIEF VALVE
- VACUUM BREAKER
- LINE CLEANOUT
- FLOOR CLEANOUT
- PRESSURE GAUGE WITH GAUGE COCK
- THERMOMETER
- M WATER METER
- R GAS REGULATOR
- FLEXIBLE CONNECTION
- PIPE FLANGE
- THERMOMETER WELL
- STEAM F & T TRAP
- STEAM BUCKET TRAP
- FM FLOWMETER
- PLUG VALVE
- CHS CHILLED WATER SUPPLY
- CHR CHILLED WATER RETURN
- CD CONDENSATE DRAIN (COLD)
- CWS CONDENSER WATER SUPPLY
- CWR CONDENSER WATER RETURN
- POINT OF CONNECTION

GENERAL NOTES AND SPECIFICATIONS

ALL NOTES SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS

A. REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS FOR CONSTRUCTION.

B. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL CEILING MOUNTED DEVICES.

C. REFER TO ARCHITECTURAL INTERIOR ELEVATION DRAWINGS, WHERE THE ARCHITECT HAS DRAWN SUCH ELEVATIONS, FOR THE LOCATIONS OF ALL WALL MOUNTED DEVICES.

D. ALL DUCTWORK SIZES SHOWN ARE FREE AIR STREAM DIMENSIONS. UNLESS NOTED OTHERWISE.

E. COORDINATE THE EXACT LOCATION OF ALL PENETRATIONS WITH THE BUILDING STRUCTURE AND ARCHITECT.

F. COORDINATE ALL SLAB PENETRATIONS AND SLEEVES PRIOR TO EACH CONCRETE POUR.

G. FURNISH ACCESS DOORS FOR INSTALLATION IN WALLS AND CEILINGS WHERE ACCESS IS REQUIRED TO CONCEALED MECHANICAL EQUIPMENT, FIRE, FIRE/SMOKE DAMPERS, VALVES, CONTROLS AND OTHER DEVICES.

H. INSTALL DUCTWORK AND PIPING TO PROVIDE THE MAXIMUM POSSIBLE CLEAR HEIGHT UNDERNEATH. MAINTAIN A MINIMUM OF 8 INCHES ABOVE FINISHED CEILING TO PROVIDE CLEARANCE FOR LIGHTING FIXTURES.

I. PAINT FLAT BLACK ANY ABOVE CEILING ITEMS WHICH CAN BE SEEN THROUGH AIR SLOTS OR GRILLES.

J. LENGTHS OF SUPPLY AND RETURN AIR SLOT DIFFUSERS SHOWN ARE APPROXIMATE. EXACT LENGTHS SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS. LENGTHS SHALL BE FIELD COORDINATED PRIOR TO FABRICATION.

K. COORDINATE THE DUCTWORK FABRICATION DRAWINGS WITH THE FIRE, SMOKE AND FIRE-SMOKE PARTITIONS SHOWN ON THE ARCHITECTURAL DRAWINGS. FIRE, SMOKE AND FIRE-SMOKE DAMPERS SHALL BE PROVIDED AT ALL LOCATIONS WHERE THEY ARE REQUIRED, EVEN IF THEY ARE NOT SHOWN ON THE MECHANICAL DRAWINGS.

L. PERFORM WORK IN ACCORDANCE WITH THE LATEST EDITIONS, REVISIONS, AMENDMENTS OR SUPPLEMENTS OF APPLICABLE STATUTES, ORDINANCES, CODES OR REGULATIONS OF FEDERAL, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION IN EFFECT ON THE DATE BIDS ARE RECEIVED.

M. WHERE APPROVAL CODES HAVE BEEN ESTABLISHED BY OSHA, UNDERWRITERS LABORATORY, AMERICAN CODES, ANSI, ASME, ASA, ASHRAE, ASTM, ARI, NEC, NFRA, SMACNA, OR THE STATE FIRE INSURANCE REGULATORY BODY THESE STANDARDS SHALL BE FOLLOWED WHETHER OR NOT INDICATED ON THE DRAWINGS AND SPECIFICATIONS.

N. ARRANGE WITH AUTHORITIES AND UTILITY COMPANIES FOR PERMITS, FEES, AND SERVICE CONNECTIONS, VERIFYING LOCATIONS AND ARRANGEMENTS AND PAYING ALL CHARGES, INCLUDING INSPECTIONS.

