

**MAIN MECHANICAL AND ELECTRICAL PLAN**  
SCALE: 1/16" = 1'-0"

**FIRE PROTECTION NOTES**

- M.C. TO DISCONNECT AND REMOVE EXISTING DUCT SMOKE DETECTOR(S) FROM UNITS WITH BELOW DESIGNATION(S). COORDINATE REMOVAL OF ANY DUCT SMOKE DETECTOR WITH WAREHOUSE MANAGER AND FIRE ALARM CONTRACTOR FOR REMOVAL FROM FIRE ALARM PANEL.
- DUCT SMOKE DETECTOR NOT REQUIRED PER IMC 606.2 EXCEPTION FOR SYSTEM INCAPABLE OF SPREADING SMOKE BEYOND THE ENCLOSING WALLS, FLOORS AND CEILINGS OF THE ROOM OR SPACE IN WHICH SMOKE IS GENERATED.
- DUCT SMOKE DETECTOR NOT REQUIRED FOR UNIT WITH LESS THAN 2000 CFM PER IMC 606.2.2.
- UNIT REMOVED FROM ROOF. REMOVE CORRESPONDING DUCT SMOKE DETECTOR.
- CONTRACTOR IS TO BE PRESENT DURING TEST WITH FIRE ALARM SERVICE COMPANY TO DEMONSTRATE FUNCTIONALITY.
- CONTRACTOR IS TO BE PRESENT DURING ANY TEST(S) REQUIRED BY JURISDICTION.

**PRIOR TO INSTALLATION**

- VERIFY EXISTING DUCT DROPS ARE FREE AND CLEAR OF SPRINKLER PIPING, STRUCTURAL MEMBERS, ETC.
- PROVIDE DIMENSIONAL DATA TO COIL TECH FOR EACH DUCT DROP FOR FABRICATION ALLOW 4 WEEK LEAD TIME FOR FABRICATION AND SHIPPING.
- DIFFUSER REPLACEMENT OPTION. IF INTERFERENCE OR OTHER CIRCUMSTANCES PROHIBIT EASY REPLACEMENT OF THE ENTIRE DUCT PACKAGE PROVIDE EXISTING DUCT SIZE INFO FOR ATTACHMENT OF NEW DIFFUSER TO EXISTING SUPPLY DUCT.
- VERIFY EXISTING UNIT NUMBER AND MODEL IN SCHEDULE.
- VERIFY ANY STRUCTURAL PLANS MATCH MECHANICAL PLANS.

**MECHANICAL PLAN NOTES**

- NEW AC UNIT ON ADAPTOR CURB.** REPLACE EXISTING AC UNIT WITH NEW AC UNIT. INSTALL ADAPTOR ON EXISTING CURB AND NEW AC UNIT ON ADAPTOR. CONNECT GAS AND CONDENSATE WHERE APPLICABLE. FIELD VERIFY SIZE, LOCATION AND DIMENSIONS OF EXISTING AC UNIT AND CURB. SCRAPE EXISTING GASKET AND ADHESIVE FROM CURB AND REPLACE WITH NEW NEOPRENE GASKET FOR BOTH ADAPTOR CURB AND NEW UNIT.  
ADAPTOR CURB TO BE PRE-ENGINEERED BY THYBAR OR EQUIVALENT. FOR COORDINATION WITH THYBAR CONTACT BILL MARZEC (775-343-0600) @ THYBAR TO ORDER ADAPTOR CURBS.  
EXISTING STAINLESS STEEL CURBS TO BE EQUIPPED WITH STAINLESS STEEL ADAPTOR CURBS.  
G.C. TO SUBMIT STAMPED DRAWING FOR ADAPTOR CURB. SUBMITTAL TO INCLUDE CONNECTIONS BETWEEN EXISTING CURB & ADAPTOR CURB; AND CONNECTION BETWEEN ADAPTOR CURB & NEW AC UNIT; AND ADAPTOR CURB WEIGHT.
- REPLACE EXISTING AC UNIT WITH CURB CAP AND CONDENSER FOR SPLIT SYSTEM.** SCRAPE EXISTING GASKET AND ADHESIVE FROM CURB AND REPLACE WITH NEW NEOPRENE GASKET FOR CURB CAP. CAP EXISTING GAS AND CONDENSATE ABOVE ROOF. DO NOT DISTURB EXISTING ROOF PENETRATIONS. INSTALL NEW ROOF CURB ADAPTER PLATE AND NEW OUTDOOR SPLIT SYSTEM UNIT. FIELD VERIFY CONDITION OF EXISTING CURB. COORDINATE WITH G.C. FOR CURB REPLACEMENT IF REQUIRED.
- M.C. TO REPLACE EXISTING DUCT DIFFUSER PACKAGE.** FIELD VERIFY EXISTING DUCT SIZE AND PROVIDE REQUIRED ADAPTOR OR EXTENSIONS FOR DUCT PACKAGE. SET DIFFUSER DIRECTION FORWARD AS INDICATED BY ARROWS.
- EXISTING HVAC IN THIS AREA TO REMAIN.

**GENERAL MECHANICAL NOTES**

- M.C. SHALL ENSURE ALL ROOF TOP EQUIPMENT IS LABELED CORRECTLY AND MATCH CALLOUTS ON PLAN ON THE INSIDE & OUT OF THE BUILDING. THIS INCLUDES HVAC UNITS & EXHAUST FANS. LABELS SHOULD BE IN 6" BLOCK LETTERING IN BLACK COLOR AND LOCATED WHERE EASILY VISIBLE FROM THE ROOF HATCH.
- MAINTAIN A MINIMUM OF 10'-0" BETWEEN EXHAUST OUTLET AND UNIT FRESH AIR INTAKE.
- COORDINATE ALL MECHANICAL DUCTWORK LOCATIONS WITH ELECTRICAL EQUIPMENT. NO DUCTWORK WILL BE ALLOWED TO RUN OVER THE TOP OF ELECTRICAL DISTRIBUTION EQUIPMENT OR PANELS.
- DIMENSIONS ARE TO COLUMN LINES.
- APPLICABLE BUILDING CODE [2018 WSEC]
- APPLICABLE MECHANICAL CODE [2018 WSEC]
- APPLICABLE ENERGY CODE [2018 WSEC]
- PROVIDE TIE DOWN FOR ALL NEW FLUES & VENTS OF 3" OR TALLER.
- RUN ALL SUPPLY, RETURN AND EXHAUST DUCTS AND FLUES BETWEEN THE ROOF AND CEILING SPACE STRAIGHT WITH INTERNAL INSULATION. NO ANGLES OR OFFSETS. CONTACT ARCHITECT TO RESOLVE ANY CONFLICTS WITH STRUCTURE.
- ALL CONDENSATE PIPING TO BE SLOPED AT 2% MINIMUM UNLESS OTHERWISE NOTED.
- RUN PIPING IN ROOF TRUSS SPACE PERPENDICULAR OR PARALLEL TO BUILDING JOIST OR GIRDERS, FOR PASSING BELOW SOLID GIRDERS MOUNT PIPING 6" MAXIMUM FROM BOTTOM OF GIRDER. DO NOT BLOCK LIGHTING & SKYLIGHTS.

**ELECTRICAL LEGEND**

- SINGLE POLE SWITCH, +42"
- SUB-LETTER INDICATES FIXTURE CONTROLLED, +42"
- THREE POLE SWITCH, +42"
- JUNCTION BOX, SIZE AND TYPE PER CODE
- MOTOR CONNECTION AS REQUIRED
- DUPLEX RECEPTACLE, +18" OR AS NOTED
- FUSED DISCONNECT, COORDINATE W/EQUIPMENT SUPPLIER
- NON-FUSED DISCONNECT, COORDINATE W/EQUIPMENT SUPPLIER
- CONDUIT IN CEILING OR WALL, 1/2" MIN.
- CONDUIT UNDERGROUND OR FLOOR, 3/4" MIN.
- HOME RUN TO PANEL WITH CIRCUIT NUMBER, SLASHES INDICATE NUMBER OF CONDUCTORS
- INDICATES WIRES AND CONDUIT OTHER THAN #12, 1/2" C - METALLIC CONDUIT, PVC - PLASTIC CONDUIT
- ISOLATED GROUND OR GROUND CONDUCTOR
- FLEXIBLE CONDUIT CONNECTION AS REQUIRED
- EXISTING PANEL
- ELECTRICAL CONTRACTOR
- WEATHERPROOF
- HACR BREAKER IN NEMA ENCLOSURE. COORDINATE WITH EQUIPMENT SUPPLIER

**ELECTRICAL GENERAL NOTES:**

- INFORMATION ON THE EXISTING INSTALLATION HAS BEEN OBTAINED FROM THE BEST SOURCES AVAILABLE BUT CAN NOT BE GUARANTEED ACCURATE IN ALL RESPECT. PRIOR TO BID, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE, THOROUGHLY FAMILIARIZE HIMSELF.
- ALL WORK SHALL BE PERFORMED TO CHANGE THE EXISTING ELECTRICAL INSTALLATION AS SHOWN. INCLUDE AS PART OF THE CONTRACT ALL RELATED WORK REQUIRED TO OBTAIN THE INDICATED RESULTS. ALL EXISTING WIRING, CONDUITS, JUNCTION BOXES AND ALL OTHER ELECTRICAL EQUIPMENT AND DEVICES IN THE AREAS AFFECTED BY THE DEMOLITION AND THE NEW WORK SHALL BE REMOVED AND RELOCATED AS REQUIRED. EXTEND ALL CONDUITS AND WIRING. REPULL NEW WIRES AS REQUIRED.
- ALL WORK IS TO BE DONE SO AS NOT TO INTERFERE WITH THE WAREHOUSE'S NORMAL OPERATION. ANY ELECTRICAL SHUTDOWN SHALL BE COORDINATED AND SCHEDULED AS APPROVED BY THE STORE MANAGER OR COSTCO'S DESIGNATED REPRESENTATIVE.
- DO NOT RUN CONDUITS AND WIRES ON ROOF.

