

GENERAL SPECIFICATIONS FOR MECHANICAL WORK

1. GENERAL

- THE FOLLOWING SECTION APPLIES TO THE MECHANICAL AND PLUMBING WORK RELATED TO THIS PROJECT.
- THE INTENT OF THE SPECIFICATIONS, INCLUDING ALL APPENDICES AND DRAWINGS, SHALL BE DEEMED TO COVER THE COMPLETE INSTALLATION, READY FOR OPERATION. CONSEQUENTLY, MINOR DETAILS NOT NECESSARILY SHOWN OR SPECIFIED BUT NECESSARY FOR THE PROPER FUNCTIONING OF THE INSTALLATION, INCLUDING EQUIPMENT SERVICEABILITY, SHALL BE INCLUDED IN THE WORK.
- THE CONTRACTOR SHALL FURNISH ALL LABOUR, MATERIAL AND EQUIPMENT RELATED TO THE INSTALLATION OF THE WORK OUTLINED IN THE CONTRACT DOCUMENTS.

2. DEFINITIONS

- THE TERM "OWNER" USED IN THROUGHOUT THE SPECIFICATIONS REFERS TO THE BUILDING OWNER/LANDLORD.
- THE TERM "TENANT" USED IN THROUGHOUT THE SPECIFICATIONS REFERS TO CHIPOTLE MEXICAN GRILL, INC.
- ANY REFERENCE TO THE "DESIGN AUTHORITY" OR "CONSULTANT" SHALL MEAN PRISM ENGINEERING LTD.
- THE WORD "PROVIDE" SHALL MEAN "SUPPLY AND INSTALL" UNLESS OTHERWISE INDICATED.
- THE NEW INSTALLATION SHALL MEET THE CURRENT BUILDING STANDARDS IN ALL ASPECTS.

3. GOVERNING REGULATIONS

- THE WORK UNDER THIS CONTRACT SHALL CONFORM, BUT NOT BE LIMITED TO, THE REQUIREMENTS OF THE FOLLOWING CODES, REGULATIONS AND STANDARDS:
 - BY-LAWS, STANDARDS AND CODES:
 - LOCAL BUILDING BY-LAWS
 - JURISDICTIONAL BUILDING BYLAWS
 - 2018 BC BUILDING CODE (2018) PART 1 TO 11 INCLUSIVE.
 - CURRENT NATIONAL BUILDING CODE
 - CURRENT ASHRAE 90.1
 - CURRENT NFPA 13
 - CANADIAN GAS CODE CAN/CGA-B149.1-M91
 - CANADIAN ELECTRICAL CODE C22
 - 2019 B-52 MECHANICAL REFRIGERATION CODE
 - SMA/CNA PUBLICATIONS:
 - CURRENT HVAC DUCT CONSTRUCTION STANDARDS
 - GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PIPING SYSTEMS
 - BOCA QUALITY STANDARDS FOR MECHANICAL INSULATION MANUAL.
 - LETTERS OF ASSURANCE COMPLETED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, WILL BE REQUIRED TO BE SUBMITTED AT THE COMPLETION OF THE PROJECT FOR THE INSTALLATION OF SEISMIC RESTRAINT OF NEW EQUIPMENT INSTALLED. PAID AND SUPPLIED BY THE MECHANICAL CONTRACTOR.
- COMPLY WITH THE OWNER'S REQUIREMENTS FOR CONSTRUCTION ACTIVITIES IN THE BUILDING.

4. PERMITS

- OBTAIN ALL REQUIRED PERMITS, PAY ALL FEES THEREFORE, AND COMPLY WITH ALL PROVINCIAL, MUNICIPAL, AND OTHER LEGAL REGULATIONS, CODES AND BY-LAWS APPLICABLE TO THE WORK.
- PROVIDE CERTIFICATES FOR INCLUSION IN O&M DOCUMENTATION, AS EVIDENCE THAT THE WORK CONFORMS WITH THE LAWS AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION.

5. EXAMINATION OF SITE

- VISIT THE SITE BEFORE TENDERING AND THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT, DUCTWORK AND PIPING WILL BE INSTALLED AND REPORT ANY CONDITION, THAT IN THEIR OPINION, PREVENTS THE PROPER INSTALLATION OF THE WORK.
- NO CONSIDERATION WILL BE GRANTED FOR ANY MISUNDERSTANDING OF WORK TO BE DONE RESULTING FROM FAILURE TO VISIT THE SITE.
- WHEN THE CONTRACT DOCUMENTS DO NOT CONTAIN SUFFICIENT INFORMATION FOR THE PROPER SELECTION OF EQUIPMENT FOR BIDDING, NOTIFY THE DESIGN AUTHORITY DURING THE TENDERING PERIOD. IF CLARIFICATION IS NOT OBTAINED, ALLOW FOR THE MOST EXPENSIVE ARRANGEMENT. FAILURE TO DO THIS SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO SUPPLY THE INTENDED EQUIPMENT.
- CO-ORDINATE WORK WITH ALL TRADES AND MAKE CHANGES TO FACILITATE A SATISFACTORY INSTALLATION. MAKE NO DEVIATIONS TO THE DESIGN INTENT WITHOUT WRITTEN APPROVAL.
- THE DIMENSIONS OF EXISTING WORK IS APPROXIMATE AND THE CONTRACTOR MUST TAKE ACTUAL MEASUREMENTS BEFORE ORDERING MATERIALS, EQUIPMENT, AND THE LIKE. FAILURE TO COMPLY WITH THIS REQUIREMENT WILL MAKE THE CONTRACTOR FULLY RESPONSIBLE FOR REPLACING SUCH MATERIAL OR EQUIPMENT AT NO EXTRA COST TO THE CONTRACT.
- A LOCKOUT AND TAGGING SYSTEM MUST BE EMPLOYED TO PREVENT THE UNEXPECTED ENERGIZING OF EQUIPMENT, MACHINERY, OR ELECTRICAL SERVICES. THIS SYSTEM MUST BE EMPLOYED BEFORE WORKING ON ELECTRICAL SERVICES TO POWER EQUIPMENT. ALL POWER EQUIPMENT MUST BE STOPPED, DISCONNECTED, AND THEN LOCKED OUT AT THE MAIN CONTROL OR BREAKER WITH TWO OR MORE LOCKS. THE SWITCH WILL THEN BE TAGGED. WHEN WORK IS COMPLETE, EACH PERSON MUST REMOVE THEIR OWN LOCK. NO ONE WILL REMOVE ANOTHER PERSON'S LOCK.

6. LIABILITY

- ASSUME RESPONSIBILITY FOR LAYING OUT WORK AND FOR DAMAGE CAUSED BY IMPROPER EXECUTION OF WORK.
- PROTECT FINISHED AND UNFINISHED WORK FILLINGS AND OCCUPANT'S FURNITURE AND EQUIPMENT FROM DAMAGE.
- TAKE RESPONSIBILITY FOR CONDITION OF MATERIALS AND EQUIPMENT SUPPLIED AND PROTECT UNTIL WORK IS COMPLETED AND ACCEPTED.
- THE OWNER SHALL HAVE RECOURSE IN TORT FOR ANY NEGLIGENT ACTION BY THE CONTRACTOR OR HIS REPRESENTATIVES.

7. EXISTING SERVICES

- ARRANGE WORK TO AVOID SHUTDOWNS OF EXISTING SERVICES. TO MAINTAIN EXISTING SERVICES IN OPERATION, TEMPORARY RELOCATIONS AND/OR BYPASSES OF DUCTWORK AND/OR PIPING MAY BE REQUIRED. SHUTDOWNS OF SYSTEMS ARE TO BE CO-ORDINATED WITH THE MANAGER OF THE FACILITY.
- PROTECT ALL EXISTING SERVICES FROM CONSTRUCTION DEBRIS.
- ALL EXISTING FIRE RATINGS THROUGH FLOOR SLABS OR WALLS SHALL BE RETAINED. ALL LIFE SAFETY SYSTEMS INCLUDING EXIT/EMERGENCY LIGHTING AND FIRE ALARM SYSTEMS SHALL REMAIN IN A FUNCTIONAL STATE DURING DEMOLITION AS WELL AS DURING CONSTRUCTION.
- UNLESS OTHERWISE SPECIFIED, COMPLETELY REMOVE ALL EQUIPMENT, WHICH BECOMES REDUNDANT AND IS NO LONGER REQUIRED DUE TO THE WORK IN THIS CONTRACT.
- WHERE NOTED ON THE DRAWINGS, THE EQUIPMENT/MATERIAL SHALL BE HANDED OVER TO THE OWNER. A RECEIPT OF THE TRANSFER MAY BE REQUIRED BY THE TENANT, INDICATING WHERE THE MATERIAL HAS BEEN STORED.
- THE EXISTING FIRE PROTECTION SYSTEM MUST REMAIN FUNCTIONAL DURING DEMOLITION AS WELL AS DURING CONSTRUCTION. IF THE WORK REQUIRES THE FIRE PROTECTION SYSTEM TO BE COMPROMISED DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A 24-HOUR FIRE WATCH PERSONNEL WHILE THE SYSTEM IS DOWN.
- ALL EQUIPMENT OPERATED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE OF THE WORK, SHALL BE MAINTAINED BY THE CONTRACTOR. ALL AIR FILTERS MUST BE REPLACED PRIOR TO TURN OVER TO THE OWNER.

8. CUTTING, CORING AND PATCHING

- LAYOUT ALL CUTTING, PATCHING, DIGGING, CANNING AND CORING REQUIRED TO ACCOMMODATE THE MECHANICAL SERVICES. THE PERFORMANCE OF ACTUAL CUTTING AND PATCHING IS BY THE GENERAL CONTRACTOR. BE RESPONSIBLE FOR ALL OPENINGS REQUIRED UNDER THIS CONTRACT, INCLUDING DUCT OPENINGS. ALLOW OVERSIZED OPENINGS FOR FIRE DAMPERS.
- VERIFY THE LOCATIONS OF EXISTING SERVICE RUNS AND STRUCTURAL REINFORCEMENT WITHIN EXISTING CONCRETE WALLS AND FLOORS PRIOR TO CORE DRILLING AND CUTTING. PROVIDE X-RAY OR PENETRATING RADAR (GPR) FOR EACH PROPOSED OPENING THROUGH CONCRETE FLOORS AND WALLS, AS REQUIRED BY THE STRUCTURAL CONSULTANT.
- CORING AND CUTTING OF STRUCTURAL BUILDING COMPONENTS SHALL ONLY TAKE PLACE UPON THE RECEIPT OF SPECIFIC WRITTEN APPROVAL OF A STRUCTURAL ENGINEER PAID BY THE MECHANICAL CONTRACTOR.

9. ACCESS DOORS AND PANELS

- SUPPLY AND INSTALL ALL NECESSARY ACCESS DOORS FOR MECHANICAL EQUIPMENT, INCLUDING DAMPERS, FILTERS, CONTROL CONNECTIONS, ETC. WHERE NECESSARY, DOORS SHALL BE RATED TO SUITE FIRE ASSEMBLY RATING.
- ALL ACCESS DOORS SHALL, IN ANY EVENT, BE SIZED TO SATISFY THE MINIMUM ACCESS REQUIREMENTS AS REQUIRED BY THE BUILDING CODE BUT SHALL BE INCREASED IN SIZE WHEREVER NECESSARY TO SUIT ARCHITECTURAL BLOCK OR OTHER CONSTRUCTION MODULES TO PROVIDE A COMPLETE MODULAR FINISHED APPEARANCE.
- DO NOT LOCATE ACCESS DOORS IN FEATURE WALLS OR CEILINGS WITHOUT THE PRIOR APPROVAL OF THE CONSULTANT AND/OR OWNER. LOCATE IN SERVICE AREAS AND STORAGE ROOMS WHERE POSSIBLE.
- PROVIDE APPROVED ACCESS PANEL FOR SERVICING AND INSPECTION OF FIRE DAMPERS.
- WHERE ACCESS PANELS ARE INSTALLED IN FIRE RATED ASSEMBLIES, THE ACCESS PANEL SHALL CARRY THE APPROPRIATE FIRE RATING.
- ACCESS PANELS SHALL BE 14 GAUGE BONDERIZED STEEL, WITH HINGED DOORS.
- CONTRACTOR SHALL LEAVE ACCESS PANELS UNINSTALLED DURING FINAL REVIEW.

10. PENETRATIONS

- SHOULD PIPES OR DUCT WORK PENETRATE FIRE RATED WALLS AND FLOORS, THE CONTRACTOR SHALL FURNISH LABOUR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY TO PROVIDE FIRE STOPPING AND SEALANT AROUND THE PENETRATION.
- PENETRATIONS THROUGH NON-RATED WALL ASSEMBLIES MUST HAVE SEALANT INSTALLED AROUND THE SERVICE TO PREVENT AIR LEAKAGE. FLOOR PENETRATIONS THROUGH NON-RATED ASSEMBLIES MUST HAVE WATER RESISTANT SEALANT INSTALLED AROUND THE SERVICE.

11. FIRE STOPPING

- PROVIDE LABOUR, MATERIAL, EQUIPMENT, AND SERVICES NECESSARY TO PROVIDE FIRE STOPPING AND SMOKE SEALS AROUND MECHANICAL SERVICE PIPING AND DUCT PENETRATIONS THROUGH FIRE RATED WALL AND FLOOR ASSEMBLIES.
- INSTALLER SHALL HAVE PERSONNEL SPECIALIZING IN FIRE STOPPING INSTALLATIONS, WITH MINIMUM OF 3 YEARS DOCUMENTED EXPERIENCE APPROVED BY THE MANUFACTURER. THE MANUFACTURER SHALL PROVIDE INSTRUCTION, TRAINING, AND INSPECTION SERVICES OF THE INSTALLATIONS TO ENSURE THAT THE FIRE MATERIAL IS CORRECTLY INSTALLED.
- EXAMINE SIZES AND CONDITIONS OF VOIDS TO BE FILLED TO ESTABLISH CORRECT THICKNESSES AND INSTALLATION OF MATERIALS. PREPARE SURFACES IN CONTACT WITH FIRE STOPPING MATERIALS AND SMOKE SEALS TO MANUFACTURER'S INSTRUCTIONS. MASK WHERE NECESSARY TO AVOID SPLASH AND COVER COATING ONTO ADJOINING SURFACES; REMOVE STAINS ON ADJACENT SURFACES.
- LOCATION AND EXTENT OF FIRE SEPARATIONS SHALL BE COORDINATED WITH EITHER, THE ARCHITECTURAL DRAWINGS OR ON SITE.
- SERVICE PENETRATION FIRESTOP COMPONENTS: CERTIFIED BY ULC IN ACCORDANCE WITH CAN-5115 AND LISTED IN ULC GUIDE NO. 40 U19.13 AND ULC GUIDE NO. 40 U19.15 UNDER THE LABEL SERVICE OF ULC OR EQUIVALENT APPROVED TESTS BY WARNOCK HERSEY.
- FIRE-RESISTANCE RATING OF INSTALLED FIRE STOPPING ASSEMBLY IN ACCORDANCE WITH BCBC.
- SUBMIT SHOP DRAWINGS TO SHOW LOCATION OF PENETRANT, PROPOSED MATERIAL, REINFORCEMENT, ANCHORAGE, AND METHOD OF INSTALLATION, PRIOR TO CONSTRUCTION. CONSTRUCTION DETAILS MUST ACCURATELY REFLECT ACTUAL JOB CONDITIONS.

12. ACCEPTABLE FIRE STOPPING SYSTEMS: HLTI, 3M

13. WORKMANSHIP

- WORKMANSHIP SHALL BE IN ACCORDANCE WITH ESTABLISHED PRACTICE AND STANDARDS ACCEPTED AND RECOGNIZED BY DESIGN AUTHORITIES AND THE TRADE. EMPLOY ONLY TRADESMEN HOLDING VALID PROVINCIAL TRADE QUALIFICATION CERTIFICATES. TRADESMEN SHALL PERFORM ONLY WORK THAT THEIR CERTIFICATE PERMITS.
- ALL ROOFING WORK SHALL BE CARRIED OUT BY A REGISTERED RACBC CONTRACTOR.
- THE CONTRACTOR SHALL CLEANUP THE WORK AREA AT THE END OF EACH SHIFT. UPON COMPLETION OF THE WORK, REMOVE ALL TOOLS, DEBRIS, SURPLUS AND WASTE MATERIALS.

14. MATERIAL

- WHERE TWO OR MORE ITEMS OF EQUIPMENT AND/OR MATERIAL, OF THE SAME TYPE, ARE REQUIRED, THEY SHALL BE THE PRODUCTS OF A SINGLE MANUFACTURER.
- MATERIAL CONSIDERED TO SATISFY THE SPECIFICATION, BUT OF A MANUFACTURER OTHER THAN THOSE NAMED, MAY BE SUBMITTED TO THE DESIGN AUTHORITY FOR CONSIDERATION.
- SHOP DRAWINGS
 - PRIOR TO ORDERING EQUIPMENT AND MATERIAL, SUBMIT DIGITAL SETS OF SHOP DRAWINGS FOR ALL MECHANICAL COMPONENTS TO THE CONSULTANT FOR APPROVAL. AT A MINIMUM, DRAWINGS SHOULD BE PROVIDED FOR FANS, AIR HANDLING UNITS (IE: ROOF TOP UNITS, HEAT PUMPS, FANCOILS, ETC), LOUVRES, GRILLES, DIFFUSERS, FIRE DAMPERS, AND CONTROLS).
 - EACH SHOP DRAWINGS SUBMITTAL SHALL BE STAMPED BY THE CONTRACTOR VERIFYING THAT THE SUBMITTED SHOP DRAWINGS HAVE BEEN REVIEWED FOR CONFORMANCE WITH THE SPECIFICATIONS AND MUST INCLUDE THE PROJECT IDENTIFICATION NUMBER, PROJECT NAME, PROJECT ADDRESS, SELECTED EQUIPMENT INCLUDING ALL ACCESSORIES AND QUANTITY OF PRODUCT..

15. RECORD DRAWINGS

- MAINTAIN ONE CONTRACT DRAWING WHITE PRINT ON SITE, SOLELY FOR THE PURPOSE OF RECORDING, IN RED, ANY CHANGE AND/OR DEVIATION FROM THE CONTRACT DRAWING AS IT OCCURS. SUBMIT A COPY OF AS-INSTALLED DRAWINGS TO THE CONSULTANT UPON SUBSTANTIAL COMPLETION OF THIS CONTRACT IN PDF FORMAT OR HARD COPY.
- MECHANICAL CONTRACTOR SHALL SUBMIT MECHANICAL RECORD

DRAWINGS ("AS-BUILTS") MARKUPS TO PRISM ENGINEERING LTD. FOR REVIEW. THE HAND MARK UP CHANGES SHALL BE IMPLEMENTED INTO AUTOCAD BY PRISM ENGINEERING LTD TO PRODUCE RECORD DRAWINGS ON BEHALF OF CHIPOTLE MEXICAN GRILLE, INC.

17. OPERATING & MAINTENANCE MANUALS

- REFER TO SECTION 01700 EXECUTION REQUIREMENTS ON DRAWING G010.

18. WARRANTY

- PROVIDE A WRITTEN AND SIGNED WARRANTY IN THE NAME OF THE TENANT. THE WARRANTY IS TO INCLUDE THE NECESSARY MATERIALS AND LABOUR TO COVER REPAIR OR REPLACEMENT OF SPECIFIED WORK, AS A RESULT OF FAULTY MATERIALS OR WORKMANSHIP. THE WARRANTY IS TO COVER ONE YEAR FROM THE DATE OF THE CERTIFICATE OF SUBSTANTIAL COMPLETION.

19. SEISMIC RESTRAINTS

- NEW EQUIPMENT, DUCTWORK, GRILLES AND PIPING SHALL BE SEISMICALLY RESTRAINED. REFER TO STRUCTURAL DRAWING S000 FOR SEISMIC REQUIREMENTS.

20. SIDE VISITS

- INTERIM FIELD REVIEWS ARE TO BE COORDINATED WITH PRISM ENGINEERING WITHIN 7 DAYS BEFORE THE PLANNED SITE VISIT. VIRTUAL SITE VISITS ARE NOT PERMITTED UNLESS PREVIOUSLY COORDINATED WITH THE CONSULTANT TEAM AND TENANT DUE TO UNFORESEEN CIRCUMSTANCES (IE: HEALTH RISK, TRAVEL RESTRICTIONS, RESOURCE SHORTAGES, ETC).
- A VIRTUAL SITE VISIT IS AGREED TO BY THE CONSULTANT AND TENANT, THE HOST OF THE MEETING MUST PROVIDE A RECORDING OF THE VIDEO WITHIN 24 HOURS OF THE MEETING TO ENSURE PROPER RECORDS ARE MAINTAINED.

- THE CONTRACTOR SHALL ADVISE THE CONSULTANT SEVEN (7) DAYS BEFORE THE PLANNED FINAL SITE REVIEW TO ARRANGE A MUTUALLY AGREEABLE TIME AND DATE TO CONDUCT THE FINAL SITE REVIEW. ALL SYSTEMS MUST BE FULLY OPERATIONAL BEFORE THE SCHEDULED SITE VISIT. IF IT IS DETERMINED AT THE TIME OF THE SITE VISIT THAT WORK IS NOT COMPLETE AND WARRANTS A SECOND SITE VISIT, ALL COSTS INCURRED WILL BE BILLED DIRECTLY TO THE MECHANICAL CONTRACTOR.

- THE CONTRACTOR IS TO PROVIDE THE REQUIRED RESOURCES AND STAFF TO REVIEW THE INSTALLATION WORK AND DEMONSTRATE THE OPERATION OF EQUIPMENT.

- THE CONSULTANT WILL ISSUE A DEFICIENCY LIST WITHIN FIVE (5) DAYS OF THE SITE VISIT. ALL DEFICIENCIES SHALL BE COMPLETED WITHIN TWO (2) WEEKS OF THE REPORT ISSUED DATE AND A LETTER SUBMITTED TO THE CONSULTANT ADVISING THAT THE WORK IS COMPLETE. FAILURE TO COMPLETE THE WORK WILL RESULT IN WORK BEING COMPLETED BY THE OWNER AND THE COSTS DEDUCTED FROM THE FINAL PAYMENT.

21. BALANCING AIR SYSTEMS

- INDEPENDENT AIR BALANCE CONTRACTOR OR QUALIFIED MECHANICAL CONTRACTOR SHALL ACCURATELY BALANCE THE SUPPLY, RETURN, OUTSIDE AND EXHAUST AIR TO PROVIDE AIR VOLUME QUANTITIES INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS. BALANCER SHALL BE QUALIFIED FOR TAB WORK PER NEBB STANDARDS.
- ADJUST DUCT AND TERMINAL BALANCE DAMPERS TO BALANCE BOTH THE HEATING AND COOLING SUPPLY AIR SYSTEM TO PROVIDE THE DESIGN AIR QUANTITIES WITHIN +/- 10% AT EACH OUTLET AND MAINTAIN THE DESIGN RELATIONSHIP BETWEEN THE SUPPLY AND RETURN AIR SYSTEMS.
- ADJUST DIFFUSERS TO OBTAIN THE OPTIMUM AIR DISTRIBUTION PATTERN. SET FINAL BALANCE POSITION ON ALL BALANCE DAMPERS AND ADJUSTABLE AIR TURNING DEVICES PRIOR TO AIR FLOW TESTING AND BALANCE REPORT WRITE-UP.
- SUBMIT A REPORT TO THE CONSULTANT INDICATING FINAL AIR QUANTITIES (SUPPLY, OUTDOOR AND EXHAUST AIR) OBTAINED. PROVIDE SINGLE LINE DUCT LAYOUT WITH TERMINAL DEVICES WITH DESIGN AND ACTUAL AIRFLOWS.

22. BALANCING WATER SYSTEMS

- MEASURE AND ADJUST THE WATER FLOW TO THE SPECIFIED GPM BY ADJUSTING THE FLOW CONTROL VALVES ON THE OUTLET OF THE PUMPS AFTER BALANCING INDIVIDUAL HEATING DEVICES.
- SUBMIT WATER BALANCING REPORT TO CONSULTANT AT SUBSTANTIAL COMPLETION.

23. COMMISSIONING AND DEMONSTRATION

- THE CONTRACTOR IS RESPONSIBLE FOR THE PERFORMANCE AND COMMISSIONING OF ALL EQUIPMENT SUPPLIED AND REUSED IN THE SCOPE OF THE MECHANICAL WORK.
- CONFIRM OPERATION OF ALL NEW EQUIPMENT AND REVIEW CONDITION OF ALL EXISTING HVAC EQUIPMENT BEING REUSED.
- AT THE CONCLUSION OF THE COMMISSIONING, DEMONSTRATE THE OPERATION OF THE MECHANICAL SYSTEMS AT ALL LOADS TO THE ENGINEER AND OWNERS OPERATING STAFF.
- AT THE COMPLETION OF THE COMMISSIONING AND TESTING AND BALANCING, SUBMIT A REPORT TO THE ENGINEER CERTIFYING THAT ALL OF THE WORK UNDER THE CONTRACT IS COMPLETE, CLEAN AND OPERATIONAL AND IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- COMMISSIONING REPORT TO BE INSERTED IN THE OPERATING AND MAINTENANCE MANUAL.

END OF GENERAL SPECIFICATIONS

HVAC GENERAL NOTES

- GENERAL NOTES APPLY TO HVAC SHEETS.
- WORK SHALL COMPLY WITH CURRENT BUILDING CODES AND LOCAL BYLAWS AND AMENDED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING APPLICABLE SECTIONS OF NFPA, BUILDING BYLAWS AND PROVINCIAL CODE, PERMITS ASSOCIATED WITH THE WORK SHALL BE PAID FOR BY THE MECHANICAL CONTRACTOR. CONTRACTOR SHALL OBTAIN ALL INSPECTIONS REQUIRED.
- CONTRACTOR AND SUBCONTRACTORS SHALL REVIEW A COMPLETE SET OF THE CONSTRUCTION DOCUMENTS.
- COORDINATE WORK WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND OF THE EXISTING CONDITIONS AT THE PROJECT SITE.
- DRAWINGS FOR THE MECHANICAL WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWING SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, OFFSETS, ACCESSORIES, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
- DUCT DIMENSIONS ON PLANS INDICATE DIMENSIONS OF INTERNAL FREE AREA.
- PERFORATED CEILING DIFFUSERS SHALL BE 4-WAY UNLESS NOTED OTHERWISE.
- COORDINATE ROOF WORK WITH THE OWNER'S CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- UNLESS NOTED OTHERWISE, RECTANGULAR DUCT ELBOWS GREATER THAN 45° SHALL BE MITERED ELBOWS WITH DOUBLE-THICKNESS TURNING VANES AND RECTANGULAR DUCT ELBOWS 45° OR LESS SHALL HAVE RADIUS ELBOWS WITH AN INSIDE RADIUS OF AT LEAST 1/2 THE WIDTH OF THE DUCT.
- REPLACE AIR FILTERS WITH NEW, CLEAN MERV 8 AIR FILTERS AT TURNOVER.
- THE TERM "FURNISH" MEANS SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS. THE TERM "INSTALL" DESCRIBES THE OPERATIONS AT THE PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTING, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS. THE TERM "PROVIDE" MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
- PHENOLIC LABELING CALLED FOR IN THE HVAC DRAWINGS USING ENGRAVED PHENOLIC PLATES.
- PROVIDE P3000 12 GA. UNISTRUT WITH PG FINISH FOR DUCT SUPPORTS AND OTHER UNISTRUT IN AREAS EXPOSED TO VIEW. SLOTTED UNISTRUT AND OTHER UNISTRUT WITH HOLES IS NOT ACCEPTABLE.