O. WORKING PRESSURE OF PIPING SYSTEMS AND EQUIPMENT HAS BEEN ESTABLISHED AT 300 PSIG UNLESS OTHERWISE NOTED.

P. COORDINATE WORK WITH ARCHITECTURAL FEATURES AND COORDINATE WORK SO THAT INTERFERENCES BETWEEN PIPING, DUCTWORK, EQUIPMENT, PLUMBING WORK, ELECTRICAL WORK, AND BUILDING STRUCTURE WILL BE AVOIDED.

Q. THE ENTIRE SYSTEM AND ITS COMPONENT ITEMS OF EQUIPMENT SHALL BE ISOLATED FROM THE STRUCTURE AND OPERATE WITHOUT OBJECTIONABLE VIBRATION OR NOISE.

R. ALL WIRING AND ELECTRICAL CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70 (N.E.C.).

S. ALL DUCT WORK IN PLENUM TO HAVE 1-1/2" INSULATION. ALL EXPOSED DUCT WORK WILL REQUIRE A 1" INTERNAL INSULATION.

T. CONTRACTOR TO PROVIDE A NEBB CERTIFIED AIR BALANCE REPORT FOR EACH SYSTEM & PERFORM A BLDG. BALANCE. (COMMON AREAS ONLY) SUBMIT TO ENGINEERS FOR APPROVAL.

U. ALL SUPPLY AND RETURN AIR DUCTS LOCATED IN UNCONDITIONED ATTICS, OUTSIDE THE ENVELOPE OR OUTSIDE THE BUILDING SHALL BE INSULATED USING A MINIMUM R-8 INSULATION.

V. ALL SUPPLY AND RETURN AIR DUCTS LOCATED IN A CONDITIONED SPACE AND/OR INSIDE ENVELOPE SHALL BE INSULATED WITH A MINIMUM R-6 INSULATION. EXTERNALLY INSULATED DUCT SHALL BE MINIMUM R-6.

W. ALL ADHESIVES, SEALANTS AND SEALANT PRIMERS MUST MEET THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) RULE #1168 WITH AMENDMENTS DATED JANUARY 7, 2005. COATINGS MUST MEET THE REQUIREMENTS OF SCAQMD RULE # 1113 WITH AMENDMENTS DATED JUNE 9, 2006. DUCT SEALANT VOC LIMIT IS 250g/L.

X. CFC-BASED REFRIGERANTS CANNOT BE USED IN HVAC SYSTEM.

Y. CONTRACTOR TO CAULK, GASKETED, WEATHER STRIPPED OR SEALED ALL JOINTS, CRACKS AND HOLES PENETRATING THE BUILDING ENVELOPE WITH A 0.3 CFM FOR FENESTRATION.

Z. CONTRACTOR TO PROVIDE SUBMITTALS TO ARCHITECT/OWNER FOR APPROVAL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLEARLY NOTE ANY DEVIATIONS OR SUBSTITUTIONS TO SUBMITTALS ON A SHEET TITLED SUBMITTAL DEVIATIONS/ SUBSTITUTIONS, PROVIDING A LIST OF DEVIATIONS OR SUBSTITUTIONS. CONTRACTOR TO PROVIDE ALL O&M MANUALS, PRODUCT DATA AND ANY OTHER MISC. INFORMATION SHEETS TO ARCHITECT/OWNER.

AA. CONTRACTOR TO INTERNALLY & EXTERNALLY INSULATE WITH 1" LINER THE FIRST 20'-0" OF DUCT COMING FROM THE UNIT.

BB. DRAWINGS: CONSTRUCTION DOCUMENTS ARE REQUIRED WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE RECORD DRAWINGS OF THE ACTUAL INSTALLATION BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER. RECORD DRAWINGS SHALL INCLUDE AS A MINIMUM THE LOCATION AND PERFORMANCE DATA ON EACH PIECE OF EQUIPMENT, GENERAL CONFIGURATION OF DUCT AND PIPE DISTRIBUTION SYSTEM INCLUDING SIZES, AND THE TERMINAL AIR OR DESIGN FLOW RATES.