**ELECTRICAL PLAN NOTES:**

- EXISTING AC UNIT TO BE REMOVED AND REPLACED. E.C. TO DISCONNECT AND RECONNECT EXISTING POWER FROM EXISTING UNIT TO NEW UNIT. E.C. TO VERIFY EXISTING FEEDER AND FUSES IF IT IS MINIMUM 3 #1/0 IN 2". IF NOT REPLACE WITH NEW 3 #1/0 CU IN 2". REPLACE EXISTING FUSES WITH 125A FUSES IN EXISTING FUSE SWITCH. REUSE EXISTING FUSE SWITCH IN EXISTING MSB. FIELD VERIFY EXISTING CONDITION PRIOR TO BID.
- EXISTING AC UNIT TO BE REMOVED AND REPLACED WITH CU-6. E.C. TO DISCONNECT AND RECONNECT POWER FROM EXISTING TO NEW CU-6. EXTEND EXISTING FEEDER IF REQUIRED. E.C. TO VERIFY EXISTING FEEDER IF IS MINIMUM OF 2#12 CU IN 1/2". IF NOT REPLACE WITH 3#10 CU IN 1/2". REUSE EXISTING CIRCUIT. E.C. TO REPLACE EXISTING BREAKER WITH NEW 40A/2P BREAKER IN EXISTING PANEL. FIELD VERIFY EXISTING CONDITION PRIOR TO BID. EXISTING ROOF RECEPTACLE TO REMAIN, RELOCATE AS REQUIRED. POWER AH-6 FROM CU-6. E.C. TO PROVIDE HACR BREAKERS.
- EXISTING AC UNIT TO BE REMOVED AND REPLACED WITH CU-1. E.C. TO REMOVE EXISTING FEEDER TO SOURCE. PROVIDE NEW FEEDER AS SHOWN. REUSE EXISTING CIRCUIT. E.C. TO REPLACE EXISTING BREAKER WITH NEW 40A/2P BREAKER IN EXISTING PANEL. FIELD VERIFY. EXISTING ROOF RECEPTACLE TO REMAIN, RELOCATE AS REQUIRED. POWER AH-1 FROM CU-1. E.C. TO PROVIDE HACR BREAKERS.
- EXISTING AC UNIT TO BE REMOVED AND REPLACED WITH CU-2. E.C. TO REMOVE EXISTING FEEDER TO SOURCE. PROVIDE NEW FEEDER AS SHOWN. E.C. TO PROVIDE A NEW 40A/2P BREAKER IN EXISTING PANEL P10. FIELD VERIFY. POWER AH-2 FROM CU-2. E.C. TO PROVIDE HACR BREAKERS.
- EXISTING AC UNIT TO BE REMOVED AND REPLACED. E.C. TO DISCONNECT AND RECONNECT EXISTING POWER FROM EXISTING UNIT TO NEW UNIT. E.C. TO VERIFY EXISTING FEEDER IF IT IS MINIMUM 3 #10 IN 1/2". IF NOT REPLACE WITH NEW 3 #10 CU IN 1/2". REUSE EXISTING CIRCUIT. E.C. TO REPLACE EXISTING BREAKER WITH NEW 20A/3P BREAKER IN EXISTING PANEL. FIELD VERIFY EXISTING CONDITION PRIOR TO BID.
- EXISTING AC UNIT TO BE REMOVED AND REPLACED WITH CU-5. E.C. TO DISCONNECT AND RECONNECT POWER FROM EXISTING TO NEW CU-5. EXTEND EXISTING FEEDER IF REQUIRED. E.C. TO VERIFY EXISTING FEEDER IF IS MINIMUM OF 2#12 CU IN 1/2". IF NOT REPLACE WITH 3#10 CU IN 1/2". REUSE EXISTING CIRCUIT. E.C. TO REPLACE EXISTING BREAKER WITH NEW 30A/2P BREAKER IN EXISTING PANEL. FIELD VERIFY EXISTING CONDITION PRIOR TO BID. EXISTING ROOF RECEPTACLE TO REMAIN, RELOCATE AS REQUIRED. POWER AH-5 FROM CU-5. E.C. TO PROVIDE HACR BREAKERS.
- E.C. TO PROVIDE A 20A/1P BREAKER IN EXISTING PANEL P1 FOR NEW PEAR FANS. FIELD VERIFY.

**PERMIT RESUBMITTAL**

PROJECT NO: 20-71

ARCHITECT REFERENCE NO:

