

EXISTING ROOF TOP UNIT SCHEDULE																							
UNIT ID	MANUFACTURER	MODEL	AREA SERVED	NOMINAL TONS	SUPPLY FAN			COOLING CAPACITY				GAS HEATING CAPACITY			ELECTRICAL DATA					THERMAL EFFICIENCY (%)	EER	OPERATING WEIGHT (LBS.)	REMARK
					SUPPLY AIR CFM	OUTSIDE AIR CFM	MAX. ESP (IN. OF W.G.)	TOTAL MBH	SENSIBLE MBH	AMBIENT TEMP. DB (°F)	ENTERING TEMP. DB / WB (°F)	INPUT MBH	OUTPUT MBH	GAS SUPPLY PRESSURES (IN. WC)	VOLTS	PH	HZ	MCA (A)	MOC (A)				
RTU-1 (E)	CARRIER (V.I.F)	48TCED08A2A5A0A0A0 (V.I.F)	SEE PLAN	7.5 (V.I.F)	3000 (V.I.F)	250	1.0 (VIF)	S.A.E	S.A.E	S.A.E	S.A.E	180 (V.I.F)	148 (V.I.F)	4-13 (V.I.F)	208-230(VIF)	3(VIF)	60(VIF)	46(VIF)	50(VIF)	82% (V.I.F)	11(VIF)	S.A.E	1-5

- NOTES:**
- S.A.E - SAME AS EXISTING, V.I.F - VERIFY IN FIELD
 - EXISTING RTU WITH ALL ACCESSORIES TO REMAIN SAME AND TO BE REUSED.
 - CONTRACTOR TO CONFIRM IF EXISTING RTU IS WORKING AT ITS 100% RATED CAPACITY.
 - CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND CONFIGURATION OF RTU ON SITE.
 - CONTRACTOR TO REBALANCE OUTSIDE AIR & RETURN AIR DAMPERS ON EXISTING RTU TO MATCH VALUES MENTIONED IN ABOVE TABLE.

EXHAUST FAN SCHEDULE													
TAG	QUANTITY	FLOW RATE CFM	EXTERNAL STATIC PRESSURE IN W.G.	SPEED RPM	ELECTRIC DATA				MAXIMUM LOUDNESS DBA	BASIS OF DESIGN		WEIGHTS (LBS)	REMARK
					V/PH/HZ	MCA (AMPS)	MOC (AMPS)	FLA (AMPS)		MANUFACTURER	MODEL		
TEF-1 (N)	1	70	0.5	838	115/1/60	0.4	15	0.29	40	GREENHECK	SP-A50-90-VG	12	1, 2, 3
TEF-2 (N)	1	70	0.5	838	115/1/60	0.4	15	0.29	40	GREENHECK	SP-A50-90-VG	12	1, 2, 3
EF-1 (N)	1	70	0.5	838	115/1/60	0.4	15	0.29	40	GREENHECK	SP-A50-90-VG	12	1, 2, 3

1) PROVIDE THERMAL OVERLOAD PROTECTION, BACKDRAFT DAMPER, AMCA SEAL & UL CERTIFIED.
2) PROVIDE ALL NECESSARY ACCESSORIES AS PER MANUFACTURER'S RECOMMENDATIONS.
3) INTERLOCK TEF-1 (N), TEF-2 (N) & EF-1 (N) WITH RTU-1 (E). COORDINATE WITH ELECTRICAL CONTRACTOR.

VENTILATION CALCULATION											
ROOM NAME	AREA	NUMBER OF PEOPLE/1000sq.ft AS PER IMC 2015	NUMBER OF PEOPLE IMC 2015	FINAL PEOPLE NO.	CFM AS PER IMC 2015		REQUIRED OA (CFM)	PROVIDED OA (CFM)	EXHAUST CFM		PROVIDED EXHAUST CFM
					CFM/PERSON	CFM/SQ.FT			CFM/SQFT/FIXTURE	CALCULATED CFM	
SALES/CUSTOMER/RETAIL AREA	709	15	11	11	7.5	0.12	170	250	0	0	210
BACK AREA	341	0	0	0	0	0.12	45	250	0	0	210
RESTROOM-1	52	0	0	0	0	0	0	250	70	70	210
RESTROOM-2	51	0	0	0	0	0	0	250	70	70	210
TOTAL	1153	-	-	11	-	-	215	250	-	140	210

