

GENERAL NOTES	
ALL NOTES INCLUDED HEREIN ARE MADE PART OF EACH AND ALL MECHANICAL, ELECTRICAL AND PLUMBING SECTIONS OF WORK.	
1. REFER TO LANDLORD'S SPECIFICATIONS AND TENANT DESIGN CRITERIA FOR NECESSARY INFORMATION AND COORDINATION WITH OTHER TRADES.	
2. THE ABBREVIATION L5D&C WHEREVER IT APPEARS IN THE DRAWINGS, SHALL REFER TO "LIMITED STORE DESIGN AND CONSTRUCTION", ANY REFERENCE TO TENANT, BRAND SPECIFIC (EXPRESS, ETC.) OR FURNISHED BY ANY OF THE ABOVE REFERS TO L5D&C.	
3. ANY DISCREPANCY BETWEEN L5D&C DRAWINGS AND TENANT CRITERIA, L5D&C DRAWINGS SHALL TAKE PRECEDENCE.	
4. THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT ALL INSTALLED ITEMS AND LOCATIONS ARE NOT EXACTLY PLACED AND ARE NOT TO BE SCALED.	
5. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED PERMITS AND INSPECTION FEES.	
6. BEFORE COMMENCING ANY WORK, CONTRACTORS SHALL REVIEW THE LATEST NATIONAL, STATE AND LOCAL CODE REQUIREMENTS INCLUDING LANDLORD CRITERIA AND PERFORM THE WORK IN STRICT ACCORDANCE WITH THESE. IN CASE OF CONFLICT THE STRICTER REQUIREMENTS WILL PREVAIL.	
7. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR ANY CHANGE ORDERS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID.	
A. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. FOR THE PURPOSE OF SURVEYING EXISTING CONDITIONS, WHICH MAY AFFECT THE WORK TO BE DONE UNDER THIS SECTION, ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE GENERAL CONTRACTOR, L5D&C OR THE LANDLORD'S FIELD REPRESENTATIVE FOR CLARIFICATION.	
B. AFTER BID, ANY QUESTIONS RELATING TO SPECIFIC M, E, OR P ISSUES ARE TO BE DIRECTED AS RFT'S THROUGH THE L5D&C PROJECT MANAGER.	
C. SHOULD THE SPACE HAVE BEEN INACCESSIBLE FOR INSPECTION CONTRACTOR MUST INDICATE SO ON HIS BID.	
8. THE GENERAL CONTRACTOR'S FIRE SPRINKLER SUBCONTRACTOR SHALL DESIGN AND INSTALL FIRE SPRINKLER SYSTEM CONFORMING TO LANDLORD'S CRITERIA, TENANT'S REQUIREMENTS AND PER LOCAL CODES AND NFPA STANDARDS.	
9. THE CONTRACTOR, WITHIN FIFTEEN (15) DAYS OF THE AWARD OF THE CONTRACT, SHALL SUBMIT TO THE OWNER, SIX (6) COPIES OF A COMPLETE LIST OF MATERIALS AND EQUIPMENT PROPOSED FOR THE JOB INCLUDING ALL DATA, PART NUMBERS, RATING CAPACITY, SIZE, DIMENSIONS, ELECTRICAL DATA, GRADE, MANUFACTURER, AND ANY OTHER DESCRIPTIVE DATA FOR ALL EQUIPMENT OR SYSTEMS THAT DEViate FROM SPECIFIED ITEMS. ANY DELAYS OR COSTS DUE TO THESE DEVIATIONS, WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.	
10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL UNUSED OR ABANDONED MATERIALS AND EQUIPMENT, AND ITS REMOVAL OFF THE LANDLORD'S PREMISES.	
11. OWNER RESERVES THE RIGHT TO HAVE CONSTRUCTION REVIEWED BY AN OUTSIDE CONSULTANT PRIOR TO ACCEPTANCE OF THE PROJECT.	
12. EACH CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP RELATED TO HIS WORK FOR A MINIMUM PERIOD OF ONE YEAR FROM THE DATE WHICH THE OWNER ACCEPTS THE PROJECT. THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR TENANT SHALL CORRECT ANY DEFECTS IN MATERIALS OR WORKMANSHIP DURING THIS GUARANTEE PERIOD.	