ISSUE DATE: MARCH 19, 2022

REVISION DATE: OCTOBER 4, 2023

DRAWN BY: ANT/DS

CHECKED BY: ANT/PRK

**HVAC REPLACEMENT**

WAREHOUSE #660  
1201 39TH AVENUE SW  
POYALLUP, WA 98373

**T.E., Inc.**  
830 N. RIVERSIDE DRIVE  
SUITE #200  
RENTON, WA 98057  
PHONE: 425-970-9753  
FAX: 425-970-3758

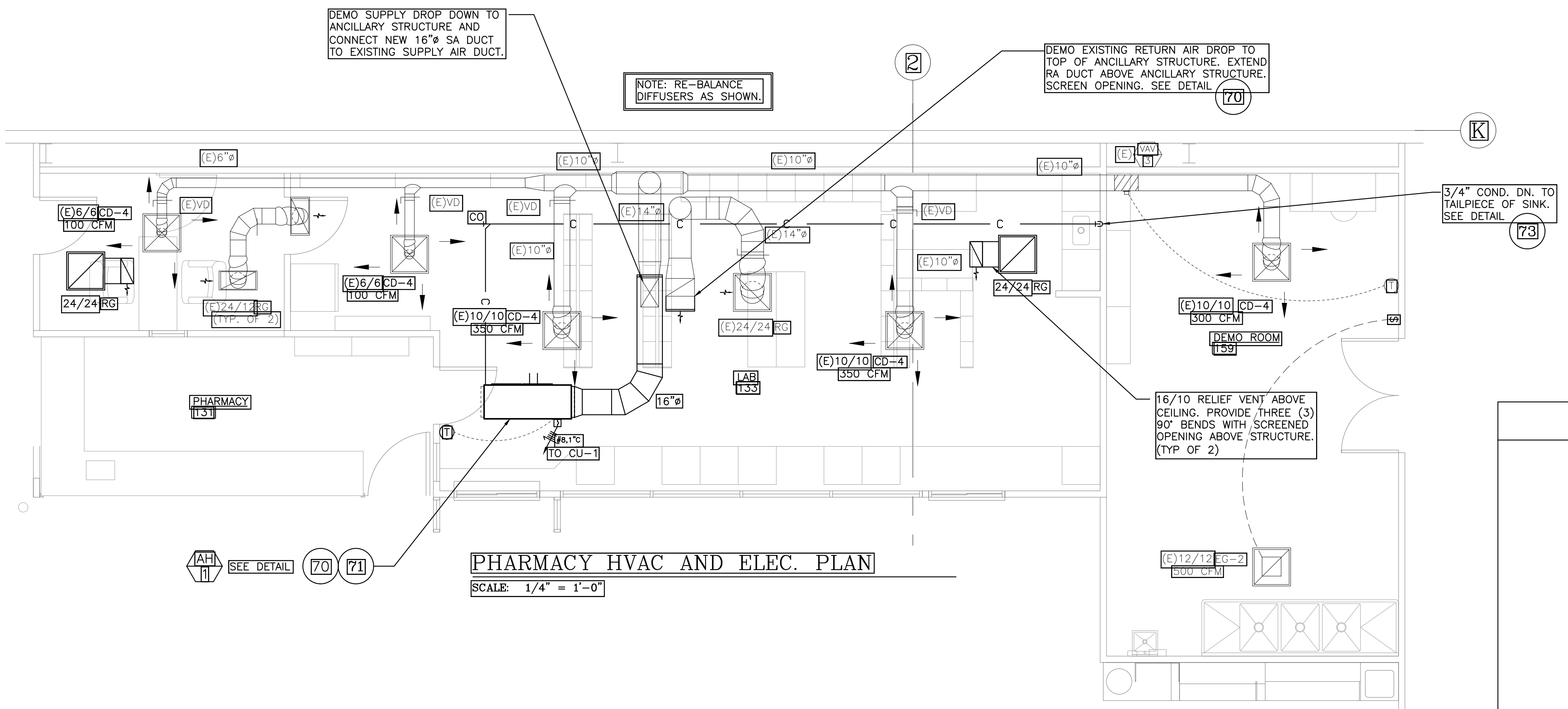