HVAC MATERIAL SCHEDULE

	APPLICATION	ALLOWABLE MATERIAL
DUCT		
	CONCEALED, GENERAL EXHAUST	RECT. OR ROUND AS SHOWN
	CONCEALED, RETURN	RECT. OR ROUND AS SHOWN, LINED OR INSULATED
	CONCEALED, SUPPLY	RECT. OR ROUND AS SHOWN, LINED OR INSULATED
	CONCEALED, TYPE I HOOD EXHAUST	RECTANGULAR 16 GA. BLACK IRON W/ WRAP OR UL 1978 FACTORY-MANUFACTURED DUCT W/ WRAP (SUBMIT SHOP DRAWINGS FOR FACTORY-MANUFACTURED DUCT PRIOR TO ORDERING FOR APPROVAL)
	EXPOSED GENERAL EXHAUST	RECTANGULAR, NO EXPOSED DUCT-SEALING MASTIC
	EXPOSED RETURN	RECTANGULAR, NO EXPOSED DUCT-SEALING MASTIC
	EXPOSED SUPPLY	RECT. LINED OR ROUND AS SHOWN, NO EXPOSED DUCT-SEALING MASTIC
PIPE		
	REFRIGERANT	TYPE 'L' COPPER
	HEATING WATER (SUPPLY & RETURN)	SCH.40 BLACK STEEL, GRADE B
	CHILLED WATER (SUPPLY & RETURN)	SCH.40 BLACK STEEL, GRADE B
	CLOSED CIRCUIT HEAT PUMP	SCH.40 BLACK STEEL, GRADE B
	CONDENSING WATER (SUPPLY & RETURN)	SCH.80 BLACK STEEL, GRADE B

HVAC SYMBOLS

	DEMOLITION
	DUCTWORK
	ACOUSTICALLY INSULATED DUCT
	SUPPLY AIR DUCT RISER - UP
	RETURN AIR DUCT RISER - UP
	SUPPLY AIR DUCT RISER - DOWN
	RETURN AIR DUCT RISER - DOWN
	SUPPLY AIR GRILLE - NEW
	RETURN/EXHAUST AIR GRILLE - NEW
	SUPPLY AIR GRILLE - EXISTING
	RETURN/EXHAUST AIR GRILLE - EXISTING
	DOOR UNDERCUT
	DOOR GRILLE
	TURNING VANES
	ACCESS HATCH
	ACCESS PANEL
	HEAT TRACE CABLE
	EXHAUST FAN - CEILING MTD.
	EXHAUST FAN - INLINE
	FIRE DAMPER - NEW
	FIRE DAMPER - EXISTING
	SMOKE DAMPER - NEW
	SMOKE DAMPER - EXISTING
	MOTORIZED DAMPER
	BALANCING DAMPER
	BACK DRAFT DAMPER
	PROGRAMMABLE THERMOSTAT
	TEMPERATURE SENSOR
	GAS METER
	WATER METER
	AIR FLOW (CFM / L/S)
	PLAN NOTE
	DIFFUSER/GRILLE TAG
	CONDENS. WATER SUPPLY
	CONDENS. WATER SUPPLY
	CHILLED WATER SUPPLY
	CHILLED WATER SUPPLY
	HEATING WATER SUPPLY
	HEATING WATER RETURN
	REFRIGERANT LIQUID
	REFRIGERANT VAPOR

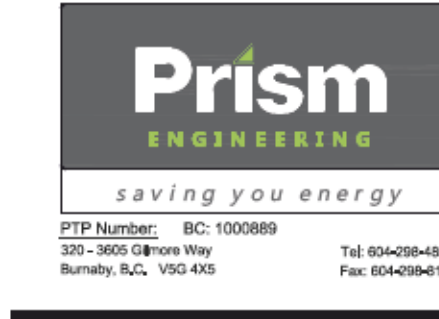
ABBREVIATIONS

(E)	EXISTING
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
ADJ	ADJACENT
AHJ	AUTHORITY HAVING JURISDICTION
APPROX	APPROXIMATELY
BLDG	BUILDING
CIE	CONNECT INTO EXISTING
CLG	CEILING
CO	CLEAN OUT
CIE	CONNECT INTO EXISTING
DCVA	DOUBLE CHECK VALVE ASSEMBLY
OCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	DOMESTIC HOT WATER RECIRC
DN	DOWN
DWG(S)	DRAWING(S)
EXTG	EXISTING
ELEC	ELECTRICAL
F&I	FURNISH AND INSTALL
FA	FROM ABOVE
FB	FROM BELOW
FD	FLOOR DRAIN
FT	FOOT/FEET
GC	GENERAL CONTRACTOR
HB	HOSE BIB
HD	HUB DRAIN
HVAC	HEATING, VENTILATION, AIR CONDITIONING
LL	LANDLORD
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OA	OUTSIDE AIR
RA	RETURN AIR
RE&RE	REMOVE & REINSTALL
REQD	REQUIRED
REV	REVISION
RL	RELOCATE
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
RWL	RAIN WATER LEADER
SA	SUPPLY AIR
SF	SQUARE FEET
TA	TO ABOVE
TB	TO BELOW
TR	TO REMAIN
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
VSC	VARIABLE SPEED CONTROLLER
VTR	VENT TO ROOF
W/	WITH
WIC	WALK-IN COOLER

Consultant:



Project No. 2022448



COPYRIGHT 2023 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN DB-037 2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

SECTION 233113 METAL DUCTS

1. DUCTWORK – GALVANIZED STEEL

- 1.1. PROVIDE GALVANIZED SHEET METAL DUCTWORK IN ACCORDANCE WITH SMACNA STANDARDS SUITABLE FOR OPERATING PRESSURE OF 500 PA AND LESS.
1.2. BALANCE DAMPERS TO BE 0.76 MM THICK, SINGLE BLADE WITH 0.4 MM SHAFT DIAMETER AND END BEARINGS. OPERATOR TO BE LOCKABLE QUADRANT TYPE.
1.3. ALL JOINTS SHALL BE MADE UP OF AIRTIGHT USING DURO-DYNE S-2 DUCT SEALER. SEALER SHALL BE APPLIED TO ALL JOINTS AND SEAMS OF SUPPLY, RETURN AND EXHAUST DUCTWORK.
1.4. ALL DUCTS HAVING ANY SIZE OVER 12" SHALL BE REINFORCED BY CROSS BRACING.
1.5. ALL DUCTS SHALL BE SUPPORTED BY 1" WIDE (16 GA.) GALVANIZED VENT HANGERS FASTENED TO THE SIDE AND BOTTOM OF THE DUCTS BY BOLTS, RIVETS, OR METAL SCREWS. DUCT HANGERS SHALL BE SUSPENDED FROM STRUCTURAL BEARINGS SUCH AS BEAMS, TOP CHORDS, OR STRUCTURAL CONCRETE SLABS. WHERE STRUCTURAL BEARINGS DO NOT EXIST, THE CONTRACTOR SHALL PROVIDE ANGLE OR CHANNEL IRON MEMBERS FROM THE NEAREST STRUCTURAL BEARINGS TO SUPPORT HANGERS.
1.6. PROVIDE AIR EXTRACTORS AT ALL TAKE-OFFS, AND DAMPERS WHERE INDICATED ON DRAWINGS.
1.7. PROVIDE ACCESS PANELS AT EACH SIDE OF HEATING COILS IN THE TRANSITION DUCTWORK AND ON ONE SIDE OF CONTROL OR MANUAL DAMPERS AND FIRE DAMPERS.
1.8. PROVIDE TURN VANES IN ALL 90° SQUARE ELBOWS.
1.9. ALL NEW EXPOSED DUCTWORK TO BE RIGID DUCT. FINAL DUCT CONNECTIONS TO ALL DIFFUSERS TO TERMINATE IN THE FORM OF A 90° RIGID ELBOW AND STRAIGHT SECTION OF RIGID DUCT. SEE DETAIL.

- 1.10. WHERE INSIDE OF DUCT OR DUCT INSULATION IS VISIBLE FROM FLOOR (BEHIND GRILLE OR IN OPEN DUCT) CONTRACTOR TO PAINT INSIDE DUCT WITH MATTE BLACK PAINT. MINIMUM COVERAGE SHALL BE 1.5X THE EQUIVALENT DUCT DIAMETER.
1.11. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF DUCT OPENINGS DURING CONSTRUCTION AND DEMOLITION TO PROTECT FROM CONSTRUCTION DUST & DEBRIS.

2. DUCTWORK – FLEXIBLE

- 2.1. FLEXIBLE DUCTWORK MAY BE INSTALLED IN CONCEALED AREAS. DUCTS SHALL BE HELICALLY WOUND SPIRAL DUCT, EQUAL TO FLEXMASTER T/L, MAXIMUM 10FT (3.048M).
2.2. FLEXIBLE DUCTS MUST BE SECURED TO SOLID DUCT WITH STAINLESS STEEL WORM GEAR TYPE CLAMP.
2.3. DUCTS SHALL CONFORM TO AND BE INSTALLED IN ACCORDANCE WITH NFPA STANDARD 90A.
2.4. RADIUS OF BENDS SHALL BE MINIMUM ONE DUCT DIAMETER CENTERLINE RADIUS.
2.5. DUCTS SHALL BE NON-METALLIC CONSTRUCTION AND INSULATED WITH 1" FIBREGLOSS INSULATION WITH INTEGRAL VAPOUR BARRIER, RATED FOR 4"SP.
2.6. DUCTS SHALL BE SECURED TO THE METAL SUPPLY DUCTS AND THE INLET SLEEVES ON THE BOXES WITH DUCT SEALANT AND NON-METALLIC DRAW BANDS.
2.7. CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF DUCT OPENINGS DURING CONSTRUCTION AND DEMOLITION TO PROTECT FROM CONSTRUCTION DUST & DEBRIS.

3. KITCHEN EXHAUST DUCTWORK – CARBON STEEL

- 3.1. DUCTWORK SERVING KITCHEN HOOD EXHAUST SHALL COMPLY WITH NFPA 96 "VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS". DUCTS SHALL BE CONSTRUCTED OF AND SUPPORTED BY WELDED CARBON STEEL NO LESS THAN 0.060 INCHES (1.52MM) IN THICKNESS (16 GAUGE).
3.2. DUCT SHALL BE INSTALLED WITH A MINIMUM 2% SLOPE ON HORIZONTAL RUNS UP TO 75FT (22.86M).
3.3. PROVIDE DRAIN AT LOW POINTS IN HORIZONTAL DUCT.
3.4. PROVIDE ACCESS PANEL OPENINGS AS REQUIRED BY NFPA 96.
3.5. EXTERIOR DUCT INSTALLATIONS SHALL BE PROTECTED WITH A PAINT OR SUITABLE WEATHER PROTECTIVE COATING (UNLESS STAINLESS STEEL DUCTWORK IS INSTALLED) AS NOTED IN THE FOLLOWING SECTION.
3.6. ENTIRE DUCT SHALL BE WRAPPED IN 2 LAYERS OF U/LC LISTED 3M FIRE DUCT WRAP.

4. FLUE GAS VENT

- 4.1. VENTING FROM ATMOSPHERIC TYPE GAS FIRED EQUIPMENT SHALL BE APPROVED TYPE "B" VENT. VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND ULC APPROVED. VENT SHALL BE SUITABLE SUPPORTED AND GUYED.
4.2. VENTING PASSING THROUGH THE ROOF SHALL BE FITTED WITH GALVANIZED WELDED 16 GAUGE STEEL ROOF CURBS COMPLETE WITH MOUNTING PLATE. CURB SHALL BE MINIMUM 400MM (16") HIGH AND SHALL BE SECURED DOWN TO THE ROOF DECK. VENT SHALL BE FITTED WITH A 20 GAUGE GALVANIZED STEEL CURB CAP FLASHING AND STORM COLLAR. CAULK WITH WEATHER TIGHT SEAL. REFER TO DETAIL SHOWN ON DRAWING M601.

END OF SECTION 233113

SECTION 230713 DUCT INSULATION

1. GENERAL

- 1.1. "CONCEALED" INSULATED MECHANICAL SERVICES IN FURRED SPACES, SHAFTS AND HUNG CEILING CONSIDERED TO BE CONCEALED.
1.2. "EXPOSED" WILL MEAN NOT CONCEALED.

- 1.3. PROVIDE INSULATION ON ALL DUCTWORK SERVING HEATING AND VENTILATION SYSTEMS INCLUDING:
1.3.1. EXTERNAL INSULATION: EXHAUST DUCTWORK WITHIN 5FT (1.5M) OF AN EXTERIOR WALL.
1.3.2. INTERNAL INSULATION: OUTDOOR AIR DUCTWORK.
1.3.3. EXTERNAL INSULATION: ALL AIR-CONDITIONED SUPPLY DUCTWORK.
1.3.4. ACOUSTIC INSULATION: ON ALL SUPPLY AND RETURN DUCT WITHIN 10FT (3.048M) OF AIR HANDLING EQUIPMENT, NOT NECESSARILY SHOWN ON THE DRAWINGS.

- 1.4. EXPOSED DUCTS WITHIN A ROOM, WHICH IS BEING SERVED BY THE EXPOSED DUCTS, DO NOT REQUIRE EXTERNAL INSULATION (EXCLUDING OUTDOOR AIR DUCTS). APPLY AT LEAST ONE COAT OF CORROSION RESISTANT PRIMER FOR SITE PAINTING.
1.5. INSULATION SHALL BE INSTALLED BY A QUALIFIED COMPANY PERFORMING IN THIS TYPE OF WORK, WITH A MINIMUM OF THREE (3) YEARS EXPERIENCE SPECIALIZING IN THIS TRADE.
1.6. DUCT DIMENSIONS, AS INDICATED, ARE CLEAR INSIDE DUCT LINING.
1.7. INSTALL IN ACCORDANCE WITH RECOMMENDATIONS OF SMACNA DUCT LINER STANDARDS.
1.8. EXTERNALLY INSULATE ALL CONCEALED RIGID SUPPLY AIR DUCTS AND PLENUMS.
1.9. EXHAUST DUCTWORK WITHIN 5FT (1.5M) OF AN EXTERIOR WALL SHALL BE EXTERNALLY INSULATED WITH 1 1/2" (38MM) THICK FOIL FACED FLEXIBLE FIBREGLASS. APPLY USING RECOMMENDED ADHESIVE AND TAPE ALL JOINTS USING VAPOUR BARRIER TAPE.

- 1.10. INSULATION ON CONCEALED DUCTWORK MAY BE LEFT AS FACTORY FINISHED WITH NO FURTHER FINISH REQUIRED. ALL JOINTS TO BE SEALED WITH VAPOUR BARRIER TAPE.
1.11. FLEXIBLE DUCTWORK CONNECTIONS TO EQUIPMENT SHALL NOT BE INSULATED.
1.12. EXTREME CARE SHALL BE TAKEN IN INSULATING HIGH AND MEDIUM PRESSURE DUCTWORK INCLUDING ALL DUCTWORK BETWEEN THE FAN DISCHARGE AND ALL MIXING BOXES TO ENSURE THE DUCT IS NOT PIERCED WITH SHEET METAL SCREWS OR OTHER FASTENERS. ALL HIGH AND MEDIUM PRESSURE DUCTS IN THESE SPECIFICATIONS ARE CLASSIFIED AS HIGH VELOCITY DUCTWORK.

2. QUALITY ASSURANCE

- 2.1. ALL INSULATION, JACKETS, ADHESIVES, MASTICS, ETC. UTILIZED IN THE FABRICATION OF THE DUCT INSULATION AND FINISH SHALL HAVE A FLAME SPREAD RATING MAXIMUM OF 25 AND THE SMOKE DEVELOPED CLASSIFICATION MAXIMUM OF 50.
2.2. INSULATION THICKNESS AND INSULATING VALUES SHALL BE IN ACCORDANCE WITH CURRENT ASHRAE 90.1.
2.3. APPLY EXTERNAL INSULATION TO DUCTWORK ONLY AFTER ALL TESTS HAVE BEEN MADE AND SYSTEMS ACCEPTED BY THE CONSTRUCTION MANAGER AS AIRTIGHT.
2.4. APPLY INSULATION AND INSULATION FINISH IN A WORKMANLIKE MANNER SO THAT THE FINISHED PRODUCT IS UNIFORM, SMOOTH IN FINISH, PLEASING TO THE EYE AND WITH LONGITUDINAL SEAMS CONCEALED FROM VIEW. APPLY DUCTWORK INSULATION MATERIALS, ACCESSORIES AND FINISHES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2.5. INSULATION AND VAPOUR BARRIER SHALL BE CONTINUOUS THROUGH ALL NON-RATED SEPARATIONS.
2.6. TERMINATE INSULATION SHORT OF ALL CONTROL, SMOKE AND FIRE DAMPERS SO AS NOT TO INTERFERE WITH THEIR OPERATION (WHERE APPLICABLE).
2.7. INSULATION SHALL BE ADHERED TO THE DUCT WITH 100 MM (4") WIDE STRIPS OF ADHESIVE AROUND THE DUCT AT APPROXIMATELY 300 MM (12") CENTRES.
2.8. INSULATION SHALL BE WRAPPED AROUND THE DUCT WITH ALL EDGES BUTTED. THE JACKET SHALL OVERLAP 50 MM (2") AT ALL JOINTS AND SHALL BE STAPLED USING FLARE TYPE STAPLES AT MAXIMUM 150MM (6") CENTRES.
2.9. ALL JOINTS, SEAMS, BREAKS, PINHEADS, STAPLES, ETC., IN THE JACKET SHALL BE SEALED WITH 75 MM (3") WIDE VAPOUR BARRIER RFRFK TAPE.
2.10. DUCT SEALANT IS NOT LIMITED TO MATERIALS OF ADHESIVE OR MASTIC NATURE BUT IS INCLUSIVE OF TAPES AND COMBINATIONS OF WOVEN FABRIC STRIPS AND MASTICS.

3. INSULATION MATERIALS

- 3.1. FLEXIBLE GLASS FIBRE: ASTM C553 AND ASTM C1290; COMMERCIAL GRADE; 'K' VALUE OF 0.25 AT 75 DEGREES F; 1.5 LB/CU FT MINIMUM DENSITY; 0.002 INCH FOIL SCRM KRAFT FACING FOR AIR DUCTS.
3.2. DUCTLINER (USED IN RETURN AIR PLENUM BOOT): FLEXIBLE GLASS FIBER, ASTM C1071; TYPE I, 'K' VALUE OF 0.23 AT 75 DEGREES F; 3.0 LB/CU FT MINIMUM DENSITY; COATING AIR SIDE FOR MAXIMUM 4,000 FEET PER MINUTE AIR VELOCITY. THE AIRSTREAM SURFACE MUST BE PROTECTED WITH A DURABLE ACRYLIC SURFACE COATING SPECIFICALLY FORMULATED TO:
3.3. FIRE RATED GREASE DUCT INSULATION (HIGH TEMPERATURE FLEXIBLE BLANKET): 1-1/2-INCH THICK REFRACTORY GRADE FIBROUS FIRE BARRIER MATERIAL WITH MINIMUM SERVICE TEMPERATURE DESIGN OF 2,000 DEGREES F; ALUMINUM FOIL LAMINATED ON BOTH SIDES; WITH A MINIMUM 'K' VALUE OF 0.25 AND A MINIMUM DENSITY OF 6 LB/CU FT; CONTAINING NO ASBESTOS. LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) UL TO MEET ASTM E 2336, ASTM E119, AND WITH FLAME SPREAD/SMOKE MINIMUM RATING OF 25 / 50 WHEN TESTED AS PER ASTM E84/UL 723.
3.4. EXPOSED OUTDOOR DUCT INSULATION (EXPOSED TO THE ELEMENTS): 1 INCH THICK MATERIAL THAT HAS A SERVICE TEMPERATURE RANGE FROM -60 DEGREES F TO 180 DEGREES F. THIS OUTDOOR DUCT INSULATION MEETS ASTM C 177 OR C 518 AND SHALL HAVE MINIMUM 'K' VALUE OF 0.27 BTU-IN. / HR-F72- DEGREES F AT MINIMUM DENSITY MEASUREMENT OF 3 LB/CU FT. THE INSULATION AND OUTSIDE SURFACE MUST BE PROTECTED WITH A WHITE THERMO PLASTIC RUBBER MEMBRANE FORMULATED TO BE RESISTANT TO UV, ACID RAIN, PHYSICAL ELEMENTS FROM OUTDOOR WEATHER. DUCT SHALL NOT BE PRESSURIZED UNTIL SEALANT HAS TIME TO CURE.
3.5. INSULATION ON EXPOSED OUTDOOR AIR DUCTWORK SHALL HAVE RD/3 PREMIUM QUALITY FINISH. APPLY TREATED CANVAS JACKET OVER INSULATION USING FABRIC ADHESIVE. FINISH CANVAS JACKET WITH ONE (1) COAT OF FABRIC COATING. INSULATION MAY BE PAINTED TO MATCH THE FINISHED CEILING.

END OF SECTION 230713

SECTION 230548 VIBRATION AND SEISMIC

1. VIBRATION ISOLATION

- 1.1. PROVIDE VIBRATION ISOLATION ON ALL MOTOR DRIVEN EQUIPMENT WITH MOTORS OF 0.37KW (0.5HP) AND GREATER POWER OUTPUT AND ON PIPING AND DUCTWORK AS SPECIFIED. WHERE EQUIPMENT IS INTERNALLY ISOLATED BY THE MANUFACTURER, EXTERNAL ISOLATION IS NOT REQUIRED.
1.2. PROVIDE NEOPRENE GROMMETS AT THE SUPPORT POINTS.
1.3. ALL FAN CONNECTIONS TO DUCTS OR PLENUMS SHALL BE MADE WITH DOUBLE COATED NEOPRENE FLEXIBLE CONNECTIONS, DURO DYNE GRIP-LOCK NEOPRENE CONNECTIONS SHALL BE 150 MM (6") LONG, INSTALLED AS PER THE MANUFACTURER'S INSTRUCTIONS.
1.4. BOLT ALL EQUIPMENT TO THE STRUCTURE. DO NOT BRIDGE ISOLATION ELEMENTS.
1.5. INSTALLATION OF RESTRAINT SYSTEMS AND FASTENING METHODS USED SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS.

2. SEISMIC REQUIREMENTS

- 2.1. ALL NEW EQUIPMENT, DUCTWORK, GRILLES AND PIPING SHALL BE PROVIDED WITH SEISMIC RESTRAINTS AS DESCRIBED IN THE GENERAL SPECIFICATIONS FOR PROJECTS LOCATED IN SEISMIC ZONES.

END OF SECTION 230548

SECTION 237400 HVAC EQUIPMENT

1. FANCOIL UNITS

- 1.1.

END OF SECTION 237400

SECTION 233315 DAMPERS

1. VOLUME CONTROL DAMPER

- 1.1. FACTORY FABRICATED VOLUME CONTROL DAMPER, COMPLETE WITH REQUIRED HARDWARE AND ACCESSORIES. SINGLE BLADE AND MULTI-BLADE OPPOSED BLADE, STANDARD LEAKAGE RATING AND SUITABLE FOR HORIZONTAL OR VERTICAL APPLICATIONS.
2. MOTORIZED CONTROLS
2.1. MOTORIZED DAMPER AND ACTUATOR TO BE SUPPLIED AND INSTALLED BY MECHANICAL CONTRACTOR AND INTERLOCKED WITH FANS AS SHOWN ON THE DRAWINGS.
2.2. CONTROLS CONTRACTOR TO INTERLOCK FAN WITH DAMPER AND DAMPER WITH TIMECLOCK.
2.3. CONTROL DAMPER SHALL BE EQUIVALENT TO RUSKIN CD40 ALUMINUM AIR FOIL OPPOSED BLADE STYLE CONTROL DAMPER; MAXIMUM AIR LEAKAGE 2.5 CFM PER SQUARE FOOT. DAMPER SIZE SHALL BE EQUIVALENT FREE AREA OF DUCT DIMENSIONS.
2.4. DAMPER ACTUATOR SHALL BE EQUIVALENT TO BELIMO NFB SWING RETURN C/W END SWITCH.
2.5. SEQUENCE OF OPERATION: MOTORIZED CONTROL DAMPER SHALL BE ENABLED BY THE TIME CLOCK. (ONCE PROVEN OPEN BY THE ACTUATOR END SWITCH, THE ASSOCIATED HVAC UNIT (FAN, FANCOIL ETC) SHALL BE ENABLED THROUGH A CONTACT RELAY.

END OF SECTION 233315

SECTION 230505 INSTALLATION OF PIPINGWORK

1. HEATING AND COOLING PIPING SYSTEM

- 1.1. PIPING SHALL BE STEEL TO ASTM A53 GRADE B SCHEDULE 40. JOINTS 65 MM AND ABOVE SHALL BE WELDED, JOINTS 50 MM AND SMALLER SHALL BE SCREWED TYPE. FITTINGS PRESSURE CLASS 125 TO ASTM A536.
1.2. ISOLATING VALVES 2", (50 MM), AND SMALLER SHALL BE BRONZE OR STAINLESS-STEEL BALL VALVES WITH SCREWED ENDS. ISOLATING VALVES 2.5", (65 MM), AND LARGER SHALL BE LUG BODY BUTTERFLY OR GROOVED END BUTTERFLY TYPE. PRESSURE CLASS 125 PSI WITH EPDM SEATS, DUCTILE IRON BODY, STAINLESS SHAFTS, BRONZE DISKS RATED FOR BUBBLE TIGHT SHUTOFF. ACCEPTABLE MAKES: TOYO, CENTRELINE, KITZ, VICTAULIC.
1.3. PROVIDE DIELECTRIC COUPLINGS WHEN JOINING COPPER PIPE TO STEEL PIPE.
1.4. INSTALL THE PIPING AS SHOWN ON THE DRAWINGS. WHEN THE PIPING IS COMPLETE, TEST THE PIPING AT 200 PSI. (1300 KPA) FOR FOUR HOURS AND REPAIR ANY LEAKS FOUND.
1.5. UTILIZE EXISTING CHEMICAL POT FEEDER INSTALLED ACROSS THE MAIN CIRCULATING PUMPS FOR INTRODUCTION OF CLEANING DETERGENT AND CHEMICAL TREATMENT.
1.6. FLUSH AND CLEAN THE PIPING WITH A DETERGENT, THEN DRAIN AND FLUSH. INSTALL CHEMICAL TREATMENT IN THE PIPING SYSTEM. WHEN EXTENDING EXISTING PIPING SYSTEMS AND/OR INSTALLING NEW HEATING OR COOLING SYSTEMS, INSTALL TEMPORARY PIPING CONNECTIONS AND PUMP TO CIRCULATE CLEANING CHEMICALS THROUGH THE NEW PIPING AND EQUIPMENT BEFORE THE PIPING IS TIED INTO THE EXISTING PIPING SYSTEM.

2. PIPING ACCESSORIES

- 2.1. PROVIDE AUTO AIR VENT AT ALL HIGH POINTS IN THE PIPING SYSTEM. PIPE THE AIR VENTS TO DRAIN. STANDARD OF ACCEPTANCE: ARMSTRONG # 67.
2.2. PROVIDE CIRCUIT BALANCING VALVES AT EACH FAN COIL/HEAT PUMP, BOILER AND WATER CIRCUIT.
2.3. PROVIDE HOSE END DRAIN VALVES WITH SCREW CAPS AT LOW POINTS.

3. PIPING INSULATION

- 3.1. SUPPLY AND INSTALL THERMAL PIPING INSULATION FOR THE HOT WATER HEATING AND THERMAL PIPING INSULATION WITH VAPOUR PROOFING FOR THE CHILLED WATER-COOLING SYSTEMS AS REQUIRED IN TERMS OF THIS CONTRACT DOCUMENT.
3.2. CARRY OUT REPAIRS TO THERMAL INSULATION AT CONNECTIONS TO EXISTING PIPING SYSTEMS
3.3. ALL INSULATION SHALL BE APPLIED OVER A CLEAN, DRY SURFACE ONLY AFTER ALL PRESSURE TESTING HAS BEEN CARRIED OUT AND REVIEWED BY THE ENGINEER. ALL INSULATION SHALL BE CONTINUOUS AND COVER ALL PIPE FITTINGS, VALVES, JOINTS AND APPURTENANCES.
3.4. INSULATION THICKNESS, USING AN INSULATION K-FACTOR OF .24 AT 75F (24C) SHALL BE:
3.4.1. HOT WATER HEATING: 1/2" TO 3" PIPE, 1" THICK.
3.4.2. HOT WATER HEATING: LARGER THAN 3", 1 1/2" THICK.
3.4.3. CHILLED WATER: 1/2" TO 3", 1 1/2" THICK.
3.4.4. CHILLED WATER: LARGER THAN 3", 2" THICK.
3.5. HOT WATER HEATING PIPES AND FITTINGS SHALL BE INSULATED WITH FIBREGLASS INSULATION WITH ASU JACKET. INSULATION JOINTS SHALL BE BUTTED TIGHTLY. ALL FITTINGS UP TO 2" (50 MM) SHALL BE INSULATED WITH MITRE-CUT PIECES OF INSULATION AND PRESSURE-SENSITIVE, COLOUR-MATCHING TAPE. ALL FITTINGS 2" (50 MM) AND LARGER, INCLUDING ELBOWS, TEES, VALVES, FLANGES AND MECHANICAL COUPLINGS, SHALL HAVE PRE-MOULDIED PVC INSULATION FITTING COVERS.
3.6. CHILLED WATER PIPES SHALL BE INSULATED WITH FIBREGLASS INSULATION WITH REINFORCED FOIL VAPOUR BARRIER JACKET AND BUTT STRIPS. INSULATION JOINTS SHALL BE BUTTED TIGHTLY, AND VAPOUR BARRIER JACKET LAP SHALL BE SEALED WITH VAPOUR ADHESIVE. ADHERE THE 3" (80 MM) WIDE BUTT JOINT STRIPS OVER ALL END JOINTS WITH VAPOUR SEAL ADHESIVE TO ENSURE CONTINUOUS VAPOUR BARRIER SEAL.
3.7. INSULATE ALL FITTINGS UP TO 2" (50 MM) WITH MITRE-CUT PIECES OF INSULATION AND PRESSURE-SENSITIVE, COLOUR MATCHING TAPE.
3.8. ALL FITTINGS 2" (50 MM) AND LARGER, INCLUDING ELBOWS, TEES, VALVES, FLANGES AND MECHANICAL COUPLINGS SHALL HAVE PRE-MOULDIED PVC INSULATING FITTING COVERS APPLIED STRICTLY IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. HANGERS SHALL BE OUTSIDE THE INSULATION AND NON-COMPRESSIBLE INSULATION INSERTS (J-M THERMO-12 OR FOAM GLASS SHALL BE USED TO EXTEND 1" [25 MM] BEYOND THE METAL SHIELDS.)
3.9. METAL SHIELDS BETWEEN HANGERS AND PIPE INSULATION SHALL BE MADE OF GALVANIZED METAL.
3.10. PUMPS AND STRAINERS SHALL BE MADE OF BUTT PIECES OF INSULATION WIRED IN PLACE AND INSULATION CEMENT WITH CANVAS.
3.11. ALL EXPOSED INSULATED PIPING AND FITTINGS SHALL BE FINISHED WITH PVC JACKET OF 0.015 GAUGE. THE JACKET SHALL BE HOT ROLLED AND HAVE SELF-SEAL LAPS. ALL SEAMS SHALL BE FUSED PVC END CAPS FOR PIPING ABOVE 1-1/2" (40 MM) OR LESS. JOINTS FOR PIPE FITTING CONNECTIONS SHALL BE SEALED WITH SILICONE SEALANT, SO THAT THE COMPLETE INSTALLATION MAINTAINS A CONTINUOUS UNBROKEN VAPOUR SEAL.
3.12. ALL HANGER RODS PROTRUDING THROUGH INSULATION SHALL HAVE INSULATION TAPE APPLIED AROUND THE ROD OPENING IN THE INSULATION AND AT LEAST 1" (25 MM) UP THE HANGER ROD. WHERE INSULATION HAS BEEN NOTCHED FOR HANGERS, THE NOTCH SHALL BE FILLED WITH INSULATION CEMENT AND SEALED AROUND AND UP THE HANGER 1" (25 MM) WITH INSULATION TAPE.