AIR BALANCE					
UNIT	AREA SERVED	SUPPLY AIR CFM	OUTSIDE AIR CFM	RETURN AIR CFM	EXHAUST AIR CFM
RTU-1 (E)	SEE PLAN	3000 CFM	250 CFM	2750 CFM	-
EF-1 (N)	BACK HOUSE	-	-	-	70 CFM
TEF-1 (N)	RESTROOM-1	-	-	-	70 CFM
TEF-2 (N)	RESTROOM-2	-	-	-	70 CFM
TOTAL:		3000 CFM	250 CFM	2750 CFM	210 CFM
BUILDING PRESSURE:				40 CFM	POSITIVE

1) CONTRACTOR TO REBALANCE OUTSIDE AIR & RETURN AIR DAMPERS ON RTUS TO MATCH VALUES MENTIONED IN ABOVE TABLE.

AIR TERMINAL DEVICES SCHEDULE							
TAG	SIZE (IN.)	DESCRIPTION	CONSTRUCTION	NECK SIZE (IN.)	BASIS OF DESIGN		NOTES
					MANUFACTURER	MODEL	
S-1	24X24	SQUARE CONE DIFFUSER	ALUMINUM	10	TITUS	TMS	1,2,3,4,5
S-2	24X24	SQUARE CONE DIFFUSER	ALUMINUM	8	TITUS	TMS	1,2,3,4,5
S-3	12X12	SQUARE CONE DIFFUSER	ALUMINUM	6	TITUS	TMS	1,2,3,4,5
R-1	24X24	EGGCRATE GRILLE	ALUMINUM	16	TITUS	50F	1,2,3,4,5

1) PROVIDE FRAME FOR MOUNTING AIR DEVICE IN LAY-IN GRID CEILING UNLESS REFLECTED CEILING PLAN INDICATES HARD CEILING. IN AREAS WITH HARD CEILINGS, PROVIDE FRAMES FOR SURFACE MOUNTING.
2) UNLESS OTHERWISE NOTED, BRANCH DUCTS SERVING AIR DEVICES SHALL BE SAME SIZE AS NECK OF AIR DEVICE.
3) COORDINATE FINAL COLOR/FINISH WITH ARCHITECT/OWNER.
4) AIR DEVICE SHALL BE OF GALVANIZED FINISH WHEN INSTALLED ON EXPOSED DUCTWORK.
5) MAXIMUM NOISE CRITERION RATING < 30 DBA.
FOR ROUND NECK DIFFUSERS: NECK SIZES SHALL BE:-
15" DIA: 901-1100 CFM
14" DIA: 601-900 CFM
12" DIA: 401-600 CFM
10" DIA: 201-400 CFM
8" DIA: 101-200 CFM
6" DIA: 0-100 CFM

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NO.	DATE	PERMIT SET	DESCRIPTION
01	05/16/24		
DRAWN BY _____ NTE			
CHECKED BY _____ NTE			
ARCH. PROJECT NO.: _____			
SHEET NAME _____			
MECHANICAL SCHEDULES			
SHEET NUMBER _____			
M6.1			

ELECTRICAL SPECIFICATIONS (CONT.)

3) BOXES:

a. OUTLET BOXES: EXCEPT AS OTHERWISE REQUIRED BY CONSTRUCTION, DEVICES OR WIRING, BOXES SHALL BE STAMPED STEEL, 4 IN. SQUARE OR OCTAGON FOR FIXTURES. BOXES ABOVE CEILING SHALL BE 1-1/2 IN. DEEP. BOXES IN CEILING OR SLAB SHALL BE 3 IN. DEEP. BOXES IN WALL FOR FIXTURES SHALL BE 2-3/4 IN. DEEP. BOXES IN WALL FOR RECEPTACLES AND SWITCHES SHALL BE 1-1/2 IN. DEEP. FURNISH WITH RAISED COVERS AND FIXTURE STUDS WHERE REQUIRED. WITHOUT FIXTURE OR DEVICE: FURNISH BLANK COVER. OFFSET BACK-TO-BACK OUTLETS WITH MINIMUM 6 IN. SEPARATION.