CC. MANUALS: CONSTRUCTION DOCUMENTS ARE REQUIRED AND O&M MANUALS BE PROVIDED TO THE BUILDING OWNER OR THE DESIGNATED REPRESENTATIVE OF THE BUILDING OWNER WITHIN 90 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE. THESE MANUALS SHALL BE IN ACCORDANCE WITH INDUSTRY-ACCEPTED STANDARDS AND SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:
- (A) SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
- (B) OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIP. REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
- (C) NAMES AND ADDRESSES OF AT LEAST ONE SERVICE AGENCY.
- (D) HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SET-POINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT CONTROL DEVICES OR FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS.
- (E) A COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING SUGGESTED SET-POINTS.

INSULATION OF DUCTS

DUCT LOCATION	INSULATION TYPES MECHANICALLY COOLED AND OUTSIDE AIR	INSULATION TYPES HEATING ONLY
ON ROOF OF EXTERIOR OF BUILDING	C, V, W	A, W
ATTICS, GARAGES AND CRAWL SPACES (LOCATED INSIDE THE BUILDING ENVELOPE)	A, V	A
ATTICS, GARAGES AND CRAWL SPACES (LOCATED OUTSIDE THE BUILDING ENVELOPE)	C, V, W	A
IN WALLS, WITHIN FLOOR-CEILING SPACES	A, V	A
SUPPLY DUCTS LOCATED WITHIN THE CONDITIONED AND SEMI CONDITIONED SPACE OR IN BASEMENTS; RETURN DUCTS IN AIR PLENUMS WHEN THE TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT DOES NOT EXCEED 15°F (8°C).	NONE REQUIRED	NONE REQUIRED
DUCTS WHERE THE TEMPERATURE DIFFERENCE BETWEEN THE INTERIOR AND EXTERIOR OF THE DUCT EXCEEDS 15°F (8°C).	A, V	A
CEMENT SLAB OR WITHIN GROUND	NONE REQUIRED	NONE REQUIRED

A= R5.6 V= VAPOR RETARDERS, ALL JOINTS TO BE SEALED
C= R8.0 W= APPROVED WEATHERPROOF BARRIER

NOTE: WHERE DUCTS ARE USED FOR BOTH HEATING AND COOLING, THE MINIMUM INSULATION SHALL BE AS REQUIRED FOR THE MOST RESTRICTIVE CONDITION.
1. VAPOR RETARDERS SHALL BE INSTALLED ON SUPPLY DUCTS IN SPACES VENTED TO THE OUTSIDE IN GEOGRAPHIC AREAS WHERE THE AVERAGE SUMMER DEW POINT TEMPERATURE BASED ON THE 2-1/2 PERCENT COLUMN OF DRY-BULB AND MEAN COINCIDENT WET-BULB TEMPERATURE EXCEEDS 60°F(16°C).
INSULATION TYPES:
A. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.48 [2.72 w/(m*K)] OR THE EQUIVALENT THERMAL RESISTANCE OF R-5.6.
C. A MATERIAL WITH AN INSTALLED CONDUCTANCE OF 0.16 [0.9 W/m*K))] OR THE EQUIVALENT THERMAL RESISTANCE OF R-8.
V. VAPOR RETARDERS: MATERIAL WITH A PERM RATING NOT EXCEEDING 0.5 PERM (29ng/Pa*s*m2). ALL JOINTS TO BE SEALED.
W. APPROVED WEATHERPROOF BARRIER.

INSULATION OF PIPING

FLUID	≤ 1.5" [d]	>1.5"-4" [d]	>4" [d]	
STEAM	1 1/2	3	4	
HOT WATER	1 1/2	2	2	
SERVICE HOT WATER	1 1/2	2	2	
CHILLED WATER, BRINE OR REFRIGERANT	1 1/2	1 1/2	2	

a. BASED ON INSULATION HAVING A CONDUCTIVITY (K) NOT EXCEEDING 0.27 BTU PER IN./H-FT2-°F.
b. THESE THICKNESSES ARE BASED ON ENERGY EFFICIENCY CONSIDERATIONS ONLY. ADDITIONAL INSULATION IS SOMETIMES REQUIRED RELATIVE TO SAFETY ISSUES/SURFACE TEMPERATURE.
c. THESE THICKNESS ARE BASED ON ENERGY EFFICIENCY CONSIDERATIONS ONLY. ISSUES SUCH AS WATER VAPOR PERMEABILITY OR SURFACE CONDENSATION SOMETIMES REQUIRE VAPOR RETARDERS OR ADDITIONAL INSULATION.
d. NOMINAL PIPE DIAMETER.