4. REFRIGERANT PIPING

- 4.1. REFRIGERANT PIPING SHALL BE SUPPLIED AND INSTALLED BY AN EXPERIENCED, QUALIFIED, AND "LICENSED" REFRIGERATION CONTRACTOR.
4.2. REFRIGERANT PIPING SHALL BE REFRIGERANT GRADE COPPER ASTM B88 TYPE "L". INSTALL TO CSA STANDARDS. B-51 AND B-52 MECHANICAL REFRIGERATION CODE. CONFIRMATION TO THESE REQUIREMENTS AND THOSE OF REGULATING AUTHORITIES REQUIRES THAT THE APPLICABLE REQUIREMENTS FOR BRAZING PROCEDURES, QUALITY CONTROL AND OTHER RELATED REQUIREMENTS SHALL BE FOLLOWED.
4.3. THE SYSTEM PIPING SCHEMATIC SHALL BE SUBMITTED AND APPROVED BY THE ORIGINAL EQUIPMENT MANUFACTURER AND THE ENGINEER PRIOR TO INSTALLATION. PROVIDE NEW SOLENOID AND THERMOSTATIC VALVES FOR EACH OF THE SIX CIRCUITS OF THE EXISTING EVAPORATOR COIL.
4.4. ALL SYSTEMS SHALL HAVE PROVISIONS TO HANDLE SAFELY THE REFRIGERANT CHARGE FOR SERVICING PURPOSES WITHOUT VENTING THE CHARGE TO ATMOSPHERE. THIS MAY INCLUDE PROPERLY LOCATED STOP VALVES, LIQUID TRANSFER VALVES AND REFRIGERANT STORAGE TANKS FOR THE SAFE TRANSFER, DISCHARGE AND DISPOSAL OF THE CHARGE WITHOUT VENTING THE CHARGE TO THE ATMOSPHERE.
4.5. PROVIDE STOP VALVES AT THE LOCATIONS SHOWN ON THE PIPING SCHEMATIC.
4.6. REFRIGERANT LINES CROSSING AN OPEN SPACE SHALL BE NOT LESS THAN 7.5 FT. (2.3 M) ABOVE THE FLOOR.
4.7. SUPPORT PIPING ON C BLOCK SUPPORTS ON THE ROOF.
4.8. PRESSURE TEST PIPING TO 1.5 TIMES WORKING PRESSURE. TEST SHALL BE WITNESSED BY THE ENGINEER AND THE SYSTEM DEMONSTRATED TO HOLD A VACUUM OF 100 MICRONS FOR A PERIOD OF 24 HOURS. WRITTEN ACCEPTANCE OF THIS REFRIGERANT TEST SHALL BE OBTAINED PRIOR TO CHARGING THE SYSTEM WITH REFRIGERANT.
4.9. START-UP AND COMMISSIONING OF THE REFRIGERATION SYSTEM SHALL BE EXECUTED

IN THE PRESENCE OF THE FACTORY REPRESENTATIVE.

- 4.10. INSULATE SUCTION AND LIQUID LINES WITH 1/2" THICK, (12 MM), NEOPRENE FOAM (ARMAFLEX), EXPOSED PIPING ON ROOF SHALL BE INSULATED WITH 1" THICK, (25MM) AND COVERED WITH ALUMINIUM JACKET WITH ALL JOINTS SEALED WITH SILICONE SEALANT.

5. REFRIGERANT CHARGING

- 5.1. AFTER THE SYSTEM IS PROPERLY INSTALLED, LEAK TESTED AND EVACUATED, CHARGE THE SYSTEM WITH R-410A REFRIGERANT AS RECOMMENDED BY THE MANUFACTURER.
5.2. RUN CONDENSER (CHILLER) FOR 3 DAYS WITH BOTH CIRCUITS IN OPERATION. AT THE END OF 3 DAYS OPERATIONS, TAKE AN OIL SAMPLE FROM BOTH CIRCUITS.
5.3. USING A REFRACTOMETER CHECK THE PERCENTAGE OF MINERAL OIL VERSUS SYNTHETIC OIL (USE WITH R-410A). IF THERE IS MORE THAN 5% MINERAL OIL, REMOVE EXISTING OIL AND CHANGE WITH NEW SYNTHETIC OIL.
5.4. REPEAT TEST WITH REFRACTOMETER AFTER 3 MORE DAYS OPERATION O UNIT WITH BOTH REFRIGERATION CIRCUIT UNTIL MINERAL OIL PERCENTAGE IS LESS THAN 5%.

6. CONDENSATE PIPING

- 6.1. CONDENSATE PIPING SHALL BE TYPE L COPPER OR PVC. INDOOR CONDENSATE PIPING INSTALLED IN OCCUPIED AREAS SHALL BE PRIMED AND PAINTED TO MATCH INDOOR WALL COLOUR. PROVIDE HANGERS SPACED NOT MORE THAN 1.2 METERS FOR REFRIGERANT AND CONDENSATE PIPING. WHERE COPPER IS USED, PROVIDE 12 MM THICK FLEXIBLE PIPE INSULATION WITH INTEGRAL VAPOUR BARRIER.

7. NATURAL GAS PIPING

- 7.1. CONTRACTOR TO OBTAIN ALL NECESSARY APPROVALS FOR THE GAS INSTALLATION. PROVIDE REPORTS AND APPROVALS TO CONSULTANT FOR REVIEW.
7.2. NATURAL GAS PIPING SHALL BE INSTALLED TO CAN/CSA B149.1, CAN/CSA B149.2 (CURRENT EDITION) AND TO FORTIS GAS STANDARDS.
7.3. ALL PIPING SHALL BE STEEL PIPE SCHEDULE 40, NPS 1/2" TO 2" WITH SCREWED SEAMS.
7.4. PROVIDE LOCKABLE SHUT-OFF AT CONNECTION TO GAS FIRED EQUIPMENT.
7.5. PROVIDE APPROVED FLEXIBLE CONNECTORS AT POINT OF CONNECTION TO RTU.
7.6. INSTALL PIPING ON ROOF USING C-PORT RUBBER BUSES, MINIMUM 1.8 M ON CENTRE.
7.7. PROVIDE LINE SIZE, EARTHQUAKE, NATURAL GAS SHUT OFF VALVE IN MAIN LINE FEEDING NEW EQUIPMENT OR IN LINE SERVING EACH INDIVIDUAL DEVICE/APPLIANCE.

8. PIPE ESCUTCHEONS

- 8.1. SUPPLY AND INSTALL CHROME PLATED ESCUTCHEON PLATES ON EXPOSED PIPING PASSING THROUGH WALLS, FLOORS AND CEILING IN FINISHED AREAS AND OUTDOORS. WHERE THE PENETRATION IS GREATER THAN 50 MM DIAM. PROVIDE SLEEVES THROUGH WALLS, FLOORS AND CEILING IN FINISHED AREAS. SLEEVES SHALL BE CONCENTRIC WITH PIPE.

9. PIPING SYSTEMS FLUSH OUT

- 9.1. FLUSH HEATING AND COOLING SYSTEM, AFTER CHEMICAL CLEANING, WITH THE DOMESTIC WATER. FIRST FLUSH SHALL BE TO REMOVE DEBRIS AND BIGGER PARTICLES FROM THE SYSTEM WITHOUT OPERATION OF THE PUMPS. THE SECOND/THIRD FLUSH SHALL BE WITH SYSTEM PUMPS OPERATIONAL AT MAXIMUM SPEED. REPEAT THE PROCESS UNTIL THERE WILL BE NO MECHANICAL PARTICLES IN THE WATER. CLEAN STRAINERS AND DIRT SEPARATORS AFTER EACH STEP OF THE FLUSHING.

10. PRESSURE TESTING

- 10.1. PIPINGWORK: TEST AS SPECIFIED IN RELEVANT SECTIONS OF HEATING, VENTILATING AND AIR CONDITIONING WORK. ALL NEW SECTION OF PIPING AND ALL INSTALLATIONS IN THE MECHANICAL ROOMS SHALL BE PRESSURE TESTED.
10.2. MAINTAIN SPECIFIED TEST PRESSURE WITHOUT LOSS FOR 4 HOURS MINIMUM UNLESS SPECIFIED FOR LONGER PERIOD OF TIME IN RELEVANT MECHANICAL SECTIONS.
10.3. CONDUCT TESTS IN PRESENCE OF CONSULTANT, TENANT OR THIRD PARTY AND PROVIDE PRESSURE TEST REPORT TO THE CONSULTANT AND TENANT FOR RECORDS.
END OF SECTION 230505

Consultant:



Project No: 2022448



Prism ENGINEERING saving you energy

Prism ENGINEERING saving you energy

Prism ENGINEERING saving you energy

Prism ENGINEERING saving you energy



CHIPOTLE MEXICAN GRILL, INC. 610 NEWPORT CENTER DR. SUITE 1300 NEWPORT BEACH, CA 92660 TELEPHONE: 714.264.7392 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546 KING GEORGE HUB 9900 KING GEORGE BLVD., CRU #50 SURREY, V3T 4Y3 B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD

Table with 4 columns: Rev, Date, Description, By. Contains 8 rows of revision history.

REVISION SCHEDULE

Table with 4 columns: Rev, Date, Description, By. Contains 1 row of revision schedule.

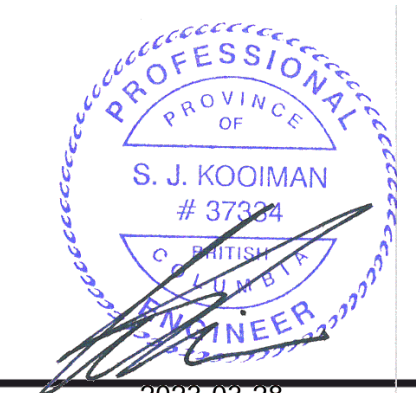
Drawn: CYL/MHP Checked: SKO

Project No. 2022448

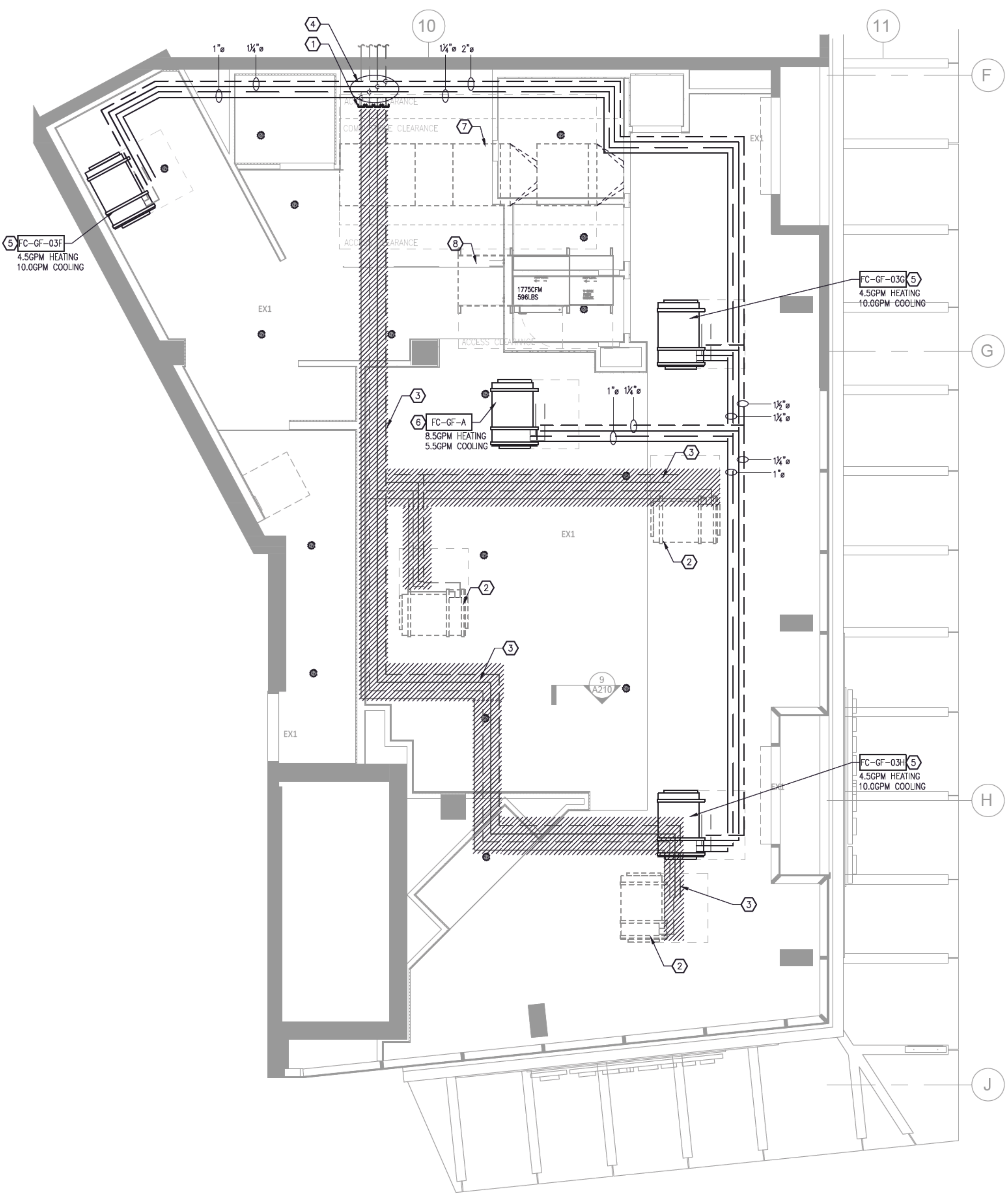
Contents:

HVAC SPECIFICATIONS

M011



2023-03-28



1 HVAC DEMO PLAN
 M100 SCALE: 1/4" = 1'-0"

HVAC PLAN NOTES

- EXISTING HWS/R AND CHWS/R PIPING TO BE CAPPED TO APPROXIMATELY 24" FROM DEMISING WALL. ENSURE EXISTING PIPES DO NOT CONFLICT WITH THE INSTALLATION OF PCU-1 AND ASSOCIATED CLEARANCES TO COMBUSTIBLE MATERIALS.
- EXISTING FANCOIL TO BE RELOCATED C/W ASSOCIATED VALVES, SENSORS, ETC.
- EXISTING HWS/R AND CHWS/R PIPING TO BE REMOVED.
- CONNECT NEW HWS/R AND CHWS/R PIPING AT TOP OF EXISTING MAINS AND RUN NEW SYSTEM PIPING AS TIGHT TO U/S SLAB AS POSSIBLE, TO KEEP PIPES OUT OF THE WAY OF DUCTS AND NEW EQUIPMENT.
- CONNECT NEW HWS/R AND CHWS/R PIPING TO RELOCATED FANCOIL.
- INSTALL NEW FANCOIL TIGHT TO U/S OF SLAB AND PROVIDE NEW HWS/R AND CHWS/R PIPING C/W NEW VALVES AS SHOWN ON DETAIL 4/M700.
- NEW PCU SUSPENDED U/S OF STRUCTURE. REFER TO DWG.M101 FOR LOCATION. PIPING TO AVOID CROSSING THIS EQUIPMENT.
- NEW MAU UNIT SUSPENDED U/S OF STRUCTURE. REFER TO DWG.M101 FOR LOCATION. COORDINATE PIPE ROUTING AROUND UNIT TO MAINTAIN CLEARANCE REQUIREMENTS.

Consultant:
STUDIO INTERSEK+
 9880 E. Fraser Drive, Unit 110, Burnaby, BC, V5H 1S5
 604-298-4888
 www.intersek.ca

Project No: 2022448
Prism
 ENGINEERING
 saving you energy
 PTP Number: BC: 1000889
 230-3600 Gilmore Way
 Burnaby, B.C. V5G 4X5
 Tel: 604-298-4888
 Fax: 604-298-4143

COPYRIGHT 2019
 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.

CHIPOTLE MEXICAN GRILL, INC.
 610 NEWPORT CENTER DR. SUITE 1300
 NEWPORT BEACH, CA 92660
 TELEPHONE: 714.264.7392
 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
 KING GEORGE HUB
 9900 KING GEORGE BLVD., CRU #50
 SURREY, V3T 4Y3
 B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD

Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE

Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/MHP
 Checked: SKO

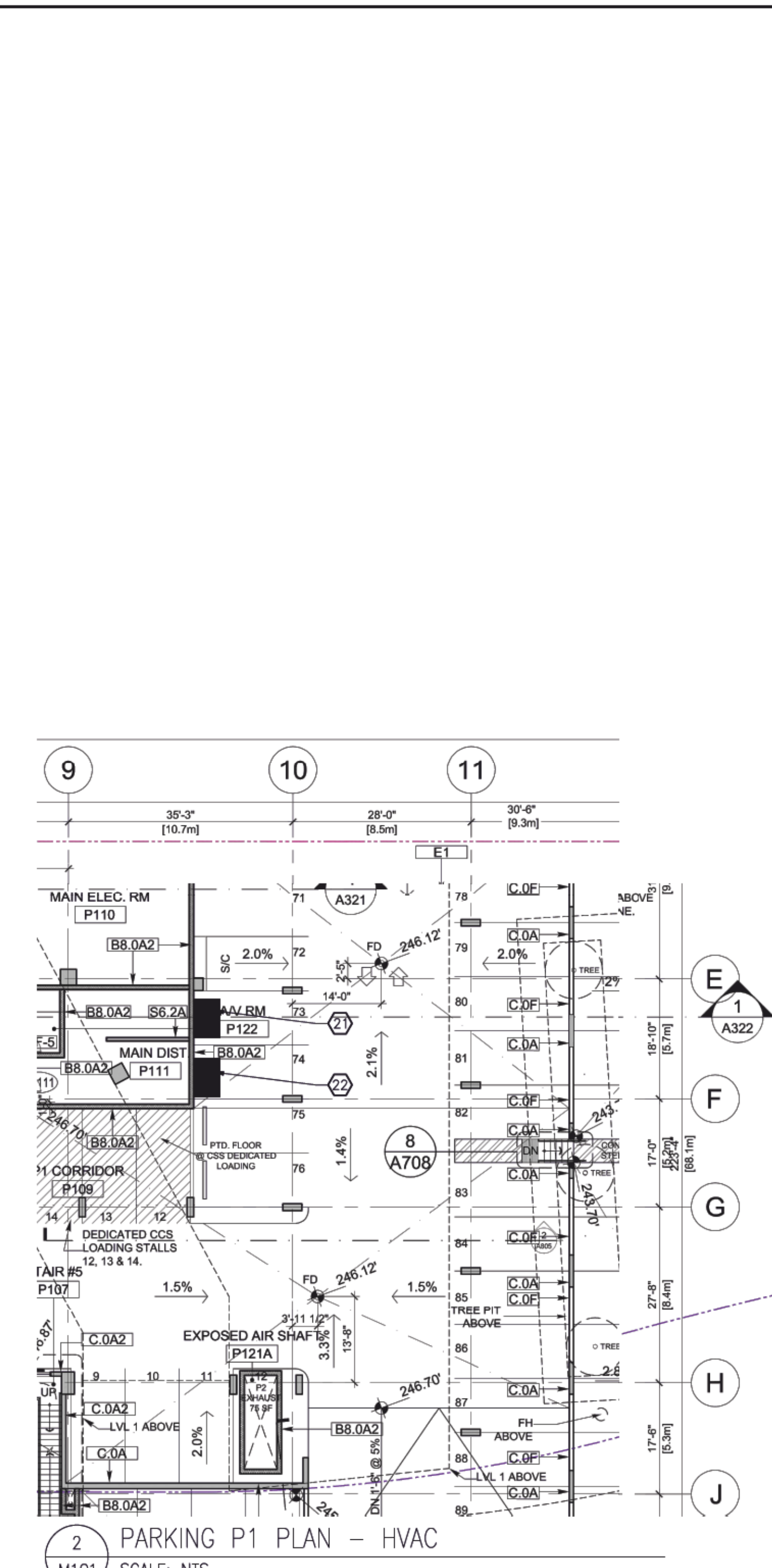
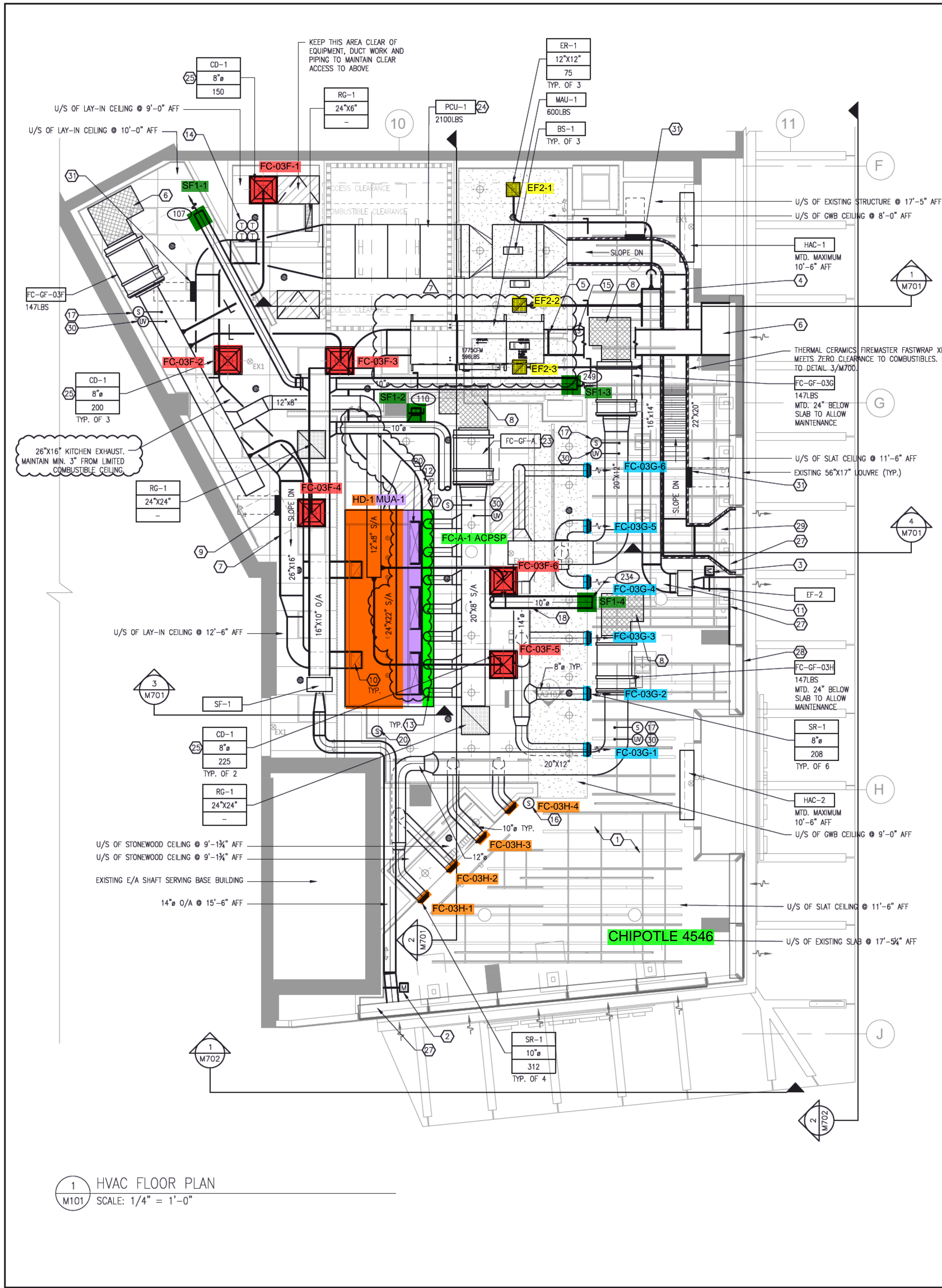
Project No. 2022448

Contents:
 HVAC DEMO PLAN

M100



2023-03-28



HVAC PLAN NOTES

- SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING MOUNTED EQUIPMENT LOCATIONS AND CEILING HEIGHTS. CEILING HEIGHTS SHOWN ON THIS DRAWING ARE FOR REFERENCE HOWEVER HEIGHTS INDICATED ON THE ARCHITECTURAL DRAWINGS GOVERN.
- MOTORIZED DAMPER INTERLOCKED WITH SUPPLY FAN (SF-1) TO BE INSTALLED IN ACCESSIBLE LOCATION. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTION TO DAMPER.
- MOTORIZED DAMPER INTERLOCKED WITH EXHAUST FAN (EF-2) TO BE INSTALLED IN ACCESSIBLE LOCATION. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTION TO DAMPER.
- 22"x20" KITCHEN EXH. C/W FIRE WRAP INSULATION (12"-11" AFF). REFER TO ELEVATION DETAIL 1/M701 FOR INSTALLATION CLEARANCES.
- 24"x22" MUA DUCT DROP DN TO EQUIPMENT CONNECTION.
- NEW 24" DEEP PLENUM BOX TO BE INSTALLED AT LOUVER CONNECTION C/W EXTERNAL INSULATION.
- GREASE DUCT TO SLOPE MIN. 2.5% BACK TO HOOD.
- 18"x14" (450X350) INSULATED RETURN AIR BOOT.
- 16"x20" ACCESS PANEL AT SIDE OF DUCT. MAINTAIN MIN. 3FT CLEARANCE IN FRONT OF PANEL.
- 14X10 (350X250) DUCT UP FROM HOOD EXHAUST CONNECTION. PROVIDE RADIUS ELBOWS WITH AN INSIDE RADIUS OF 0.5W AT ELBOWS IN GREASE DUCT. BALANCE EACH CONNECTION TO 1462CFM.
- 16"x14" (400X350) WASHROOM EXHAUST DUCT TO EF-2.
- 28"x12" (700X300) DUCT DN TO MAKEUP AIR PSP DUCT CONNECTION AT HOOD. BALANCE TO 825CFM.
- 8" (200mm) DIA. DUCT DN TO AC PSP DUCT CONNECTION.
- INSTALL GRIDPOINT THERMOSTATS FURNISHED BY TEMS FOR FANCOILS. MAX 48" (1200mm) AFF. INSTALL ABOVE ONE ANOTHER AND SIDE BY SIDE AS NEEDED. COORDINATE WITH ELECTRICAL SWITCHING IN THIS AREA. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR FC-GF-03G AT THIS LOCATION 60" (1500mm) AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL GRIDPOINT ZONE SENSOR MODULE FURNISHED BY TEMS FOR FC-GF-03H AT THIS LOCATION 60" (1500mm) AFF DIRECTLY TO WALL (NO JUNCTION BOX). COORDINATE LOCATION WITH EQUIPMENT. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- INSTALL REMOTE SUPPLY PROBE FURNISHED BY TEMS IN THE SUPPLY DUCTWORK UPSTREAM FROM THE FIRST BRANCH CONNECTION. PROVIDE WIRING AS SHOWN IN DETAIL 8/E710.
- 10"ø A/OA DUCT TO RUN ABOVE S/A DUCTS TO FC-GF-03H.
- INSTALL REMOTE TEMPERATURE SENSOR FOR HOOD HD-1 AT THIS LOCATION 66" (1650mm) AFF. COORDINATE LOCATION WITH EQUIPMENT. PROVIDE (2) #18 G. THERMISTOR CABLE FROM TEMPERATURE SENSOR TO HOOD CONTROL PANEL.
- INSTALL KITCHEN HOOD, HD-1. SUPPORT HOOD PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. INSTALL HOOD ACCORDING TO THE REQUIREMENTS OF ITS LISTING, IN COMPLIANCE WITH NFPA 96, THE BUILDING CODE, AND AUTHORITIES HAVING JURISDICTION. HOOD SHALL HAVE AN INTEGRAL DUCT COLLAR TEMPERATURE SENSOR TO AUTOMATICALLY ENERGIZE THE EXHAUST AND MAKEUP AIR FANS IF COOKING TEMPERATURES ARE DETECTED. EXHAUST DUCT SYSTEM TO BE WELDED OR FACTORY-MANUFACTURED WATER AND AIR TIGHT. INSTALL CLEANOUTS PER CODE AND AS SHOWN. INSTALL HOOD PER DETAILS 2 AND 4/M700. CHIPOTLE WILL PROVIDE AN INDEPENDENT TESTING AGENCY FOR TESTING THE INTEGRITY OF THE GREASE DUCT SYSTEM.
- INSTALL REMOTE CONDENSING UNIT FOR WALK-IN COOLER IN PARKING GARAGE AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. LOCATION TO BE COORDINATED WITH SITE CONDITIONS AND APPROVED BY BASE BUILDING PRIOR TO FINAL INSTALLATION. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING, TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE FLOOR TO WITHIN 3" OF THE CONDENSING UNIT. CUT 2-1/2" HOLE IN WALK-IN COOLER ROOF FOR REFRIGERANT LINE SET AND SEAL PER THE COOLER MANUFACTURER'S INSTALLATION INSTRUCTIONS AFTER LINE SET IS INSTALLED.
- INSTALL REMOTE CONDENSER FOR ICE MACHINE ON PARKING GARAGE AS DETAILED IN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. LOCATION TO BE COORDINATED WITH SITE CONDITIONS AND APPROVED BY BASE BUILDING PRIOR TO FINAL INSTALLATION. INSTALL REFRIGERANT LINE SET, THERMOSTATIC EXPANSION VALVE, SOLENOID VALVE, TEMPERATURE CONTROL, SIGHT GLASS, FILTER DRIER, PRESSURE CONTROL, LOW AMBIENT CONTROLS, AND WEATHERPROOF HOUSING, TRAP AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. SEAL PIPING PENETRATIONS THROUGH ROOF. INSTALLATION SHALL COMPLY WITH ASHRAE/ANSI STANDARD 15. INSTALL THE REFRIGERANT LINE SET UNDER THE FLOOR TO WITHIN 3" OF THE REMOTE CONDENSER. IF REFRIGERANT PIPING TO ICE MAKER IS EXPOSED TO PUBLIC VIEW CONCEAL WITH A STAINLESS STEEL SHROUD AS SHOWN IN THE ARCHITECTURAL DRAWINGS.
- NEW FANCOIL UNIT TO BE INSTALLED AS PER DETAIL 8/M700. PROVIDE NEW HWS/R AND CHWS/R PIPING TO FANCOIL UNIT AS SHOWN ON DWG.M100.
- INSTALL PCU-1 AS SHOWN ON DETAIL 1/M701.
- PROVIDE GREASE DUCT TRANSITION TO FULL OPENING AT LOUVER CONNECTION C/W FIRE WRAP FOR ZERO CLEARANCE TO LIMITED COMBUSTIBLE MATERIAL.
- INSTALL REME HALO AIR PURIFIER FURNISHED BY TUV IN DUCT PER DETAIL 6/M700 (24VAC, 07AMPS, 17 WATTS). INSTALL UV WARNING STICKERS ON FACE OF ENCLOSURE THROUGH WHICH THE REME HALO WOULD BE VISIBLE IF OPEN.
- ACCESS PANEL AT SIDE OF DUCT TO BE LOCATED WITHIN 3FT OF PCU-1. ENSURE 3FT OF CLEARANCE IS MAINTAINED IN FRONT OF ACCESS PANEL FOR MAINTENANCE.