**COSTCO WHOLESALE**

**ME-1**

03/19/21 INITIAL RELEASE  
04/28/21 REVISED TO MIN SPLITS  
10/05/21 PERMIT RESUBMITTAL

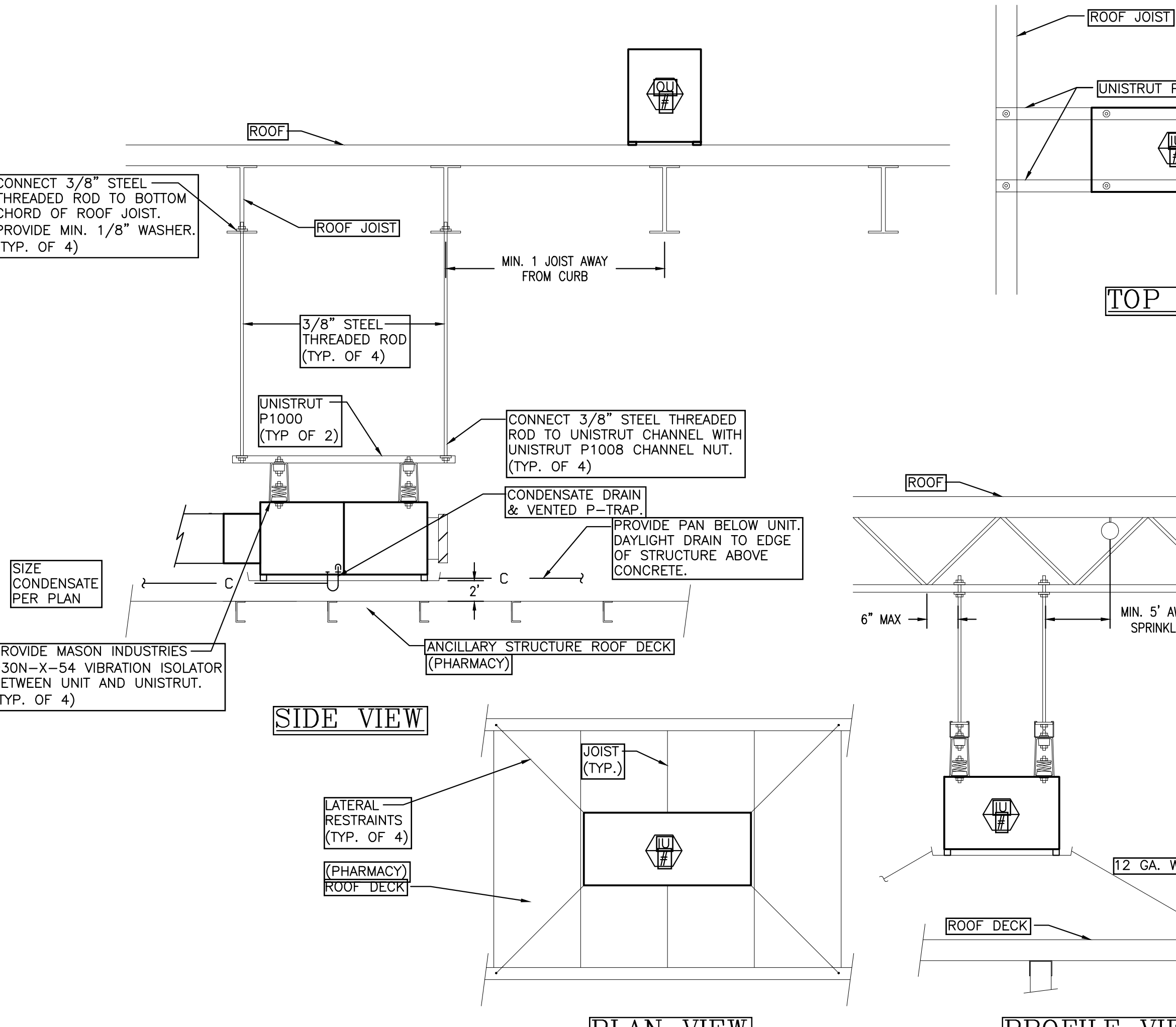
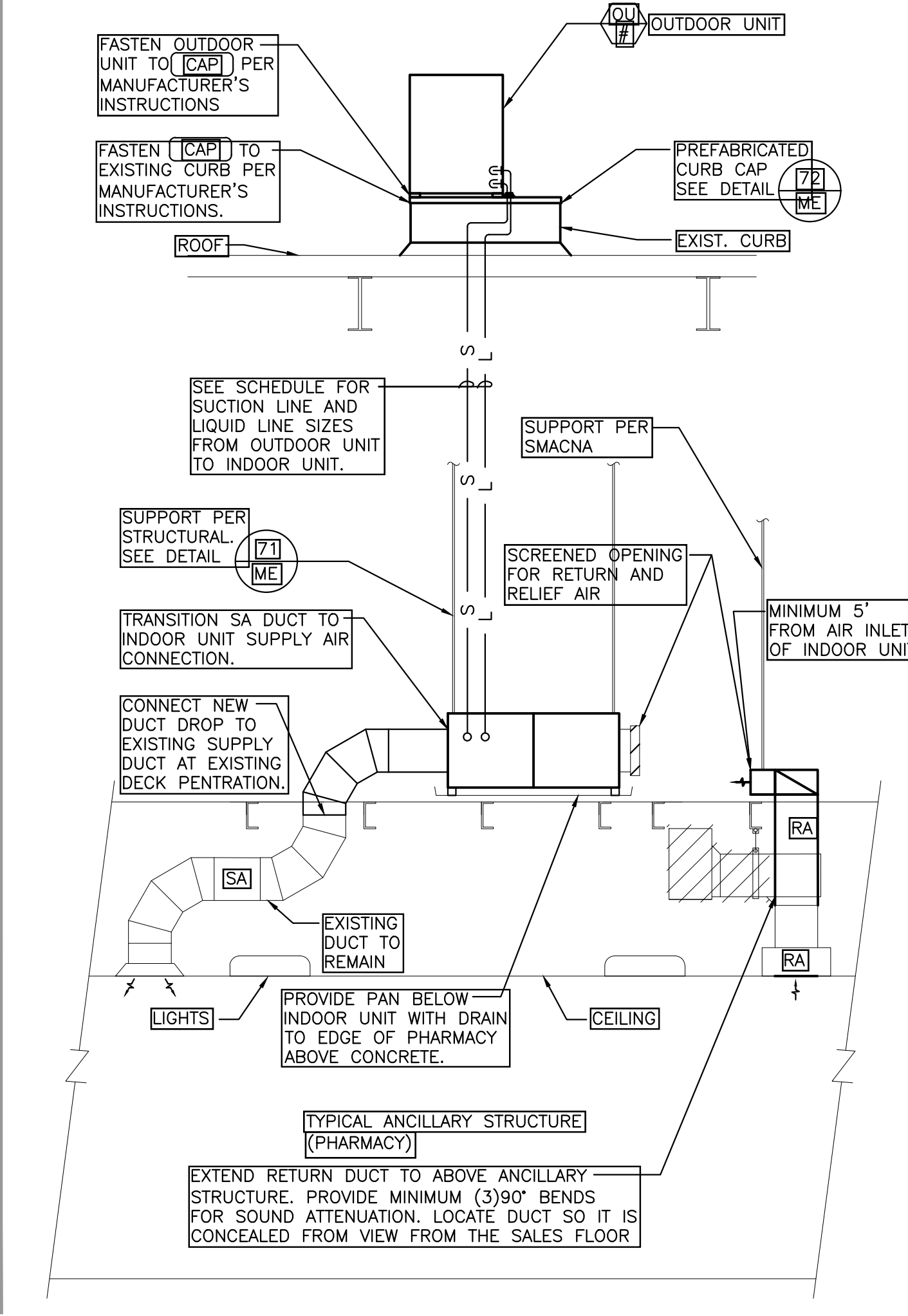
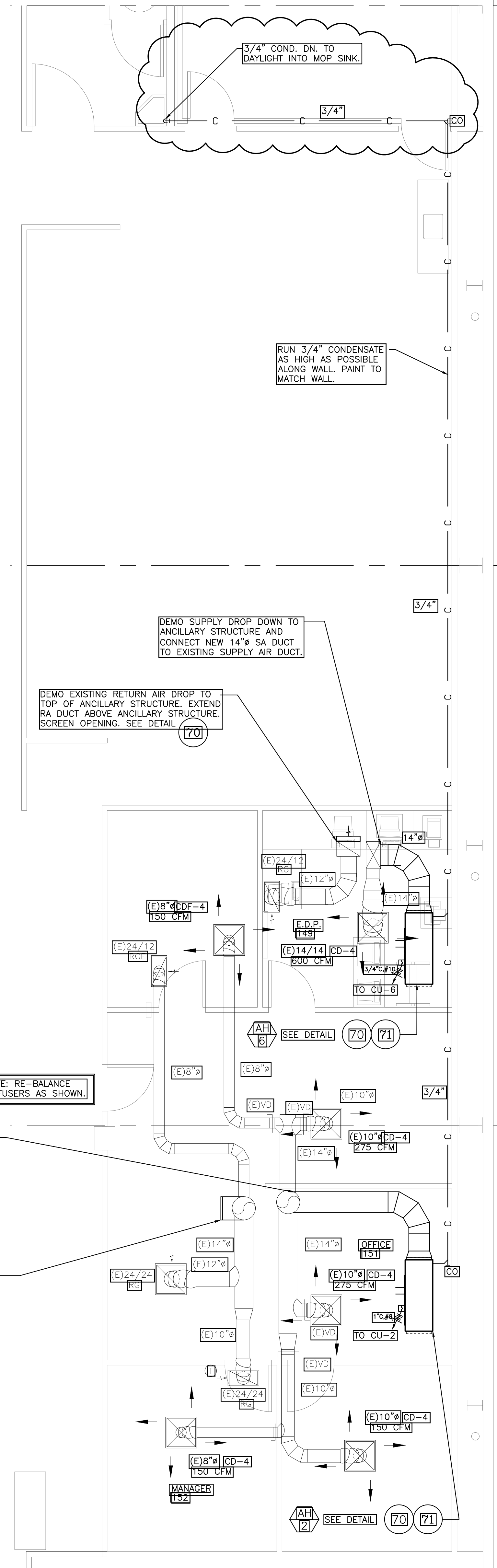
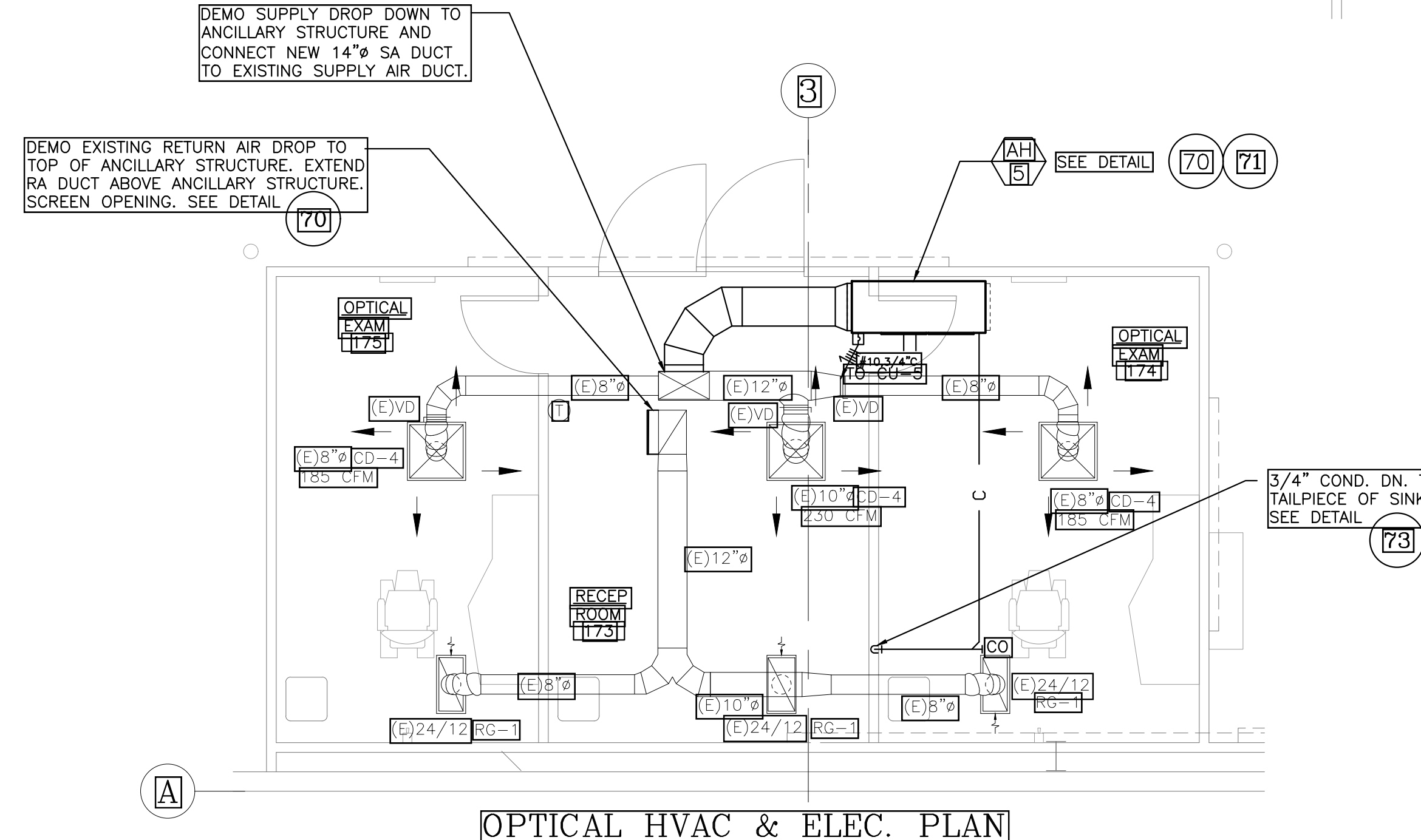
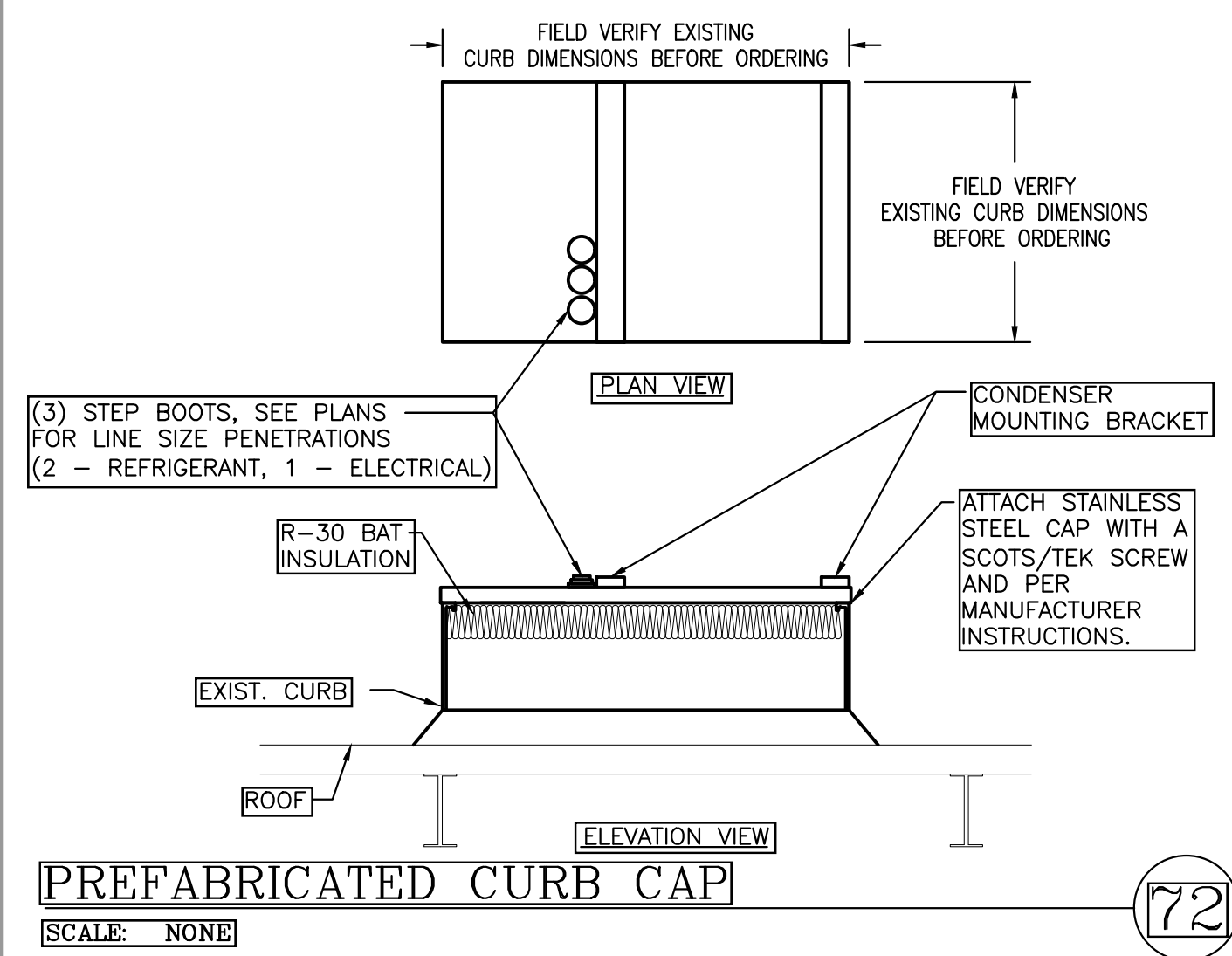
JOE A. KORBORN  
REGISTERED PROFESSIONAL  
10/04/2021