13. EACH CONTRACTOR SHALL BE RESPONSIBLE AND ENSURE A CLEAN INSTALLATION ESPECIALLY IN EXPOSED CEILING AREAS. THE FINAL APPROVAL OF THIS WORK WILL BE ISSUED BY L5D&C PROJECT MANAGER.	
14. PROVIDE ONE SETS OF "AS-BUILT" DRAWINGS INTO PLAIN TUBE AND ONE BOUND SETS OF ALL OPERATIONS MANUALS, DIAGRAMS, SERVICE CONTRACTS AND GUARANTEES IN BINDER TO STORE MANAGER. A REPORT PREPARED IN ACCORDANCE WITH MECHANICAL SPECIFICATIONS BY AN INDEPENDENT AIR BALANCE CONTRACTOR, HIRED BY GC, MUST BE INCLUDED IN THE CLOSE-OUT PACKAGE.	
HVAC GENERAL NOTES	
1. THESE PLANS MAY BE USED FOR CONSTRUCTION ONLY AFTER APPROVAL IS OBTAINED FROM THE BUILDING DEPARTMENT MECHANICAL PLAN CHECK DIVISION AND THAT DIVISION'S STAMPED APPROVAL AND AUTHORIZED SIGNATURE APPEAR ON THE PLANS.	
2. COORDINATE ALL WORK WITH ALL TRADES INCLUDED BUT NOT LIMITED TO ELECTRICAL, PLUMBING, FIRE PROTECTION AND STRUCTURAL CONTRACTORS. INSTALL ALL WORK TO CLEAR NEW AND EXISTING ARCHITECTURAL AND STRUCTURAL MEMBERS. NO ITEM SUCH AS PIPE, DUCT, ETC. IS TO COME IN CONTACT WITH ANY EQUIPMENT.	
3. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION WORK.	
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT FIXTURE LOCATION.	
5. CONTRACTOR SHALL PROVIDE CUT SHEETS TO L5D&C FOR ALL EQUIPMENT AND DEVICES FURNISHED BY THE CONTRACTOR THAT DEVIATE FROM SPECIFIED ITEM FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OF ANY SUCH EQUIPMENT OR DEVICES.	
6. HVAC CONTRACTOR IS RESPONSIBLE TO INQUIRE WITH THE LANDLORD'S REPRESENTATIVE ON ANY SMOKE EVACUATION SYSTEM IN USE AT THE MALL AT THE TIME OF THE BID. IF THE SAID SYSTEM IS NOT ADEQUATELY DESCRIBED ON THE DRAWINGS, THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO INFORM THE GENERAL CONTRACTOR AND INCLUDE THE COST AS A SEPARATE LINE ITEM IN THE BID. NO ADDITIONAL MONEYS SHALL BE AWARDED FOR THE IN REQUIREMENTS TO A LANDLORD'S SMOKE EVACUATION SYSTEM THAT IS IN EXISTENCE AT THE TIME OF THE BID, WITHOUT HAVING IDENTIFIED A SEPARATE LINE ITEM FOR THE SMOKE EVACUATION SYSTEM AT THE TIME OF THE BID.	
7. ACCESS TO ALL COMPONENTS AND EQUIPMENT MUST BE PROVIDED TO MEET CODE AND SERVICE/MAINTENANCE EASE.	
8. PRIOR TO STARTUP OF HVAC EQUIPMENT, MECHANICAL CONTRACTOR WILL CONFIRM WITH ONE OF THE LISTED HVAC MANUFACTURER REPRESENTATIVES THAT CORRECT POWER FOR EQUIPMENT HAS BEEN PROVIDED TO L5D&C PROVIDED HVAC UNITS AND HAS BEEN TURNED ON FOR A MINIMUM OF 24 HOURS. L5D&C RESERVES THE RIGHT TO CHECK CONSTRUCTION COMPLIANCE WITH PLANS AND SPECIFICATIONS. SHOULD THE OWNER FIND CORRECTIVE WORK TO BE NECESSARY, HE WILL NOTIFY CONTRACTOR OF SUCH WORK IN WRITING AND EXPECT COMPLIANCE PERFORMED WITH DUE DILIGENCE. IF ANY CORRECTIVE WORK IS DEEMED TO BE NECESSARY, THE COST OF REINSPECTIONS WILL BE BORNE BY THE CONTRACTOR. THE MECHANICAL CONTRACTOR WILL THEN ENSURE THAT THE EQUIPMENT IS POWERED FOR A MINIMUM OF 24 HRS BEFORE START-UP.	