Consultant:

STUDIO INTERSEK+
1888 Epcor Drive, Unit 110, Burlington, ON, L7R 5P5
905-682-0630
www.intersek.ca

Project No: 2022448

Prism
ENGINEERING
saving you energy

Prism Number: BC: 1000889
230-3000 Gilmore Way
Burnaby, B.C. V5G 4J5
Tel: 604-298-4018
Fax: 604-298-4143

COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE
AND AS SUCH REMAINS THE PROPERTY OF
CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR
USE OF THIS DOCUMENT IS LIMITED AND CAN BE
EXTENDED ONLY BY WRITTEN AGREEMENT WITH
CHIPOTLE MEXICAN GRILL, INC.

CHIPOTLE
MEXICAN GRILL

CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/MHP
Checked: SKO

Project No. 2022448

Contents:

HVAC NEW PLAN

M101

2023-03-28

GRILLE AND DIFFUSER SCHEDULE

TAG	DESCRIPTION	FACE SIZE	MATERIAL	FINISH	MOUNTING	FURNISHED BY	INSTALLED BY	MANUFACTURER	MODEL NO.	SPECIFICATION
BS-1	BATHROOM AIR PURIFICATION UNIT	N/A	STAINLESS STEEL	STAINLESS STEEL	SURFACE MTD	TUV	GC	RGF ENVIRONMENTAL GROUP	BRU ASSEMBLY	REFER TO ELECTRICAL DRAWINGS FOR CONNECTION.
CD-1	PERFORATED CEILING DIFFUSER	24"X24"	ALUMINUM	WHITE	LAY-IN	GC	GC	NAILOR	4320A TYPE L	PROVIDE WITH INTEGRAL OBD.
SR-1	ROUND AIR NOZZLE DIFFUSER	SEE DWGS	ALUMINUM	WHITE	WALL MTD.	GC	GC	NAILOR	RANC-SM	SURFACE MOUNTED ROUND AIR NOZZLE, STANDARD AW APPLIANCE FINISH
ER-1	PERFORATED CEILING EXHAUST	12"X12"	ALUMINUM	WHITE	SURFACE MTD	GC	GC	NAILOR	4330R TYPE S	PROVIDE WITH INTEGRAL OBD.
RG-1	PERFORATED CEILING RETURN	SEE DWGS	ALUMINUM	WHITE	LAY-IN	GC	GC	NAILOR	4340RA	PERFORATED RETURN GRILLE WITH EXTRUDED FRAME

FAN SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	AIR FLOW MIN/MAX (CFM)	E.S.P (IN WG)	POWER (V/PH/Hz)	MOTOR HP	RPM	WEIGHT (LBS)	SPECIFICATION
MAU-1	MAKE UP AIR FAN	REFER TO CAPTIVE AIRE DRAWINGS		2475	0.5	600/3/60	1.5	1797	577	REFER TO CAPTIVE AIRE DRAWINGS.
SF-1	SUPPLY FAN	COOK	100SQN-D GALV EC	700	0.75	208/1/60	0.33	1902	100	DIRECT DRIVE SUPPLY FAN C/W OSHA GUARD AND MOTOR COVER, VIBRATION ISOLATORS, BACKDRAFT DAMPER, DISCONNECT AND STARTER. PROVIDE AIR PROVING SWITCH INTERLOCKED WITH THE KITCHEN EXHAUST FAN EF-1 CONTROLS. EXHAUST FAN MUST RECEIVE CONFIRMATION THAT THE SUPPLY FAN IS ON PRIOR TO THE EXHAUST FAN TURNING ON.
EF-2	WASHROOM EXHAUST FAN	REFER TO CAPTIVE AIRE DRAWINGS		150	0.5	120/1/60	0.31	643	40	REFER TO CAPTIVE AIRE DRAWINGS.
PCU-1	KITCHEN EXHAUST	REFER TO CAPTIVE AIRE DRAWINGS		2925	1.75	600/3/60	5	1684	2078	REFER TO CAPTIVE AIRE DRAWINGS.

HOOD SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	LENGTH	EXHAUST (CFM)	MAKE UP AIR (CFM)	SUPPLY (CFM)	DESIGN CFM/FT	WEIGHT (LBS)	SPECIFICATION
HD-1	KITCHEN EXHAUST HOOD	CAPTIVEAIRE	5424 ND-2-A CPSP-F	169"	2925	2475	798	225		REFER TO CAPTIVEAIRE DRAWINGS

HEATED AIR CURTAIN SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	AIRFLOW (CFM)	HEATING OUTPUT (KW)	FLA (A)	LENGTH (INCHES)	POWER (V/PH/Hz)	WEIGHT (LBS)	SPECIFICATION
HAC-1	MAIN ENTRY AIR CURTAIN	FRICO	PAEC3200CE-600-NA	2250	55MBH	17	81.4	600/3/60	112	INSTALLATION HEIGHT MAXIMUM 10.5FT (3.2m). 3 STEP FAN, 2 ELECTRICAL HEATING STEPS, WALL BRACKET, WHITE.
HAC-2	SECONDARY ENTRY AIR CURTAIN	FRICO	PAEC3200CE-600-NA	2250	55MBH	17	81.4	600/3/60	112	INSTALLATION HEIGHT MAXIMUM 10.5FT (3.2m). 3 STEP FAN, 2 ELECTRICAL HEATING STEPS, WALL BRACKET, WHITE.

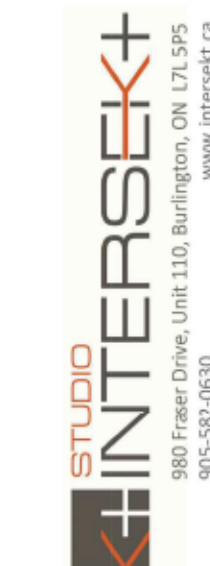
FANCOIL SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	AIR VOLUME (CFM)	COOLING CAPACITY (TON)	COOLING CAPACITY (BTUH)	HEATING OUTPUT (BTUH)	POWER (V/PH/Hz)	WEIGHT (LBS)	SPECIFICATION
FC-GF-A	KITCHEN ZONE	CARRIER	42CAA08BRBY6YYAR	800	2	20,227	82,371	120/1/60	64	HEATING WATER FLOW: 8.4GPM (82,371 BTUH), COOLING WATER FLOW: 5.5GPM (20,227 BTUH), 4 ROW COOLING COIL, 0.5" EXTERNAL STATIC PRESSURE, 2.4 FLA, 3 MCA, 15A.

AIR BALANCING CALCULATION

	Supply Air	Return Air	Exhaust Air	Make-up Air	Subtotal
PCU-1 Hood Exhaust (CFM)	0	0	-2925	0	-2925
EF-2 Washroom Exhaust (CFM)	0	0	-150	0	-150
Total Exhaust (CFM)					-3075
MAU-1 Make-up Air Unit (CFM)	0	0	0	2475	2475
SF-1 Outdoor Air Supply fan (CFM)	700	0	0	0	700
Positive Pressurization required	147.05	0	0	0	147.05
Total Supply (CFM)					847.05
Total MUA required (CFM):					2475
Net Pressurization (CFM)					247.05

Consultant:



Project No: 2022448



Prism ENGINEERING
saving you energy

1777 Number: BC: 100889
230-3800 Gilmore Way
Burnaby, B.C. V5C 4K5
Tel: 604-298-4188
Fax: 604-298-4143

COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD

Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE

Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/MHP Checked: SKO

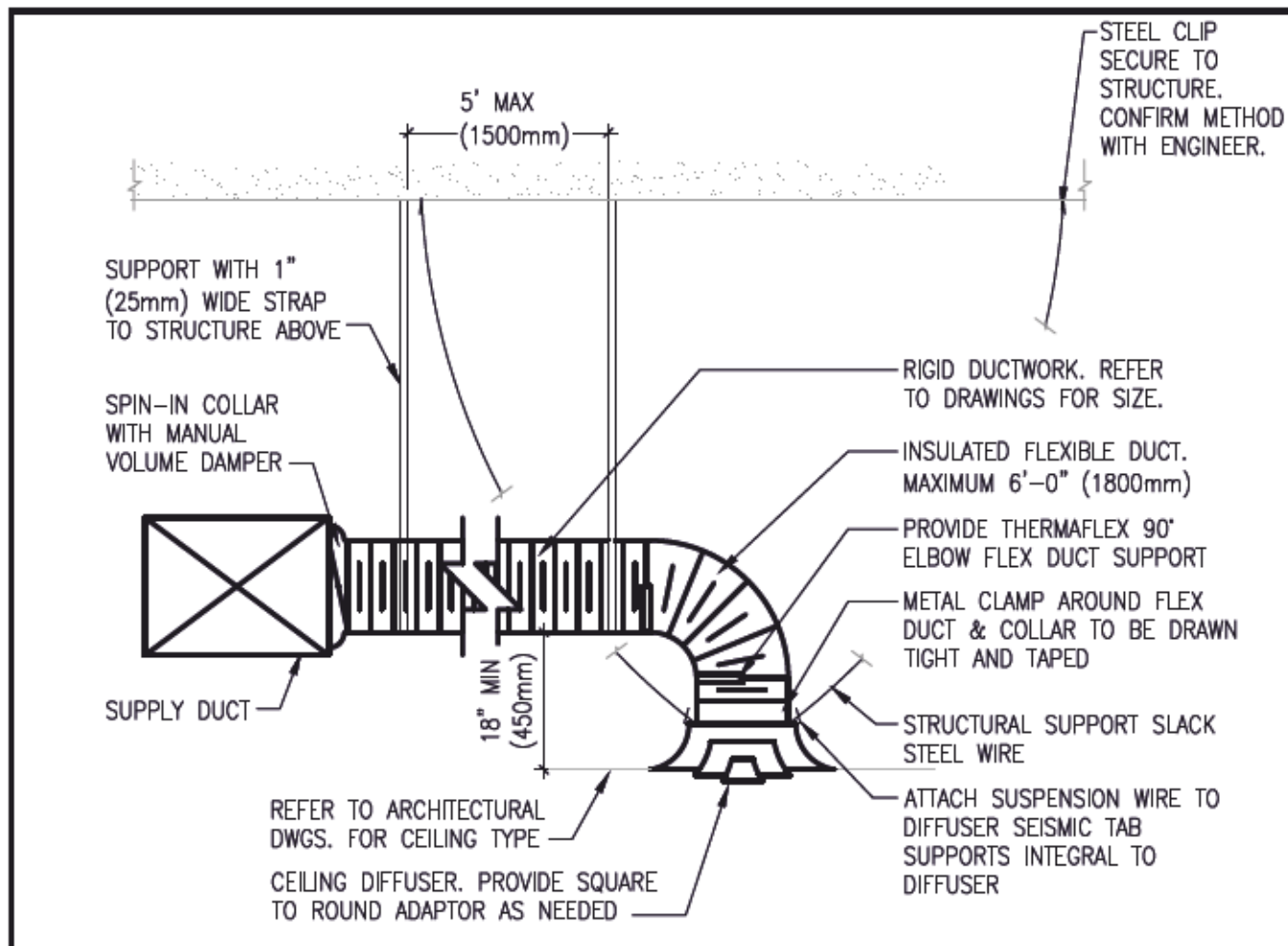
Project No: 2022448

Contents:

HVAC SCHEDULES

M600



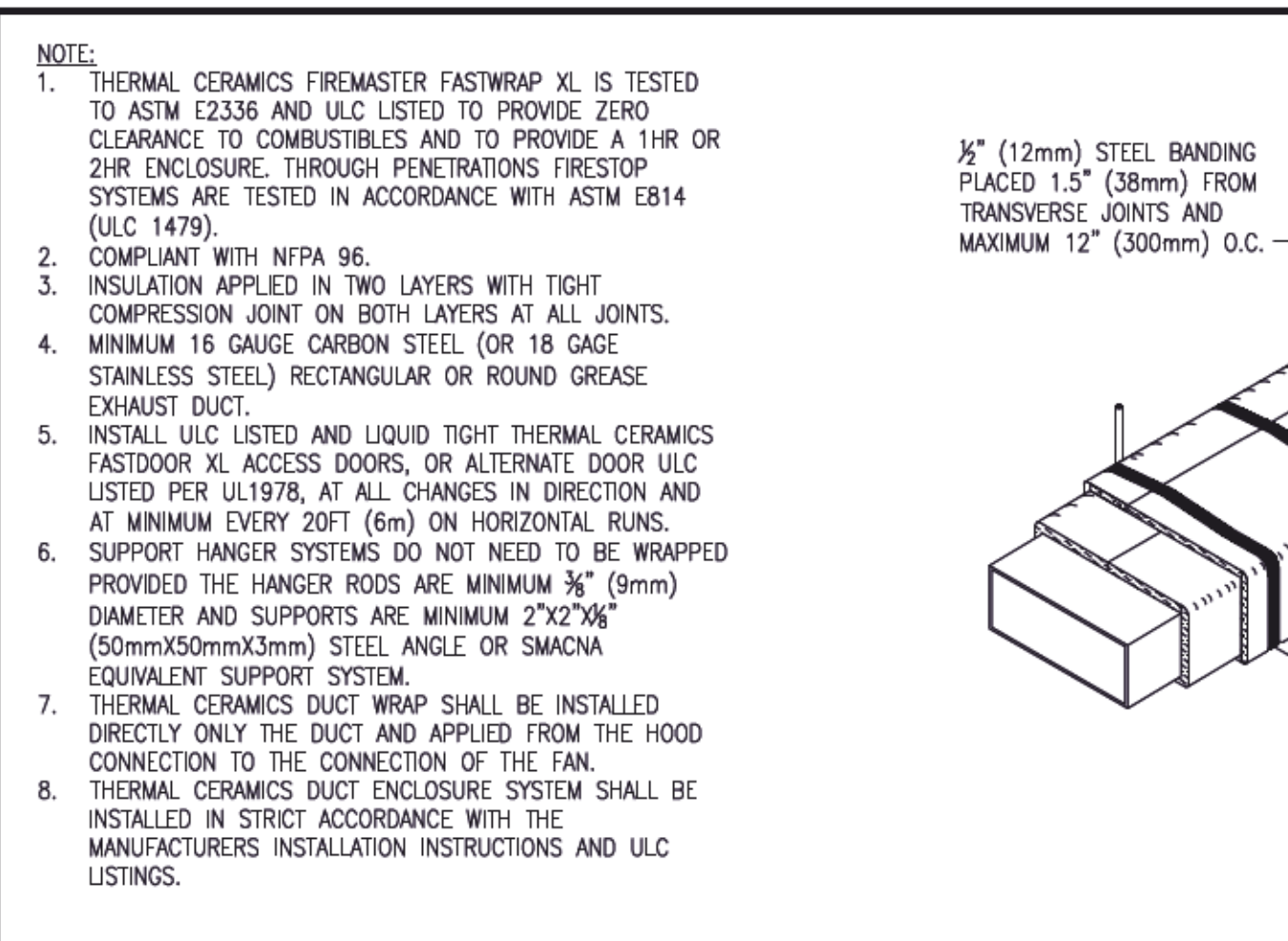


- NOTE:
- METHOD OF INSTALLATION FOR AIRTIGHT SEAL IS TYPICAL FOR ALL FLEX CONNECTIONS TO AIR DISTRIBUTION DEVICES.
 - PROVIDE SEISMIC RESTRAINT CONNECTIONS ON ALL DIFFUSERS INSTALLED IN SEISMIC ZONES.

1 DIFFUSER CONNECTION DETAIL
SCALE: NTS

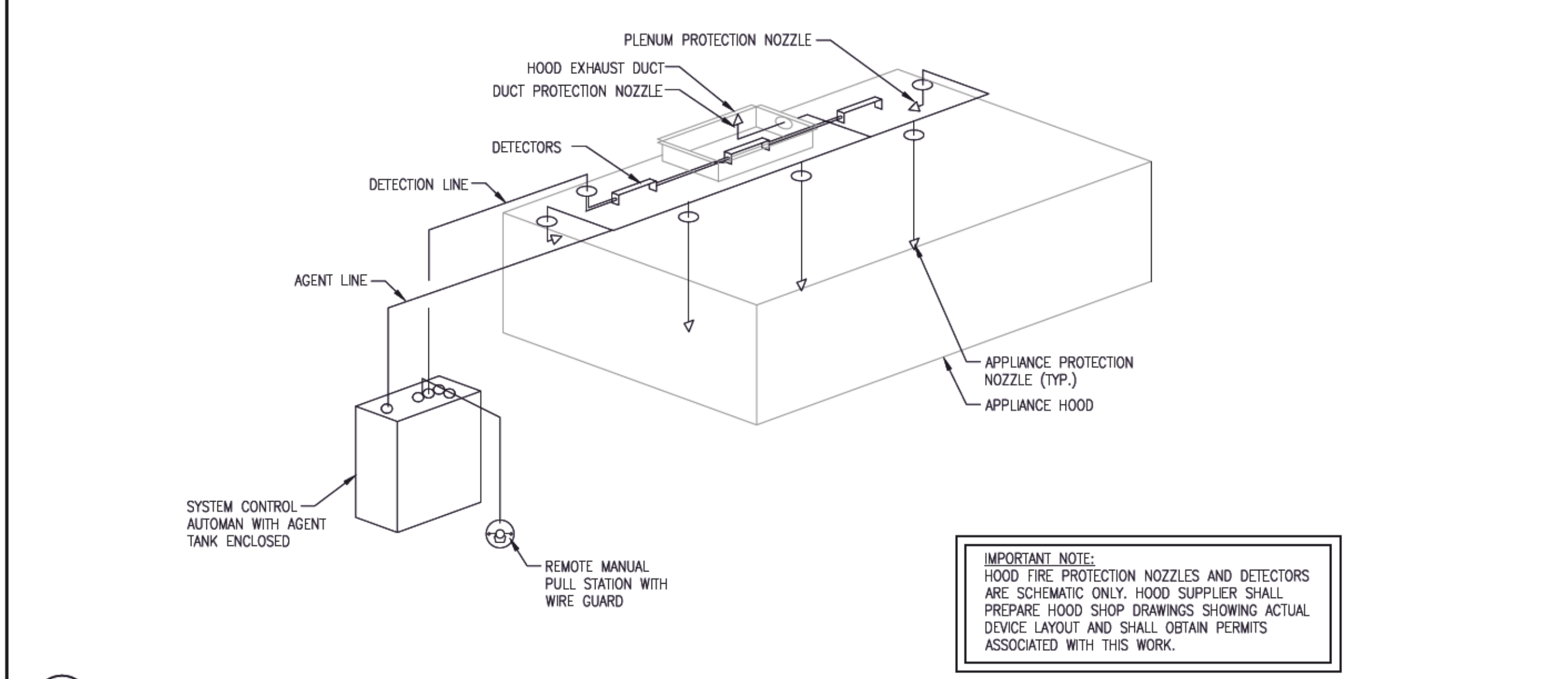


2 RESERVED
SCALE: NTS

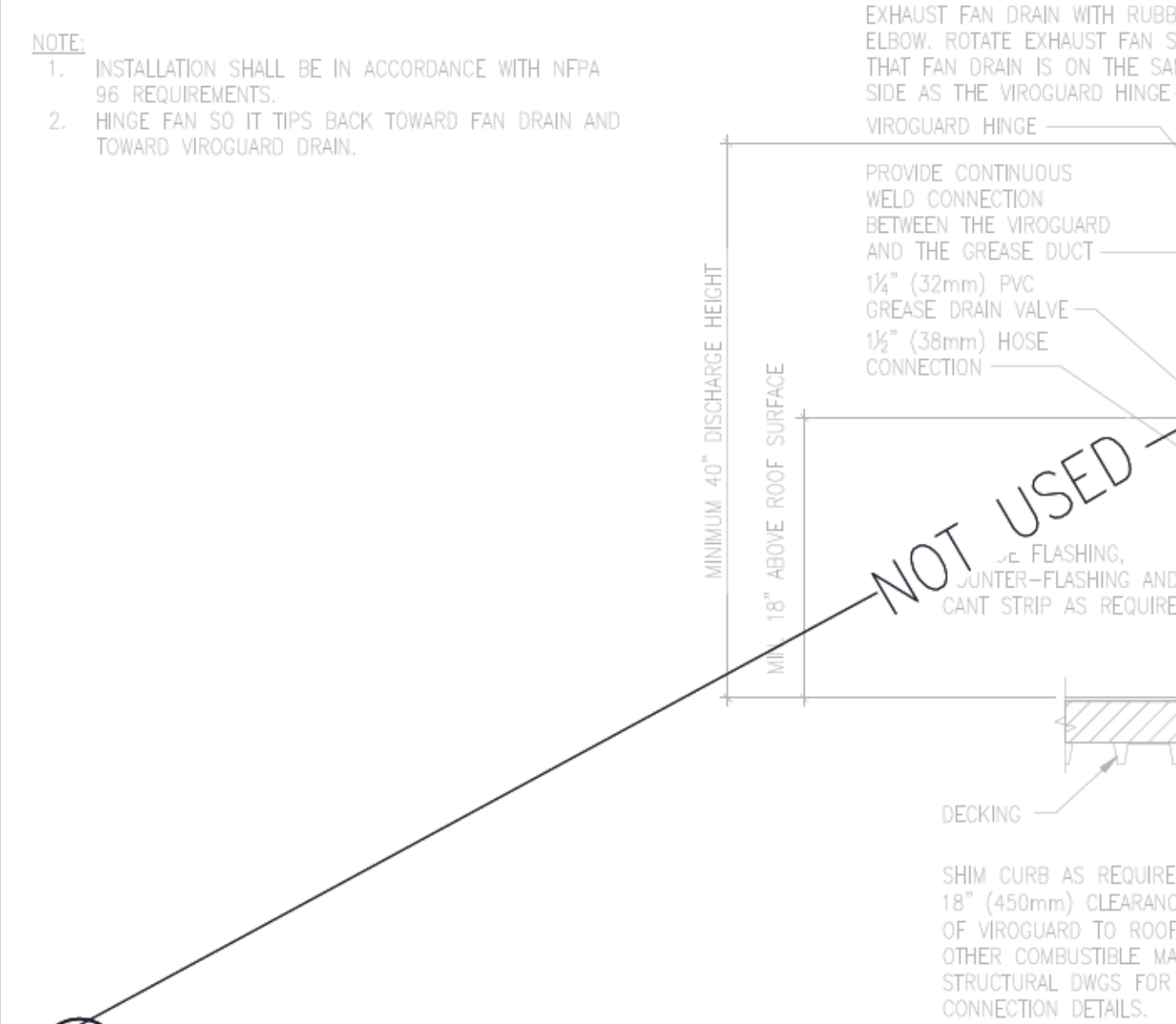


- NOTE:
- THERMAL CERAMICS FIREMASTER FASTWRAP XL IS TESTED TO ASTM E2336 AND ULC LISTED TO PROVIDE ZERO CLEARANCE TO COMBUSTIBLES AND TO PROVIDE A 1HR OR 2HR ENCLOSURE THROUGH PENETRATIONS FIRESTOP SYSTEMS ARE TESTED IN ACCORDANCE WITH ASTM E814 (ULC 1479).
 - COMPLIANT WITH NFPA 96.
 - INSULATION APPLIED IN TWO LAYERS WITH TIGHT COMPRESSION JOINT ON BOTH LAYERS AT ALL JOINTS.
 - MINIMUM 16 GAUGE CARBON STEEL OR 18 GAGE STAINLESS STEEL RECTANGULAR OR ROUND GREASE EXHAUST DUCT.
 - INSTALL ULC LISTED AND LIQUID TIGHT THERMAL CERAMICS FASTDOOR XL ACCESS DOORS, OR ALTERNATE DOOR ULC LISTED PER UL1978, AT ALL CHANGES IN DIRECTION AND AT MINIMUM EVERY 20FT (6m) ON HORIZONTAL RUNS. SUPPORT HANGER SYSTEMS DO NOT NEED TO BE WRAPPED PROVIDED THE HANGER RODS ARE MINIMUM 3/8" (9mm) DIAMETER AND SUPPORTS ARE MINIMUM 2"x2"x3/4" (50mmx50mmx3mm) STEEL ANGLE OR SMACNA EQUIVALENT SUPPORT SYSTEM.
 - THERMAL CERAMICS DUCT WRAP SHALL BE INSTALLED DIRECTLY ONLY THE DUCT AND APPLIED FROM THE HOOD CONNECTION TO THE CONNECTION OF THE FAN.
 - THERMAL CERAMICS DUCT ENCLOSURE SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND ULC LISTINGS.

