HVAC LEGEND

- SUPPLY/OUTSIDE AIR DUCT UP
- SUPPLY/OUTSIDE AIR DUCT DOWN
- RETURN/EXHAUST DUCT UP
- RETURN/EXHAUST DUCT DOWN
- RECTANGULAR DUCT ELBOW WITH TURNING VANES
- STANDARD BRANCH, SUPPLY OR RETURN, NO SPLITTER
- DUCT TRANSITION
- RECTANGULAR TO ROUND DUCT TRANSITION
- MANUAL VOLUME DAMPER (VD)
- FIRE DAMPER (FD)
- BACKDRAFT DAMPER (BDD)
- MOTOR-OPERATED SMOKE/FIRE DAMPER (S/FD)
- MOTOR-OPERATED DAMPER (MD)
- DUCT SMOKE DETECTOR (SD)
- PIPE TURNING UP
- PIPE TURNING DOWN
- DIRECTION OF FLOW IN PIPE
- TRANSITION FROM ROUND TO RECTANGULAR DUCTWORK
- DEMOLITION
- SUPPLY AIR DIFFUSER
- RETURN OR EXHAUST REGISTER OR GRILLE
- REMOTE SPACE TEMPERATURE SENSOR (S)

ABBREVIATIONS

BB	= AIR CONDITIONING
AMD	= AMBIENT
AMP	= AMPERE
APD	= AIR PRESSURE DROP
ATC	= AUTOMATIC TEMPERATURE CONTROL
ATM	= ATMOSPHERE
AV	= AIR VENT
BHP	= BRAKE HORSEPOWER
BTU	= BRITISH THERMAL UNIT
BTUH	= BTU PER HOUR
C TO C	= CENTER TO CENTER
CAP	= CAPACITY
CF	= CUBIC FEET
CFH	= CUBIC FEET PER HOUR
CFM	= CUBIC FEET PER MINUTE
CONN	= CONNECTION
DB	= DRY BULB
DEG	= DEGREE
DIA	= DIAMETER
DIFF	= DIFFERENCE OR DELTA
DN	= DOWN
Δ P	= DELTA-P (PRESSURE DIFFERENTIAL)
Δ T	= DELTA-T (TEMPERATURE DIFFERENTIAL)
DX	= DIRECT EXPANSION (REFRIGERANT) COOLING
EA	= EACH
CAT	= ENTERING AIR TEMPERATURE
EF	= EXHAUST FAN
ER	= EXHAUST REGISTER
ESP	= EXTERNAL STATIC PRESSURE
EWT	= ENTERING WATER TEMPERATURE
F	= FAHRENHEIT
FC	= FLEXIBLE CONNECTOR
FLA	= FULL LOAD AMPS
FPM	= FEET PER MINUTE
FPS	= FEET PER SECOND
FT	= FEET
H	= HIGH
HP	= HORSEPOWER
HPS	= HIGH PRESSURE SWITCH
HV	= HEATING AND VENTILATING UNIT
HZ	= FREQUENCY (CYCLES PER SECOND)
ID	= INSIDE DIAMETER
IN	= INCH
KW	= KILOWATT
LAT	= LATENT OR LEAVING AIR TEMPERATURE
LB	= POUND
LD	= LOUVERED DOOR
LF	= LINEAR FEET
LPS	= LOW PRESSURE SWITCH
LRA	= LOCKED ROTOR AMPS
LVG	= LEAVING
MAX	= MAXIMUM
MBH	= THOUSANDS BTUH
MIN	= MINIMUM
MO	= MOTOR-OPERATED
NC	= NORMALLY CLOSED
NIC	= NOT IN CONTRACT
NTS	= NOT TO SCALE
OA	= OUTSIDE AIR
PH	= PHASE (ELECTRICAL)
PSI	= POUNDS PER SQUARE INCH
PSIG	= POUNDS PER SQUARE INCH GAGE
R	= RETURN
RA	= RETURN AIR
RH	= RELATIVE HUMIDITY
RLA	= RUNNING LOAD AMPS
RPM	= REVOLUTIONS PER MINUTE
RTU	= PACKAGED ROOFTOP HVAC UNIT
SD	= SUPPLY AIR DIFFUSER
SCT	= SATURATED CONDENSING TEMPERATURE
SEN	= SENSIBLE
SF	= SQUARE FEET OR SUPPLY FAN
SP	= STATIC PRESSURE
SR	= SUPPLY REGISTER
TSP	= TOTAL STATIC PRESSURE
TYP	= TYPICAL
UH	= UNIT HEATER
V	= VOLT (ELECTRICAL)
VD	= MANUAL VOLUME DAMPER
W	= WATT OR WIDE
WB	= WET BULB