9. IF WORK IS REQUIRED BY L5D&C IN ORDER TO IMPROVE, CHANGE OR CORRECT AIR CONDITIONING OPERATIONAL CONDITIONS DUE TO: PART MALFUNCTION, WARRANTY OR OTHER INABILITY TO PROVIDE THE COMFORT CONDITIONS REQUIRED BY THE STORE, CONTRACTOR SHALL BE DIRECTED BY L5D&C TO ADDRESS THIS WORK IN A TIMELY MANNER. IF IT BECOMES EVIDENT THAT THE CONTRACTOR CANNOT ACCOMPLISH THE TASK, THEN AFTER 72 HOURS OF WRITTEN NOTICE THE OWNER MAY, AT HIS DISCRETION, TAKE OVER SUCH WORK AND BACK CHARGE THE CONTRACTOR FOR ANY CORRECTIVE WORK THAT WAS REQUIRED DUE TO LACK OF PERFORMANCE, WORKMANSHIP AND/OR ADHERENCE TO PLANS AND SPECIFICATIONS.	
10. UPON COMPLETION OF THE WORK, CONTRACTOR SHALL VERIFY THE PROPER WORKING ORDER OF THE SYSTEM(S) AND MAKE ANY ADJUSTMENTS AS REQUIRED.	
11. PROVIDE FILTER CHANGES THROUGHOUT CONSTRUCTION AS REQUIRED FOR ALL HVAC EQUIPMENT. PROVIDE FILTER CHANGES AT LEAST TWICE MONTHLY ONCE STARTED, PRIOR TO TEST AND BALANCE, AND LASTLY, PRIOR TO MERCHANDISING. ANY EQUIPMENT OR DUCTWORK THAT BECOMES SOILED DUE TO A LACK OF FILTER CHANGES, AS DETERMINED SOLEY BY THE L5D&C PROJECT MANAGER, SHALL BE CORRECTED ON BEHALF OF THE CONTRACTOR AND CHARGES BILLED TO THE CONTRACTOR.	
12. NOTES TO EQUIPMENT SCHEDULES USE THE WORDS "FURNISH" AND "PROVIDE", WHERE THE WORD "FURNISH" IS USED, SOME FIELD INSTALLATION IS REQUIRED BY THE CONTRACTOR, WHERE THE WORD "PROVIDE" IS USED, NO FIELD INSTALLATION IS REQUIRED AS THE DEVICES OR ACCESSORIES ARE FURNISHED AND INSTALLED BY THE MANUFACTURER AS PART OF THE EQUIPMENT WHEN SHIPPED.	
13. UNLESS OTHERWISE SPECIFIED, CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, MATERIAL, LABOR AND SUPERVISION NECESSARY TO COMPLETE THE HEATING, VENTILATING AND AIR CONDITIONING WORK IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS AS OUTLINED HEREIN. SEE RESPONSIBILITY SCHEDULE ON SHEET M04.01.	
14. MECHANICAL CONTRACTOR SHALL FIELD MEASURE EXISTING ROOF CURB(S) FOR CURB ADAPTER(S), WHERE APPLICABLE, AND SHALL SUPPLY DIMENSIONS TO L5D&C HVAC SUPPLIER PRIOR TO START OF CONSTRUCTION.	
15. ALL HEATING VENTILATING AND AIR CONDITIONING EQUIPMENT SHALL BE CLEARLY IDENTIFIED WITH TENANT'S NAME, SPACE NUMBER AND UNIT DESIGNATION AND SHALL BE STENCILED IN 4" HIGH BLACK LETTERS.	
16. FURNISH AND INSTALL ALL NEW DUCTWORK INCLUDING INSTALLATION OF OWNER SUPPLIED PLENUM BOOTS, SUPPLY AIR DIFFUSERS, AND RETURN AIR GRILLES. (SEE AIR DEVICE SCHEDULE ON THIS SHEET).	