1 LEGENDS & SPECIFICATIONS

SCALE: NTS

LANCASTER & ASSOCIATES
10655 SIX PINES DRIVE, SUITE 290
THE WOODLANDS, TEXAS 77380
PHONE: (281) 364-1666 FAX: (281) 292-2666
FIRM # F-18566

STATE OF TEXAS
MICHAEL E. RABENA
68736
REGISTERED PROFESSIONAL ENGINEER

08/23/2017

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FAITH BIBLE CHURCH
RENOVATIONS TO PHASE I FACILITIES

ISSUE RECORD
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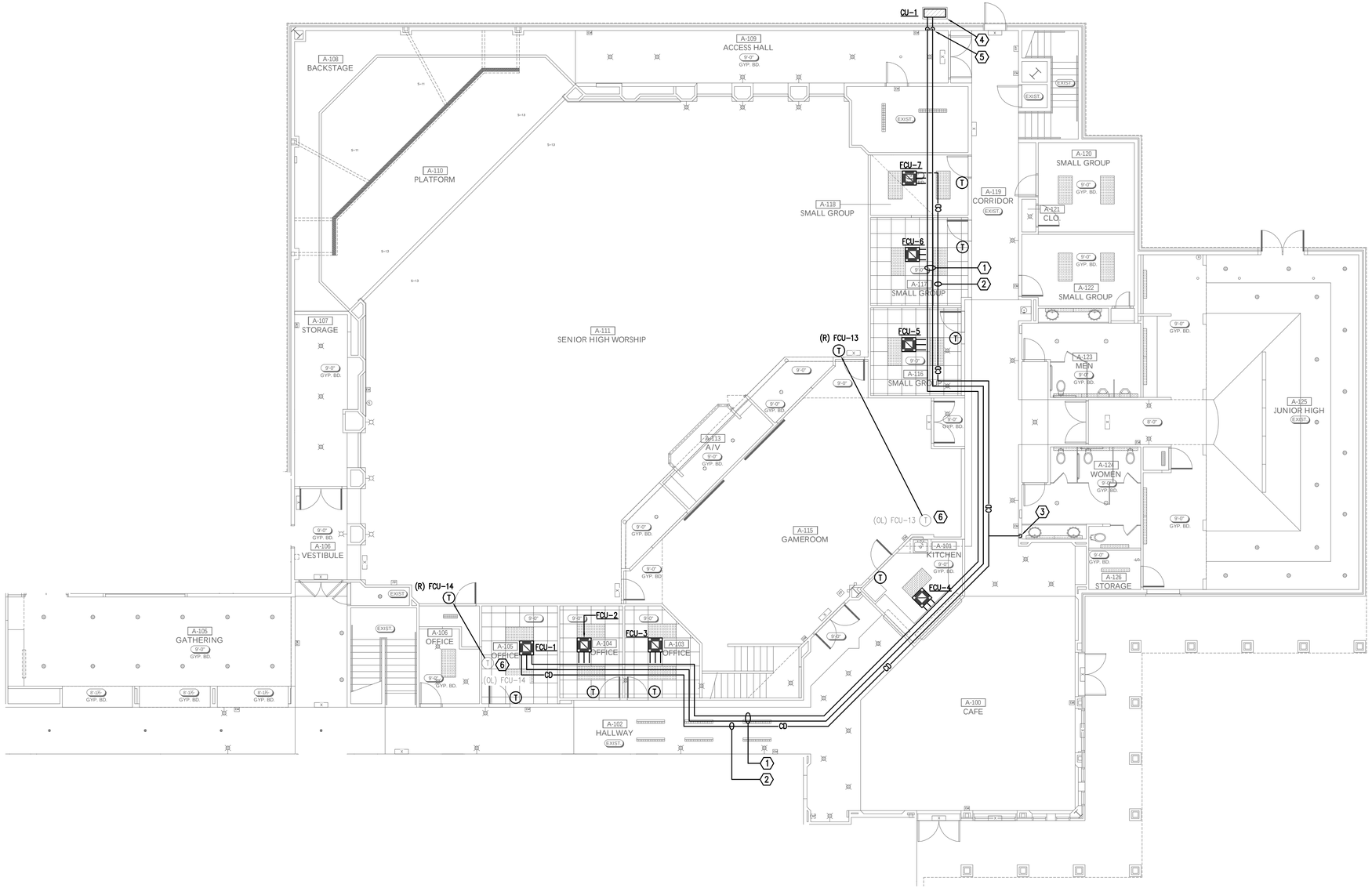
THE PDC GROUP, LLC
MEP Design & Consulting Engineers
14011 Park Drive ❖ Tomball, TX 77377
281.356.9002 ❖ 281.356.9008 ❖ www.thepdcgroup.com



GENERAL NOTES

(A) ALL WORK METHODS AND INSTALLATIONS INVOLVED IN THE MECHANICAL DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.