GENERAL NOTES

1. THE GENERAL REQUIREMENTS, OTHER CONDITIONS, SECTIONS AND DIVISIONS, AS APPROPRIATE, APPLY TO WORK SPECIFIED IN THIS DIVISION. ALSO, ALL MECHANICAL WORK SHALL BE PROVIDED IN STRICT ACCORDANCE WITH THE STATE AND LOCAL CODES, NFPA STANDARD 90A, AND WITH THE STANDARDS AND DETAILS OF THE TENANT'S CONSTRUCTION DEPARTMENT.

2. OBTAIN ALL REQUIRED PERMITS AND PAY ALL FEES RELATED TO SAME.

3. THESE SPECIFICATIONS AND THE ACCOMPANYING DRAWINGS COVER THE PROVISION OF ALL LABOR, EQUIPMENT, APPLIANCES, DEVICES, AND MATERIALS, AND PERFORMING ALL OPERATIONS IN CONNECTION WITH THE CONSTRUCTION OF THE AIR-CONDITIONING, VENTILATION, AND HEATING SYSTEMS AS SPECIFIED HEREIN AND AS SHOWN.

4. PROVIDE ALL NECESSARY PIPING, EQUIPMENT AND SUPPORTS AS WELL AS ANY ADDITIONAL EQUIPMENT, ETC, NOT SHOWN ON DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT NECESSARY TO PROVIDE COMPLETE AND WORKABLE SYSTEMS.

5. THE IMPLIED AND STATED INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE TO ESTABLISH THE MINIMUM ACCEPTABLE STANDARDS FOR MATERIALS, EQUIPMENT, WORKMANSHIP, AND TO PROVIDE OPERABLE MECHANICAL SYSTEMS COMPLETE IN EVERY RESPECT.

6. ALL DUCTWORK SIZES AND LOCATIONS INDICATED ON THE DRAWINGS ARE THOSE WHICH ARE PREFERRED. IN THAT INTERFERENCES MAY OCCUR DUE TO UNFORESEEN CIRCUMSTANCES AND SYSTEMS, THE CONTRACTOR SHALL VARY SIZES AND LOCATIONS OF DUCTWORK AND DUCT SYSTEMS TO ACCOMMODATE INSTALLATION. IN ANY CASE, THE CROSS SECTIONAL AREA OF THE DUCTWORK IS IMPERATIVE AND ANY CHANGE IN CONFIGURATION SHALL MAINTAIN THE CROSS SECTIONAL AREA OF DUCT AS SIZED ON THE DRAWINGS. DIMENSIONS SHOWN ON THE DRAWINGS ARE INSIDE DIMENSIONS. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH LATEST ADDITION OF SMACNA.

7. THE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT COMPLETE MECHANICAL SYSTEMS ARE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROLS COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH. ANY ITEMS AND LABOR REQUIRED FOR COMPLETE MECHANICAL SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, AND THESE CONTRACT DOCUMENTS SHALL BE PROVIDED WITHOUT ANY ADDITIONAL COST TO THE CONTRACT. THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS AND SHALL COORDINATE WITH OTHER TRADES WHILE PREPARING THE MECHANICAL SHOP DRAWINGS.

8. DO NOT SCALE THESE DRAWINGS. TAKE ALL MEASUREMENTS IN THE FIELD IN COORDINATION WITH ALL EQUIPMENT AS APPROVED AND WITH ALL OTHER TRADES.

9. THE CONTRACTOR SHALL COORDINATE ALL DUCTWORK, PIPING, AND EQUIPMENT WITH THE GENERAL CONTRACTOR, ALL OTHER TRADES, AND STRUCTURAL BUILDING FEATURES INCLUDING FLOOR, WALL, OR ROOF PENETRATIONS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY OFFSETS OR FITTINGS REQUIRED TO AVOID CONFLICTS AND TO MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY. CONTRACTOR SHALL VERIFY DUCT, PIPING AND EQUIPMENT LOCATIONS FOR INTERFERENCES BEFORE INSTALLATION.