A. ALL MATERIAL SHALL BE NEW AND OF COMMERCIAL GRADE AND BEAR UNDERWRITER'S LABORATORY AND UNION LABELS WHERE SUCH LABELING APPLIES.	
B. ALL PLENUMS MUST BE FABRICATED FROM GALVANIZED SHEET METAL OF THE APPROPRIATE GAUGE AND BE INSULATED WITH A MINIMUM OF 1" THICK, 0.75 LB/CU.FT. DENSITY FIBERGLASS INSULATION WITH ALUMINUM FOIL BACKED VAPOR BARRIER.	
C. WHERE DESIGNATED, BRANCHES FROM MAIN LOW VELOCITY TRUNK DUCTWORK SHALL BE FURNISHED WITH SPLITTERS, DAMPERS OR SIMILAR BALANCING DEVICES IN ACCORDANCE WITH THE STANDARDS OF SMACNA.	
D. ALL DUCTS FOR FINAL CONNECTION TO DIFFUSERS SHALL BE CLASS 1, UL LISTED (SL 181) FLEXIBLE AIR DUCT NOT TO EXCEED 4'-0" IN LENGTH (THERMAFLEX, GLASFLEX, OR APPROVED EQUAL).	
E. SUPPLY AND RETURN DUCTWORK SHALL BE LINED AND WITH CODE COMPLYING BLANKET INSULATION. ACOUSTICAL LINER MAY BE PROVIDED. ALL MATERIALS SHALL COMPLY WITH N.F.P.A. 90A AND 90B. SEE SPECIFICATIONS ON SHEET M01.01.	
F. HANGER WIRES, DUCT STRAPS, FASTENING DEVICES, ETC. SHALL BE FASTENED TO THE STEEL JOISTS AND/OR BEAMS ABOVE. DO NOT ATTACH ANY SUCH ITEMS DIRECTLY TO FLOOR SLABS, PIPING, OTHER DUCTWORK, ELECTRICAL CONDUITS OR THE ROOF DECK ABOVE.	
G. ADDITIONAL FIRE DAMPERS SHOULD BE INSTALLED AS REQUIRED BY ANY APPLICABLE CODES AND/OR JURISDICTIONAL AUTHORITIES.	
17. SEAL AROUND PIPES AND DUCTS PENETRATING FIRE SEPARATIONS WITH LISTED AND APPROVED FIRE SEAL MATERIAL. ONLY LISTED AND APPROVED SEALANTS AND METHODS FOR THE SPECIFIC USE WILL BE PERMITTED.	
18. MECHANICAL CONTRACTOR SHALL INSTALL TEMPERATURE SENSORS AND AS SHOWN ON THE PLAN (VERIFY LOCAL CODES. IF PLAN LOCATION IS NOT ACCEPTABLE, IMMEDIATELY CONTACT L5D&C PROJECT MANAGER FOR DIRECTION.)	
19. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL FULLY PRESSURE CHECK AND CHARGE ALL REFRIGERANT SYSTEMS (IF REQUIRED).	
20. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN INDEPENDENT, AIR/WATER BALANCING COMPANY THAT IS A NEBB CERTIFIED CONTRACTOR OR HAS AN AIBO CERTIFIED TEST & BALANCE ENGINEER. THIS COMPANY SHALL PERFORM THE BALANCING OF AIR/WATER SYSTEM(S) AND MAKE ANY REQUIRED ADJUSTMENTS TO ENSURE PROPER WORKING ORDER. UPON COMPLETION, THE BALANCING COMPANY SHALL PROVIDE A COMPLETE SYSTEM REPORT.	
GRAINGER NATIONAL ACCOUNT INFORMATION	
COORDINATE WITH L5D&C PROJECT MANAGER FOR MORE INFORMATION.	
MECHANICAL GENERAL NOTES AND ABBREVIATIONS	

HVAC EQUIPMENT COMMISSIONING	
DETAILED HVAC COMMISSIONING INFORMATION IS INCLUDED IN THE L5D&C SITE MANUAL PROVIDED TO THE CONTRACTOR AT THE START OF THE PROJECT.	
MANUFACTURER WILL CONTACT THE CONTRACTOR EARLY IN THE PROJECT TO SET PRELIMINARY DATES FOR HVAC INSPECTION, COMMISSIONING AND HVAC CONTROLS COMMISSIONING.	