b. JUNCTION AND PULL BOXES: GALVANIZED SHEET STEEL WITH SCREW-ON COVERS, EXCEPT AS NOTED. FURNISH WITH INSULATED SUPPORTS FOR CABLES. LOCATIONS SHALL BE AS NOTED OR REQUIRED AND ACCESSIBLE. PROVIDE BARRIERS IN NEW AND RENOVATED BOXES BETWEEN 120/208 VOLT AND 265/460 VOLT WIRING AND BETWEEN EMERGENCY AND NORMAL WIRING. FLOOR BOXES SHALL BE SUITABLE FOR CONDUIT AND DEVICES NOTED. RAISED OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH ABOVE FLOOR FITTING. TELEPHONE: BUSHED HOLE. POWER: DUPLEX RECEPTACLE OR OTHER AS NOTED. INCREASE SIZE TO SUIT AS NECESSARY. FLUSH OUTLETS SHALL BE HUBBELL #B2414 SERIES WITH FLUSH FLOOR FITTING FOR TELEPHONE AND FLUSH DUAL FLAP COVER WITH DUPLEX RECEPTACLE FOR POWER AS NOTED. INCREASE SIZE TO SUIT AS NECESSARY.

c. PROVIDE RACEWAYS ONLY AS HEREIN SPECIFIED, EXCEPT AS NOTED. RACEWAYS SHALL BE RUN CONCEALED, EXCEPT AS NOTED.

PROVIDE RACEWAY SUPPORT UTILIZING CEILING TRAPEZE STRAP HANGERS OR WALL BRACKETS. PROVIDE U-BOLTS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND CONNECTED TO ACCEPTABLE SUPPORTS. PROVIDE RISER CLAMPS AT EACH FLOOR LEVEL OF RISER RACEWAYS AND RESTING ON SLAB. FOR THROUGH-THE-FLOOR SYSTEMS, UTILIZE AN ASSEMBLY SIMILAR TO HUBBELL FIRE RATED POKE-THROUGH-FLOOR BOX SYSTEM. FOR ABOVE FLOOR FITTINGS TELEPHONE SHALL BE BUSHED HOLE AND POWER SHALL BE DUPLEX RECEPTACLE OR OTHER AS NOTED. PROVIDE SEPARATION BARRIER BETWEEN POWER AND TELEPHONE COMPARTMENTS. PROVIDE JUNCTION BOX ON UNDERSIDE OF FLOOR. PACK FITTING TO RESTORE FIRE RATING OF FLOOR.

SECURE ALL RACEWAYS TO SUPPORTS WITH PIPE STRAPS OR U-BOLTS. SPACING OF SUPPORTS SHALL BE A MINIMUM OF 10 FT ON CENTER FOR METALLIC RACEWAY AND AS REQUIRED FOR NONMETALLIC RACEWAY. SPACING SHALL BE 5 FT ON CENTER FOR WIREWAYS AND PER CODE AND AS NOTED FOR OTHERS. MOUNT SUPPORTS TO STRUCTURE MASONRY WITH TOGGLE BOLTS ON HOLLOW MASONRY, EXPANSION SHIELDS OR INSERTS IN CONCRETE AND BRICK, MACHINE SCREWS ON METAL, BEAM CLAMPS ON FRAMEWORK, WOOD SCREWS ON WOOD, AND PAN THROUGH STRAPS IN METAL DECK. NAILS, RAWL PLUGS OR WOOD PLUGS SHALL NOT BE PERMITTED. WHERE REQUIRED BY STRUCTURE, FURNISH THROUGH BOLTS AND FISHPLATES.

EXPOSED RACEWAYS SHALL BE RUN PARALLEL WITH OR AT RIGHT ANGLES TO WALLS. PROVIDE CLEARANCE WITH WATER, STEAM OR OTHER PIPING (MINIMUM 3 IN. SEPARATION FROM STEAM AND HOT WATER PIPES, EXCEPT 1 IN. FROM PIPE COVER AT CROSSINGS AND 18 IN. FOR PARALLEL RUNS). FOR HUNG CEILING OUTLETS, RUN IN HUNG CEILING AND CONNECT TO CEILING SUPPORT CHANNELS. IN MASONRY AND POURED CONCRETE, RUN VERTICALLY ONLY.