10. REVIEW ALL ARCHITECTURAL, STRUCTURAL, PLUMBING, ELECTRICAL, FIRE PROTECTION AND SITE DRAWINGS BEFORE STARTING ANY WORK TO BECOME FAMILIAR WITH THE DETAILS OF CONSTRUCTION, AND TO COORDINATE WITH OTHER TRADES TO ELIMINATE CONFLICTS.

11. PIPING, DUCTWORK, AND EQUIPMENT AS SHOWN IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL DETERMINE EXACT LOCATIONS OF PIPING AND DUCTWORK RUNS, EQUIPMENT LOCATIONS, AND CONNECTIONS TO SUIT FIELD CONDITIONS.

12. ALL ROTATING EQUIPMENT SHALL HAVE FLEXIBLE PIPE OR DUCT CONNECTIONS AND APPROVED VIBRATION ISOLATORS.

13. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL FIRE RATED AND/OR SMOKE RATED WALLS AND ASSEMBLIES. PROVIDE U.L. APPROVED FIRE AND/OR SMOKE DAMPERS IN ALL REQUIRED PENETRATIONS FOR DUCTWORK, GRILLES, REGISTERS, AND DIFFUSERS. PROVIDE AND INSTALL DUCT MOUNTED HINGED ACCESS DOORS FOR ALL FIRE OR COMBINATION FIRE/SMOKE DAMPERS NOT OTHERWISE ACCESSIBLE. ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE, SMOKE, AND FULL HEIGHT WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF U.L. APPROVED FIRE PROOF CAULKING MATERIAL.

14. AFTER COMPLETION OF CONTRACT WORK, ALL MECHANICAL AREAS SHALL BE THOROUGHLY CLEANED OF ALL DIRT AND DEBRIS.

15. DUCT SIZES AS SHOWN ON DRAWINGS REPRESENT CLEAR INSIDE DIMENSIONS.

16. PROVIDE VOLUME DAMPERS WITH LOCKED QUADRANTS ON ALL SUPPLY, RETURN, AND EXHAUST BRANCH TAKEOFFS.

17. PROVIDE VOLUME EXTRACTORS OR BELLMOUTH CONNECTIONS WITH VOLUME DAMPERS ON ALL TAKEOFFS FROM SUPPLY AIR DUCTS.

18. PROVIDE DOUBLE THICKNESS TURNING VANES ON ALL SQUARE ELBOWS DOWNSTREAM OF SYSTEM FANS.

19. ALL PIPE PENETRATIONS THRU THE ROOF SHALL BE PROVIDED WITH PITCH POCKETS.

20. PROVIDE ACCESS TO ALL EQUIPMENT REQUIRING PERIODIC SERVICE AND MAINTENANCE.

21. PROVIDE AIRTIGHT ACCESS DOOR FOR INSPECTION OF FIRE DAMPERS, FILTERS AND COILS.

22. FINAL LOCATION OF ALL REGISTERS, GRILLES, AND DIFFUSERS SHALL BE COORDINATED WITH THE REFLECTED CEILING AND LIGHTING PLANS PRIOR TO INSTALLATION. COORDINATE THE TYPE AND LOCATION OF ALL REGISTERS, GRILLES, DIFFUSERS, ACCESS DOORS, ETC. WITH THE ARCHITECTURAL REFLECTED CEILING PLANS.

23. PORTIONS OF DUCTWORK VISIBLE THRU REGISTERS, GRILLES, AND DIFFUSERS IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.

24. ALL THERMOSTAT AND SENSOR LOCATIONS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. DEVICES SHALL BE MOUNTED 60" A.F.F. UNLESS LOCATED IN A.D.A. RATED AREAS, WHERE THEIR INSTALLATION SHALL MEET A.D.A REQUIREMENTS.

25. CONTRACTOR SHALL COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING. ALLPOWER WIRING AND FINAL CONNECTIONS TO EQUIPMENT SHALL BE PROVIDED UNDER THE ELECTRICAL DIVISION.

26. PLENUM RATED CABLE OR TUBING CONTAINED IN CONDUIT.

27. THOROUGHLY CLEAN DUCTS AND EQUIPMENT OF ALL FOREIGN SUBSTANCES INSIDE AND OUT BEFORE PLACING IN OPERATION.

28. CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT, DUCT, PIPE, VALVE, ETC., SIZES AND ARRANGEMENTS PRIOR TO PURCHASING MATERIALS.