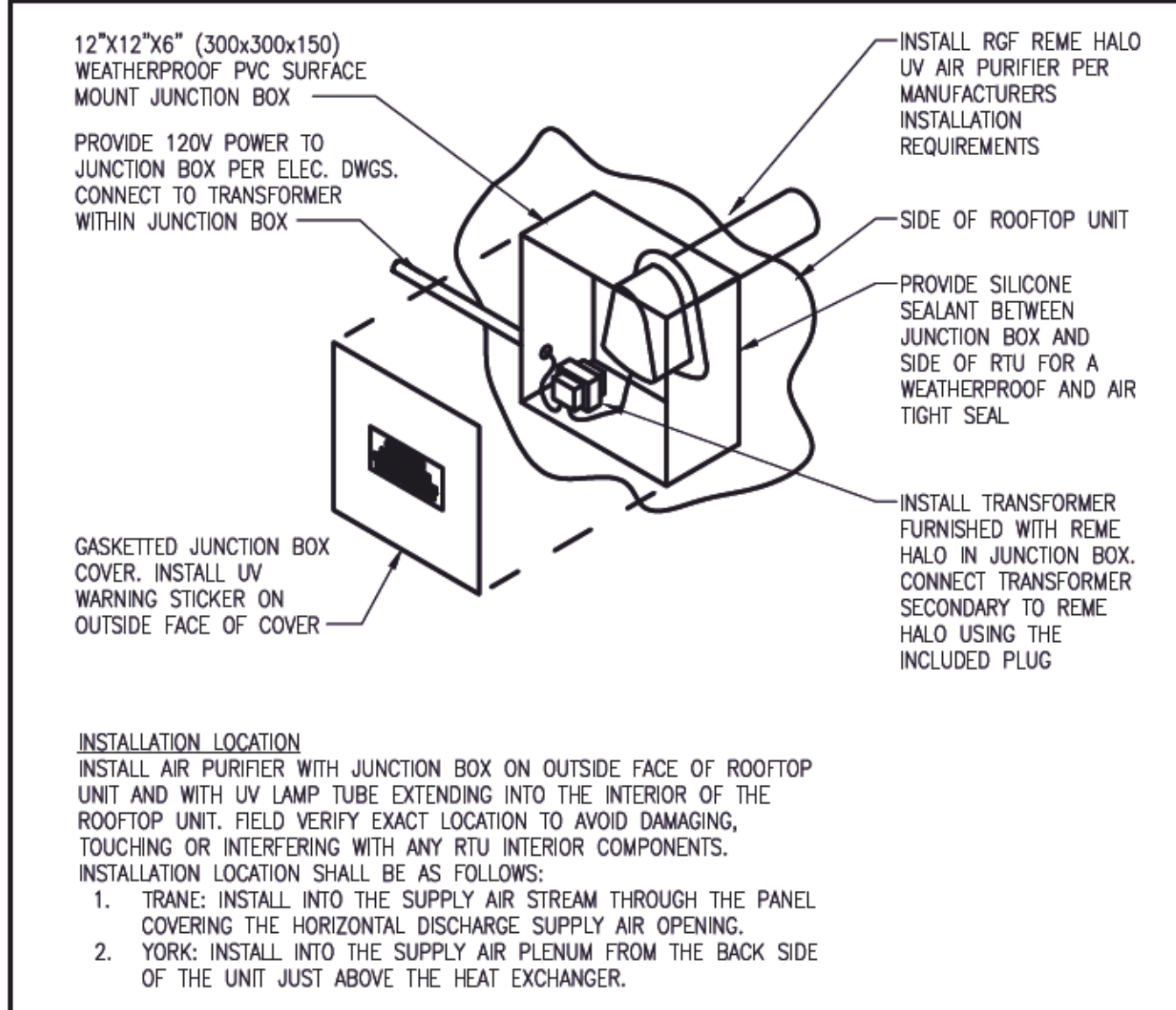
3 GREASE DUCT ENCLOSURE SYSTEM (ZERO CLEARANCE)
SCALE: NTS



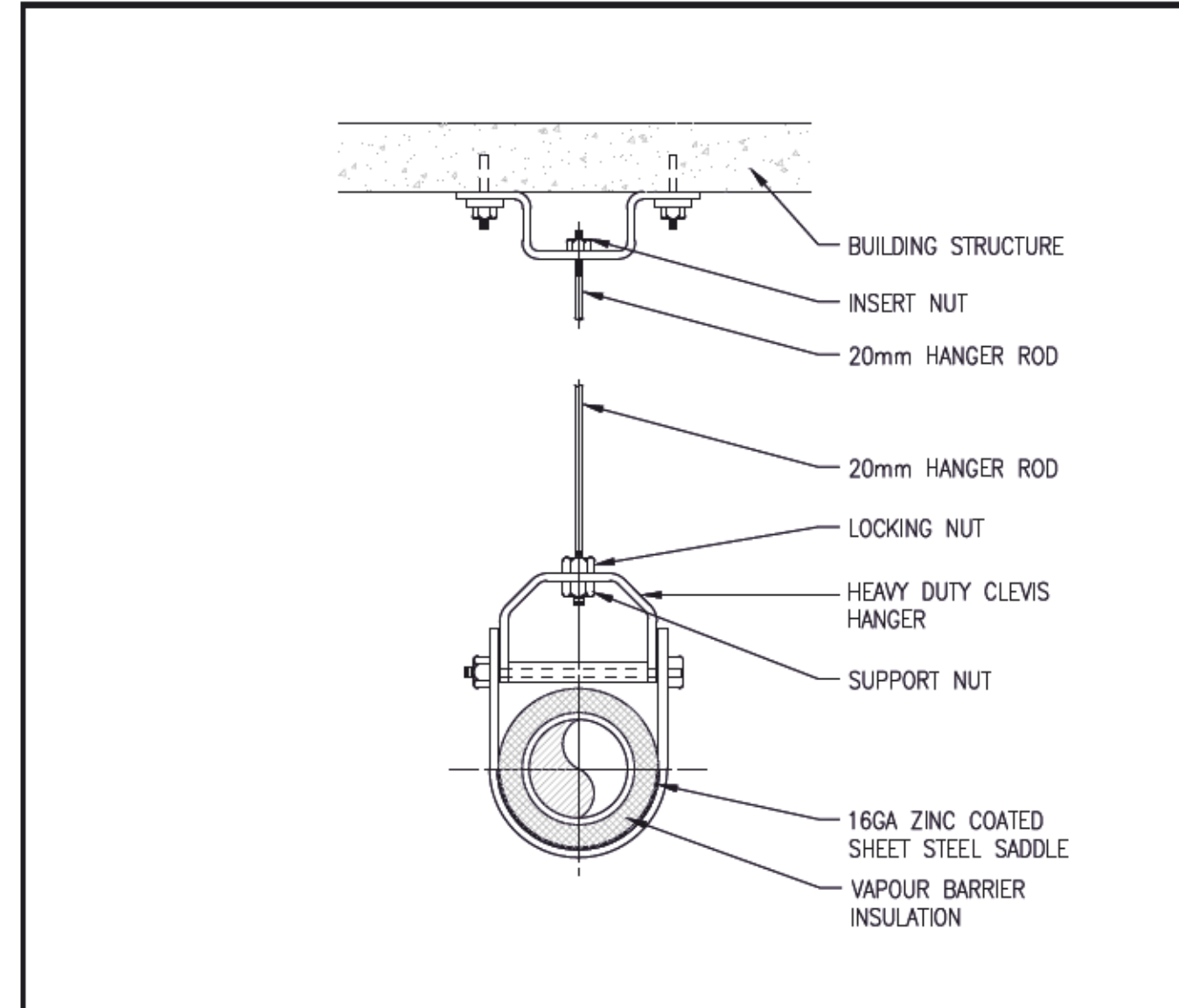
4 FIRE SUPPRESSION SCHEMATIC
SCALE: NTS



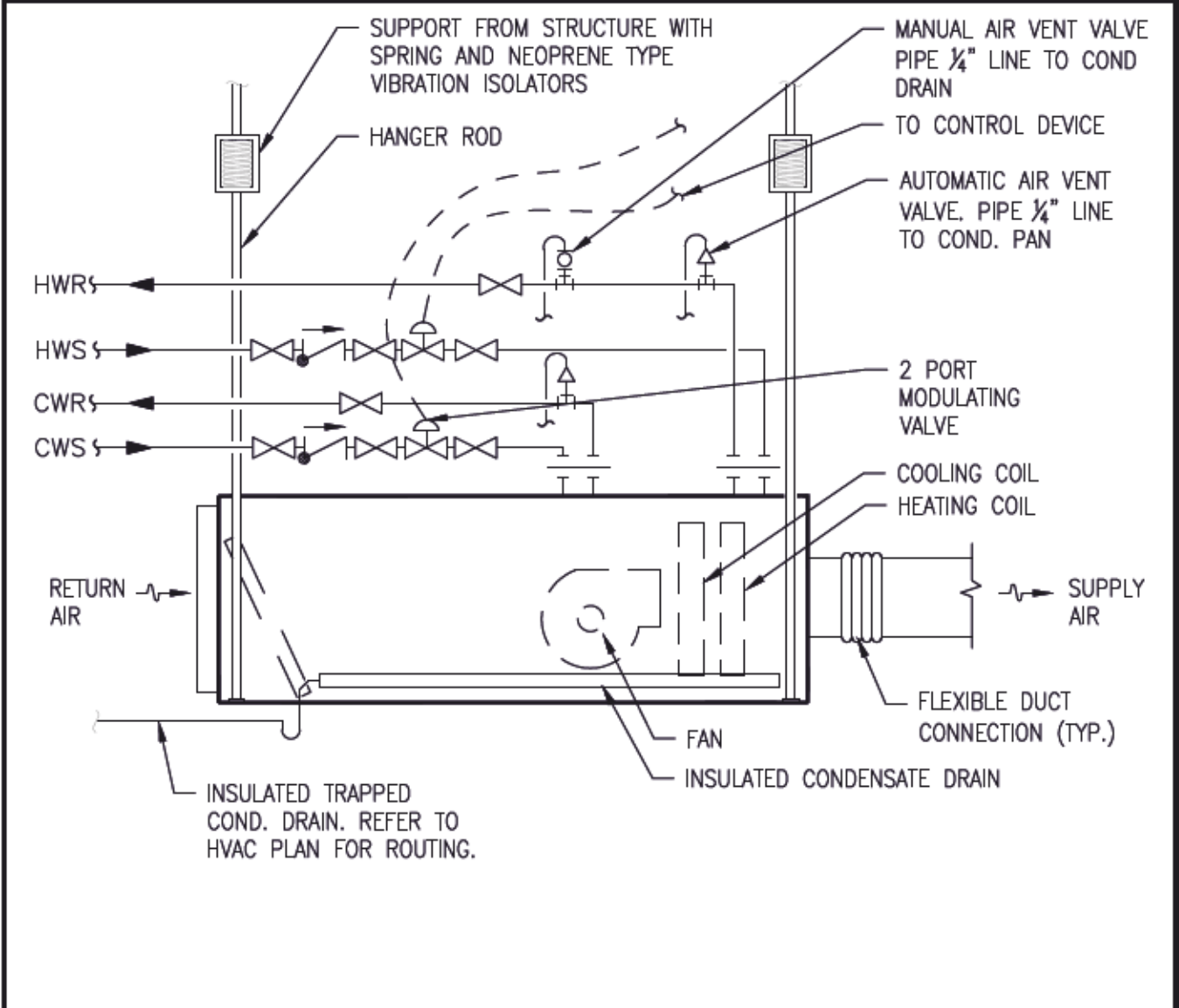
5 GREASE EXHAUST FAN
SCALE: NTS



6 UV AIR PURIFIER INSTALLATION
SCALE: NTS



7 PIPE SUPPORT DETAIL
SCALE: NTS



8 TYPICAL FANCOIL UNIT DETAIL
SCALE: NTS

Consultant:

STUDIO INTERSEK+
1888 E. Pacific Drive, Unit 110, Burnaby, BC, V5A 1S5
905-582-0830
www.intersek.ca

Project No: 2022448

Prism
ENGINEERING
saving you energy

PTP Number: BC: 1000889
230-3900 Gilmore Way
Burnaby, B.C. V5C 4X5
Tel: 604-298-4933
Fax: 604-298-4143

COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.

CHIPOTLE MEXICAN GRILL
CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD				
Rev	Date	Description	By	
1	08/SEP/22	COORDINATION	PE	
2	16/SEP/22	FOR LL APPROVAL	PE	
3	02/NOV/22	IFP & IFT	PE	
4	28/NOV/22	TENDER	PE	
5	16/DEC/22	RE-ISSUED FOR BP	PE	
7	20/MAR/23	RE-ISSUED FOR BP	PE	
8	28/MAR/23	CONSTRUCTION	PE	

REVISION SCHEDULE				
Rev	Date	Description	By	
6	31/JAN/23	ADDENDUM M-01	PE	

Drawn: CYL/MHP
Checked: SKO

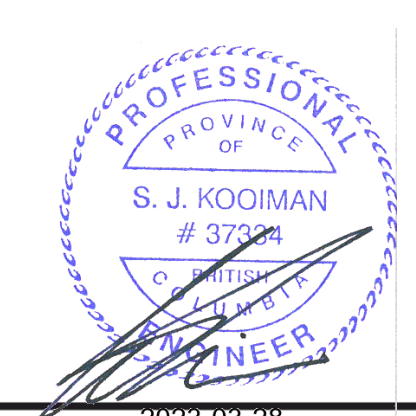
Project No. 2022448

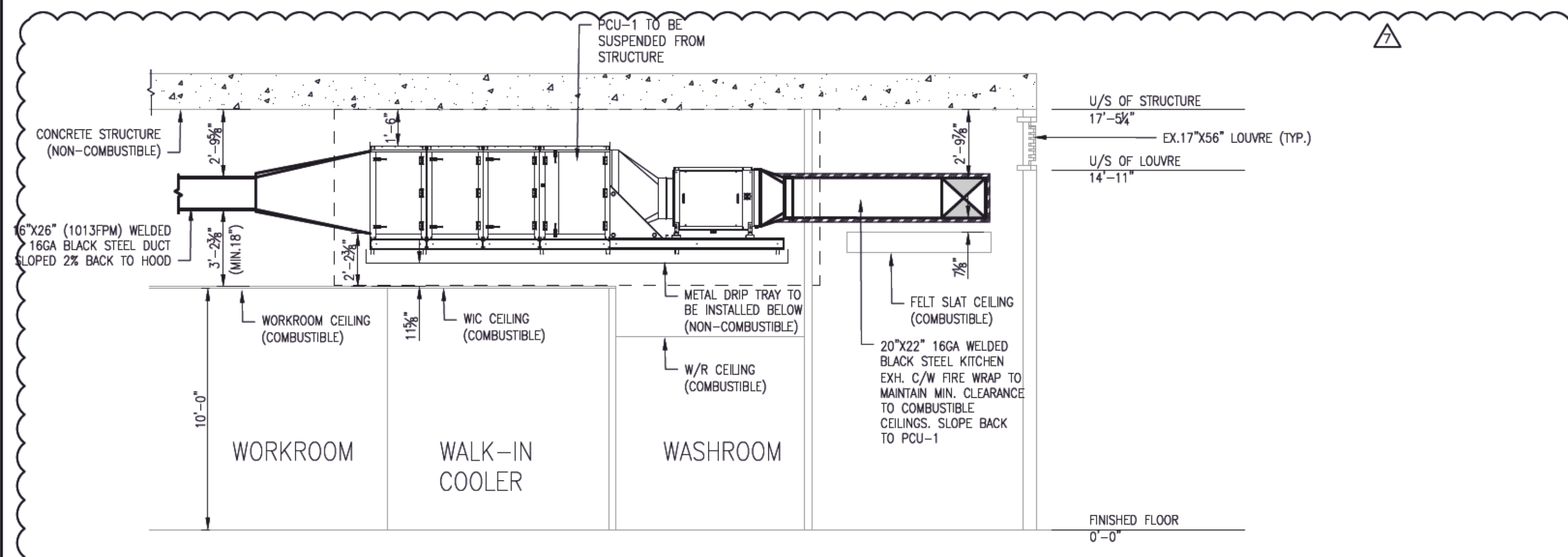
Contents:

HVAC DETAILS 1 OF 2

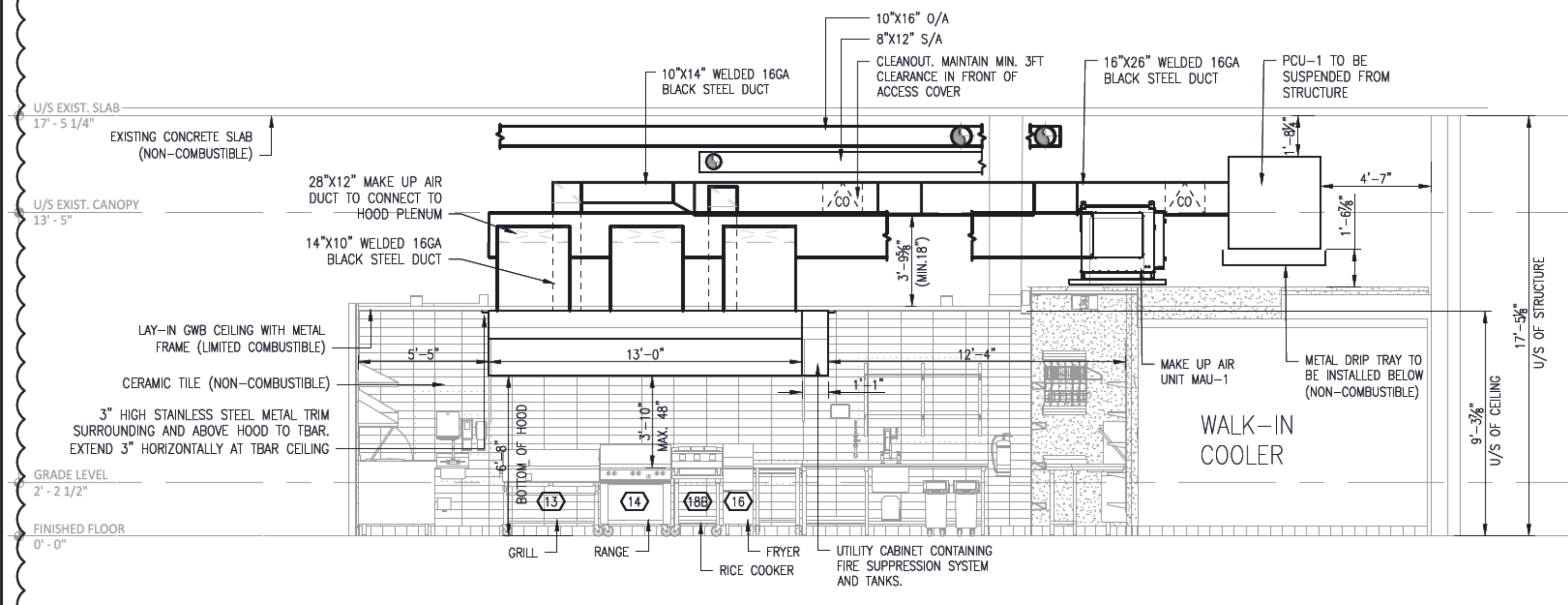
M700

2023-03-28

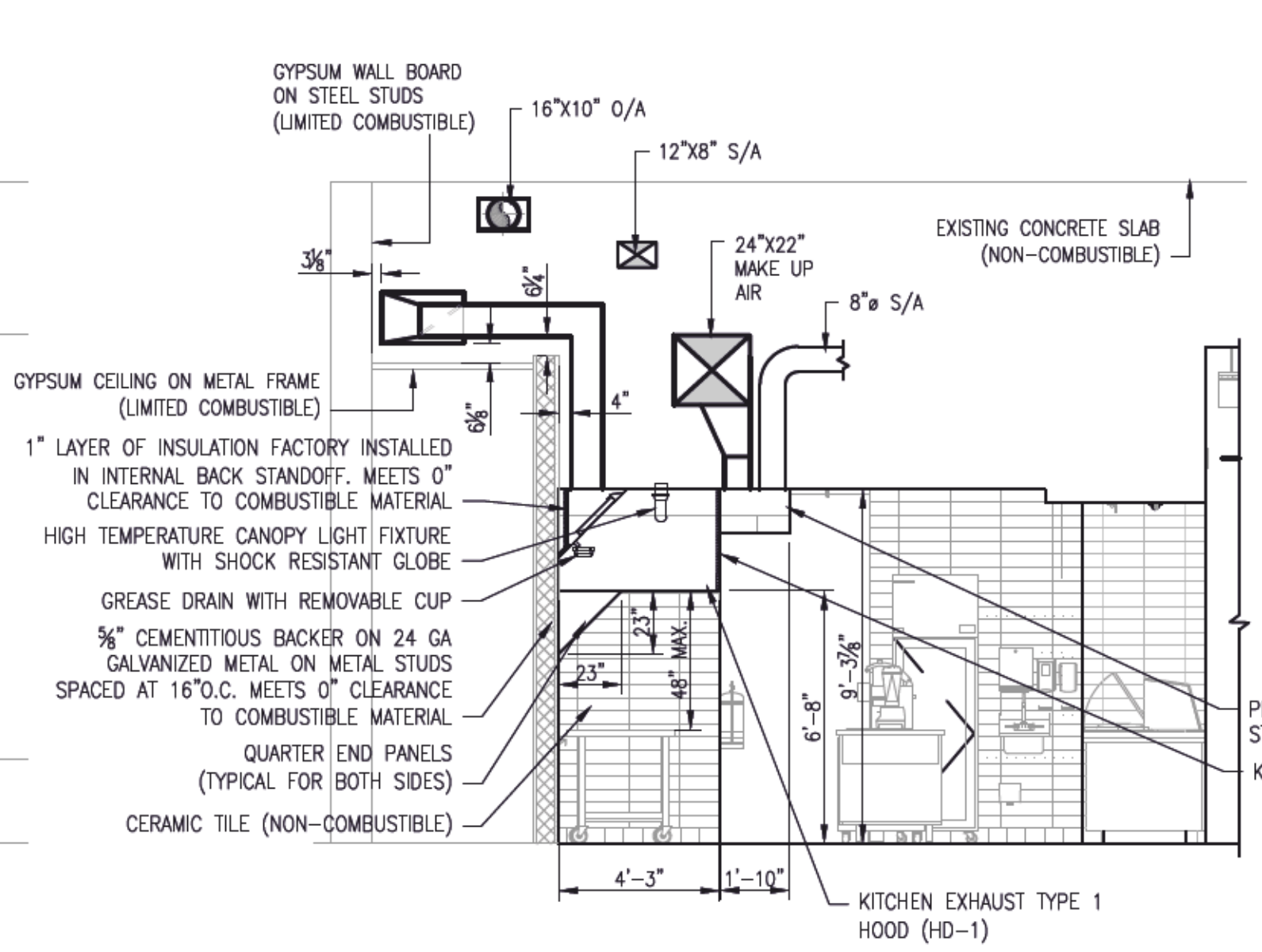




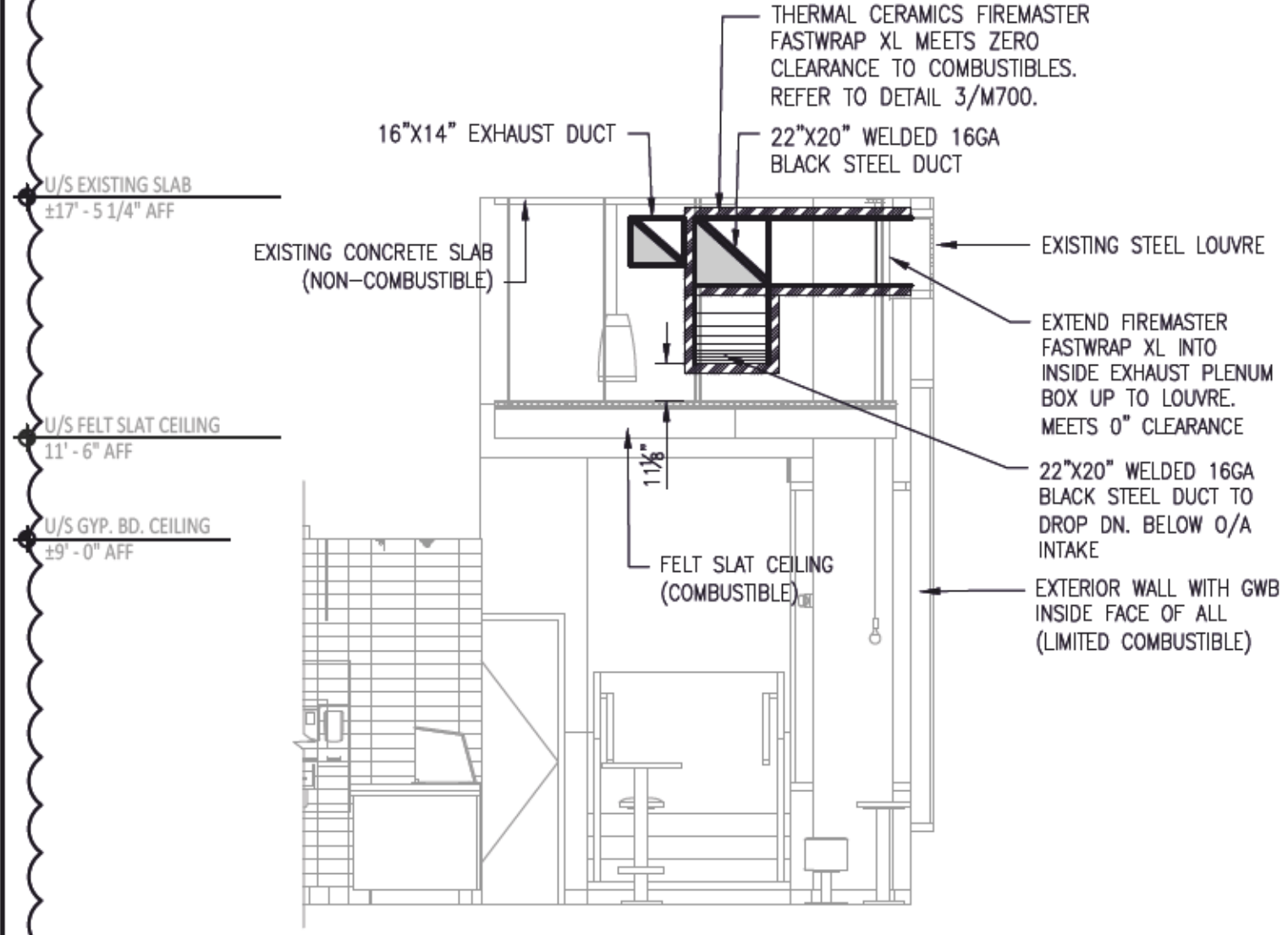
1 PCU ELEVATION
SCALE: 1/4"=1'-0"



2 KITCHEN HOOD ELEVATION
SCALE: 1/4"=1'-0"



3 KITCHEN HOOD ELEVATION
SCALE: 1/4"=1'-0"



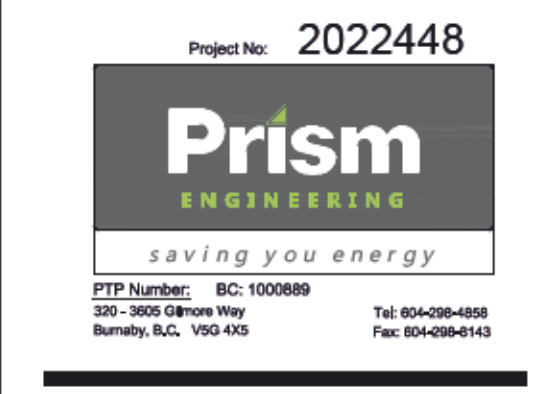
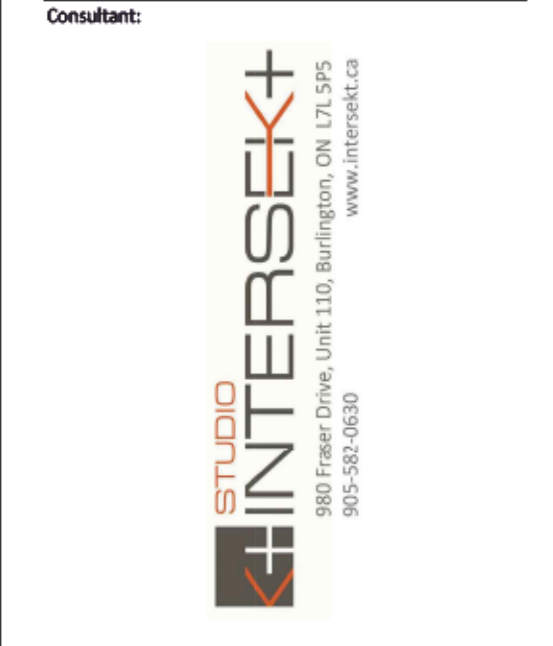
4 DINING ROOM ELEVATION
SCALE: 1/4"=1'-0"

CLEARANCE REQUIREMENTS

- GREASE HOOD, GREASE REMOVAL DEVICES, EXHAUST FAN AND DUCT SHALL HAVE A MINIMUM CLEARANCE OF AT LEAST:
 - 18" (457mm) TO COMBUSTIBLE MATERIAL
 - 3" (76mm) TO LIMITED-COMBUSTIBLE MATERIAL
 - 0" (0mm) TO NON-COMBUSTIBLE MATERIAL
- CLEARANCE REDUCTION SYSTEM, THROUGH COMBUSTIBLE ROOF, SHALL CONSIST OF 0.027" (0.69mm) 22GA SHEET METAL ON 1" (25mm) MINERAL WOOL BATTS OR CERAMIC FIBER BLANKET REINFORCED WITH WIRE MESH OR EQUIVALENT, SPACED 1" (25MM) ON NON-COMBUSTIBLE SPACERS.
- ZERO CLEARANCE TO LIMITED COMBUSTIBLE MATERIALS SHALL BE PERMITTED WHERE PROTECTED BY ONE OF THE FOLLOWING:
 - METAL LATH AND PLASTER
 - CERAMIC TILE
 - QUARRY TILE
 - OTHER NON-COMBUSTIBLE MATERIALS OR ASSEMBLY OF NONCOMBUSTIBLE MATERIALS THAT ARE LISTED FOR THE PURPOSE OF REDUCING CLEARANCE
 - OTHER MATERIALS AND PRODUCTS THAT ARE LISTED FOR PURPOSE OF REDUCING CLEARANCE.
- THE EXHAUST DUCT SHALL NOT BE IN CONTACT WITH NONCOMBUSTIBLE FLOORS, INTERIOR WALLS OR OTHER NON-COMBUSTIBLE STRUCTURES (OR SUPPORTS) FOR MORE THAN 50% OF ITS SURFACE AREA FOR EACH LINEAR FOOT OF CONTACT LENGTH. WHERE DUCT CONTACT EXCEEDS THIS REQUIREMENT, THE DUCT SHALL BE PROTECTED FROM CORROSION, UNLESS THE DUCT IS LISTED FOR ZERO CLEARANCE.

COMMERCIAL KITCHEN EXHAUST NOTES

- GREASE EXHAUST DUCTWORK SHALL BE 16-GAUGE ALL WELDED BLACK IRON OR FACTORY MANUFACTURED IN ACCORDANCE WITH NFPA 96 STANDARDS. PROVIDE NFPA 96 COMPLIANT DUCT CLEANOUTS AT ALL CHANGES OF DIRECTION AND EVERY 12FT WITH MINIMUM 3FT CLEARANCE PROVIDED. HORIZONTAL DUCTWORK TO RUN WITH 2% SLOPE BACK TO HOOD. MAINTAIN ALL REQUIRED CLEARANCES TO COMBUSTIBLES AND PROVIDE CLEARANCE REDUCTION PANELS AS OUTLINED IN NFPA 96 OR ULC LISTED FIRE WRAP AS REQUIRED.
- REFER TO KITCHEN EXHAUST DRAWINGS M-800 TO M-802 FOR FURTHER DETAILS REGARDING CAPTIVE AIR EQUIPMENT INSTALLATION AND SPECIFICATIONS.
- THE HOOD EXHAUST FAN (PCU-1) SHALL BE INTERLOCKED TO OPERATE WITH THE MAKE UP AIR (MAU-1) FAN. THIS CONTROL CIRCUIT IS ACTIVATED BY A SWITCH AND INCLUDES A FIRE PROTECTION OVERRIDE.
- REFER TO CLEARANCE REQUIREMENTS FOR CLEARANCE REDUCTION SPECIFICATIONS AND ADDITIONAL REQUIREMENTS PER NFPA 96.