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REGISTERED PROFESSIONAL  
10/04/2021



### HVAC LEGEND

[24/48]	AIR DUCT - FIRST # IS SIDE SHOWN
[CD]	FLEXIBLE DUCT CONNECTION
[TV]	TURNING VANE
[SU]	SUPPLY DUCT UP
[SD]	RETURN DUCT UP
[SDU]	SUPPLY DUCT DOWN
[SDD]	RETURN DUCT DOWN
[AVD]	AIR VOLUME DAMPER
[CD]	CEILING DIFFUSER
[SQR]	SQUARE TO ROUND DUCT TRANSITION
[CD]	CONDENSATE DRAIN
[AC#1]	AIR CONDITIONER #1
[T]	THERMOSTAT
[TLW]	THERMOSTAT (W/LOCKING COVER)
[S]	SENSOR
[H]	HUMIDISTAT
[CD]	CARBON DIOXIDE
[CONT]	CONTINUATION
[TYP.]	TYPICAL
[CFM]	CUBIC FEET PER MINUTE
[DBT]	DRY BULB TEMPERATURE
[WB]	DOOR GRILLE
[WBH]	WET BULB TEMPERATURE
[MBH]	1,000 BRITISH THERMAL UNITS/HR
[ESP]	EXTERNAL STATIC PRESSURE
[RG]	EXHAUST GRILLE
[CD]	RETURN GRILLE
[RA]	RETURN AIR
[SA]	SUPPLY AIR
[CDF]	CEILING DIFFUSER WITH FIRE DAMPER
[RGF]	RETURN GRILLE WITH FIRE DAMPER
[CDFF]	CEILING DIFFUSER FOOD PREPARATION
[RGFF]	RETURN GRILLE FOOD PREPARATION
[CO]	CLEAN OUT
[VD]	VOLUME DAMPER
[MBS]	METAL BUILDING SUPPLIER
[M.C]	MECHANICAL CONTRACTOR
[G.C]	GENERAL CONTRACTOR



OFFICE & EDP HVAC & ELEC. PLAN, PHARMACY HVAC & ELEC. PLAN, OPTICAL HVAC & ELEC. PLAN, DETAILS AND LEGENDS

PROJECT NO: 20-71    ARCHITECT REFERENCE NO:    ISSUE DATE: MARCH 19, 2022    REVISION DATE: OCTOBER 4, 2023    CHECKED: ANT/PKR    DRAWN: ANT/DS