PRIOR TO HVAC INSPECTION / COMMISSIONING (TO BE COMPLETED BY MECHANICAL SUBCONTRACTOR)	
1. CONNECT AND BLEED CONDENSATE, DUCTWORK, NATURAL GAS, CHILLED WATER PIPING, AND/OR CONDENSER WATER PIPING.	
2. CHARGE HVAC SYSTEMS WITH REFRIGERANT FOLLOWING MANUFACTURERS' GUIDELINES AND INSTRUCTIONS. COLD WEATHER CONDITIONS REQUIRE SPECIFIC PROCESSES, CONTACT MANUFACTURER FOR TECHNICAL SUPPORT.	
3. CONNECT POWER TO THE HVAC EQUIPMENT FOR A MINIMUM OF 24 HOURS. NOTE: IN COLD WEATHER SITUATIONS, DO NOT OPERATE THE UNITS PRIOR TO COMMISSIONING!	
HVAC EQUIPMENT SHOULD BE STARTED UP EARLY IN THE PROJECT. COORDINATE EARLY START UP OF EQUIPMENT WITH MANUFACTURER.	
NOTE: THE GC MAY BE BACK CHARGED FOR ADDITIONAL AC SITE VISITS BEYOND THE FIRST THREE (3) NECESSARY TO DOCUMENT THE RESOLUTION OF THE HVAC PUNCHLIST ITEMS.	
HVAC COMMISSIONING PROCESS	
VISIT 1: HVAC EQUIPMENT START UP	
1. CONTRACTOR SHALL HAVE THE MECHANICAL AND ELECTRICAL SUBCONTRACTOR ON SITE DURING THE HVAC INSPECTION AND COMMISSIONING. BUDGET 5 HOURS FOR THE HVAC INSPECTION AND COMMISSIONING. (NOTE: THESE HOURS ARE TO BE USED FOR THE COMPLETION OF THE COMMISSIONING PROCESS ONLY. ADDITIONAL HOURS WILL NOT BE APPROVED FOR WORK THAT WAS IN SCOPE AND NOT COMPLETED PRIOR TO THE COMMISSIONING PROCESS.)	
2. CONTRACTOR TO COMPLETE AND EMAIL, OR FAX, THE HVAC EQUIPMENT START UP SURVEY TO MANUFACTURER PRIOR TO THE HVAC STARTUP.	
3. MANUFACTURER COORDINATES THE HVAC EQUIPMENT COMMISSIONING. CONTRACTOR IS RESPONSIBLE FOR COMMUNICATING SCHEDULE DATE CHANGES TO MANUFACTURER AND SUBCONTRACTORS.	
4. PROVIDED THERE ARE NO HVAC INSTALLATION ISSUES, SYSTEMS SHALL BE STARTED FOR TEMPORARY OPERATION ON LOCAL CONTROL.	
5. IF THERE ARE HVAC INSTALLATION PUNCHLIST ITEMS, THE GC MUST CORRECT THEM AND RESCHEDULE COMMISSIONING WITH MANUFACTURER.	
VISIT 2: HVAC CONTROLS COMMISSIONING	
THE CONTROLS COMMISSIONING IS PERFORMED BY THE MANUFACTURER IN CONJUNCTION WITH THE GENERAL CONTRACTOR AND THE MECHANICAL AND ELECTRICAL SUBCONTRACTORS. ALLOW FOR 4 HOURS TO COMPLETE THE CONTROLS COMMISSIONING. (NOTE: THESE HOURS ARE TO BE USED FOR THE COMPLETION OF THE COMMISSIONING PROCESS ONLY. ADDITIONAL HOURS WILL NOT BE APPROVED FOR WORK THAT WAS IN SCOPE AND NOT COMPLETED PRIOR TO THE COMMISSIONING PROCESS.)	
FOLLOW THE CONSTRUCTION DRAWINGS AND MANUFACTURER'S DETAILS AND DRAWINGS DURING THE INSTALLATION OF THE HVAC CONTROL EQUIPMENT.	
1. CONTRACTOR TO COMPLETE AND EMAIL, OR FAX, THE CONTROLS COMMISSIONING SURVEY TO MANUFACTURER PRIOR TO THE CONTROL COMMISSIONING.	