29. CONTRACTOR SHALL VISIT THE PROJECT AREA PRIOR TO SUBMITTAL OF PROPOSAL AND THOROUGHLY FAMILIARIZE SELF WITH THE EXISTING CONDITIONS AND ANY OTHER CONDITIONS THAT WILL AFFECT THE PERFORMANCE OF THEIR WORK. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO ANY ADDITIONAL COMPENSATION FOR PROVIDING A COMPLETE AND APPROVED SYSTEM.

30. WHERE EXISTING EQUIPMENT, PIPING, ETC., ARE TO BE REMOVED, ALL ASSOCIATED PIPING SHALL BE REMOVED AND CAPPED TO WITHIN WALLS, FLOORS, OR CEILING AND THE AREA SHALL BE LEFT CLEAR OF ALL DEBRIS.

31. EXACT LOCATION OF ALL NEW FLOOR AND WALL OPENINGS SHALL BE DETERMINED IN THE FIELD WITH EXISTING CONDITIONS.

32. EXISTING ROOF CUTTING, FLASHING, SEALING, ETC., SHALL BE ACCOMPLISHED BY THE ROOFING CONTRACTOR APPROVED BY THE OWNER AND SHALL BE INSTALLED IN ACCORDANCE WITH THE ROOF MANUFACTURER'S RECOMMENDATIONS SO AS TO NOT VOID THE ROOF WARRANTY.

33. DISCONNECT AND REMOVE ANY PIPING, VALVES, ETC., WHICH ARE NO LONGER REQUIRED FOR THE NEW CONSTRUCTION.

34. CONTRACTOR TO FIELD VERIFY AND COORDINATE FINAL LOCATIONS OF DUCT ROUTING AND DIFFUSERS WITH EXISTING ROOF STRUCTURE.

PACKAGED HEATING AND COOLING UNIT SCHEDULE (PROVIDED BY CUMBERLAND FARMS)

SYMBOL	LOCATION (S) SERVED	MANUFACTURER	MODEL	TYPE	COOLING DATA			HEATING DATA (NG)				CFM AIR	MINIMUM OA CFM	EXTERNAL SP (INCHES)	ELECTRICAL DATA			OPERATING WEIGHT	NOTES
					TONS/MBH	EAT °F DB/WB	LAT °F DB/WB	BTUH INPUT	BTUH OUTPUT	EAT °F	LAT °F				MCA	MAX FUSE	VOLTAGE		
RTU-1	SEE DRAWINGS	TRANE	YHC060	DOWNFLOW	5 / 61	80 / 67	59.6 / 57.3	130,000	103,000	60.6° F	108.3° F	2000	220	1.00"	27.4	40	208/3/60	976.0 lbs	1
RTU-2	SEE DRAWINGS	TRANE	YHC060	DOWNFLOW	5 / 61	80 / 67	59.6 / 57.3	130,000	103,000	60.6° F	108.3° F	2000	220	1.00"	27.4	40	208/3/60	976.0 lbs	1

NOTES

1. FURNISH UNIT WITH 14"HIGH ROOF CURB, COMPARATIVE ENTHALPY ECONOMIZER 0-100% WITH BAROMETRIC RELIEF, 2" PLEATED MERV 8 FILTERS, MICROPROCESSOR CONTROLS, ANTI-SHORT CYCLE TIMER, TIME DELAY RELAY, MULTISTAGE PROGRAMMABLE ELECTRONIC AUTO-CHANGEOVER NIGHT SETBACK THERMOSTAT WITH REMOTE HUMIDITY AND TEMPERATURE SENSORS, DEHUMIDIFICATION-HOT GAS REHEAT, NON-FUSED DISCONNECT, BELT DRIVE OPTION AND UNPOWERED CONVENIENCE OUTLET.

EXHAUST FAN SCHEDULE (PROVIDED BY CUMBERLAND FARMS)

SYMBOL	LOCATION (S) SERVED	MODEL NUMBER	CFM	SP (EXT)	ELECTRICAL DATA			FAN TYPE	REMARKS
					HP	FAN RPM	VOLTAGE		
EF-1	RESTROOM	GREENHECK,SP-A110	75	0.25"	49w	950	120 V/1 PH	CEILING-MOUNTED	1)
EF-2	RESTROOM	GREENHECK,SP-A110	75	0.25"	49w	950	120 V/1 PH	CEILING-MOUNTED	1)
EF-3	SEE PLANS	ACME MODEL PRN-80	200	0.25"	6.0 AMP	1725	120 V/1 PH	ROOF-MOUNTED	2)

NOTES

1) CONTROLLED UNDER DIVISION 16.