MAINTAIN GROUNDING CONTINUITY OF INTERRUPTED METALLIC RACEWAYS WITH GROUND CONDUCTOR, AND IN FLEXIBLE CONDUIT FOR FEEDERS AND MOTOR TERMINAL CONNECTIONS.

EMPTY RACEWAYS OVER 10 FT LONG: PROVIDE FISH OR PULL WIRE, GALVANIZED OR NYLON ROPE.

RIGID STEEL CONDUIT SHALL BE PERMITTED FOR FEEDERS AND BRANCH CIRCUITS. PAINT MALE THREADS OF FIELD-THREADED CONDUIT WITH GRAPHITE-BASE PIPE COMPOUND AND BUTT CONDUIT ENDS. TOUCH UP MARRED SURFACES AND FIELD-CUT THREADS. CRC-COLD GALVANIZED, EMT SHALL BE PERMITTED FOR BRANCH CIRCUITS ONLY, IN DRY LOCATIONS, DRY WALLS, HUNG CEILINGS, HOLLOW BLOCK WALLS AND FURRED SPACES. EMT SHALL NOT BE PERMITTED IN RAISED FLOORS. FLEXIBLE STEEL CONDUIT SHALL BE UTILIZED FOR SHORT CONNECTIONS WHERE RIGID CONDUIT IS IMPRACTICAL. FROM OUTLET BOX TO RECESSED LIGHTING FIXTURE: PROVIDE MINIMUM 4 FT AND MAXIMUM 6 FT LENGTHS. FOR FINAL CONNECTION TO MOTOR TERMINAL BOX, TRANSFORMER AND OTHER VIBRATING EQUIPMENT: PROVIDE WITH POLYVINYL SHEATHING AND GROUND CONDUCTOR. MINIMUM LENGTH: 18 IN. WITH SLACK. CONNECT GROUND CONDUCTOR TO ENCLOSURE OR RACEWAY AT EACH END. FOR EXPANSION JOINT CROSSINGS, CROSS AT RIGHT ANGLES AND ANCHOR ENDS.

CUT CONDUIT ENDS SQUARE. REAM SMOOTH. PAINT MALE THREADS OF FIELD THREADED RACEWAYS WITH GRAPHITE BASE PIPE COMPOUND. DRAW UP TIGHT WITH RACEWAY COUPLING.

ALL COUPLINGS SHALL BE COMPRESSION TYPE. NO SET SCREW FITTINGS.

EXPANSION FITTINGS SHALL BE INSTALLED AT RIGHT ANGLES WITH CLIP JOINT CENTERED IN EXPANSION JOINT. PROVIDE A LENGTH OF RUN IN ACCORDANCE MANUFACTURER'S RECOMMENDATIONS. PRESET FITTINGS SHALL ALLOW FOR TEMPERATURE VARIATION.

RACEWAYS PASSING THROUGH FIRE-RATED CONSTRUCTION: SEAL OPENING WITH FIRE SEALANT.

d. PROVIDE CABLE SUPPORTS IN ACCORDANCE WITH NATIONAL ELECTRIC CODE ARTICLE 300.19. CABLE SUPPORTS SHALL UTILIZE A ONE-PIECE PLUG WITH POZI-GRIP WEDGING PLUG AS MANUFACTURED BY OZ-GEDNEY. TYPE SF SHALL BE USED FOR ARMORED CABLE.