2. CONNECT THE HVAC CONTROLS TO AN OPERATIONAL ANALOG PHONE LINE OR ETHERNET CONNECTION TO ALLOW COMMUNICATION. IF NECESSARY, UTILIZE SITE FAX LINE TO CONNECT TO THE CONTROLS MODEM IN THE IFS PANEL.	
3. CONTACT MANUFACTURER AT THE SCHEDULED TIME FOR THE CONTROLS COMMISSIONING.	
4. PROVIDED THERE ARE NO OPEN ISSUES, VISIT 2 IS COMPLETE. IN THE EVENT THERE ARE OPEN ITEMS, THE GC MUST CORRECT THEM AND RESCHEDULE THE CONTROLS COMMISSIONING.	
VISIT 3: FINAL HVAC INSPECTION	
THIS VISIT IS TO DO A FINAL INSPECTION OF THE HVAC EQUIPMENT AND CONTROL INSTALLATION. THIS VISIT MUST TAKE PLACE PRIOR TO CONSTRUCTION COMPLETION.	
THE FOLLOWING ITEMS MUST BE COMPLETED PRIOR TO THE INSPECTION:	
1. HVAC SYSTEM INSTALLATION IS COMPLETE - NO OPEN PUNCHLIST ITEMS EXCEPT FOR POSSIBLY THE PERMANENT PHONE LINE.	
2. AIR BALANCE IS COMPLETE. NOTE: AIR BALANCE IS IN THE CONTRACTOR'S SCOPE OF WORK.	
THE GC MUST COMPLETE TRANE'S SITE VISIT #3 SURVEY PRIOR TO THE VISIT BEING SCHEDULED.	
THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE MECHANICAL SUBCONTRACTOR AND THE ELECTRICAL SUBCONTRACTOR ON SITE DURING THE FINAL INSPECTION. BUDGET 4 HOURS FOR THE FINAL INSPECTION.	
1. THE CONTRACTOR IS RESPONSIBLE FOR COMMUNICATING SCHEDULE DATE CHANGES FOR THE FINAL INSPECTION.	
2. FILTERS ARE TO BE REPLACED DURING THIS VISIT. FILTERS ARE TO BE PROVIDED BY THE CONTRACTOR AND SHALL BE ON SITE WHEN THE TRANE TECHNICIAN ARRIVES.	
3. WHEN COMPLETE AND ALL OPEN CONTRACTOR HVAC ISSUES ARE RESOLVED A CONTROL NUMBER IS ISSUED BY THE MANUFACTURER. IT IS RECORDED INSIDE THE CONTROL PANEL DOOR IN THE IFS ELECTRICAL PANEL AND ON THE FINAL VISIT CHECK LIST.	
4. IN THE EVENT THERE ARE OPEN ITEMS, THE CONTRACTOR MUST CORRECT THEM AND RESCHEDULE THE FINAL INSPECTION WITH MANUFACTURER. GC IS RESPONSIBLE FOR REPLACEMENT OF SHEAVES, PULLEYS, AND BELTS, IF NEEDED.	
5. THE HVAC CONTROL NUMBER WILL BE ISSUED AT THE END OF THE VISIT PROVIDED THERE ARE NO UNRESOLVED HVAC PUNCHLIST ITEMS.	
THE TRANE TECHNICIAN WILL WRITE THE HVAC CONTROL NUMBER ON THE STICKER INSIDE THE WR CONTROLS PANEL (IFS PANEL) AND ON THE FINAL VISIT CHECK LIST.	
NATIONAL ACCOUNTS HVAC SUPPLIER GENERAL NOTES	
HVAC EQUIPMENT NOTED HAS BEEN PREPURCHASED BY LIMITED STORE DESIGN & CONSTRUCTION. WITHIN THE FIRST WEEK OF CONSTRUCTION, THE GENERAL CONTRACTOR OR THEIR MECHANICAL SUBCONTRACTOR SHALL NOTIFY SUPPLIER BY EMAIL.	