2) FURNISH WITH MIN 12" HIGH INSULATED ROOF CURB, SOLID STATE SPEED CONTROL, DISCONNECT SWITCH, ALUMINUM BIRDSCREEN AND BACKDRAFT DAMPER. SET AIRFLOW AT 150 CFM THRU USE OF SOLID STATE SPEED CONTROLLER

DIFFUSER, REGISTER & GRILLE SCHEDULE

SYMBOL	MANUFACTURER	MODEL	TYPE	THROW	CFM	THROAT SIZE	FACE SIZE	NOTES
S-1	PRICE	SDBI	CEILING, LINEAR	ADJUSTABLE	190	- - -	4x48	1, 5, 6
S-2	PRICE	SDBI	CEILING, LINEAR	ADJUSTABLE	175, 185	- - -	4x48	1, 4, 6
S-3	PRICE	SMDA	CEILING	3W	50	6x6	12x12	1, 5
S-4	PRICE	SMDA	CEILING	4W	140 - 250	9x9	24x24	1, 4
R-1	PRICE	630DAL-TB	CEILING	- - -	1780	46x22	48x24	1, 4
T-1	PRICE	630DAL-TB	CEILING	- - -	690	22x22	24x24	1, 4
E-1	PRICE	630DAL	CEILING	- - -	150	22x12	24x14	1, 5

NOTES:
1) ALUMINUM CONSTRUCTION, FACTORY PAINTED WHITE ENAMEL.
2) PROVIDE OPPOSED-BLADE DAMPERS ON ALL REGISTERS AND DIFFUSERS.
3) ALL UNITS, PROVIDE SQUARE TO ROUND TRANSITIONS AS NECESSARY.
4) LAY-IN TYPE
5) SURFACE-MOUNT
6) PROVIDE WITH 10"H INSULATED PLENUM w/ 7"Ø INLET CONN. AND TWO 1" SLOTS. PROVIDE REDUCER AT INLET CONNECTION.
7) IN BOTH RECTANGULAR & RECTANGULAR TO ROUND TRANSITIONS, SLOPE IS NOT TO EXCEED 1" IN 4".
8) ALL REGISTERS, GRILLES AND DIFFUSERS SHALL BE INSULATED TYPE.
9) ALL UNITS, PROVIDE FRAME SUITABLE FOR SURFACE MOUNTING, CEILING OR SIDEWALL; COORDINATE MOUNTING & FINISH REQUIREMENTS WITH ARCHITECTURAL REFLECTED CEILING PLANS.

* S = SUPPLY
* R = RETURN
* E = EXHAUST
* T = TRANSFER
** SIZE
*** CFM

MECHANICAL NOTES

1) THE HVAC CONTRACTOR SHALL COORDINATE ALL WORK TO BE PERFORMED WITH THE GENERAL, PLUMBING AND ELECTRICAL CONTRACTORS. ANY WORK DONE BY THIS CONTRACTOR WHICH INTERFERES WITH WORK BY OTHERS AND WHICH WAS NOT FIRST COORDINATED SHALL BE REMOVED AND RELOCATED AT HVAC CONTRACTOR'S EXPENSE.

2) THIS CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UTILITIES AND THE PLACEMENT OF ALL MECHANICAL EQUIPMENT PRIOR TO THE START OF HIS WORK. NO EXTRAS WILL BE ALLOWED DUE TO EQUIPMENT LOCATION CHANGE FROM THAT SHOWN ON DRAWINGS.

3) IT IS THE INTENT THAT THE WORK SHALL BE COMPLETE IN EVERY RESPECT, AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK, SHALL BE PROVIDED.

4) THE LOCATION OF SOME ITEMS SHOWN ON THE DRAWINGS MAY BE APPROXIMATE AND THE OWNER SHALL HAVE THE RIGHT TO MAKE REVISIONS BEFORE THE WORK IS INSTALLED, WITHOUT ADDITIONAL COST.

5) ALL WORK SHALL BE IN ACCORDANCE WITH ASHRAE, SMANCA OR GOVERNING CODES (MORE STRINGENT SHALL APPLY IN ALL INSTANCES)

6) ALL SUPPLY & RETURN DUCTS SHALL BE INSULATED WITH 1-1/2" THICK FLEXIBLE FIBERGLASS BLANKET INSULATION WITH VINYL VAPOR BARRIER AS MANUFACTURED BY KNAUF FIBER GLASS OR EQUAL.