(B) THIS CONTRACTOR SHALL COORDINATE ROUTING OF DUCT WORK IN LIMITED CEILING SPACES WITH PLUMBING PIPES, ELECTRICAL EQUIPMENT, LIGHTS AND CONDUITS. SHOULD A CONFLICT OCCUR, THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE ROUTING OF MATERIALS.

(C) DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSION. ADD 4" (2") THICK DUCT INSULATION TO EACH DIMENSIONS SHOWN.

(D) FLEXIBLE DUCT TO CEILING AIR DEVICES, TO BE ONE CONTINUES LENGTH FROM SPIN-IN FITTING TO AIR DEVICE WITH NO JOINTS.

(E) TEST AND BALANCE ARE REQUIRED TO BE DONE PRIOR TO CLOSING THE CEILING. PROVIDE WRITTEN REPORT TO ARCH/ENGINEER FOR REVIEW AND APPROVAL.

KEYED NOTES

1. REFRIGERANT LINES. REFER TO PIPING SCHEMATIC ON SHEET M2.0.
2. 3/4" PUMPED CONDENSATE DRAIN HEADER.
3. DROP 3/4" PUMPED CONDENSATE IN WALL. TIE IN TO EXISTING LAVATORY TAILPIECE.
4. 4" CONCRETE HOUSEKEEPING PAD.
5. DROP REFRIGERANT PIPING IN WALL.
6. RELOCATE (E) THERMOSTAT AS SHOWN.

DUCTWORK LEGEND

- (N) OR (R) ITEM SHOWN DARK
- (E) ITEM SHOWN LIGHT
- (E) ITEM TO BE REMOVED SHOWN LIGHT AND DASHED
- A 20"x8" — SUPPLY DIFFUSER
- B 20"x10" — RETURN OR EXHAUST GRILLE

1 AREA "A" – 1ST FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'-0"

LANCASTER & ASSOCIATES
10655 SIX PINES DRIVE, SUITE 290
THE WOODLANDS, TEXAS 77380
PHONE: (281) 364-1666 FAX: (281) 292-2666