THE EMAIL SHALL STATE THE PHONE NUMBER, EMAIL ADDRESS AND DELIVERY ADDRESS OF THE CONTACT PERSON RESPONSIBLE FOR SCHEDULING AND RECEIVING THE HVAC EQUIPMENT AND ACCESSORIES. EQUIPMENT AND ACCESSORIES ARE TO BE SHIPPED BY ANY SPECIAL SHIPPING INSTRUCTIONS REQUIRED OR REQUESTED. ALLOW A MINIMUM OF TWO WEEKS AFTER CONSTRUCTION STARTS FOR DELIVERY UNLESS SPECIAL ARRANGEMENTS ARE MADE PRIOR TO THE START OF CONSTRUCTION.	
GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL SHIPPING COST INCURRED IF DELIVERY IS REQUIRED PRIOR TO THE STANDARD TWO WEEKS SCHEDULED.	
IF THIS INFORMATION IS NOT SENT TO NATIONAL ACCOUNT SUPPLIER, THEN THE EQUIPMENT AND ACCESSORIES WILL BE SHIPPED IN ACCORDANCE WITH THE PURCHASE ORDER DATE AND INSTRUCTIONS ISSUED BY L5D&C AND THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UNLOADING AND STORAGE OF EQUIPMENT UNTIL SUCH TIME AS REQUIRED FOR INSTALLATION ON PROJECT.	
IF OWNER'S REPRESENTATIVE IS PERFORMING START UP, THEN GC AND/OR MECHANICAL CONTRACTOR MUST COORDINATE WITH MANUFACTURER REP. 2 WEEKS PRIOR TO CONSTRUCTION END DATE.	
TRANE CONTACT INFORMATION	
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JOHN D'AGOSTINO PROJECT MANAGER AND HVAC COMMISSIONING EMAIL: JOHN.DAGOSTINO@TRANE.COM PHONE NO: 866.415.2499	SCOTT DAVIS PROJECT MANAGER AND HVAC COMMISSIONING EMAIL: SCOTT.DAVIS@TRANE.COM PHONE NO: 866.415.2499
ABBREVIATIONS - MECHANICAL	
AABC A/C ABV AD AFD AHU AP ASHRAE	AMERICAN AIR BALANCE COUNCIL AIR CONDITIONING UNIT ABOVE ACCESS DOOR APPROVED FIRE DAMPER ABOVE FINISH FLOOR AIR HANDLING UNIT ACCESS PANEL AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS
BDD BEL BHP BLDG BOP BTUH	BACK DRAFT DAMPERS BELOW BRAKE HORSEPOWER BUILDING BOTTOM OF DUCT BOTTOM OF PIPE BRITISH THERMAL UNIT PER HOUR
CAP CD CFM CHWR CHWS CLG CO2 CONN CONT CONTR COW CWS	CAPACITY CEILING DIFFUSER OR CONDENSATE DRAIN CUBIC FEET PER MINUTE CHILLED WATER RETURN CHILLED WATER SUPPLY CEILING, COOLING CARBON DIOXIDE CONNECTION OR CONNECTOR CONTINUOUS CONTRACTOR COEFFICIENT OF PERFORMANCE CONDENSATE WATER RETURN CONDENSER WATER SUPPLY
DB DEG DET DIA DIM DISCH DL DN DTR DWS	DRY BULB, DECIBEL DEGREE DETAIL DIAMETER DIMENSION DISCHARGE DOOR LOUVER DOWN DOWN THRU ROOF DRAWING
EA EAG EAR EAT ECR EE EF EFF EG ELEC ELV ENCL	EXHAUST AIR EXHAUST AIR GRILLE EXHAUST AIR REGISTER ENTERING AIR TEMPERATURE ELECTRICAL CONTRACTOR ENERGY EFFICIENCY RATIO EXHAUST FAN EFFICIENCY EXHAUST GRILLE ELECTRIC ELEVATION ENCLOSURE
EQUV ESP EVC EWH	EQUIVALENT EXTERNAL STATIC PRESSURE ELECTRIC WATER COOLER EXHAUST
F FCU FLA FLEX FLR FPM FPS	FAHRENHEIT FAN COIL UNIT FULL LOAD AMPS FLEXIBLE FLOOR FEET PER MINUTE FEET PER SECOND