PROPERTY OF
THIS DRAWING IS AN INSTRUMENT OF SERVICE
AND AS SUCH REMAINS THE PROPERTY OF
CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR
USE OF THIS DOCUMENT IS LIMITED AND CAN BE
EXTENDED ONLY BY WRITTEN AGREEMENT WITH
CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

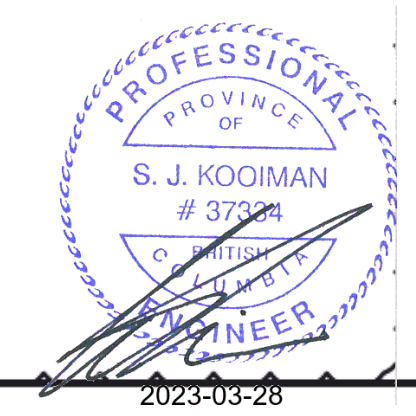
REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

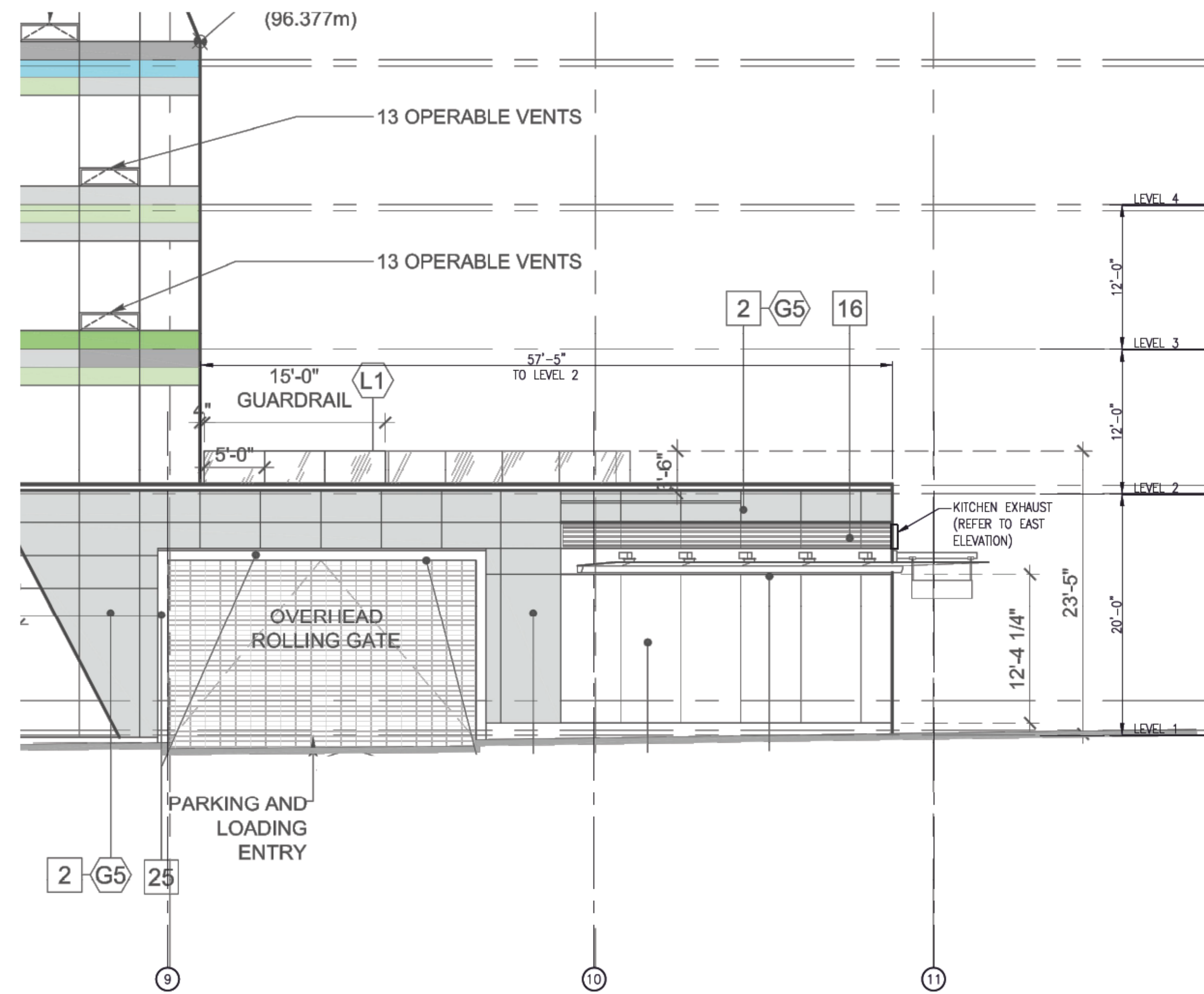
Drawn: CYL/MHP Checked: SKO

Project No. 2022448

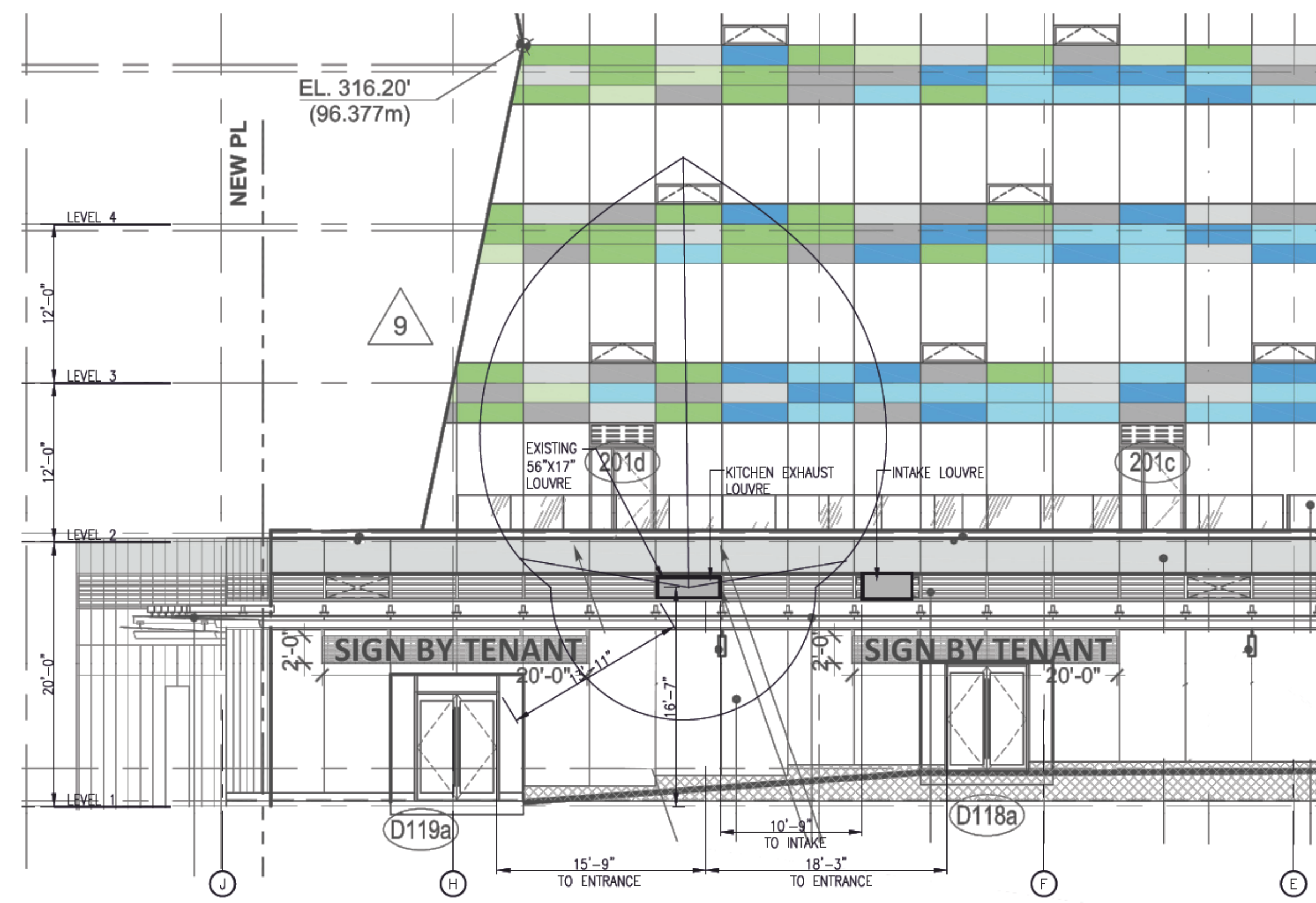
Contents:
SECTIONS

M701





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



2 EAST ELEVATION
SCALE: 1/8" = 1'-0"



Project No: 2022448

Prism
ENGINEERING
saving you energy

ITP Number: BC: 1000889
230-3600 Oakway
Burnaby, B.C. V5G 4X5
Tel: 604-298-4538
Fax: 604-298-4543

COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE
AND AS SUCH REMAINS THE PROPERTY OF
CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR
USE OF THIS DOCUMENT IS LIMITED AND CAN BE
EXTENDED ONLY BY WRITTEN AGREEMENT WITH
CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD

Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE

Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/MHP
Checked: SKO

Project No: 2022448

Contents:
ELEVATIONS

M702



FOR QUESTIONS, CALL THE
Highwoods Group
REGION 40
PHONE: (919) 875-0420
EMAIL: reg40@captivateire.com

PATENT NUMBERS
AC-PSP (UNITED STATES) - US PATENT 7963830 B2.
AC-PSP WALL (CANADA) - CA PATENT 2820509.
AC-PSP ISLAND (CANADA) - CA PATENT 2520330.

HOOD INFORMATION - JOB#5600858

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)				MUA CFM	AC CFM	HOOD CONSTRUCTION	HOOD CONFIG			
										WIDTH	LENG	HEIGHT	DA				CFM	VEL	SP	END TO END
1		5424 ND-2-ACSP-F	CAPTIVEAIRE	13' 0"	600 DEG	I	HEAVY	225	2925	10"	14"	4"	1462	1504	-0.603"	2475	904	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)				LIGHT(S)				UTILITY CABINET(S)				FIRE SYSTEM PIPING	HOOD HANGING WEIGHT		
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE	SIZE			MODEL #	SWITCHES
1		CAPTRATE SOLO FILTER	9	20"	16"	85% SEE FILTER SPEC	9	L55 SERIES E26	NO	RIGHT	12"x54"x24"	TANK FS	4.0/4.0	SC-311110MA	1 LIGHT 1 FAN	YES	1353 LBS

HOOD OPTIONS

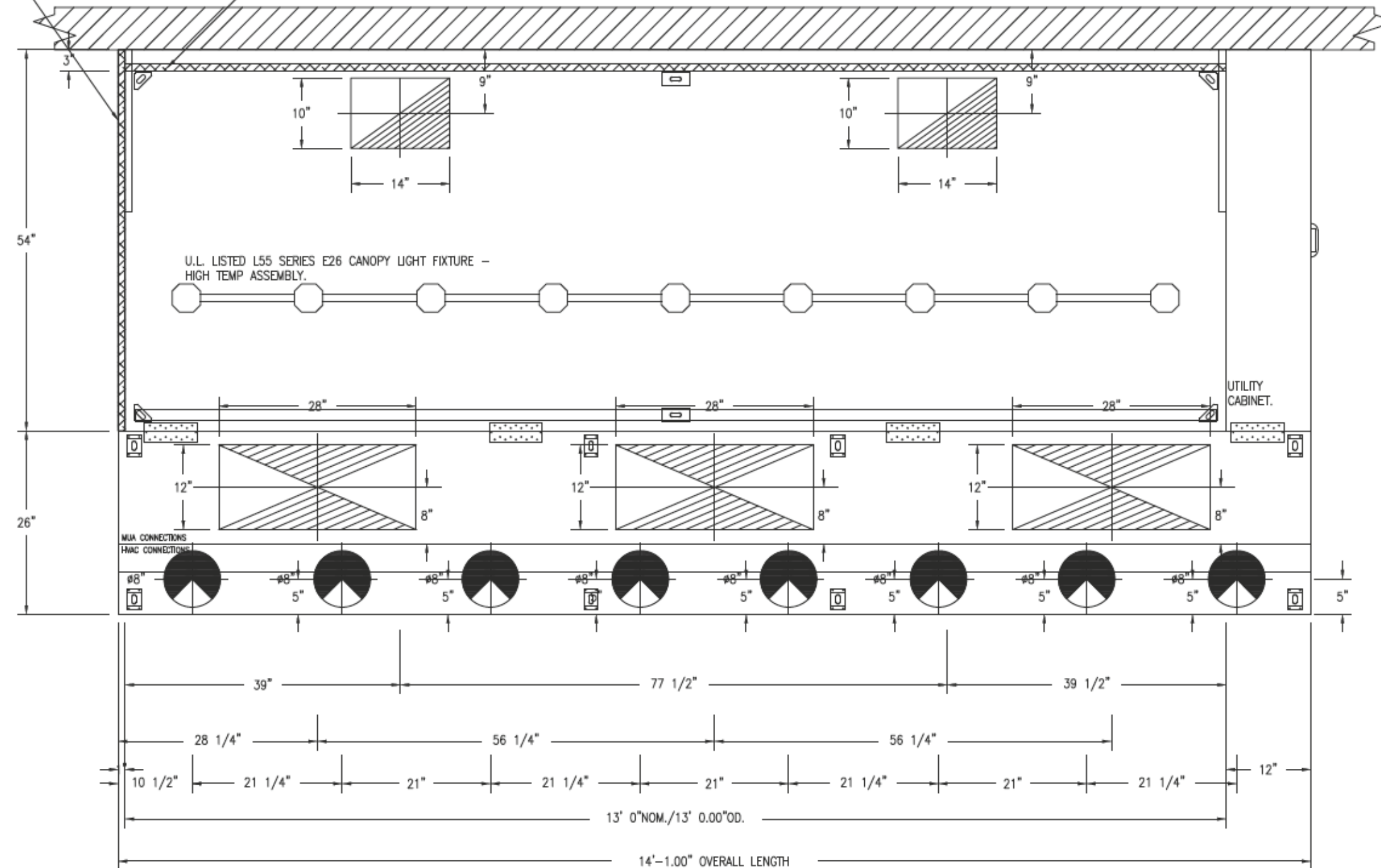
HOOD NO	TAG	OPTION
1		FIELD WRAPPER 10.00" HIGH FRONT, LEFT, RIGHT. LEFT END STANDOFF (FINISHED) 1" WIDE 54" LONG INSULATED. RIGHT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. LEFT QUARTER END PANEL 23" TOP WIDTH, 0" BOTTOM WIDTH, 23" HIGH 430 SS. INSULATION FOR BACK OF HOOD. RISER SENSOR INSTALL 6IN PLEN. FULL DIMENSION HANGING BRACKET - FRONT.

PERFORATED SUPPLY PLENUM(S)

HOOD NO	TAG	POS	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S)			
							WIDTH	LENG	DIA	CFM
1	Front	169"	26"	6"	MUA	12"	28"		825	0.218"
					MUA	12"	28"		825	0.218"
					MUA	12"	28"		825	0.218"
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	
					AC		8"	113	0.041"	

1" LAYER OF INSULATION FACTORY INSTALLED IN 1.00" END STANDOFF MEETS 0" REQUIREMENTS CLEARANCE TO COMBUSTIBLE SURFACES.

1" LAYER OF INSULATION FACTORY INSTALLED IN INTERNAL BACK STANDOFF. MEETS 0" INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES.



PLAN VIEW - HOOD #1
13' 0.00" LONG 5424ND-2-ACSP-F
NOTE: ADDITIONAL HANGING ANGLES PROVIDED FOR HOODS 12" AND LONGER.

ACPSH SHIPS LOOSE FOR FIELD INSTALLATION

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-Baffle DESIGN IN CONJUNCTION WITH A SLOTTED REAR Baffle DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

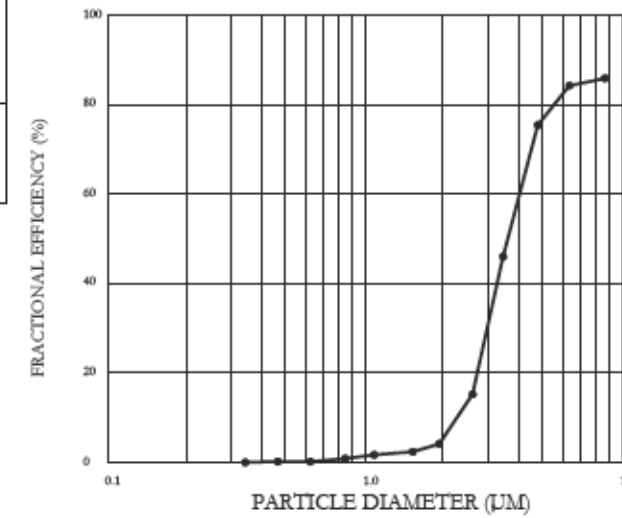
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

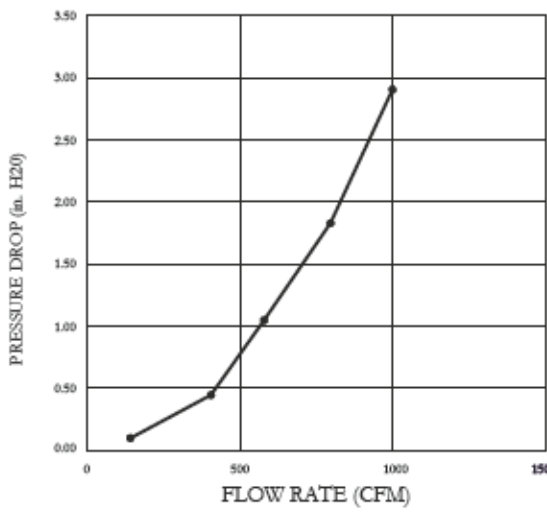
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER

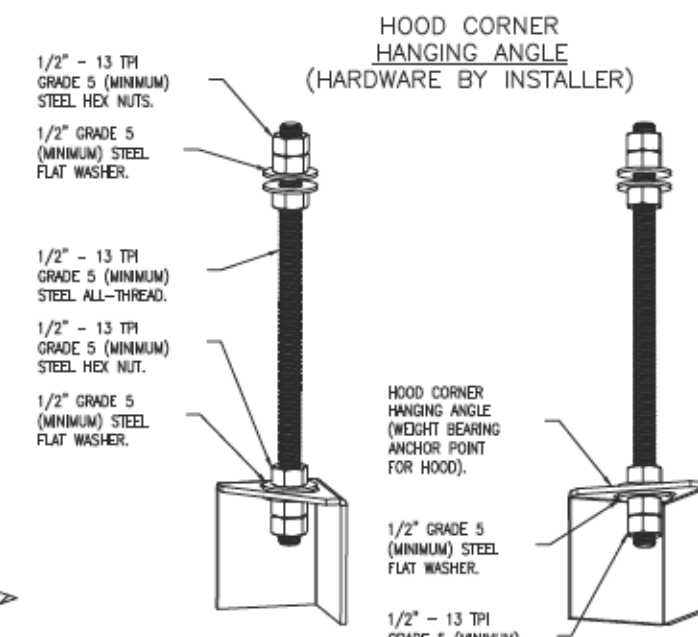


PRESSURE DROP VS. FLOW RATE



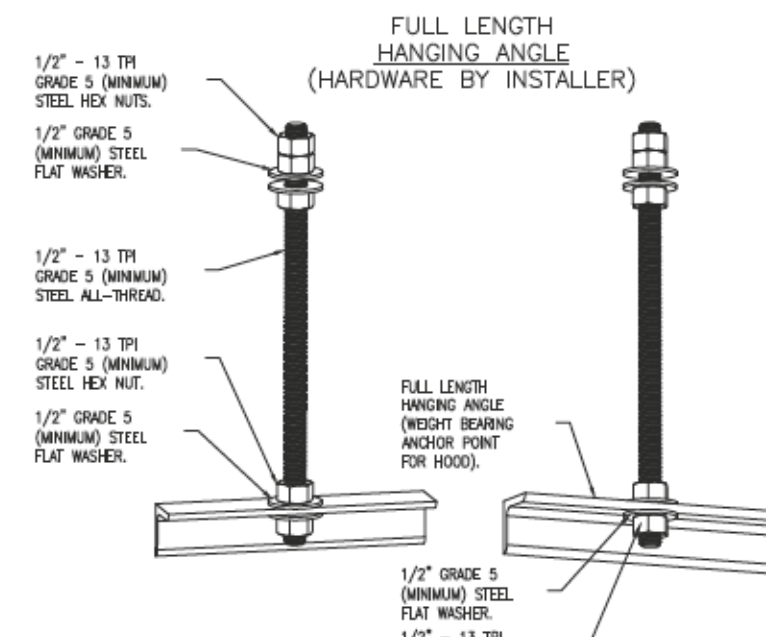
CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:

- NFPA #96.
- NSF STANDARD #2.
- UL STANDARD #1046.
- INT. MECH. CODE (IMC).
- ULC-S649.



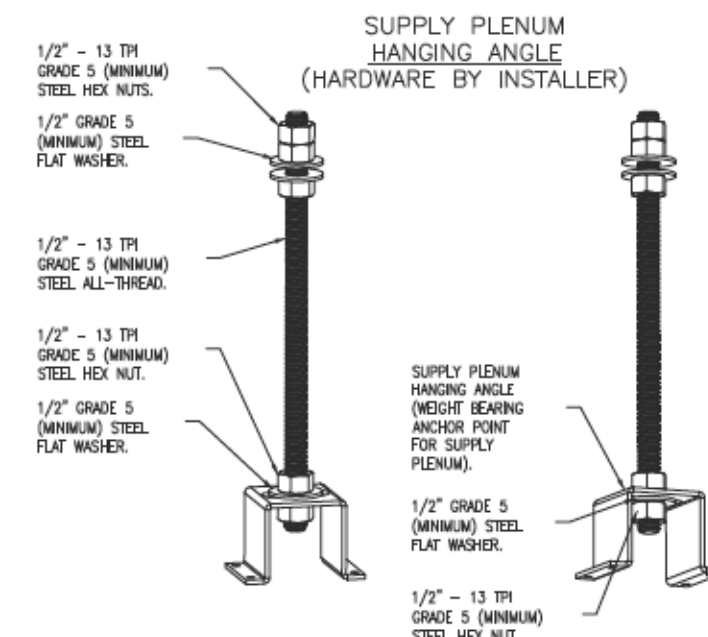
ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

REVISIONS

NO.	DESCRIPTION	DATE

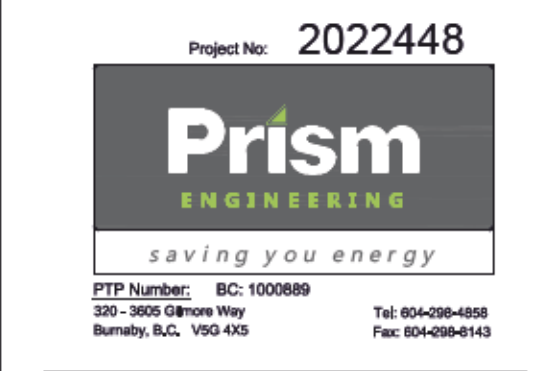
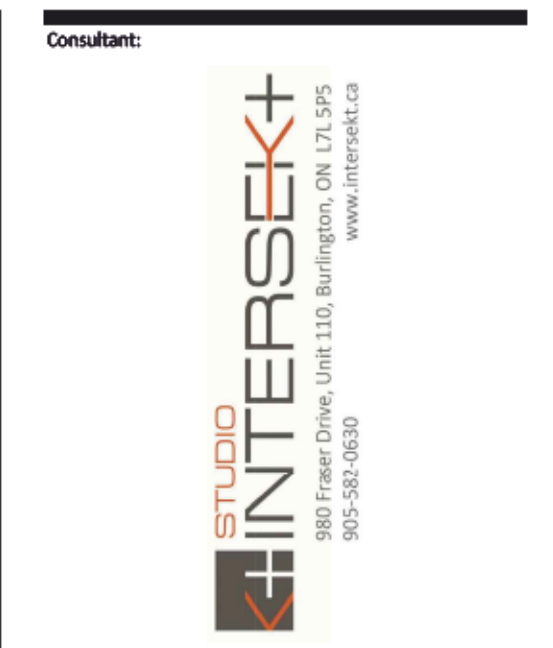
CAPTIVEAIRE
Highwoods Group
www.captiveaire.com
www.captiveaire.com

4641 Paragon Park Rd., Raleigh, NC 27616 PHONE: (919) 875-0420 FAX: (919) 875-0577 EMAIL: reg40@captiveaire.com

CHIPOTLE KING GEORGE HUB #4546
SURREY, BC, V3T 4Y3

DATE: 3/6/2023
DWG.#: 5600858
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 1



COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD

Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE

Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

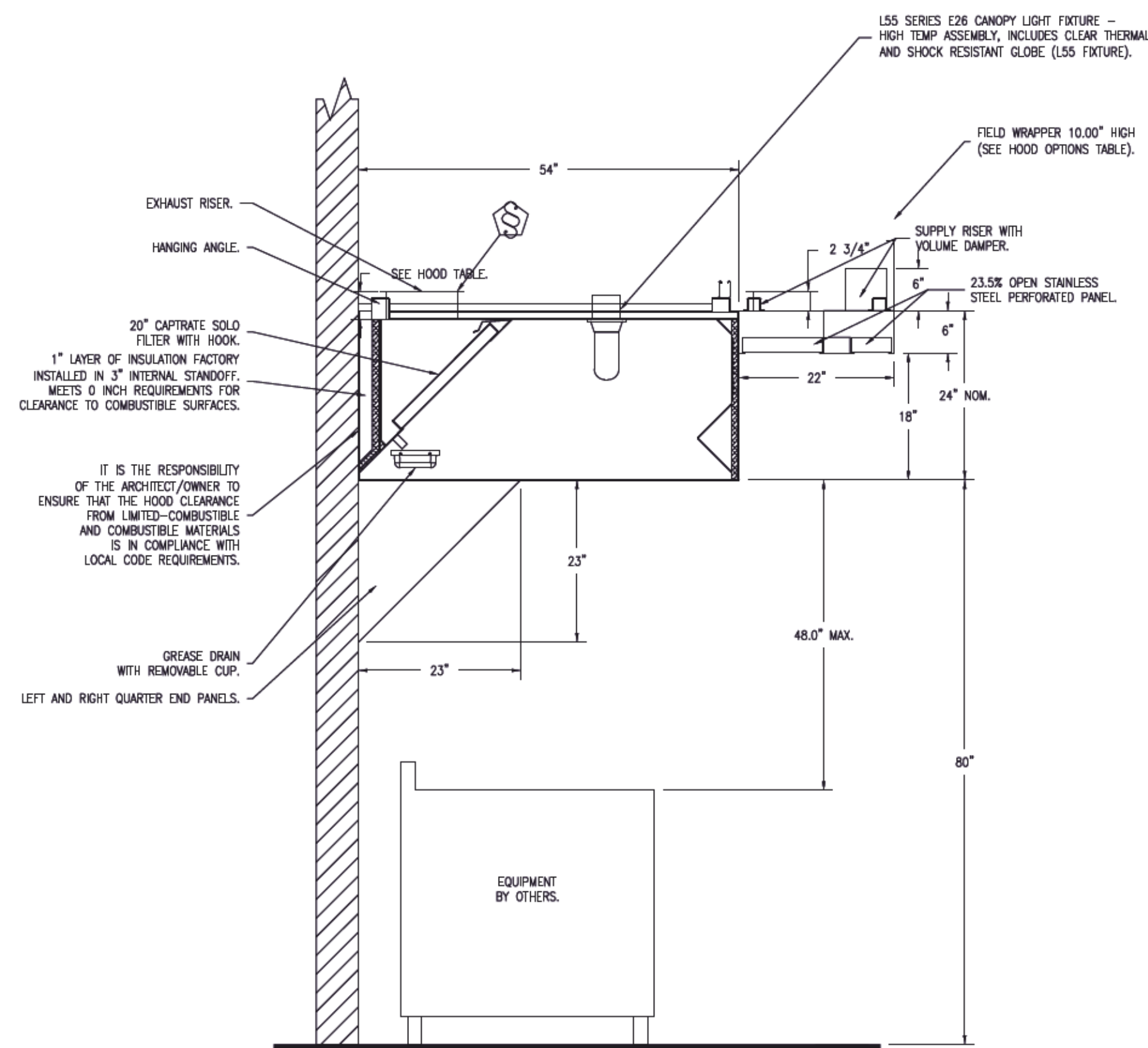
Drawn: CYL/MHP
Checked: SKO

Project No. 2022448

Contents:

KITCHEN EXHAUST SYSTEM DETAILS

M800



SECTION VIEW - MODEL 5424ND-2-ACPSP-F
HOOD - #1

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

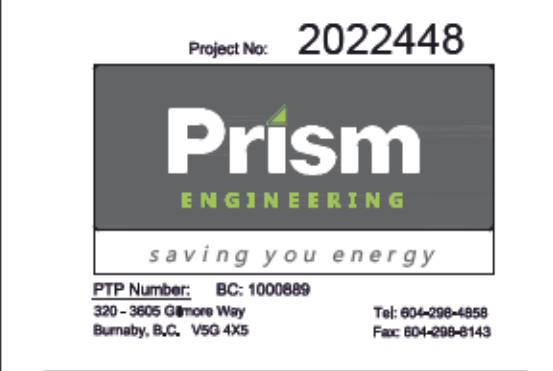
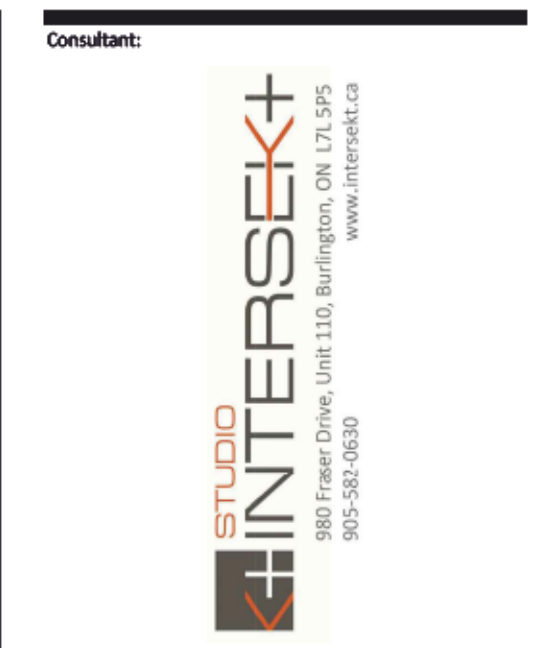
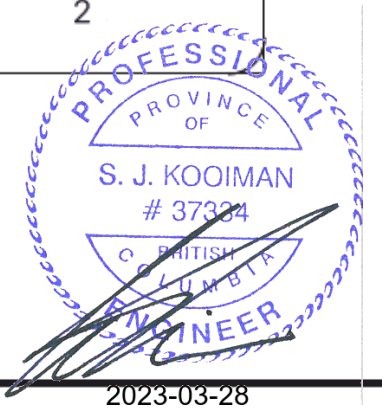
REVISIONS	
DESCRIPTION	DATE



CHIPOTLE SUNRIDGE #4684
CALGARY, AB, T1Y 2G1

DATE: 11/17/2022
DWG.#: 5707860
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 2



COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD				
Rev	Date	Description	By	
1	08/SEP/22	COORDINATION	PE	
2	16/SEP/22	FOR LL APPROVAL	PE	
3	02/NOV/22	IFP & IFT	PE	
4	28/NOV/22	TENDER	PE	
5	16/DEC/22	RE-ISSUED FOR BP	PE	
7	20/MAR/23	RE-ISSUED FOR BP	PE	
8	28/MAR/23	CONSTRUCTION	PE	