7) DUCT SIZES GIVEN ARE INSIDE CLEAR DIMENSIONS.

8) ROUND DUCTS SHALL BE RIGID WITH LARGE MOUTH TAKEOFF FITTINGS.

9) THIS CONTRACTOR SHALL PROVIDE ADJUSTABLE VOLUME DAMPERS IN ALL AIR DISTRIBUTION DUCTWORK, TO FACILITATE AIR BALANCING, AT BOTH BRANCH TAKEOFFS AND AT DIFFUSERS.

10) USE TURNING VANES IN ALL SQUARE ELBOWS.

11) THIS CONTRACTOR SHALL BALANCE AIR DISTRIBUTION SYSTEM AND SUBMIT BALANCE REPORT TO ARCHITECT/ENGINEER.

12) ALL EQUIPMENT WHICH PRODUCES AIR MOVEMENT SHALL HAVE A FLEXIBLE CONNECTOR AT ALL DUCT CONNECTIONS TO EQUIPMENT TO PREVENT THE TRANSMISSION OF VIBRATION TO STRUCTURE.

13) ALL MATERIALS USED FOR AIR DISTRIBUTION SHALL BE NON-COMBUSTIBLE AND SHALL HAVE A SMOKE DEVELOPED RATING OF FIFTY (50) OR LESS. DUCTWORK SHALL BE DESIGNED AND INSTALLED IN STRICT CONFORMANCE TO THE CONSTRUCTION STANDARDS OF THE LATEST EDITION OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION, INC. (SMACNA) LOW PRESSURE SECTION AND SHALL BE CONSTRUCTED OF NEW GALVANIZED SHEET METAL WITH ACCESS DOORS FOR DAMPERS, MOTORS, VALVES OR ANY OTHER EQUIPMENT OR ACCESSORIES WHICH MAY REQUIRE SERVICING.

14) FLEXIBLE DUCT SHALL NOT EXCEED FIVE FEET (5') IN LENGTH AND ITS' USE SHALL BE LIMITED ONLY FOR THE FINAL CONNECTIONS TO DIFFUSERS.

15) ALL DUCTWORK SHALL BE INSTALLED UP AS HIGH AS PRACTICAL.

16) ALL THERMOSTATS SHALL BE PROGRAMMED BY THE INSTALLER PER THE OWNERS DIRECTION.

17) TABS SHALL BE REMOVED FROM ALL THERMOSTATS AFTER THERMOSTATS ARE PROGRAMMED BY THE INSTALLER.

18) CONTRACTOR SHALL SUPPLY AND INSTALL ASTROLOGICAL TIME CLOCK, WIRED TO THERMOSTATS, FOR SETBACK CAPABILITY.

19) SMOKE DETECTORS SHALL BE INSTALLED IN THE SUPPLY AND RETURN DUCTS OF EACH OF THE RTU's. THE SMOKE DETECTORS SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR, INSTALLED BY THE MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR.

20) THE CONTRACTOR SHALL INSPECT THE EXISTING FIELD CONDITIONS. IF FIELD CONDITIONS WARRANT POSSIBLE DEVIATION FROM "PLANS" FOR SYSTEM AND EQUIPMENT LAYOUT, GC IS OBLIGATED TO BRING TO THE ATTENTION OF THE CF CPM IMMEDIATELY AND RFI SUBMITTED ON E-BUILDER.

Project Title:
Cumberland Farms
Store # 5613
512 Woodford Street

Portland, ME

Cumberland FARMS

100 Crossing Blvd
Framingham, Ma
tel 508 270 1400

Architect

phase zero design
40 TREMONT STREET, SUITE 62
DUXBURY, MASSACHUSETTS 02332
PHONE:(781) 452-7121
FAX:(860) 264-1628
WEBSITE:www.phasezerodesign.com

Seal

STATE OF MAINE — GLEN G. MARVEY — LICENSED PROFESSIONAL ENGINEER

Consultant

CDS ENGINEERING DESIGN SERVICES INCORPORATED
141 Industrial Highway Scituate, RI 02857
Tel (401) 765-7939 Fax (401) 765-2964

Revisions

No.	Date	Issued for
-	11/22/13	90% Review Set
-	01/24/14	Bid and Permit

Key Plan

Title
HVAC:
LEGEND, NOTES AND SCHEDULES

Date

Drawing No.
M0.1

Cumberland Farms
Project No. 2113119