FIRM # F-18566

STATE OF TEXAS
MICHAEL E. RABENA
68736
REGISTERED PROFESSIONAL ENGINEER

08/23/2017

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FAITH BIBLE CHURCH
RENOVATIONS TO PHASE I FACILITIES

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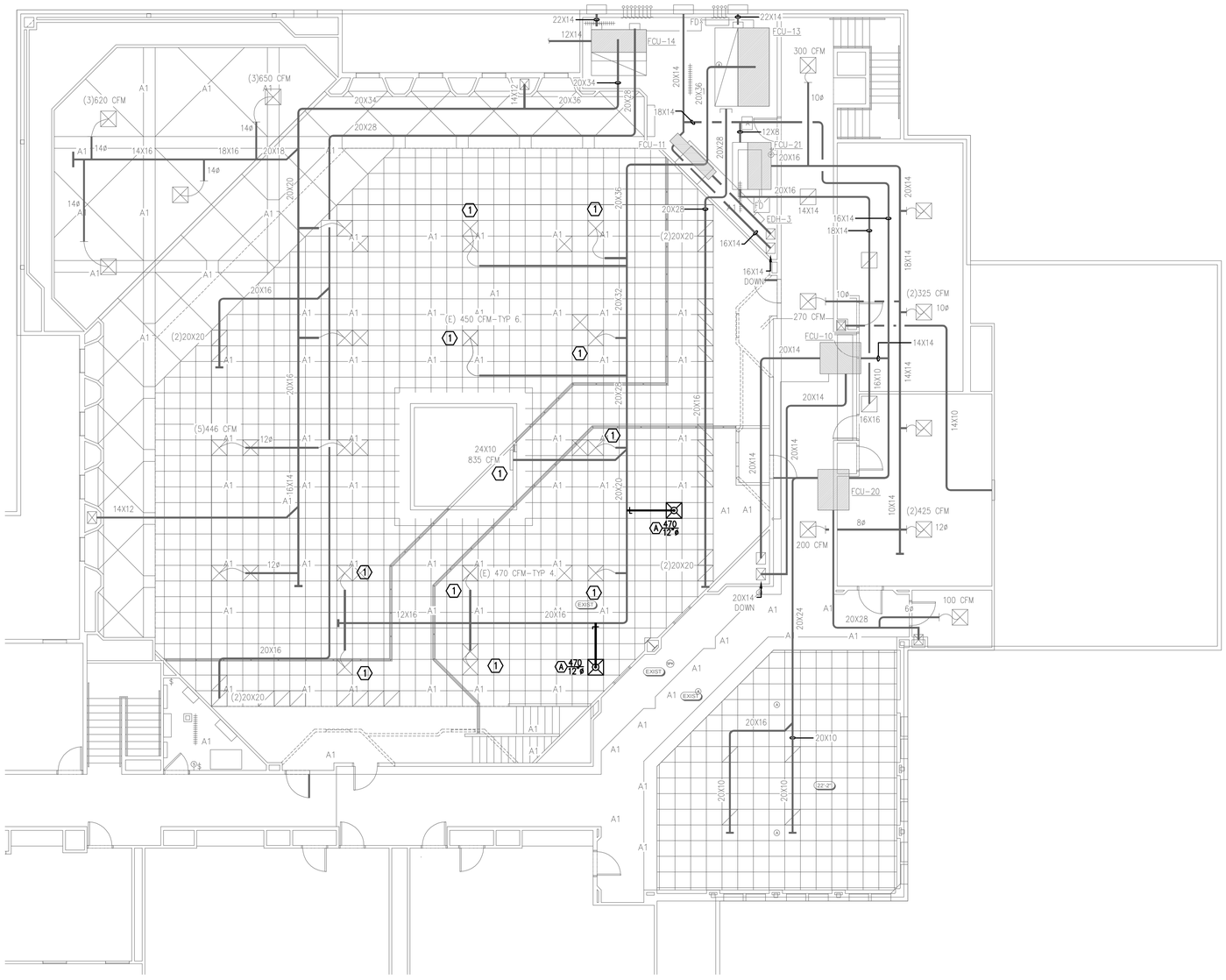
THE PDC GROUP, LLC
MEP Design & Consulting Engineers
14011 Park Drive ❖ Tomball, TX 77377
281.356.9002 ❖ 281.356.9008 ❖ www.thepdcgroup.com



GENERAL NOTES

(A) ALL WORK METHODS AND INSTALLATIONS INVOLVED IN THE MECHANICAL DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.

(B) THIS CONTRACTOR SHALL COORDINATE ROUTING OF DUCT WORK IN LIMITED CEILING SPACES WITH PLUMBING PIPES, ELECTRICAL EQUIPMENT, LIGHTS AND CONDUITS. SHOULD A CONFLICT OCCUR, THIS CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE ROUTING OF MATERIALS.

(C) DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSION. ADD 4" (2") THICK DUCT INSULATION TO EACH DIMENSIONS SHOWN.

(D) FLEXIBLE DUCT TO CEILING AIR DEVICES, TO BE ONE CONTINUES LENGTH FROM SPIN-IN FITTING TO AIR DEVICE WITH NO JOINTS.

(E) TEST AND BALANCE ARE REQUIRED TO BE DONE PRIOR TO CLOSING THE CEILING. PROVIDE WRITTEN REPORT TO ARCH/ENGINEER FOR REVIEW AND APPROVAL.

KEYED NOTES

(1) BALANCE (E) DIFFUSER TO CFM SHOWN ON THIS DRAWING.