REVISION SCHEDULE		
Rev	Date	Description
6	31/JAN/23	ADDENDUM M-01

Drawn: CYL/MHP
Checked: SKO

Project No. 2022448

Contents:
KITCHEN EXHAUST SYSTEM DETAILS

M801

FIRE SYSTEM INFORMATION - JOB#5600858

FIRE SYSTEM NO	TAG	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	36	FIRE CABINET RIGHT	RIGHT, HOOD 1

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	1.000	CAPTIVEARE SYSTEMS

FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER - PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1		0 - 0 - 12-F28021-32144-0T-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO. CLOSE ON TEMP RISE AT 360°F.	2	0
		0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5" BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
		0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	8	0
		0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	8	0
		0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 - 0 - B1145 3/8" BLACK IRON 90 ELL.	4	0
		0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION.	6	0
		0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	9	0
		16 - 16 - OL-F NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE)- 4 FLOW POINTS.	9	0
		26 - 26 - OSA-3/8 QUIK SEAL - 3/8" (UL).	9	0
		34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0

KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

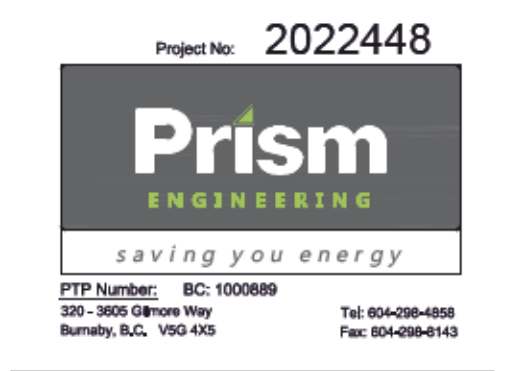
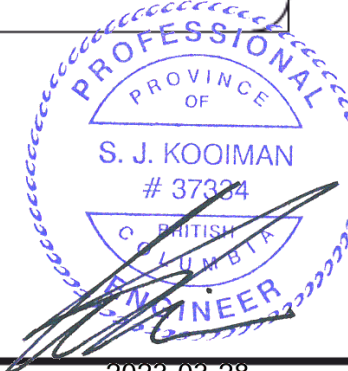
REVISIONS	
DESCRIPTION	DATE



CHIPOTLE SUNRIDGE #4684
CALGARY, AB, T1Y 2G1

DATE: 11/17/2022
DWG.#: 5707860
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 3



COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE		
Rev	Date	Description
6	31/JAN/23	ADDENDUM M-01

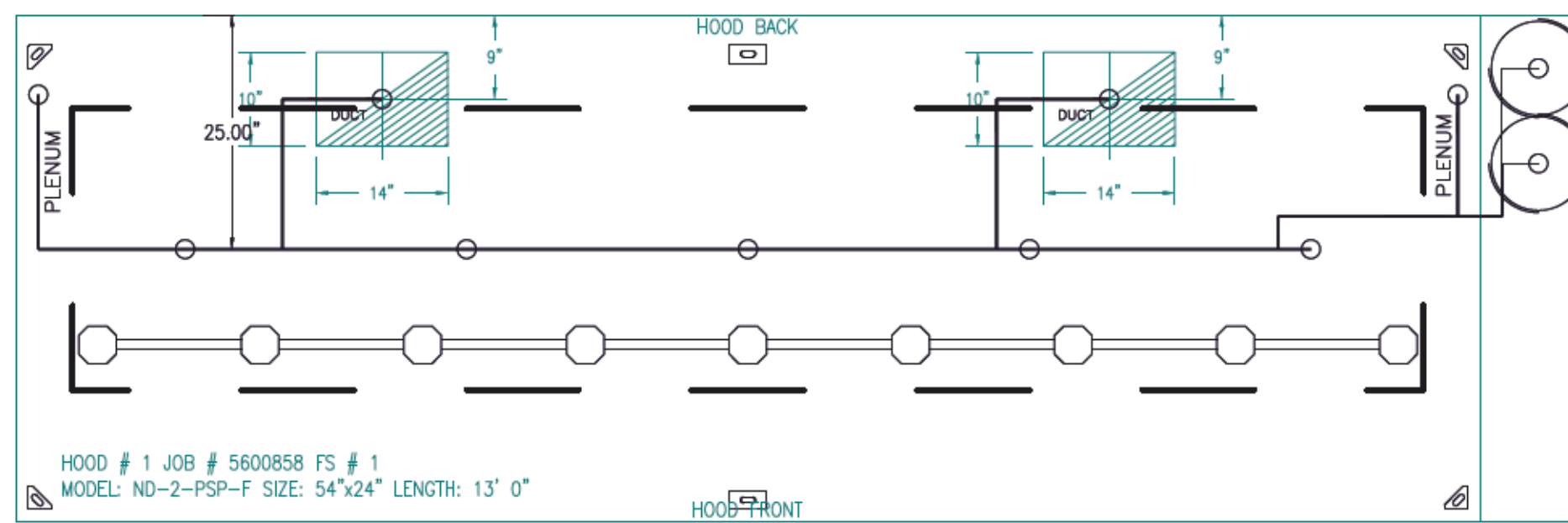
Drawn: CYL/MHP
Checked: SKO

Project No. 2022448

Contents:

KITCHEN EXHAUST SYSTEM DETAILS

M802



SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.5 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS.

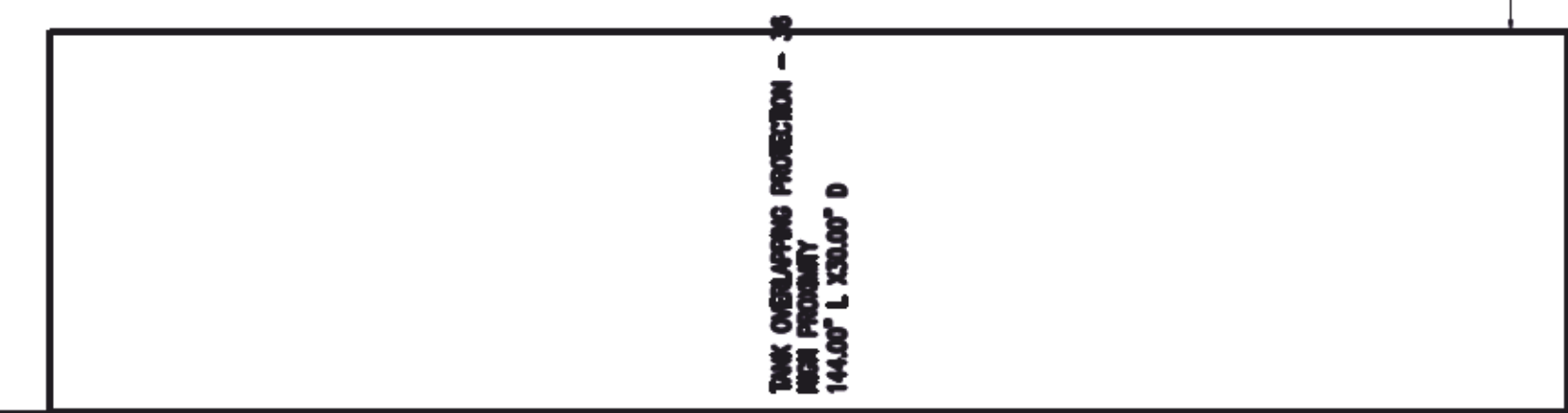
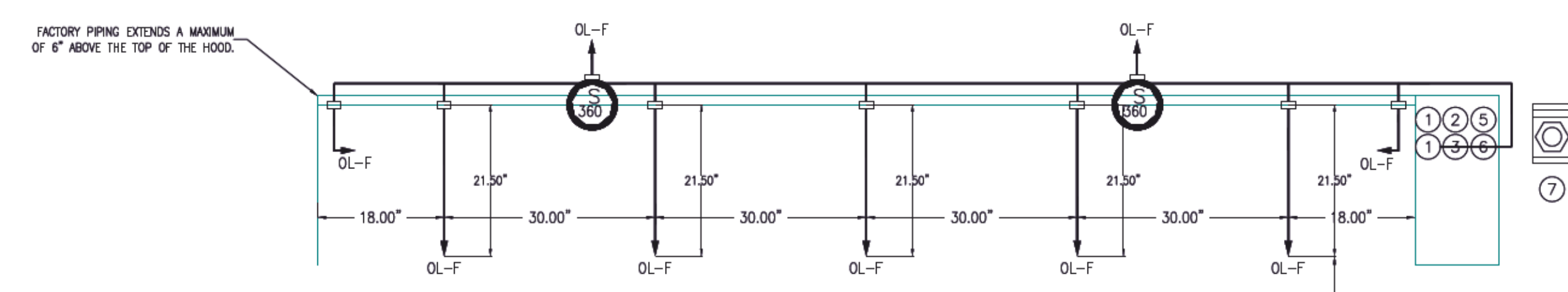
- NOTES
- FIELD PIPE DROPS AS SHOWN
 - PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
 - FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
 - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
 - OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
 - IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
 - FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
 - APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.
 - THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.
 - OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB #: 5600858
 JOB NAME: CHIPOTLE KING GEORGE HUB #4546
 SYSTEM SIZE: TANK-SP-2 TOTAL FP REQUIRED: 36
 HOOD # 1 13' 0.00" LONG x 54" WIDE x 24" HIGH.
 RISER # 1 SIZE: 10" x 14".
 RISER # 2 SIZE: 10" x 14".
 HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND - FIRE CABINET TANK SYSTEM

- | | |
|---|---------------------------------|
| 1 | 4 GALLON TANK. |
| 2 | PRIMARY ACTUATOR RELEASE. |
| 3 | SECONDARY ACTUATOR RELEASE. |
| 4 | PRESSURE SUPERVISION SWITCH. |
| 5 | PRIMARY HOSE ASSEMBLY. |
| 6 | SECONDARY HOSE ASSEMBLY. |
| 7 | REMOTE MANUAL ACTUATION DEVICE. |

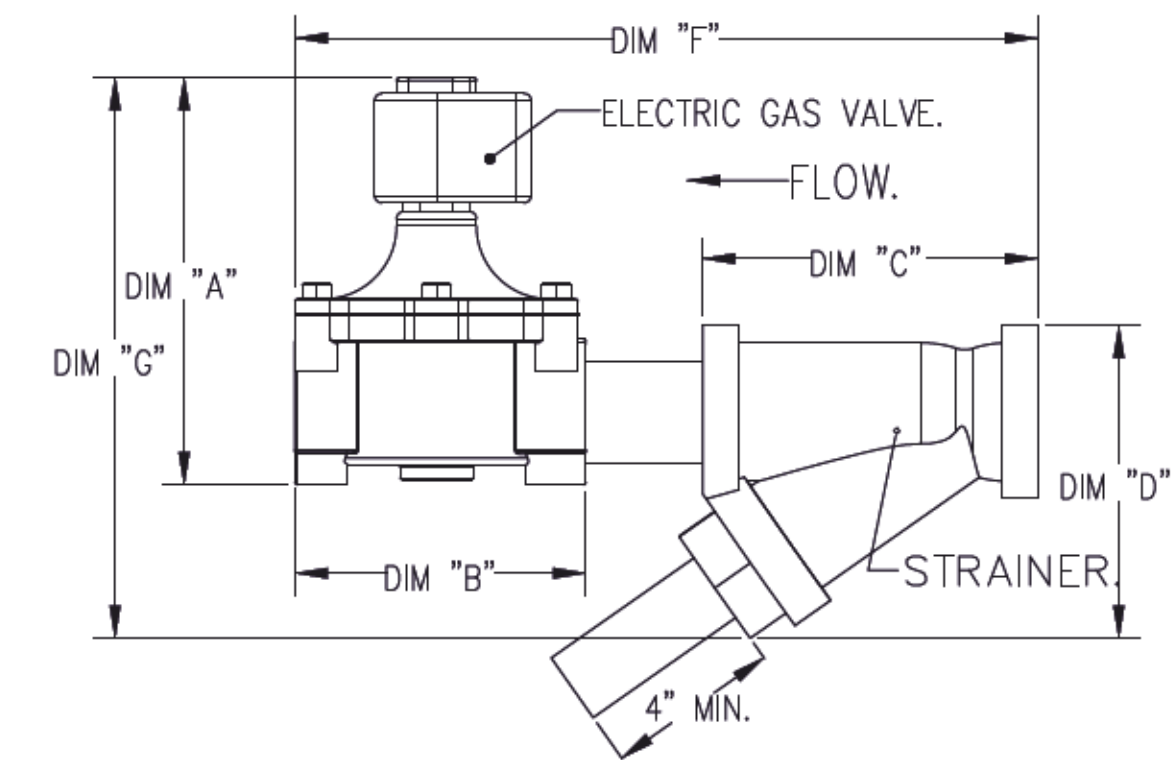


INCLUDES: FIELD INSTALLATION AND HOOKUP DURING NORMAL BUSINESS HOURS BY CERTIFIED INSTALLERS ONLY IN THE LOCATION NOTED ABOVE. TWO SITE VISITS ONLY (ONE VISIT TO SET PULL STATION & SYSTEM HOOKUP AND ONE VISIT FOR ONE TEST; ADDITIONAL VISITS WILL RESULT IN ADDITIONAL CHARGES). ONE MECHANICAL OR ELECTRICAL GAS VALVE PER SYSTEM AT A MAXIMUM SIZE OF 2", PERMIT, AND SYSTEM TEST.
 EXCLUDES: UNION LABOR & PREVAILING WAGE (LABOR & WAGES WILL BE ADDED IF APPLICABLE), GAS VALVE INSTALLATION, ELECTRICAL HOOKUP AND CONNECTIONS, HANGING OF FIRE CABINET, SHUNT TRIP, HANDHELD EXTINGUISHER(S), ON-SITE RE-PIPING DUE TO EQUIPMENT LAYOUT CHANGES.

GAS VALVES AND STRAINERS																
TYPE	SIZE	VOLTAGE	GAS VALVE SIZING		GAS VALVE DIMENSIONS						INSTALLATION	PART NUMBERS				
			MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"		DIM "E"	DIM "F"	DIM "G"	GAS VALVE PART NUMBER	STRAINER PART NUMBER
ELECTRICAL	1"	120 VAC	0 PSI (0 IN.W.C.)	5 PSI (1.38 IN.W.C.)	1,132,300 BTU/HR	734,733 BTU/HR	6-15/16"	5-15/16"	4-7/8"	5-3/16"	12-13/16"	10-11/16"	HORIZONTAL/VERTICAL	8214250	4417K65	(SC)EGVA1

ALL GAS VALVES/STRAINERS
 PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS
 TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP
 NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP^{0.85}
 TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY
 NEW BTU/HR = (BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)^{0.85}



KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

REVISIONS

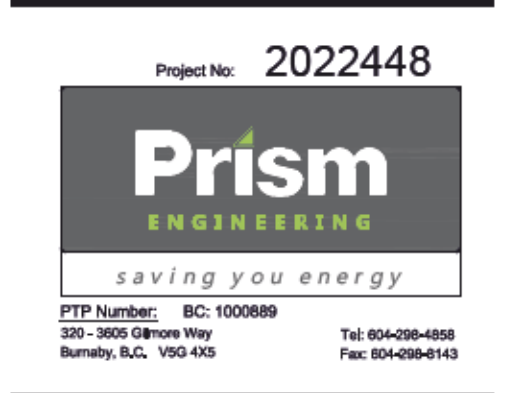
DESCRIPTION	DATE

CAPTIVE
 Highwoods Group
 4641 Paragon Park Rd., Raleigh, NC, 27616 PHONE: (919) 875-0420 FAX: (919) 875-0577 EMAIL: reg.00@captivair.com
 www.captivair.com

CHIPOTLE SUNRIDGE #4684
 CALGARY, AB, T1Y 2G1

DATE: 11/17/2022
 DWG.#: 5707860
 DRAWN BY: JMB-40
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING

SHEET NO. 4



COPYRIGHT 2019
 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



STORE NO.: 52-4546
 KING GEORGE HUB
 9900 KING GEORGE BLVD., CRU #50
 SURREY, V3T 4Y3
 B.C., CANADA

DESIGN BULLETIN: DB-03/2022

Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/MHP
 Checked: SKO

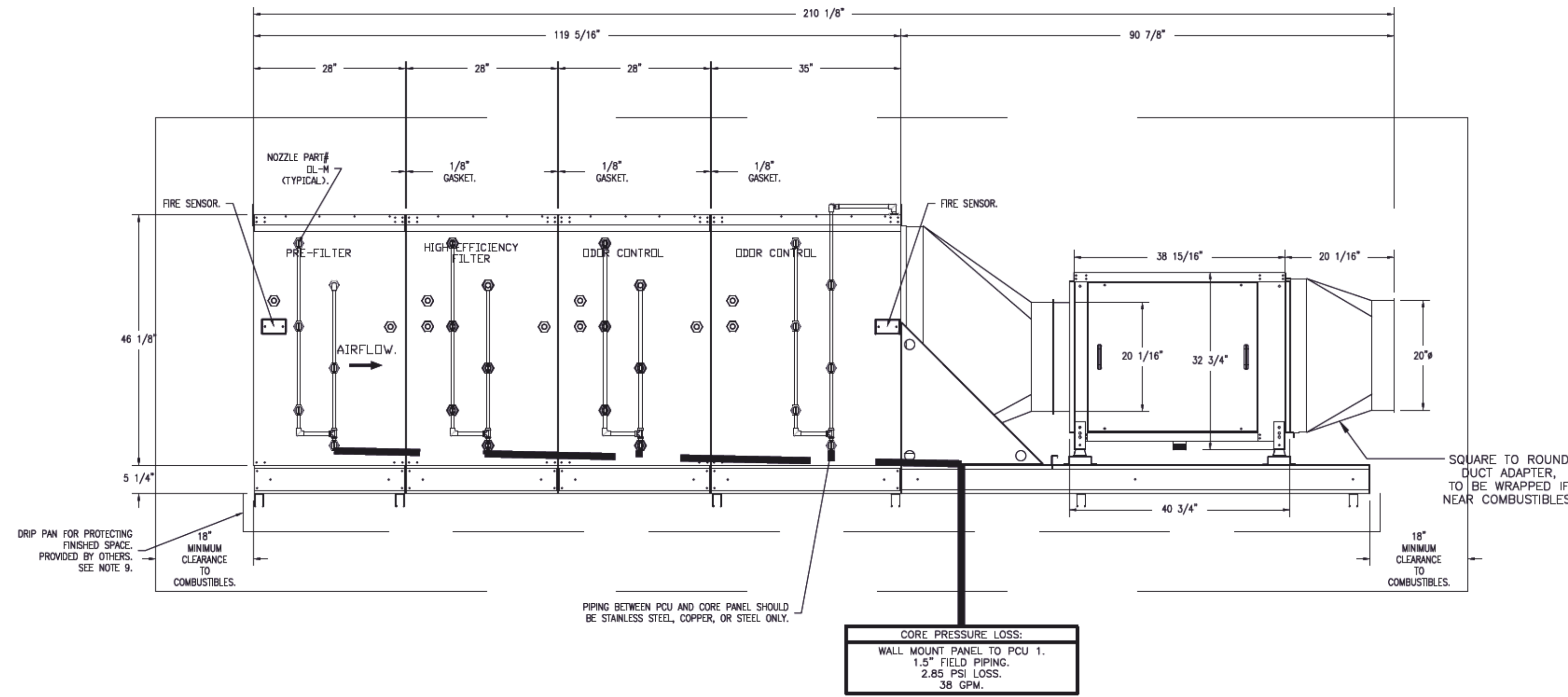
Project No. 2022448

Contents:
 KITCHEN EXHAUST SYSTEM DETAILS

M803

POLLUTION CONTROL UNIT FIRE SYSTEM

FAN #1 SIF20DD-HSS-UL762 - EXHAUST FAN (PCU-1) - POLLUTION CONTROL UNIT WITH CORE PROTECTION FIRE SYSTEM INSTALLED, INCLUDES STEEL PRE-FILTER MODULE, HIGH EFFICIENCY MERV 15 FILTER MODULE, AND DUAL ODOR CONTROL MODULES PREWIRED WITH 88 OIL-M NOZZLES AND INCLUDES DOWNSTREAM PROTECTION. ELECTRIC FIRE DETECTOR AND NOZZLES ARE INCLUDED.



PCU CORE WATER FLOW SUMMARY			
	PIPE DIAMETER	MINIMUM FLOW RATE (GPM)	PRESSURE DROP (PSI)
Field Piping Wall Mount Panel to PCU 1	1.5	38	2.85
PCU Internal Piping	0.375	38	20

TOTAL SYSTEM INLET REQUIREMENTS			
	MINIMUM FLOW RATE (GPM)	MINIMUM PRESSURE (PSI)	
TOTAL CORE INLET REQUIREMENTS	38	22.85	

* OPERATING PRESSURE RANGE AT CORE PANEL GAUGE IS 22.85 TO 70 PSI.
MAXIMUM STATIC PRESSURE IS 125 PSI.

KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

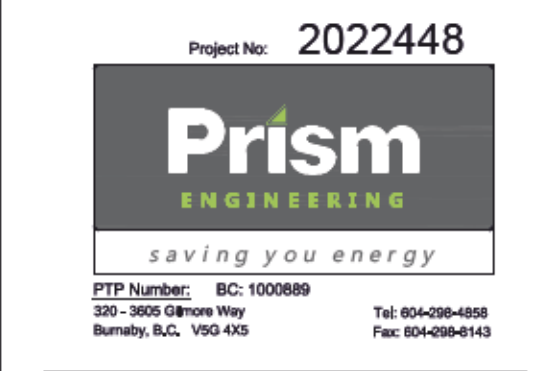
REVISIONS	
DESCRIPTION	DATE



CHIPOTLE SUNRIDGE #4684
CALGARY, AB, T1Y 2G1

DATE: 11/17/2022
DWG.#: 5707860
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO. 5



COPYRIGHT 2019
THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
610 NEWPORT CENTER DR. SUITE 1300
NEWPORT BEACH, CA 92660
TELEPHONE: 714.264.7392
INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
KING GEORGE HUB
9900 KING GEORGE BLVD., CRU #50
SURREY, V3T 4Y3
B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD				
Rev	Date	Description	By	
1	08/SEP/22	COORDINATION	PE	
2	16/SEP/22	FOR LL APPROVAL	PE	
3	02/NOV/22	IFP & IFT	PE	
4	28/NOV/22	TENDER	PE	
5	16/DEC/22	RE-ISSUED FOR BP	PE	
7	20/MAR/23	RE-ISSUED FOR BP	PE	
8	28/MAR/23	CONSTRUCTION	PE	

REVISION SCHEDULE		
Rev	Date	Description
6	31/JAN/23	ADDENDUM M-01

Drawn: CYL/MHP
Checked: SKO

Project No. 2022448

Contents:
KITCHEN EXHAUST SYSTEM DETAILS

M804

EXHAUST FAN INFORMATION - JOB#5600858

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	WEIGHT (LBS)	SONES
1	PCU-1	1	SIF2000	CAPTIVEARE	2925	1.750	1684	TEFC,PREMIUM	5.000	2.8860	3	575	5.1	2126	23.5
2	EF-2	1	CFA 250CA	CAPTIVEARE	150	0.500	658	GENERALPURPOSE	0.222	0.1090	1	115	2.1	27	N/A

MUA FAN INFORMATION - JOB#5600858

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	BLOWER	HOUSING	MIN CFM	DESIGN CFM	ESP	RPM	MOTOR ENCL.	HP	BHP	PHASE	VOLT	FLA	MCA	MOCF	WEIGHT (LBS)	SONES
3	MAU-1	1	A2-E.735-20D	ZOMF-2-MOD	A2-E.735	2000	2475	0.500	1054	TEFC,PREMIUM	2.000	0.6000	3	575	2.2	2.8A	15A	764	7.5

ELECTRIC MAKE-UP AIR UNIT(S)

FAN UNIT NO	TAG	DSGN KW'S	MAX KW'S	PHASE	VOLTS	AMPERAGE	TEMP RISE	OUTPUT BTUs
3	MAU-1	70	73	3	575	70.3	100 °F	249149

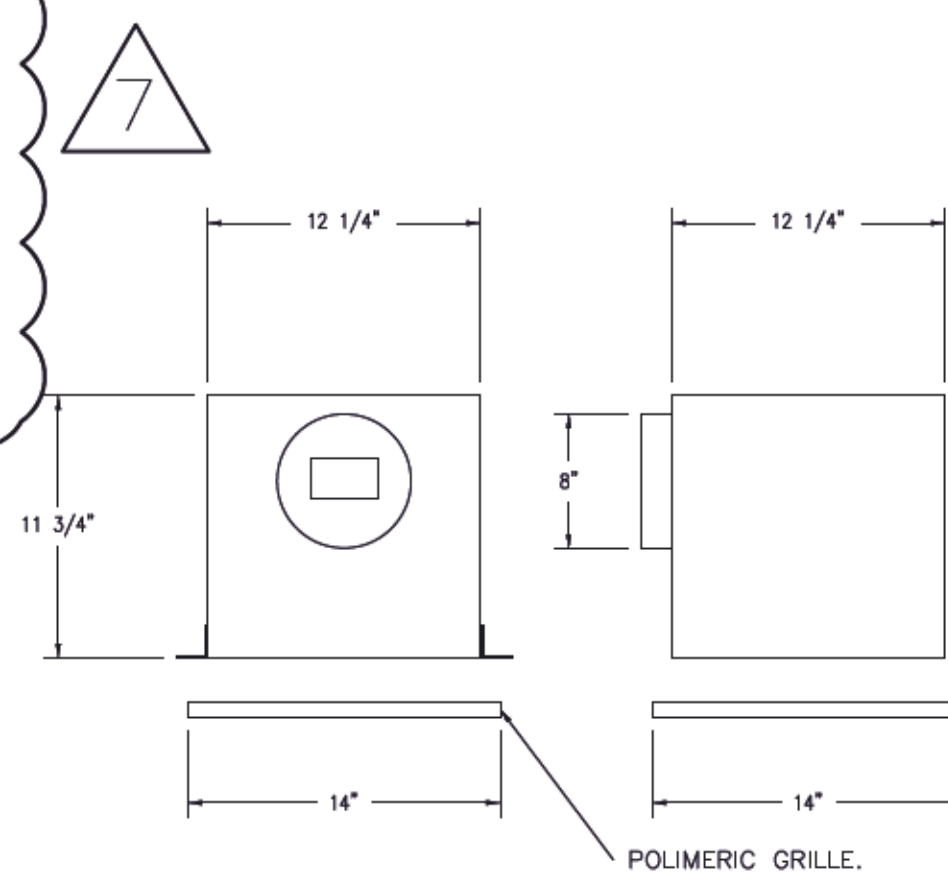
FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1	PCU-1	1	SIF 20- SS LOW SP. STRAIGHT DISCHARGE- SQUARE TO ROUND DISCHARGE ADAPTER
		1	SIF20 - INLET - STANDARD 20" DUCT CONNECTION
		1	PCU-SIZE 4 SIF-20 HESS
		1	RUBBER VIBRATION ISOLATORS (SET OF 4), ISO16 THRU ISO22
		1	SIF - HORIZONTAL FLOOR MOUNT - PRE-INSTALLED MOUNTS (11-36)
		1	OPPOSITE SIDE CONTROLS- SIF
		1	POLLUTION CONTROL UNIT WITH PREFILTER, HIGH EFFICIENCY, AND DUAL ODOR CONTROL WITH INSTALLED ELECTRICAL DETECTION SYSTEM. SIZE 4
		1	UNIT MOUNTED VFD FOR USE WITH ECPM03
		1	VFD MOUNTING PLATE ON SIF 20
		1	2 YEAR PARTS WARRANTY
2	EF-2	1	STRAIGHT THROUGH DISCHARGE - ASSEMBLY - CFA INLINE
		1	CEILING VIBRATION HANGERS
		1	FAN CONTROL - 3 AMP FAN MOUNTED SPEED CONTROL FOR CFA CEILING FANS
3	MAU-1	1	2 YEAR PARTS WARRANTY
		1	EH 2 MUA CONTROLS SHEET METAL
		1	MOTORIZED BACKDRAFT DAMPER FOR A2-D HOUSING - MEETS AMCA CLASS 1A RATING
		1	INSULATION OPTION FOR VBANK FILTER SECTION
		1	SIZE 2 ELECTRIC HEATER INDOOR HANGING OPTION. INCLUDES 2 HSA125 HANGING SPRING ISOLATORS PER LIN-STRUT
		1	LOAD REACTOR MOUNTED IN FAN
		1	SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY
1	2 YEAR PARTS WARRANTY		

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1	PCU-1							
2	EF-2							
3	MAU-1				YES		YES	

FAN #2 CFA 250CA - EXHAUST FAN (EF-2)



FEATURES:

- 1/2" ACOUSTIC HOUSING INSULATION.
- 20 GA. GALVANIZED STEEL HOUSING.
- PLUG TYPE DISCONNECT.
- BUILT IN AUTOMATIC BACKDRAFT DAMPER.
- AMCA SOUND & AIR CERTIFIED.
- UL LISTED.
- CAN BE INSTALLED IN CEILING OR WALL.
- 8 POSITION MOUNTING BRACKETS.

OPTIONS

- STRAIGHT THROUGH DISCHARGE - ASSEMBLY - CFA INLINE.
- CEILING VIBRATION HANGERS.
- FAN CONTROL - 3 AMP FAN MOUNTED SPEED CONTROL FOR CFA CEILING FANS.
- 2 YEAR PARTS WARRANTY.

KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

REVISIONS	
DESCRIPTION	DATE

CAPTIVE
 Highwoods Group
 www.captiveare.com
 4641 Paragon Park Rd., Raleigh, NC. 27616 PHONE: (919) 875-0420 FAX: (919) 875-0577 EMAIL: reg40@captiveare.com

CHIPOTLE KING GEORGE HUB #4546
 SURREY, BC, V3T 4Y3

DATE: 3/6/2023
DWG.#: 5600858
DRAWN BY: JMB-40
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 6



COPYRIGHT 2019
 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.