PERMIT RESUBMITAL

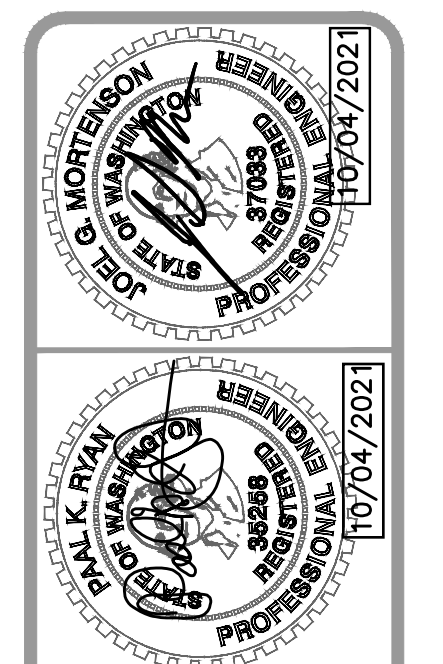
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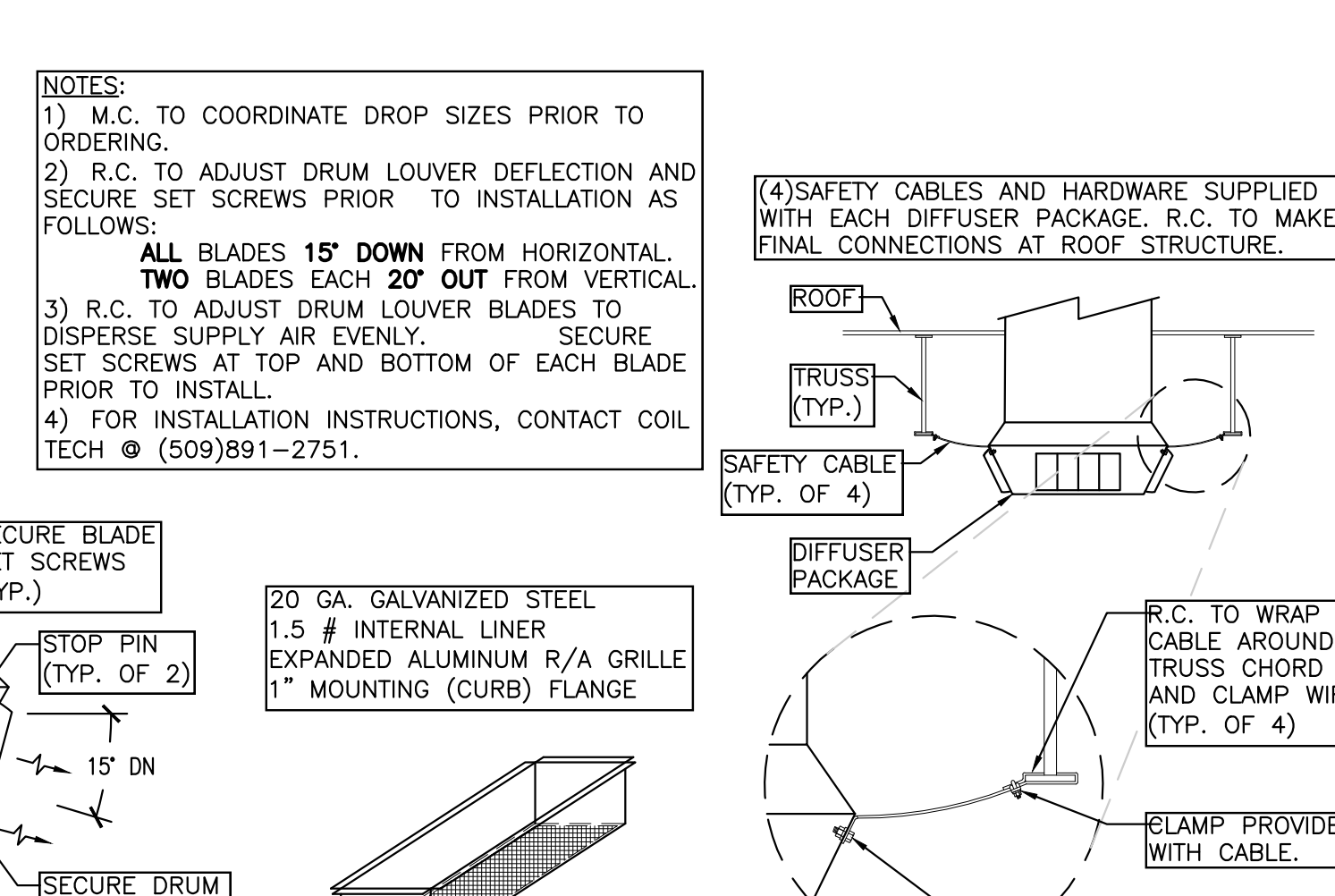
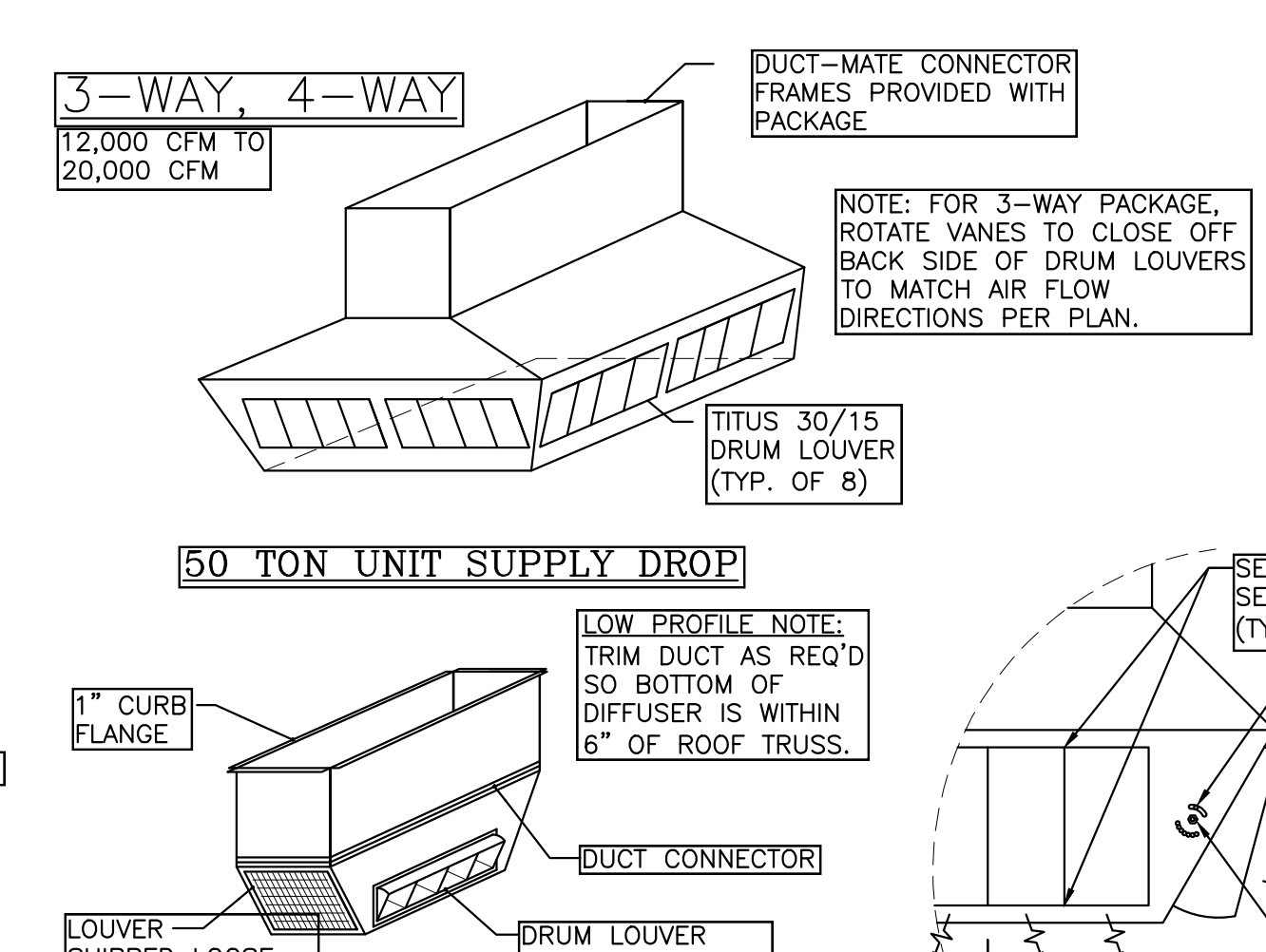
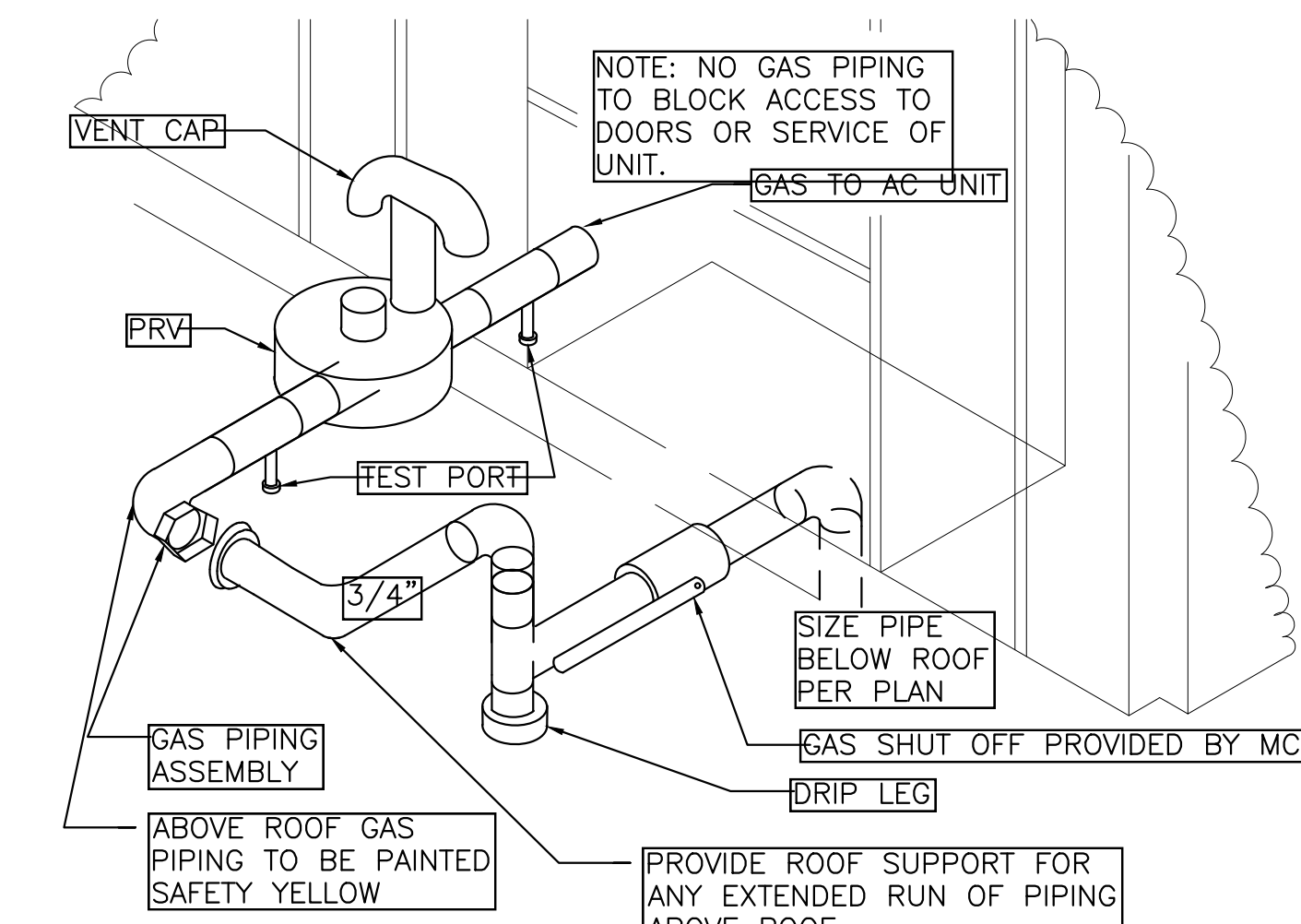
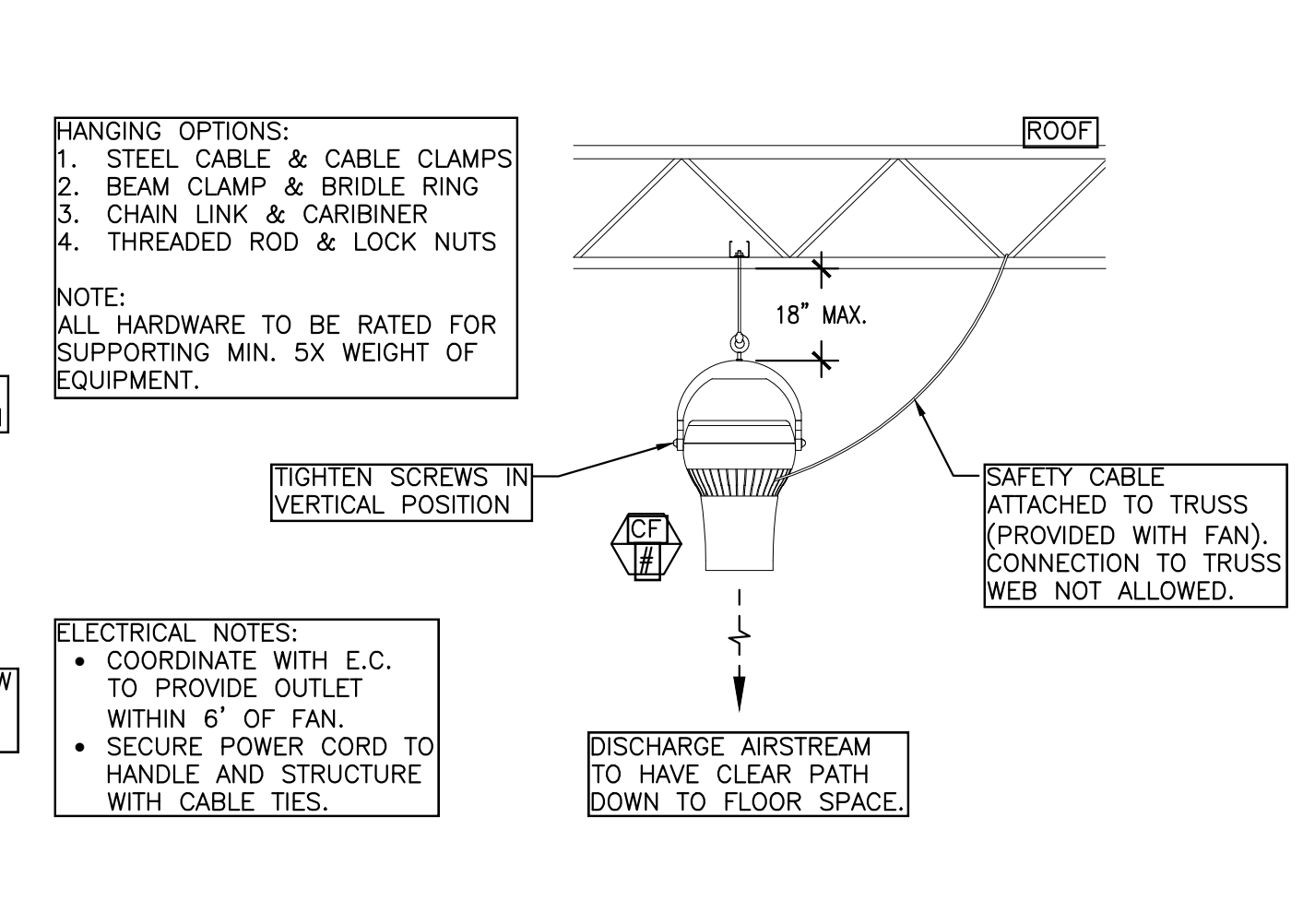
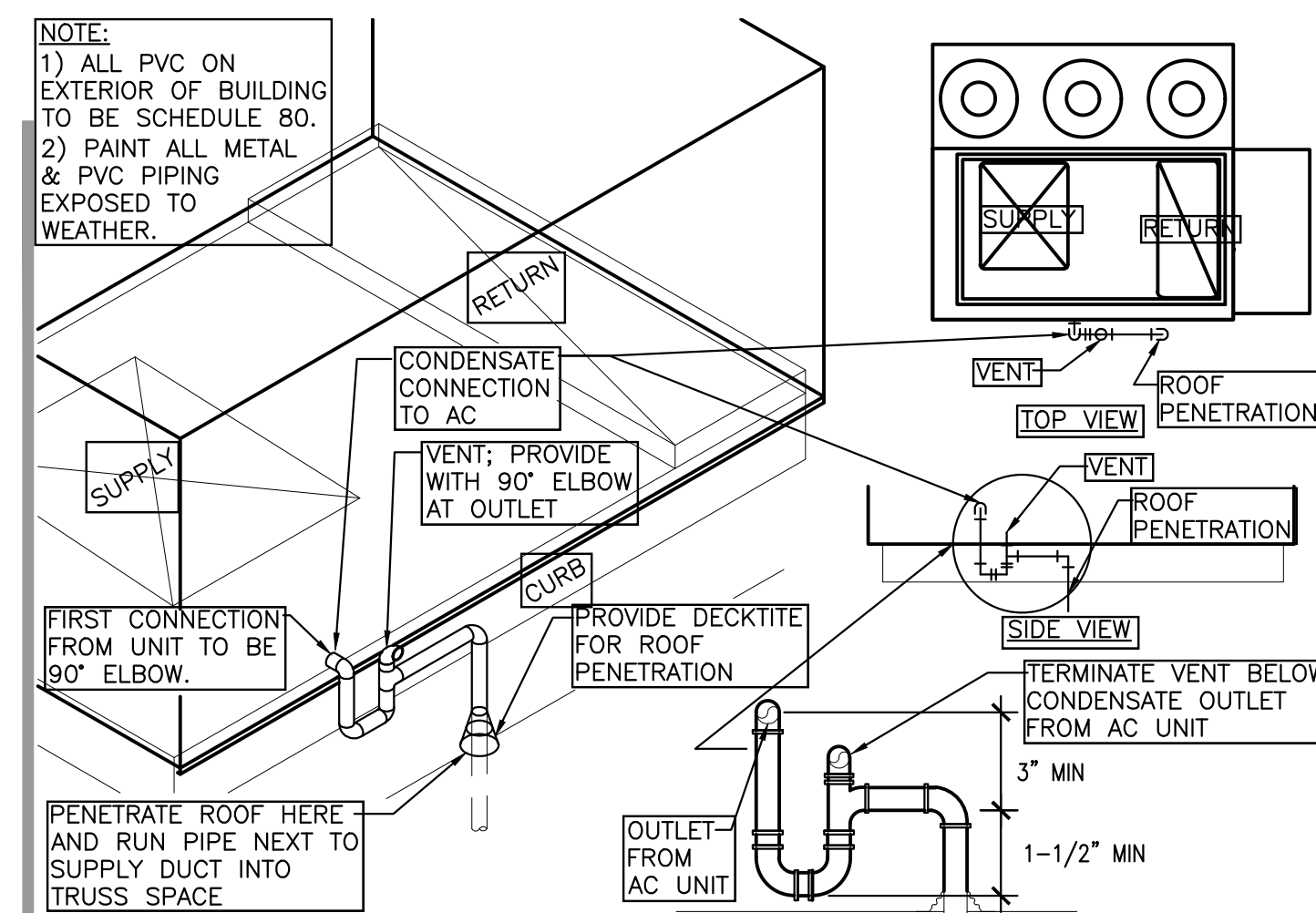
**HVAC REPLACEMENT**