INSTALL CABLE SUPPORTS AT THE TOP OF A VERTICAL RISE AND PROVIDE INTERMEDIATE ADDITIONAL SUPPORTS AS REQUIRED TO LIMIT SUPPORTED CONDUCTOR LENGTHS TO NOT GREATER THAN THOSE SPECIFIED IN TABLE 300.19(A).

e. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING. OUTLET BOXES SHALL BE SET SQUARE AND TRUE WITH BUILDING FINISH. SECURE TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRON OR GROUT IN WITH MASONRY. VERIFY OUTLET LOCATIONS IN FINISHED SPACES WITH

ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISHES. PROVIDE BARRIERS BETWEEN SWITCHES CONNECTED TO DIFFERENT PHASES FOR VOLTAGES EXCEEDING 150 VOLTS TO GROUND.

d. PANEL, JUNCTION AND PULL BOXES SHALL BE LOCATED CLEAR OF OTHER TRADES. CONCEAL JUNCTION AND PULL BOXES IN FINISHED SPACES. WHERE NECESSARY, REROUTE RACEWAYS OR MAKE OTHER ARRANGEMENTS FOR CONCEALMENT. BOXES SHALL BE ACCESSIBLE. SUPPORT BOXES FROM BUILDING STRUCTURE, INDEPENDENT OF CONDUIT. PROVIDE FLOOR-TO-CEILING CHANNELS FOR MOUNTING ON DRYWALL AND LIGHTWEIGHT CONSTRUCTION. OUTLET BOXES FOR FIXTURES RECESSED IN HUNG CEILINGS SHALL BE ACCESSIBLE THROUGH OPENINGS CREATED BY REMOVAL OF FIXTURE. SECURE TO BLACK IRON SUPPORT. MOTOR TERMINAL BOXES: COORDINATE WITH MOTOR BRANCH CIRCUIT CONDUIT AND WIRING; ADD BOX VOLUME WHERE REQUIRED.

e. FIRE SEALANTS: PROVIDE FOR RACEWAYS AND WIRE PASSING THROUGH FLOOR SLOTS, SLEEVES OR OPENINGS IN FIRE-PARTITIONS ROOMS.

f. PERFORM CONTINUITY TESTS OF RESISTANCE OF FEEDER CONDUITS FROM SERVICE TO POINT OF FINAL DISTRIBUTION USING 1 CONDUCTOR RETURN. MAXIMUM RESISTANCE SHALL BE 25 OHMS.

9. WIRE AND CABLE:

a. PROVIDE WIRE AND CABLE COMPLETE WITH ACCESSORIES. SIZE REFERENCE SHALL BE AWG EXCEPT AS NOTED.

b. CONDUCTORS SHALL BE COPPER, ASTM STANDARD SOLID (NO. 10 AND SMALLER) OR STRANDED (NO. 8 AND LARGER). GENERAL USE CABLEING SHALL BE NO. 12 MINIMUM. AT 120 VOLTS AND OVER 100 FT CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM. AT 265 VOLTS AND OVER 200 FT CIRCUIT LENGTH PROVIDE NO. 10 MINIMUM.

c. CONTROL AND ALARM CABLING, EXCEPT AS NOTED, SHALL BE NO. 14 MINIMUM. AT 120 VOLTS AND OVER 200 FT CIRCUIT LENGTH PROVIDE NO. 12 MINIMUM. OTHER VOLTAGES AND PHASES: ADJUST CABLE SIZING AS REQUIRED TO MAINTAIN VOLTAGE DROP. INCREASE RACEWAY SIZES FOR LARGER WIRE AS REQUIRED.

d. INSULATION SHALL BE RUBBER AND THERMOPLASTIC MEETING ASTM AND IPCEA STANDARDS. TYPE THW OR THWN SHALL BE UTILIZED FOR FEEDERS AND BRANCH CIRCUITS EXCEPT AS NOTED. TYPE SFF-2 SHALL BE UTILIZED FOR BRANCH CIRCUITS LOCATED IN WIRING CHANNELS OF CONTINUOUS FLUORESCENT FIXTURES AND IN AMBIENT TEMPERATURES OVER 90 DEG C. FOR UNGROUNDED ISOLATED BRANCH CIRCUITS PROVIDE CROSS-LINKED POLYETHYLENE INSULATION (TYPE XHHW).

e. ARMORED CABLE (BX) SHALL BE UTILIZED FOR BRANCH CIRCUITS IN DRY HOLLOW LOCATIONS, HUNG CEILINGS, AND BLOCK WALLS. WHEN USED IN LIEU OF WIRING IN CONDUIT, STATE IN PROPOSAL THAT PRICE IS BASED UPON THE USE OF HOSPITAL GRADE 'BX'.

f. COLOR CODING SHALL BE AS FOLLOWS:

- 120/208 VOLT SYSTEM:
- BLACK FOR A PHASE
- RED FOR B PHASE
- BLUE FOR C PHASE

1) NEUTRAL WIRE SHALL UTILIZE WHITE OUTER COVERING THROUGHOUT. EQUIPMENT GROUND WIRE SHALL UTILIZE GREEN OUTER COVERING THROUGHOUT.