G GAL GALV GC GPM	GAS GALLONS GALVANIZED GENERAL CONTRACTOR GALLONS PER MINUTE
HD HP HTR HVAC HWS	HEAD HORSEPOWER HEATER HEATING VENTILATING AND AIR CONDITIONING HOT WATER RETURN HOT WATER SUPPLY
ID IN INCH INCH INCH	INSIDE DIAMETER CONNECTION OR CONNECTOR CONTINUOUS KILOWATT
LL L LB LIN LNF	LANDLORD LONG POUND LINEAR FEET LINEAR DIFFUSER
MAX MBH MCA MECH MFR MOCP MTR	MAXIMUM THOUSAND BTU PER HOUR MINIMUM CIRCUIT AMPACITY MOTORIZED DAMPER MECHANICAL MANUFACTURER MAXIMUM OVER CURRENT PROTECTION MOUNTED MOTOR
NEBB N.C. N.O. N/A NTS	NATIONAL ENVIRONMENTAL BALANCING BUREAU NORMALLY CLOSED NOT IN CONTRACT NORMALLY OPEN NOT APPLICABLE NOT TO SCALE
OD OD OPNG OV P PD PLBG PRV PSI RA RAG RAR RG RH RPM SA SAG SAR SCH SENS SF SMACNA SOV SP SQ SQ FT SS TEMP TG TSP TSTAT TYP UC UH UN UTR VAV VENT VFD VTR W WB WCO WG WT (E)	OPPOSED BLADE DAMPER OUTSIDE DIMENSION OR DIAMETER OPENING OUTDOOR AIR PUMP PRESSURE DROP PLUMBING PRESSURE REDUCING VALVE POUNDS PER SQUARE INCH RETURN AIR RETURN AIR GRILLE RETURN AIR REGISTER RETURN GRILLE RELATIVE HUMIDITY REVOLUTIONS PER MINUTE SUPPLY AIR SUPPLY AIR GRILLE SUPPLY AIR REGISTER SCHEDULE SENSIBLE SUPPLY FAN, SQUARE FOOT SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION SHUT-OFF VALVE STATIC PRESSURE SQUARE SQUARE FEET STAINLESS STEEL TEMPERATURE TRANSFER GRILLE TOTAL, STATIC PRESSURE THERMOSTAT TYPICAL UNDERCUT UNIT HEATER UNLESS OTHERWISE NOTED UP THRU ROOF VARIABLE AIR VOLUME VENTILATION, VENTILATOR VARIABLE FREQUENCY DRIVE VENT THRU ROOF WATT WET BULB WALL CLEANOUT WATER GAUGE WEIGHT EXISTING
MECHANICAL EQUIPMENT SCHEDULES	
NTS	
00N-M0101-B00-SCHD	
F	
MECHANICAL EQUIPMENT SCHEDULES	
NTS	
00N-M0101-A00-LGND	
A	
LEGEND & SYMBOLS	

EXISTING VAV TERMINAL UNIT SCHEDULE					
MARK (VAV-#)	1	2	3	4	5
MANUFACTURER	TRANE	TRANE	TRANE	TRANE	TRANE
MODEL	VCCF	VCCF	VCCF	VCCF	VCCF
INLET SIZE	12" #	12" #	12" #	12" #	12" #
DESIGNED AIR FLOW (CFM)	1880	1880	1880	1620	1640
ACCSSORIES	1,2	1,2	1,2	1,2	1,2
NOTES	1,4	1,4	1,4	1,4	1,4
ACCESSORIES ("S" INDICATES STANDARD; "O" INDICATES OPTIONAL):					
1. S-EXISTING FACTORY PROVIDED DISCONNECT SWITCH.					
2. S-EXISTING FACTORY PROVIDED CONTROL TRANSFORMER.					
NOTES:					
1. REFER TO CONTROL WIRING SCHEMATICS FOR ANY FIELD INSTALLED CONTROL DEVICES NOT FACTORY INSTALLED.					
2. NEW EQUIPMENT PROVIDED BY LANDLORD AT GENERAL CONTRACTOR'S EXPENSE.					
3. EXISTING EQUIPMENT TO BE RELOCATED BY LANDLORD AT GENERAL CONTRACTOR'S EXPENSE.					
4. COORDINATE WITH WALL OPERATIONS FOR WALL'S REQUIRED CONTRACTOR.					

MECHANICAL EQUIPMENT SCHEDULES	NTS	F
	05N-M0101-B00-SCHD	