DUCTWORK LEGEND

- (N) ITEM SHOWN DARK
- (E) ITEM SHOWN LIGHT
- (E) ITEM TO BE REMOVED SHOWN LIGHT AND DASHED
- A 200 / 8ø — SUPPLY DIFFUSER
- B 200 / 10X10 — RETURN OR EXHAUST GRILLE

1 AREA "A" – 2ND FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'-0"

LANCASTER & ASSOCIATES
10655 SIX PINES DRIVE, SUITE 290
THE WOODLANDS, TEXAS 77380
PHONE: (281) 364-1866 FAX: (281) 292-2866

FIRM # F-18566

STATE OF TEXAS
MICHAEL E. RABENA
68736
REGISTERED PROFESSIONAL ENGINEER

08/23/2017

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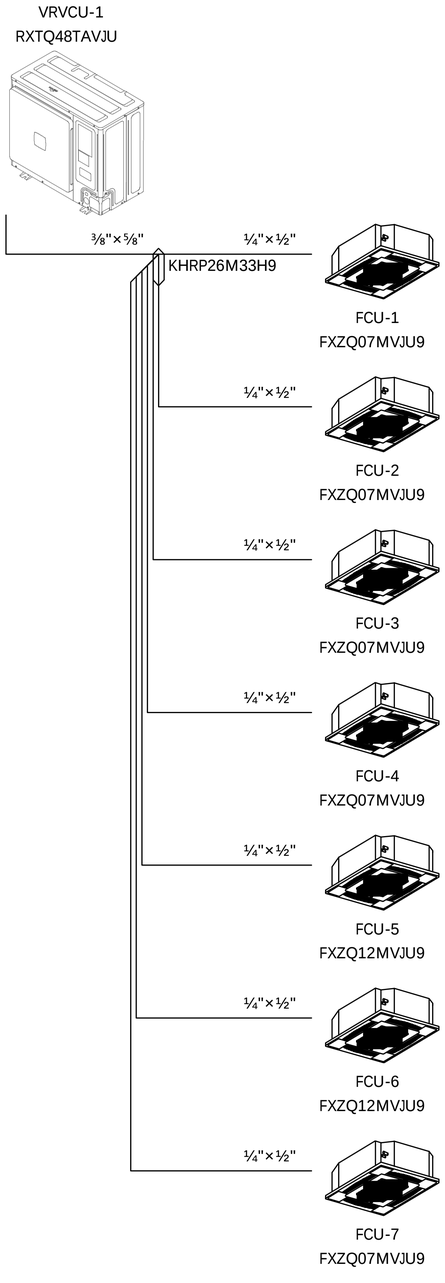
THE PDC GROUP, LLC
MEP Design & Consulting Engineers
14011 Park Drive ❖ Tomball, TX 77377
281.356.9002 ❖ 281.356.9008 ❖ www.thepdcgroup.com



VRV PIPING SCHEMATIC
SCALE: N.T.S

AIR DISTRIBUTION DEVICE SCHEDULE

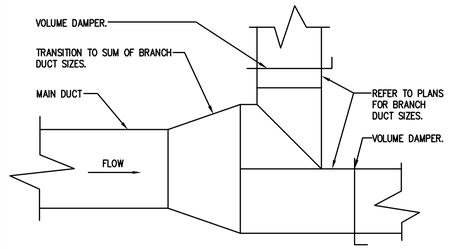
MARK	MANUFACTURER AND MODEL NO.	FRAME SIZE	NECK SIZE	FRAME TYPE	DESCRIPTION
A	TITUS TDCA–FR	12X12 OR 24X24	SEE PLAN	LAY–IN OR SURF. MT.	LOUVER FACE ADJUSTABLE FIRE RATED CEILING SUPPLY DIFFUSER, WHITE EXTERIOR, FLAT BLACK INTERIOR. PROVIDE WITH U.L. LISTED RADIATION DAMPER AND THERMAL BLANKET. MATCH (E) DIFFUSERS.

2x2 4-WAY CASSETTES:

Mark	Manufacturer	Model No.	Airflow Low-High	EAT (DB/WB) °F	LAT (DB) °F	Total Cooling BTU/h	Sensible Cooling BTU/h	EAT °F	Heating Capacity BTU/h	ESP	Sound dBA	Voltage	MCA A	MOP	Dimensions (WxHxD) inches	Weight (lbs)
FCU-1	Daikin	FXZQ07MVJU9	247-320	75.0 / 63.0	56.7	6433	4927	64	9233	-	29-31	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-2	Daikin	FXZQ07MVJU9	247-320	75.0 / 63.0	56.7	6433	4927	64	9233	-	29-31	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-3	Daikin	FXZQ07MVJU9	247-320	75.0 / 63.0	56.7	6433	4927	64	9233	-	29-31	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-4	Daikin	FXZQ07MVJU9	247-320	75.0 / 63.0	56.7	6433	4927	64	9233	-	29-31	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-5	Daikin	FXZQ12MVJU9	265-335	75.0 / 63.0	52.5	10299	6886	64	14766	-	29-33	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-6	Daikin	FXZQ12MVJU9	265-335	75.0 / 63.0	52.5	10299	6886	64	14766	-	29-33	230V 1ph	0.8	15A	22.6x11.3x22.6	42
FCU-7	Daikin	FXZQ07MVJU9	247-320	75.0 / 63.0	56.7	6433	4927	64	9233	-	29-31	230V 1ph	0.8	15A	22.6x11.3x22.6	42