WHERE COLOR-CODED CABLE IS NOT AVAILABLE, CERTIFY IN WRITING AND REQUEST PERMISSION TO OVERLAP CONDUCTORS WITH 6 IN. OF COLOR TAPING IN ACCESSIBLE LOCATIONS.

g. PROVIDE FLAMEPROOF LINEN OR FIBER TAGS IN ACCESSIBLE LOCATIONS. FOR FEEDERS INDICATE FEEDER NUMBER, SIZE, PHASE AND POINTS OF ORIGIN AND TERMINATIONS. FOR CONTROL AND ALARM WIRING INDICATE TYPE (CONTROL OR ALARM), SIZE OF WIRE, AND POINTS OF ORIGIN AND TERMINATIONS.

h. TERMINATIONS, SPLICES AND TAPS UNDER 600 VOLTS: COPPER CONDUCTORS NO. 10 AND SMALLER SHALL UTILIZE COMPRESSION-TYPE OF TWIST-ON SPRING-LOADED CONNECTORS AND CLEAR NYLON-INSULATED COVERING. COPPER CONDUCTORS NO. 8 AND LARGER SHALL UTILIZE MECHANICAL BOLTED PRESSURE OR HYDRAULIC COMPRESSION TYPE USING MANUFACTURER'S RECOMMENDED TOOLING. CABLE LUGS AND CONNECTORS SHALL UTILIZE COMPRESSION TYPE OF SAME METAL AS CONDUCTOR. PROVIDE TO MATCH CABLE, WITH MARKING INDICATING SIZE AND TYPE. COPPER LUG CONNECTIONS TO BUS BARS: USE ANTISEIZE COMPOUND ON TANG.

i. NOT MORE THAN 3 LIGHTING OR CONVENIENCE OUTLET CIRCUITS SHALL BE INSTALLED IN ONE CONDUIT UNLESS OTHERWISE INDICATED. PULL NO THERMOPLASTIC WIRES AT TEMPERATURES LOWER THAN 32 DEG F. PROVIDE SEPARATE RACEWAYS FOR CONDUCTORS OF 120/208 AND 265/460 VOLT SYSTEMS, EXCEPT 460 VOLT MOTOR BRANCH CIRCUIT WIRING AND RELATED 120 VOLT CONTROL WIRING. THERMOPLASTIC WIRES SHALL NOT BE INSTALLED IN COMPUTER AREA RAISED FLOORS.

j. LEAVE WIRES WITH SUFFICIENT SLACK TO PERMIT MAKING FINAL CONNECTIONS.

k. PERFORM CONTINUITY AND INSULATION TESTS. MEGGER TEST 100 PERCENT OF FEEDERS, 10 PERCENT OF BRANCH CIRCUITS AND ALL MOTOR BRANCH CIRCUITS OVER 25 HP.

PERFORM TESTS PRIOR TO CONNECTING EQUIPMENT AND IN PRESENCE OF AUTHORIZED REPRESENTATIVES. SUBMIT WRITTEN REPORT OF RESULTS. CORRECT OR REPLACE CABLE TESTING BELOW MANUFACTURER'S STANDARDS.