**COSTCO WHOLESALE**

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 1201 39TH AVENUE SW  
 PUYALLUP, WA 98373

**ME-2**





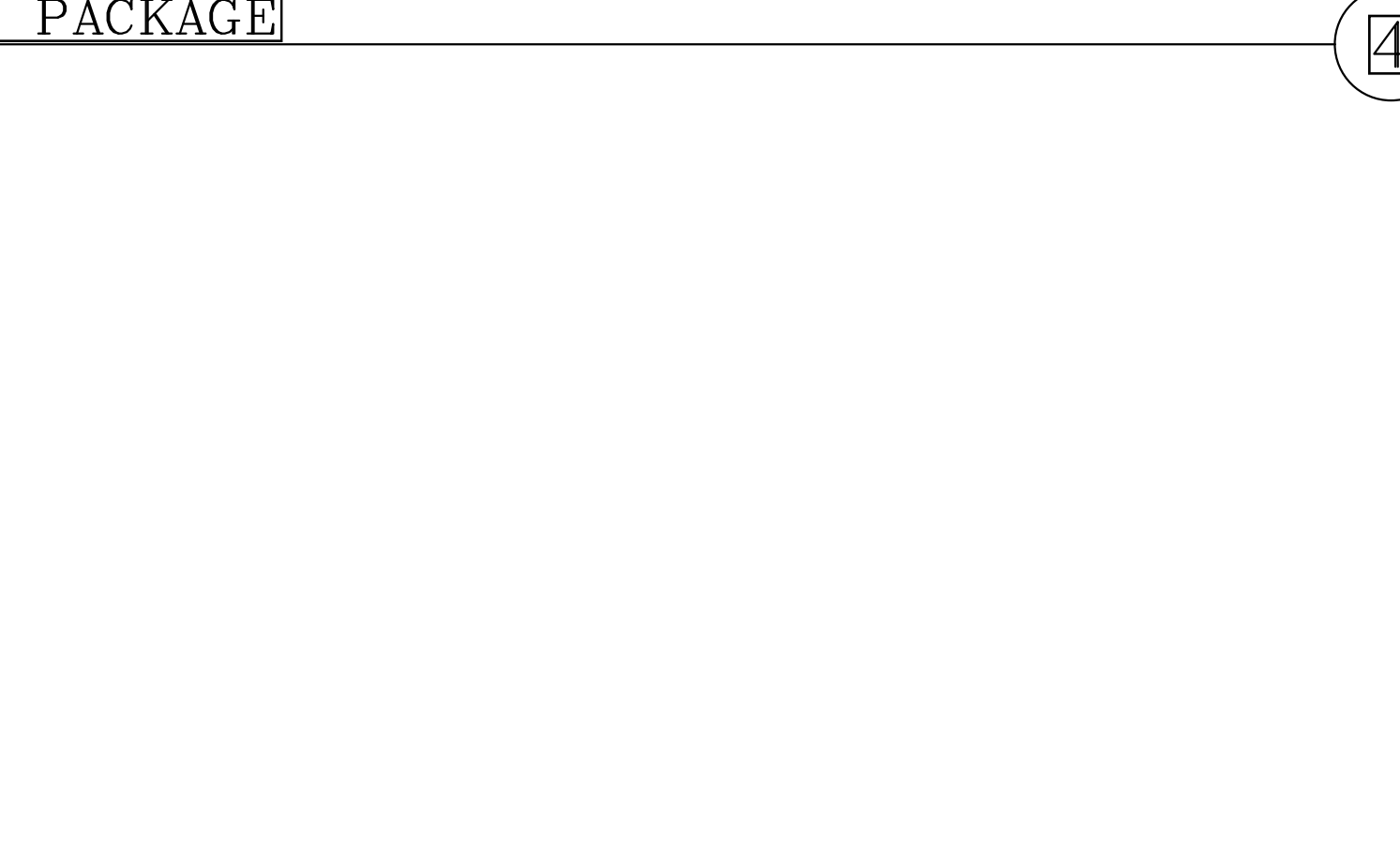
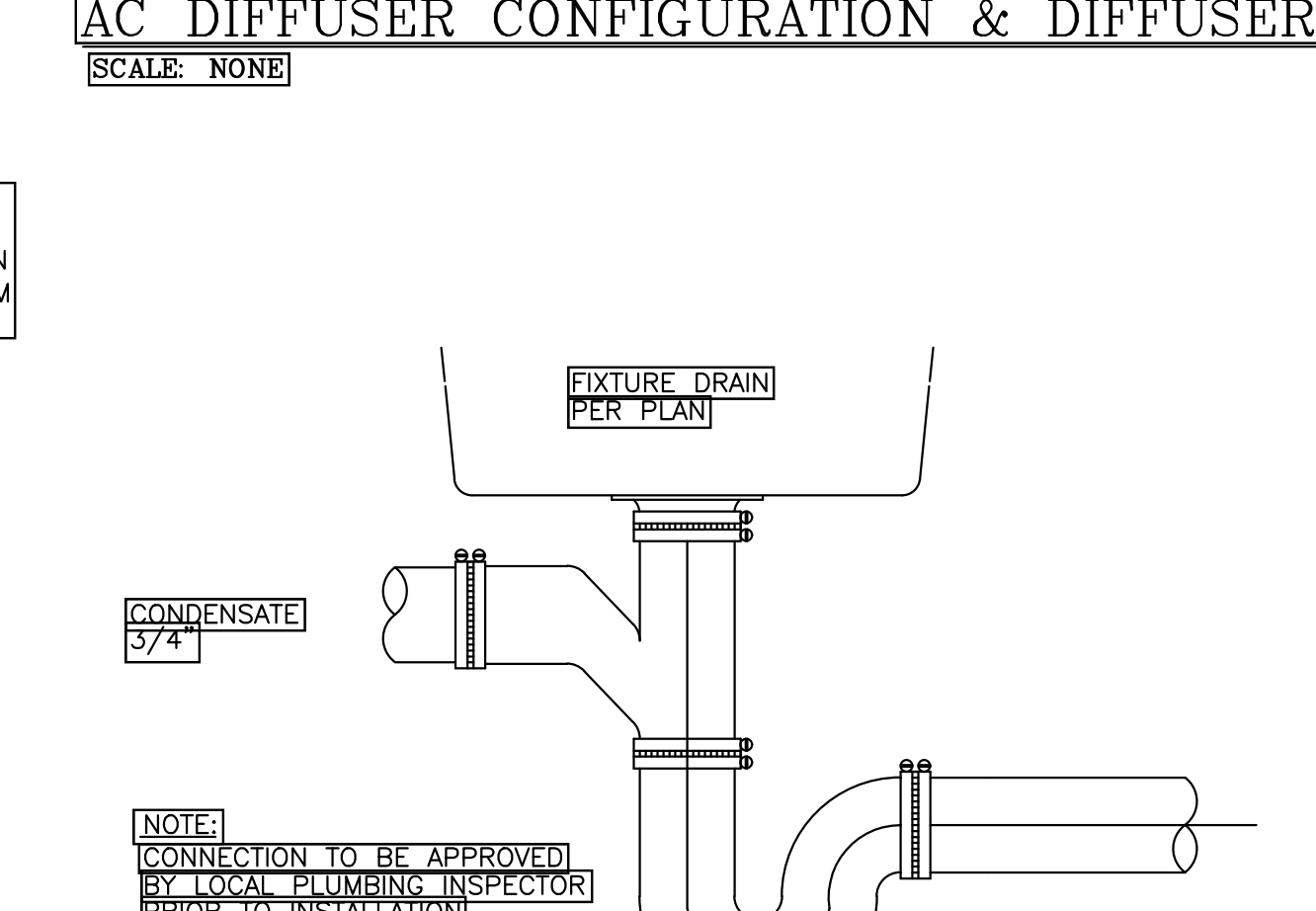
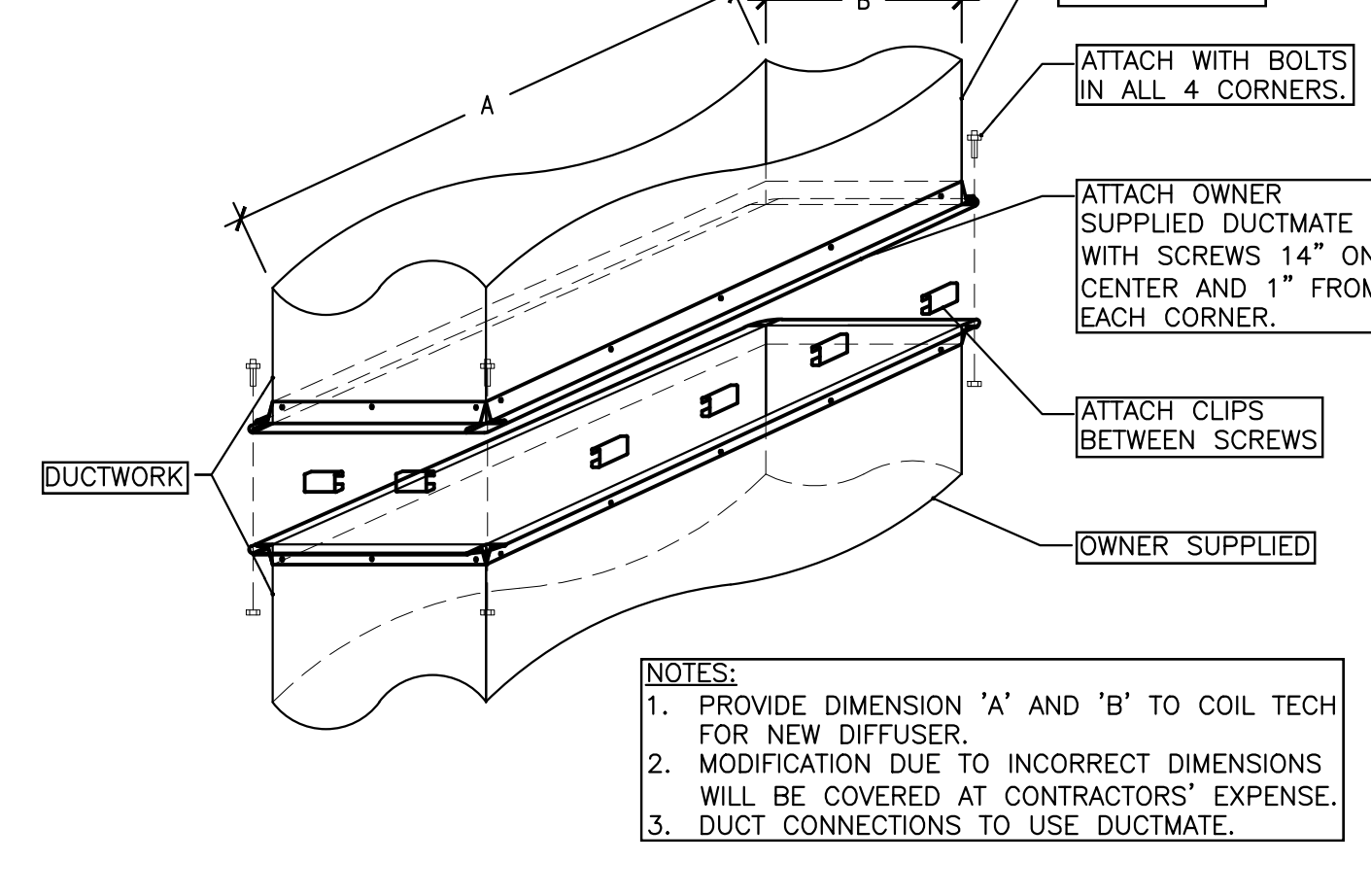
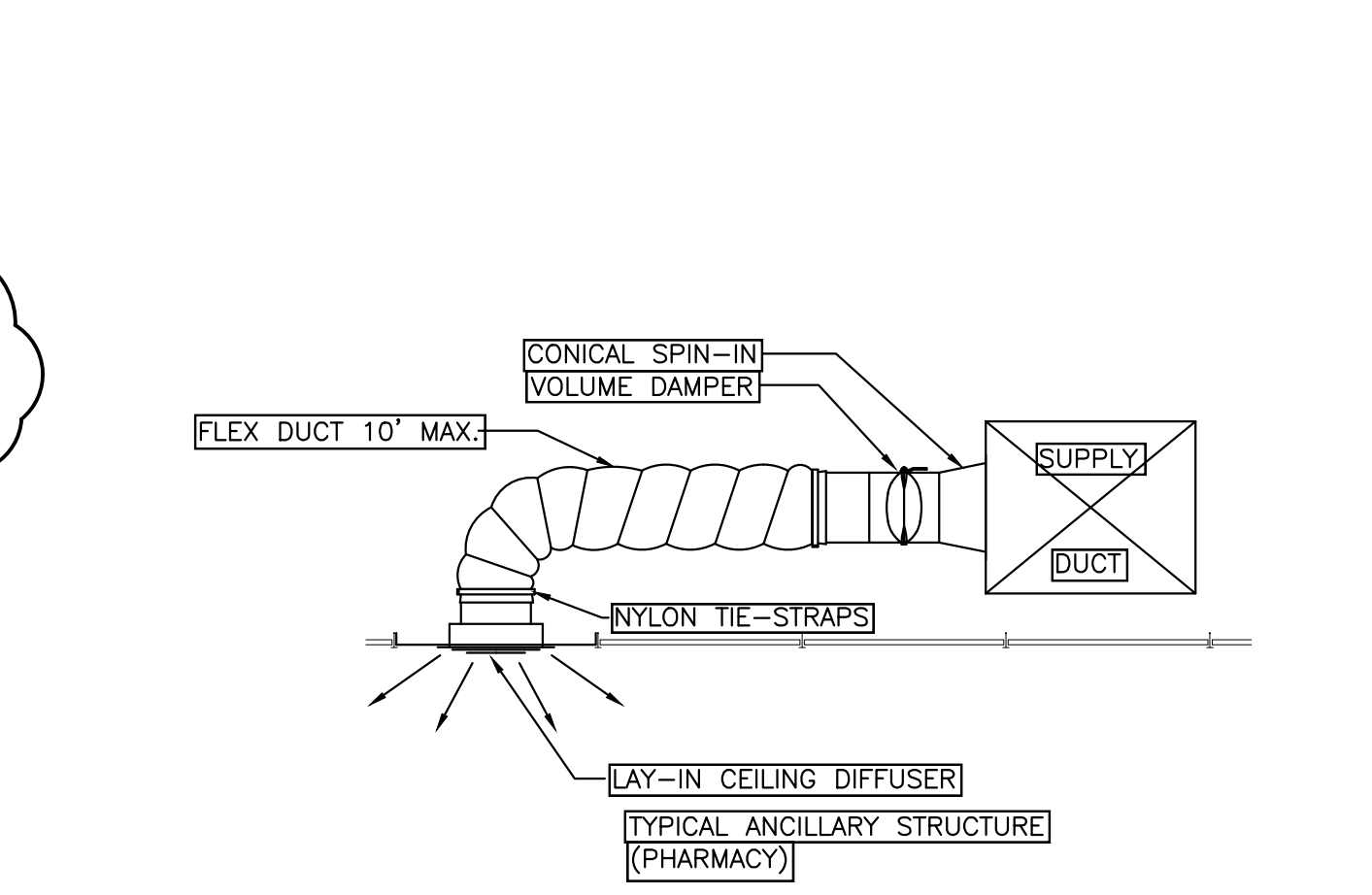
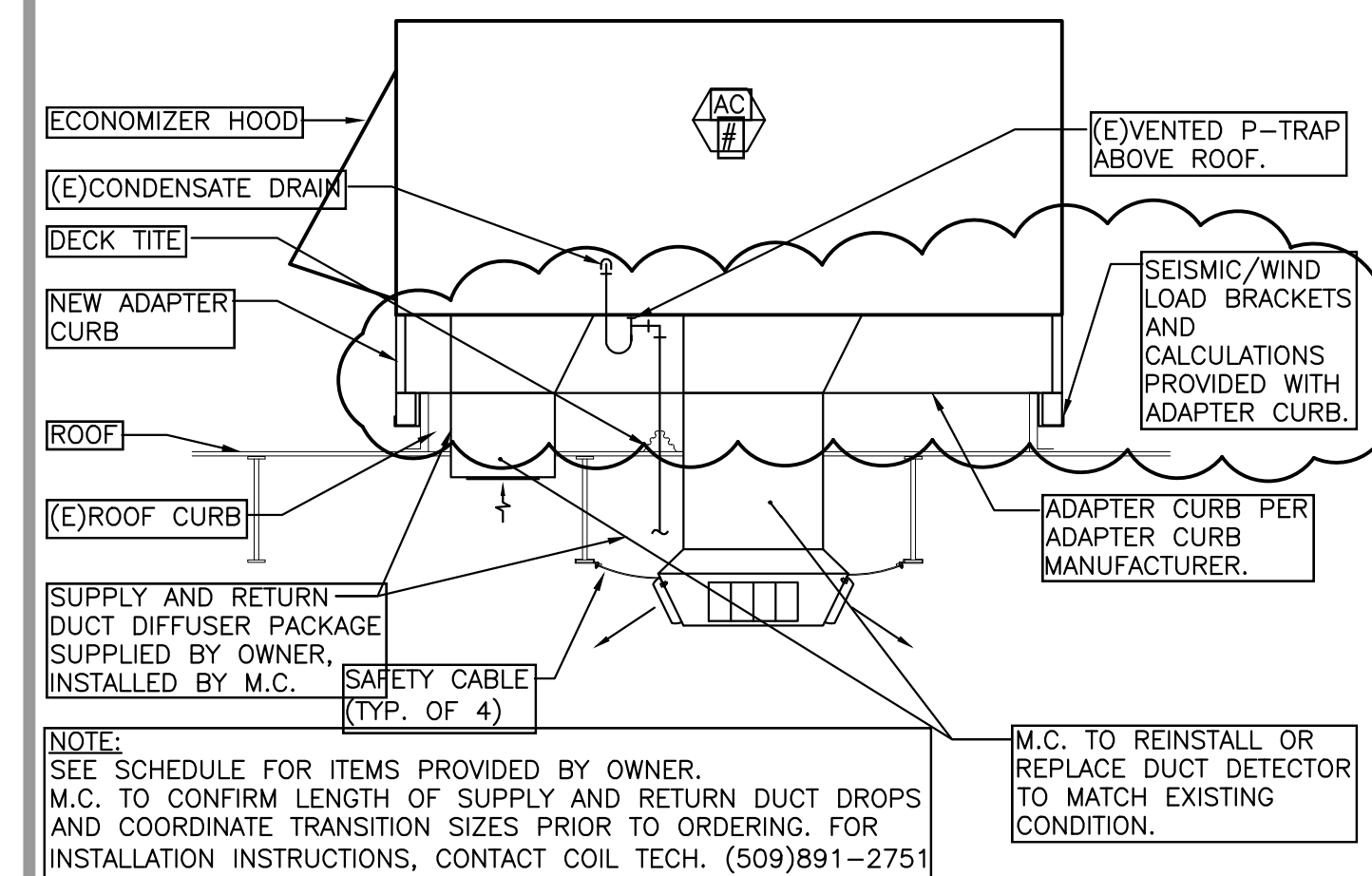
AC CONDENSATE PIPING DIAGRAM (SCALE: NONE)