CHIPOTLE MEXICAN GRILL, INC.
 610 NEWPORT CENTER DR. SUITE 1300
 NEWPORT BEACH, CA 92660
 TELEPHONE: 714.264.7392
 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
 KING GEORGE HUB
 9900 KING GEORGE BLVD., CRU #50
 SURREY, V3T 4Y3
 B.C., CANADA

DESIGN BULLETIN: DB-03/ 2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Drawn: CYL/ MHP
 Checked: SKO

Project No. 2022448

Contents:
 KITCHEN EXHAUST SYSTEM DETAILS

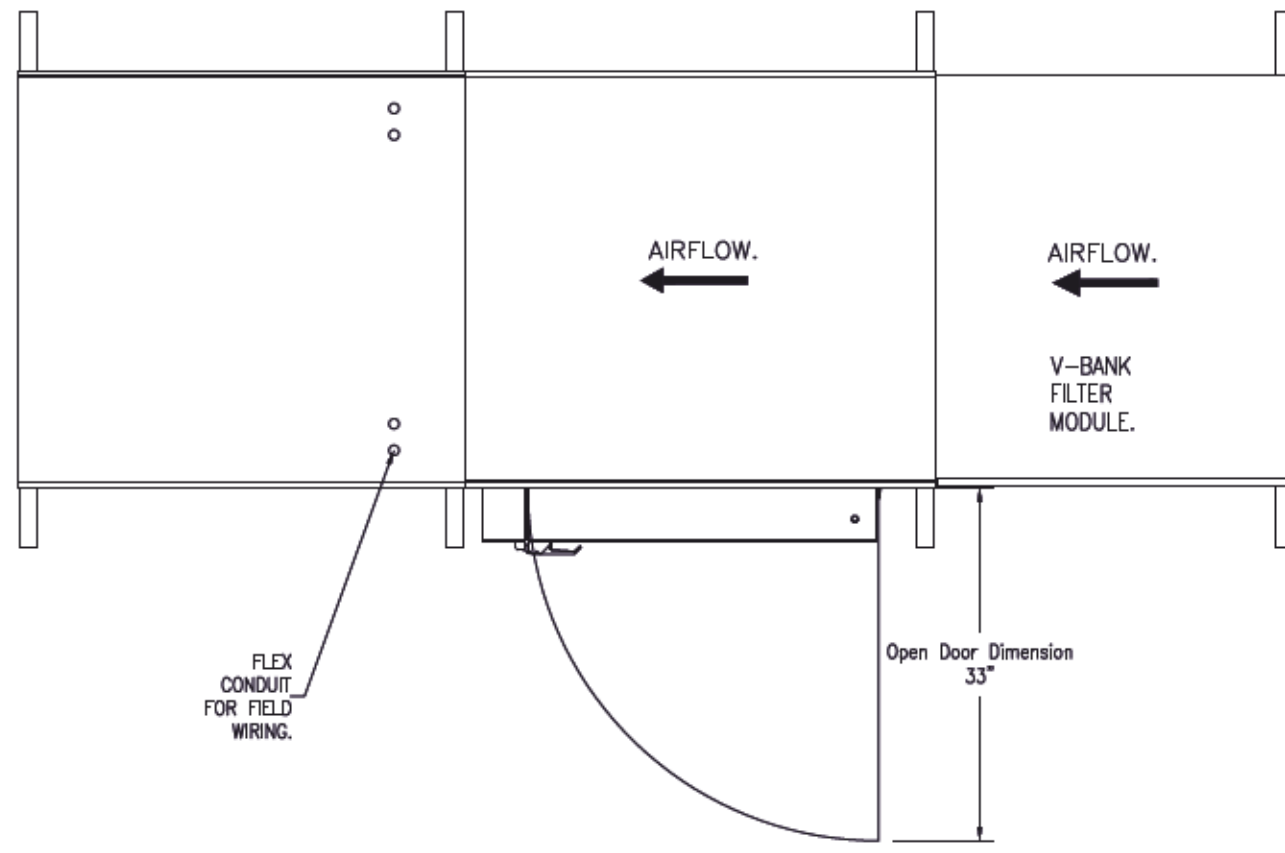
M805

- FAN #3 A2-E735-200 - HEATER (MAU-1)
1. ELECTRIC HEATED MAKE-UP AIR UNIT WITH 20" MIXED FLOW DIRECT DRIVE FAN AND A 2 STAGE TOTAL, 1 MODULATING, 73KW 600 - 3 COD.
 2. V-BANK EZ FILTERS - INDOOR.
 3. SIDE DISCHARGE - AIR FLOW RIGHT -> LEFT.
 4. SIZE 2 ELECTRIC HEATER WITH MIA CONTROLS SHEET METAL.
 5. MOTORIZED BACK DRAFT DAMPER 22.75" X 24" FOR SIZE 2 STANDARD & MODULAR HEATER UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, LF1205 ACTUATOR INCLUDED.
 6. "INSULATION" FOR V-BANK INTAKE OPTION.
 7. INDOOR HANGING CRADLE FOR THE SIZE 2 ELECTRIC HEATER, 2 HSA125 HANGING ISOLATORS PER UNI-STRIUT INCLUDED.
 8. MOUNT LOAD REACTOR IN FAN.
 9. SEPARATE LOGGING WIRING PACKAGE FOR MAKE-UP AIR UNITS. OPTION MUST BE SELECTED WHEN MOUNTING YTD IN PREMISE PANEL OR WITH DCV PACKAGE. PROVIDES SEPARATE LOGGING WIRING TO SUPPLY FAN. THIS 120V SIGNAL MUST BE RUN BY ELECTRICIAN FROM DCV TO MIA SWITCH.
 10. 2 YEAR PARTS WARRANTY.

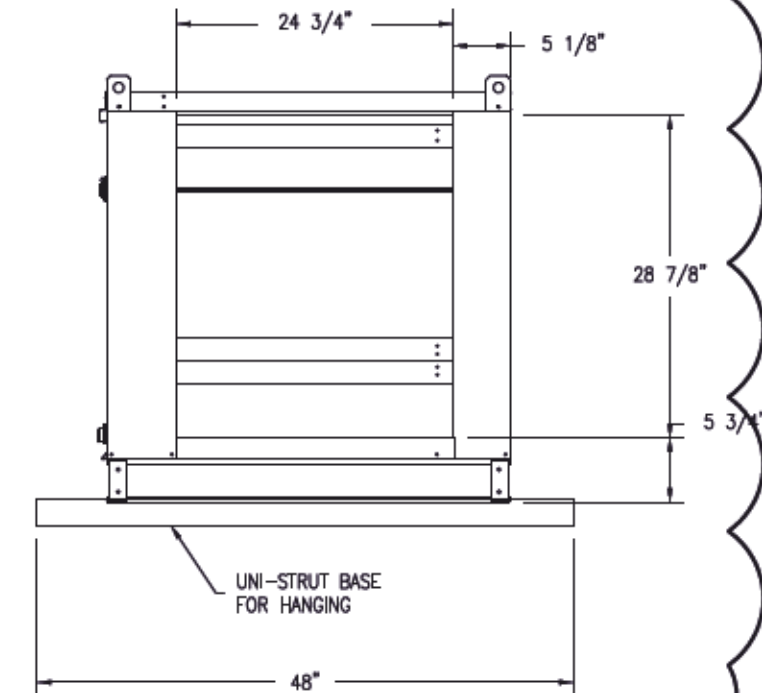
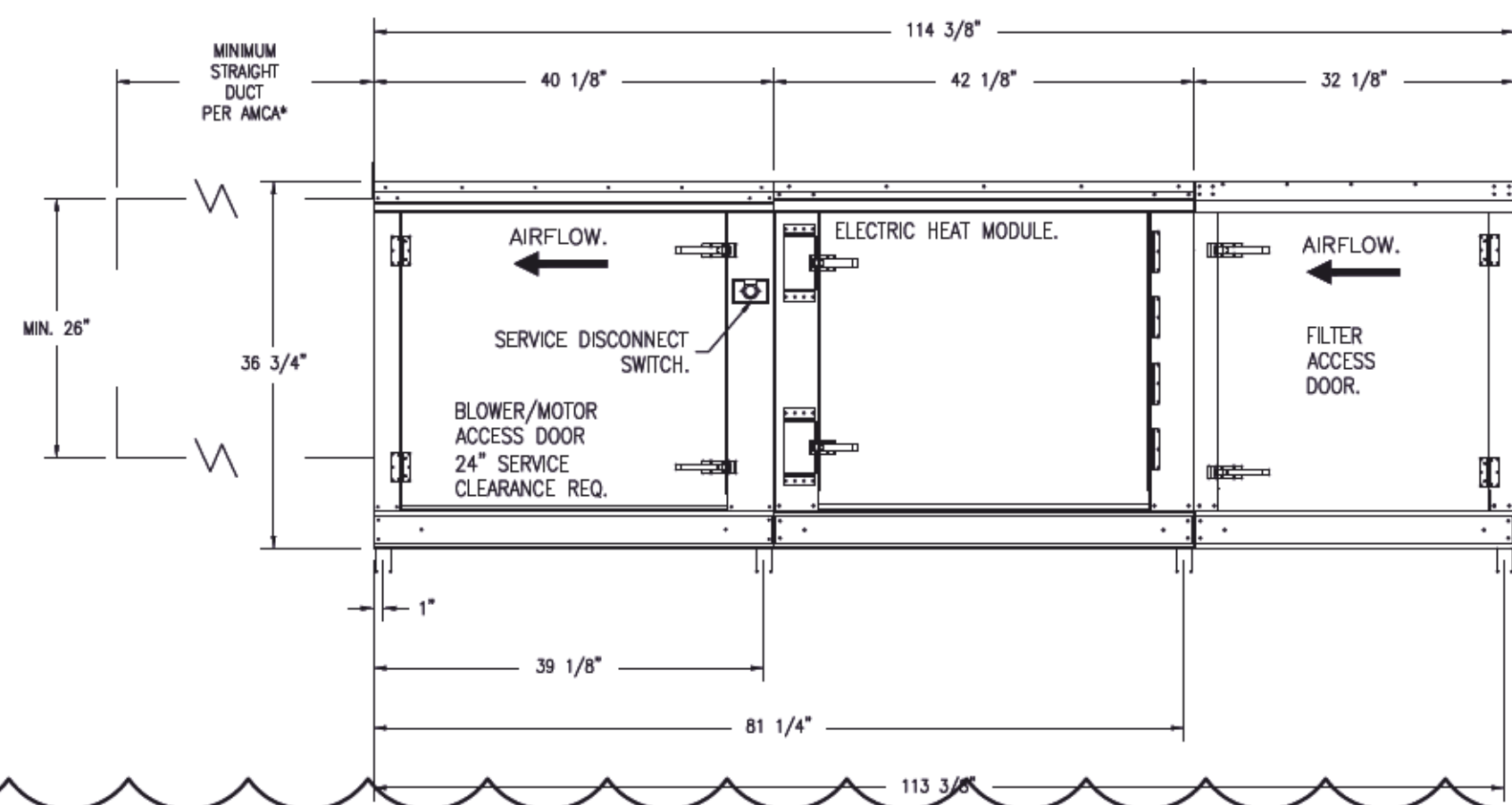
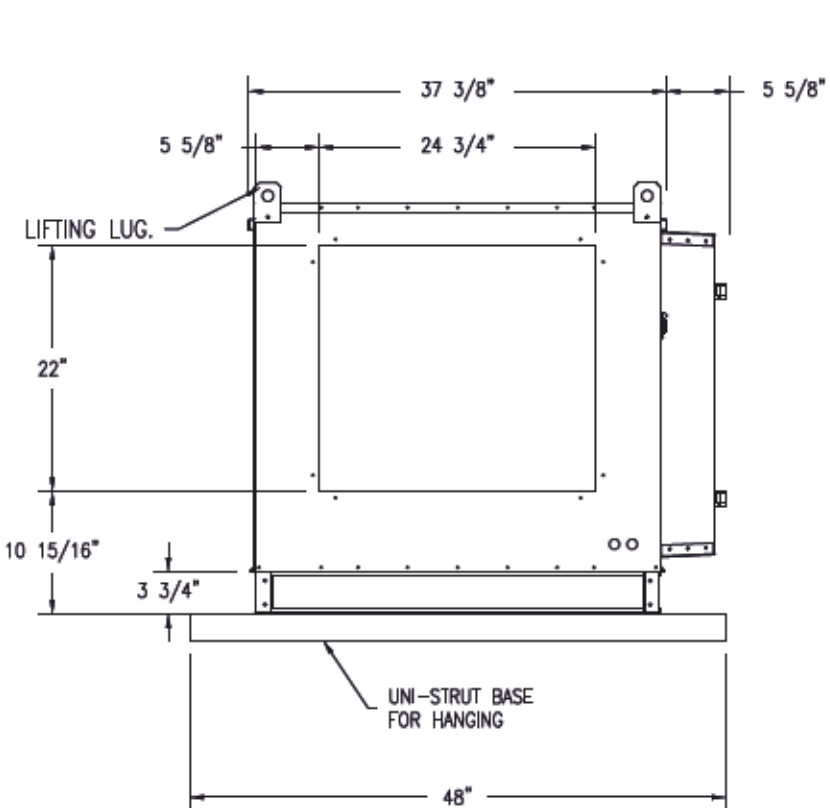
*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 26" X 26".

SUPPLY SIDE HEATER INFORMATION:

WINTER TEMPERATURE = 24°F. TEMP. RISE = 100°F.
 KWs CALCULATED OFF ACTUAL AIR DENSITY.
 KWs AT ALTITUDE OF 0.0 FT. = 71.
 KWs AT ALTITUDE OF 338 FT. = 70.



7



KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

REVISIONS	
DESCRIPTION	DATE



CHIPOTLE KING GEORGE HUB #4546
 SURREY, BC, V3T 4Y3

DATE: 3/6/2023
 DWG.#: 5600858
 DRAWN BY: JMB-40
 SCALE: 3/4" = 1'-0"
 MASTER DRAWING
 SHEET NO. 7



Project No: 2022448
 saving you energy
 PTP Number: BC: 1000889
 330-3600 Gilmore Way
 Burnaby, B.C. V5G 4X5
 Tel: 604-298-4558
 Fax: 604-298-4143



CHIPOTLE MEXICAN GRILL, INC.
 610 NEWPORT CENTER DR. SUITE 1300
 NEWPORT BEACH, CA 92660
 TELEPHONE: 714.264.7392
 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
 KING GEORGE HUB
 9900 KING GEORGE BLVD., CRU #50
 SURREY, V3T 4Y3
 B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD				
Rev	Date	Description	By	
1	08/SEP/22	COORDINATION	PE	
2	16/SEP/22	FOR LL APPROVAL	PE	
3	02/NOV/22	IFP & IFT	PE	
4	28/NOV/22	TENDER	PE	
5	16/DEC/22	RE-ISSUED FOR BP	PE	
7	20/MAR/23	RE-ISSUED FOR BP	PE	
8	28/MAR/23	CONSTRUCTION	PE	

REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

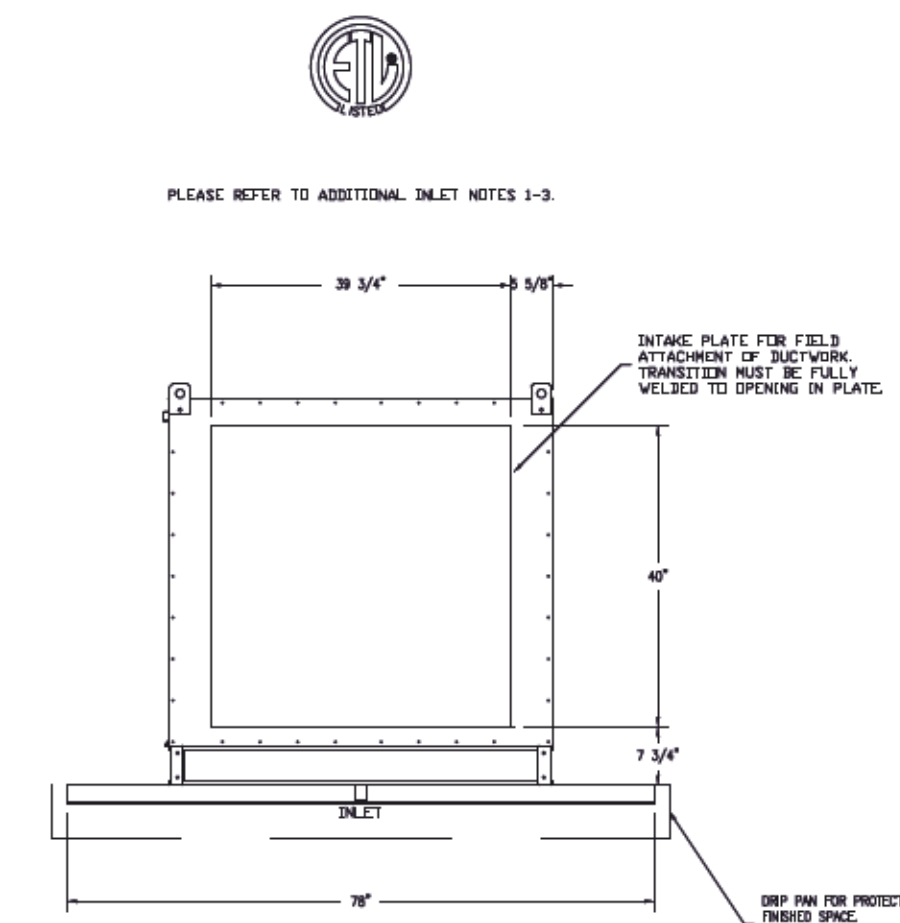
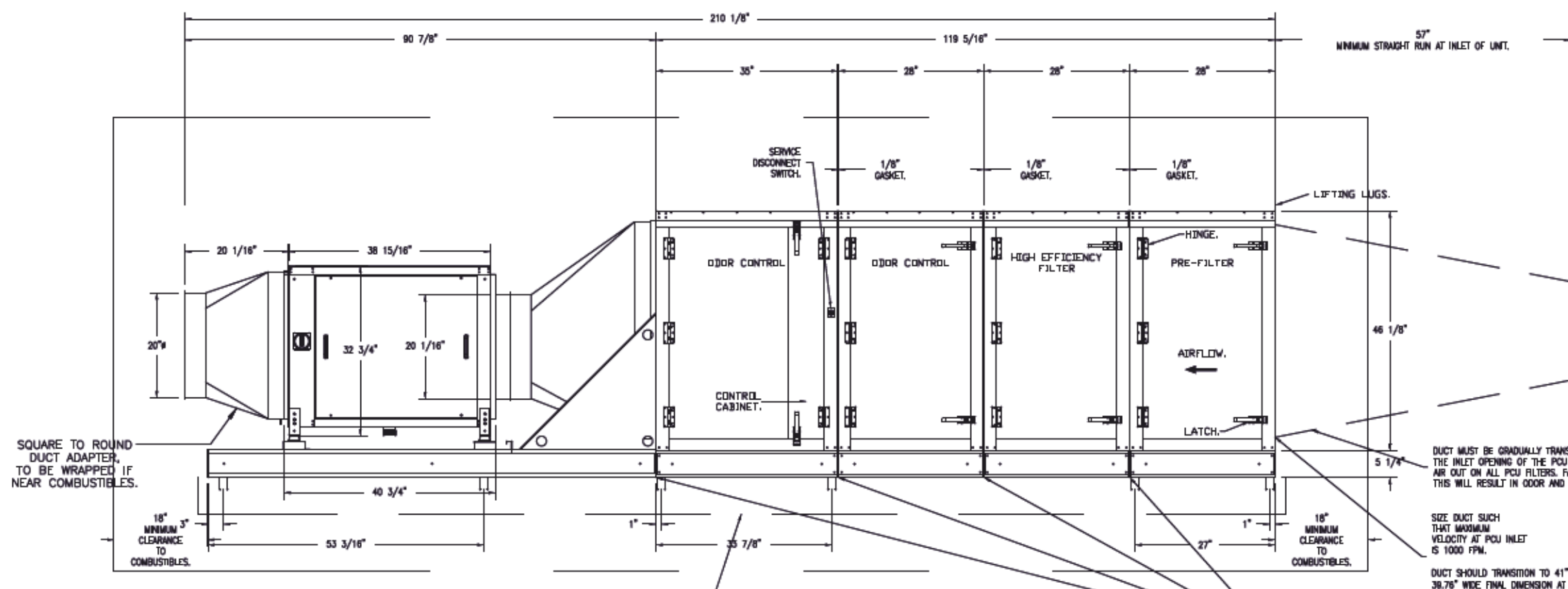
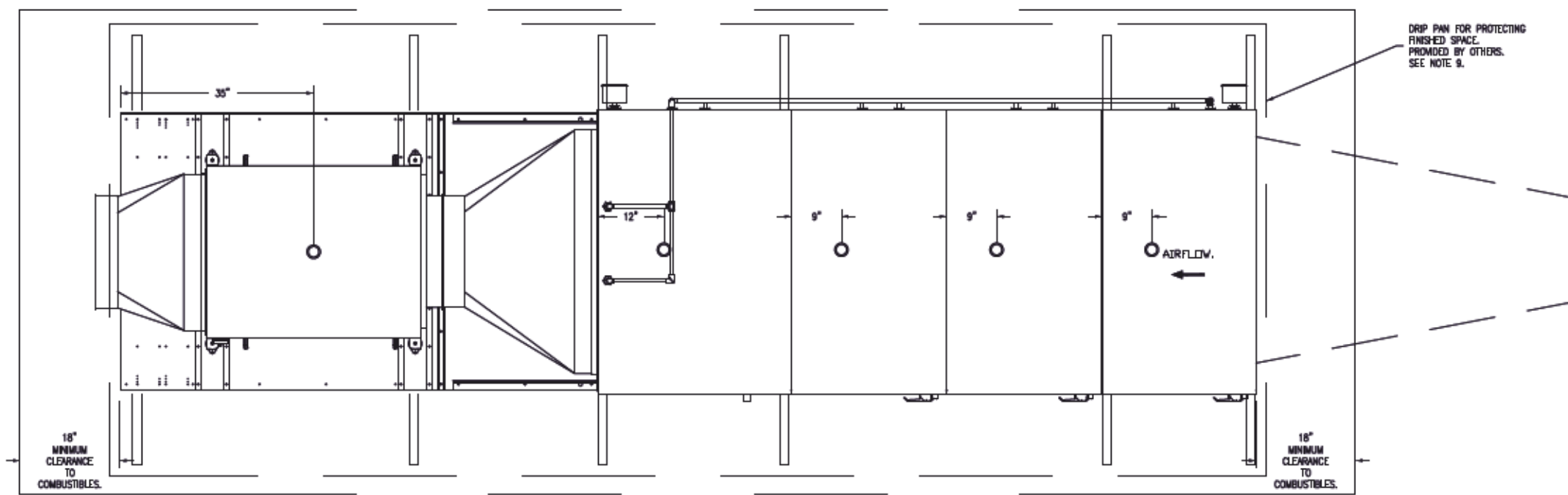
Drawn: CYL/MHP
 Checked: SKO

Project No. 2022448

Contents:
 KITCHEN EXHAUST SYSTEM DETAILS

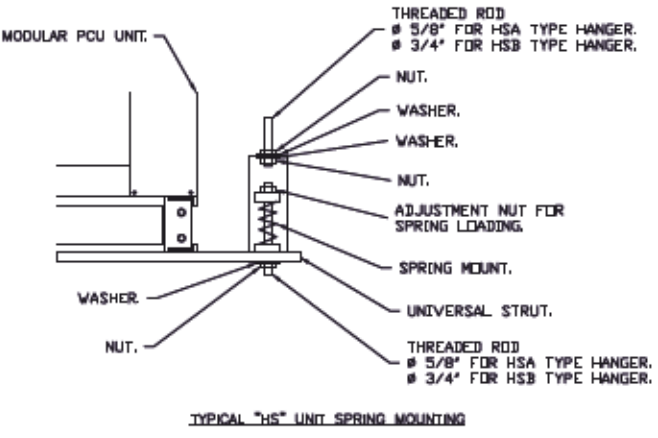
M806

DESCRIPTION:
 FAN #1 S07000-HS3-UL760 - EXHAUST FAN (PCU-D) - POLLUTION CONTROL UNIT WITH CODE PROTECTION FINE SYSTEM INSTALLATION INCLUDES STEEL PAN FILTER MEDIA, HIGH EFFICIENCY HEAVY DUTY FILTER MEDIA, AND DRAIN COOL CONTROL. MODULES IMPROVED WITH 30 GPM MEDIA AND INCLUDES DOWNSTREAM PROTECTION. ELECTRIC FINE DETECTOR AND MODULES ARE INCLUDED.



- NOTES:
- ALL DIMENSIONS ARE NOMINAL AND GIVEN IN INCHES.
 - CAUSE UL760 LISTED FOR GRABBLE DUCT INSTALLATION.
 - UL760 RATED DIRECT DRIVE SQUARE ONLINE FAN WITH 2075F HIGH EFFICIENCY MOTOR FLEW WHEEL.
 - WHEN USED IN NETWORK GRADE DUCT UNIT MUST BE INSTALLED DOWNSTREAM OF A LISTED HOOD ASSEMBLY OF A HEAVY LISTED HOOD ASSEMBLY OR A NETWORK COMPLIANT HOOD AS LONG AS IT IS INSTALLED WITH A FIRE SUPPRESSION SYSTEM THAT IS INTEGRATED WITH THE NFPA 96 COMPLIANT HOOD FINE SYSTEM.
 - CLEARANCE ON FILTER ACCESS SIDE OF THE PCU SHOULD BE A MINIMUM OF 36" FOR PROPER SERVICE OF THE UNIT. ALL OTHER SIDES SHOULD FOLLOW CLEARANCE TO COMBUSTIBLE GUIDELINES FOR CODE.
 - UNIT CONTAINS PRESSURE SENSITIZING SWITCH REFER TO ELECTRICAL SCHEDULES OR OPERATION MANUAL FOR MORE INFORMATION.
 - 1/2" WPT BRASS SUPPLIES IN EACH MODULE BASE. CORRECT INDIVIDUAL BRASS TO A COMMON 1/2" BRASS AND ROUTE TO GRABBLE INTERFERENCE.
 - FINE SYSTEM TO BE INSTALLED INDOORS OR IN A FINISHED SPACE. THE INSTALLING CONTRACTOR MUST PROTECT THE FINISHED SPACE TO PREVENT WATER DAMAGE ON THE FRONT OF A FINE SYSTEM EXCHANGE OR WHEN REGULAR CLEANING IS PERFORMED ON THE UNIT.
 - POLLUTION CONTROL UNIT IS RATED FOR INDOOR USE WHEN INSTALLED IN ACCORDANCE WITH THE SCHEDULE, INCLUDING THE USE OF A FINE RATED ENCLOSURE AS APPLICABLE.

PCU FILTER SPECIFICATIONS				
DESIGN QM - 2925				
MODULE	FILTER TYPE	FILTER EFFICIENCY	QTY	SP(CFLOW) (ft ³ /MIN)
1	CAPTIVE SOLO	HEV 8	10	20025K2 0.166
2	HIGH EFFICIENCY	HEV 15	10	20025K4 0.108
3	OC CHAUSTIC IMPROVED	N/A	10	20025K4 0.337
4	OC 100% CARBON	N/A	10	20025K4 0.337
				0.948



KITCHEN EXHAUST SYSTEM VENDOR DRAWINGS HAVE BEEN INCLUDED FOR REFERENCE PURPOSES ONLY. EQUIPMENT AND COMPONENTS AS DETAILED ABOVE TO BE SUPPLIED DIRECTLY BY THE OWNER FOR INSTALLATION UNDER THIS CONTRACT

REVISIONS	
NO.	DESCRIPTION



4641 Paragon Park Rd., Raleigh, NC 27616 PHONE: (919) 875-0420 FAX: (919) 875-0577 EMAIL: rjg40@captiveair.com

CHIPOTLE KING GEORGE HUB #4546
 SURREY, BC, V3T 4Y3

DATE: 1/5/2023
 DWG.#: 5600858
 DRAWN BY: JMB-40
 SCALE: 1/2" = 1'-0"
 MASTER DRAWING

SHEET NO. 8
 PROFESSIONAL SEAL OF S. J. KOOIMAN #37324
 2023-03-28

STUDIO INTERSEK+
 9880 E. Lakeview Drive, Unit 110, Burlington, ON L7R 1P5
 905-582-0830 www.intersekt.ca

Prism ENGINEERING
 saving you energy
 PTP Number: BC: 1000889
 230-3000 Graham Way
 Burnaby, B.C. V5G 4X5
 Tel: 604-298-4038
 Fax: 604-298-4143

COPYRIGHT 2019
 THIS DRAWING IS AN INSTRUMENT OF SERVICE AND AS SUCH REMAINS THE PROPERTY OF CHIPOTLE MEXICAN GRILL, INC. PERMISSION FOR USE OF THIS DOCUMENT IS LIMITED AND CAN BE EXTENDED ONLY BY WRITTEN AGREEMENT WITH CHIPOTLE MEXICAN GRILL, INC.

CHIPOTLE MEXICAN GRILL, INC.
 610 NEWPORT CENTER DR. SUITE 1300
 NEWPORT BEACH, CA 92660
 TELEPHONE: 714.264.7392
 INTERNET: WWW.CHIPOTLE.COM

STORE NO.: 52-4546
 KING GEORGE HUB
 9900 KING GEORGE BLVD., CRU #50
 SURREY, V3T 4Y3
 B.C., CANADA

DESIGN BULLETIN: DB-03/2022

ISSUE RECORD			
Rev	Date	Description	By
1	08/SEP/22	COORDINATION	PE
2	16/SEP/22	FOR LL APPROVAL	PE
3	02/NOV/22	IFP & IFT	PE
4	28/NOV/22	TENDER	PE
5	16/DEC/22	RE-ISSUED FOR BP	PE
7	20/MAR/23	RE-ISSUED FOR BP	PE
8	28/MAR/23	CONSTRUCTION	PE

REVISION SCHEDULE			
Rev	Date	Description	By
6	31/JAN/23	ADDENDUM M-01	PE

Project No. 2022448
 Contents:
 KITCHEN EXHAUST SYSTEM DETAILS
 M807