11. WIRING DEVICES:

a. WIRING DEVICES SHALL BE SPECIFICATION GRADE UNLESS OTHERWISE SPECIFIED. ALL DEVICES SHALL BE FLUSH MOUNTED, UNLESS OTHERWISE NOTED. PROVIDE COMPLETE MATERIAL AND ACCESSORIES AS NOTED.

b. LOCAL WALL SWITCHES SHALL BE ROCKER TYPE, QUIET OPERATING, RATED 20 AMP, 120/208 VOLT, AC. SIMILAR TO LEVITON DECORA SERIES A5621 (SINGLE POLE), A5623 (3-WAY) AND A5624 (4-WAY).

c. STRAIGHT BLADE RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE DUPLEX CONVENIENCE 125 VOLTS, 2 POLE, 3 WIRE, U GROUND SLOT, DECORA SERIES BY LEVITON. GROUNDED, EXCEPT AS NOTED.

1) SINGLE GANG, RECESSED, DUPLEX RECEPTACLE: TAMPER RESISTANT, 2-POLE, 3-WIRE GROUNDING, 15A, 125V, NEMA 5-20R; LEVITON 689 SERIES (COLOR AS SPECIFIED BY ARCHITECT).

2) USB CHARGER/ DUPLEX TAMPER-RESISTANT RECEPTACLE: TAMPER RESISTANT.

e. DEVICE PLATES: SEE ARCHITECT FOR TYPE. FOR RECEPTACLES WITH OTHER THAN 120 VOLT, INSCRIBED VOLTAGE AVAILABLE.

f. COLORS: COORDINATE COLORS WITH ARCHITECT.

g. MOUNTING ORIENTATION OF RECEPTACLES (HORIZONTAL OR VERTICAL): COORDINATE WITH ARCHITECT.

12. LIGHTING FIXTURES:

a. FIXTURES TO BE AS SPECIFIED BY ARCHITECT AND SHALL BE COMPLETELY FACTORY ASSEMBLED, WIRED AND EQUIPPED WITH ALL NECESSARY SOCKETS, BALLASTS, SUPPORTING HARDWARE AND ACCESSORIES. REFER TO DRAWINGS FOR INDIVIDUAL FIXTURE DESCRIPTIONS.

b. FIXTURE CATALOG NUMBERS USED TO ILLUSTRATE EQUIPMENT TYPE DO NOT NECESSARILY DENOTE REQUIRED MOUNTING EQUIPMENT OR ACCESSORIES. PROVIDE ACCESSORIES TO SUIT.

c. BALLAST: CLASS P, HIGH POWER FACTOR, LOWEST AVAILABLE NEMA RATED NOISE LEVEL, E11 AND CBM APPROVED. ENERGY SAVING TYPE. TRIGGER START FOR 24-INCH LAMPS AND RAPID START FOR 48-INCH, TWO LAMP BALLASTS; NO THREE LAMP BALLASTS. BALLASTS SHALL BE ADVANCE MAGNETIC, UNIVERSAL OR EQUAL.

d. LED DRIVERS SHALL BE ELECTRONIC TYPE, LABELED AS COMPLIANT WITH RADIO FREQUENCY INTERFERENCE (RFI) REQUIREMENTS OF FCC TITLE 47, PART 15 AND COMPLY WITH NEMA SSL 1 "ELECTRONIC DRIVERS FOR LED DEVICES, ARRAYS OR SYSTEMS". LED DRIVERS SHALL HAVE A SOUND RATING OF "A", HAVE A MINIMUM EFFICIENCY OF 85% AND BE RATED FOR A THD OF LESS THAN 20% AT ALL INPUT VOLTAGES.

e. DIMMABLE LED DRIVERS SHALL BE CAPABLE OF DIMMING WITHOUT LED STROBING OR FLICKER. ACCESS THEIR FULL DIMMING RANGE. PROVIDE TYPE OF LED DRIVER AS PER LIGHTING FIXTURE SCHEDULE. DIMMABLE LED DRIVERS SHALL BE 0-10V WHERE NOT INDICATED.

f. CONTINUOUS ROW, TWO LAMP STRIP FIXTURES SHALL BE STAGGERED TYPE.

g. FLUORESCENT LIGHTING FIXTURES, INCLUDING GENERAL CONSTRUCTION, LAMPS AND BALLASTS SHALL CONFORM TO THE ENERGY EFFICIENCY REQUIREMENTS OF CONSOLIDATED EDISON CO. AND QUALITY FOR A UTILITY REBATE TO OWNER UNDER CON EDISON'S ENLIGHTENED ENERGY LIGHTING REBATE PROGRAM. CONTRACTOR SHALL COORDINATE REBATE PROGRAM WITH CON EDISON AND ARRANGE FOR CON EDISON TO PERFORM A SURVEY TO INVENTORY ALL EXISTING FIXTURES PRIOR TO DEMOLITION.