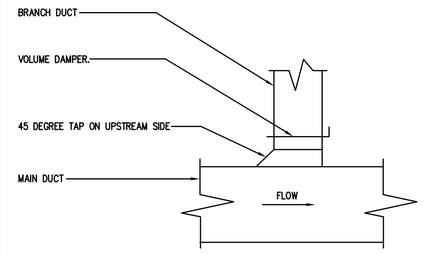
VRV Heat Pump Condensing Unit

Mark	Manufact.	Model	Nominal Tonnage	Voltage	MCA	MOCP	Weight (lbs)	Ambient Temp (Cooling)	Cooling (MBH)	Ambient Temp (Heating)	Heating (MBH)	Cooling EER	Cooling IEER	Heating COP
CU-1	Daikin	RXTQ48TAVJU	4	208-230/60/1	29.1	35	176	105	46.3	NA	NA	10.3	18	NA



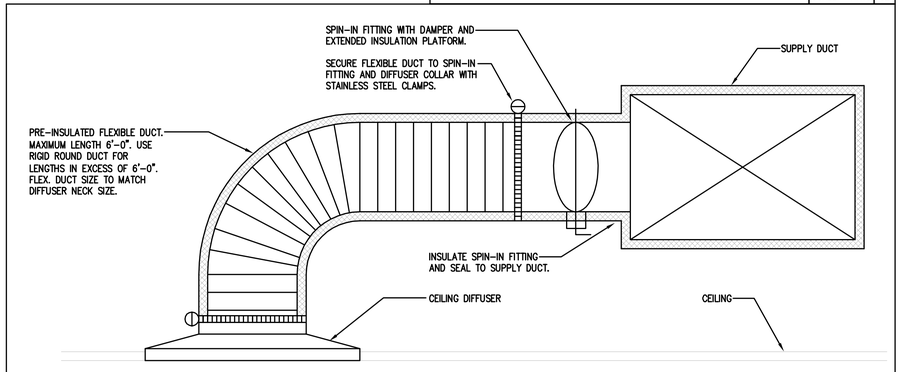
NOTES
1. USE DUCT SPLIT WHEN BRANCH FLOW IS GREATER THAN 1/3 OF MAIN FLOW.
2. VOLUME DAMPERS ARE NOT REQUIRED BETWEEN AIR HANDLER AND VAV BOXES.

DUCT SPLIT — SCALE: N.T.S | 03



NOTES
1. USE BRANCH DUCT TAKE–OFF WHEN BRANCH FLOW IS 1/3 OR LESS THAN MAIN FLOW.
2. VOLUME DAMPERS ARE NOT REQUIRED BETWEEN AIR HANDLER AND VAV BOXES.
3. USE CONICAL SPIN–IN FOR BRANCH DUCTS TO VAV BOXES.

SCALE: N.T.S | 02



FLEXIBLE DUCT RUNOUT TO DIFFUSER — SCALE: N.T.S | 01

1 MECHANICAL SCHEDULES AND DETAILS
SCALE: NTS

LANCASTER & ASSOCIATES
10655 SIX PINES DRIVE, SUITE 290
THE WOODLANDS, TEXAS 77380
PHONE: (281) 364-1866 FAX: (281) 292-2866
FIRM # F–18566
STATE OF TEXAS · MICHAEL E. RABENA · 68736 · REGISTERED PROFESSIONAL ENGINEER
08/23/2017

FAITH BIBLE CHURCH
RENOVATIONS TO PHASE I FACILITIES

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THE PDC GROUP, LLC
MEP Design & Consulting Engineers
14011 Park Drive ❖ Tomball, TX 77377
281.356.9002 ❖ 281.356.9008 ❖ www.thepdcgroup.com