DESTRATIFICATION FAN (SCALE: NONE)

AC THRU THE BASE GAS PIPING DIAGRAM (SCALE: NONE)

50 TON UNIT SUPPLY DROP (SCALE: NONE)

AC DIFFUSER CONFIGURATION & DIFFUSER PACKAGE (SCALE: NONE)



ROOF MOUNTED AC UNIT W/ ADAPTER (SCALE: NONE)

DIFFUSER INLET DETAIL (SCALE: NONE)

EXISTING DROP CONNECTION (SCALE: NONE)

CONDENSATE CONNECTION TO DRAIN (SCALE: NONE)

CEILING FAN SCHEDULE - S.O.I.C./S.I.C. (SCALE: NONE)

REQUIRED VENTILATION SCHEDULE table with columns for room, occupancy, net volume, and various airflow and pressure requirements.

CEILING FAN SCHEDULE - S.O.I.C./S.I.C. table with columns for symbol, item, serves, MFR, description, elect, weight, reference, remarks, and notes.

HVAC EQUIPMENT SCHEDULE - S.O.I.C. table with columns for symbol, item, serves, MFR, description, elect, fan hp, reference, remarks, notes, MFR, heat, electrical, net weights, new net weights, and remarks.

AIR TERMINAL SCHEDULE table with columns for symbol, manufacturer, service, model, pattern, damper neck, frame, location, and remarks.

- GENERAL NOTES: List of installation and equipment requirements, including equipment source (Costco), AC unit controls, contractor installation, and specific unit details.

PERMIT RESUBMITTAL stamp and project information including issue date, revision dates, and permit details.

Project information and logos including T.F., Inc., HVAC REPLACEMENT, COSTCO WHOLESALE, and ME-3.