h. EXIT SIGNS SHALL BE PRECISION DIE-CAST ALUMINUM HOUSING WITH LASER-FORMED ACRYLIC LEGEND. EXIT SIGNS SHALL COMPLY WITH UL 924 AND BE MEA APPROVED. AC POWERED WITH PREMIUM LONG-LIFE NICKEL CADMIUM BATTERY WITH STANDARD UL LISTED 3-HOUR RUN TIME. PROVIDE WITH INTEGRAL AUTOMATIC CHARGER IN A SELF CONTAINED POWER PACK. LED INDICATOR WITH PUSH TO TEST SWITCH.

13. TELEPHONE CONDUIT SYSTEM:

a. PROVIDE COMPLETE SYSTEM OF: RACEWAYS AND ACCESSORIES, OUTLET BOXES, SLEEVES AND FISHWIRES.

b. EQUIPMENT SHALL CONFORM TO REQUIREMENTS OF TELEPHONE COMPANY.

c. OUTLETS SHALL BE:

1) WALL: 4 IN. SQUARE WITH BUSHED COVER PLATE.

d. PROVIDE FISHWIRES, IN RACEWAYS OVER 10 FT LONG.

e. CONDUIT SHALL BE 3/4 IN. MINIMUM. FURNISH EMPTY CONDUIT FROM OUTLET BOX TO BUSHED END THRU WALL 6" BELOW THE PLASTER CEILING.

f. FACE RACEWAYS IN ROOMS SHALL HUBBELL HBL500, HBL750 OR HBL2000 SERIES OR AS ACCEPTABLE.

14. GROUNDING AND BONDING:

a. PROVIDE GROUNDING SYSTEM IN ACCORDANCE WITH (2020) NATIONAL ELECTRICAL CODE WITH NC AMENDMENTS), AND THESE SPECIFICATIONS. THE WIRING SYSTEM SHALL BE INSTALLED AS REQUIRED TO PROVIDE A CONTINUOUSLY GROUNDED SYSTEM. WHERE FLEXIBLE CONDUIT IS USED FOR PART OF A CONDUIT RUN, EXCEPT LIGHTING BRANCH CIRCUITS, AN INSULATED GROUNDING CONDUCTOR SHALL BE PROVIDED IN THE CONDUIT AND CONNECTED TO GROUNDING BUSHINGS AT EACH END OF THE RUN.

b. USE EXOTHERMIC WELDING PROCESS FOR INACCESSIBLE CONNECTIONS.

c. EXTEND EXISTING SYSTEM GROUND TO INCLUDE ALL THE ELECTRICAL EQUIPMENT IN THE SCOPE OF WORK.

d. WHERE FLEXIBLE METALLIC CONDUIT IS USED AN INTERNAL BONDING CONDUCTOR SHALL BE INSTALLED.

e. IN ADDITION, FURNISH A SEPARATE INSULATED GREEN EQUIPMENT GROUND CONDUCTOR WHERE INDICATED ON DRAWINGS AND FOR THE FOLLOWING BRANCH CIRCUITS:

- 1) CIRCUITS SERVING ANY WALL BOX DIMMER.
- 2) CIRCUITS SERVING ANY ISOLATED GROUND RECEPTACLES. TERMINATE GROUND DIRECTLY AT AN EQUIPMENT GROUNDING CONDUCTOR TERMINAL OF THE SOURCE, OR AS OTHER WISE NOTED ON DRAWINGS.

3) CIRCUITS SERVING ANY DUPLEX OR SIMPLEX COMPUTER RECEPTACLES

4) ANY CIRCUIT SERVED VIA AN ISOLATION TRANSFORMER OR COMPUTER POWER DISTRIBUTION UNIT.

15. PANELBOARDS:

a. PANELBOARDS SHALL BE OF THE DEAD FRONT TYPE MANUFACTURED IN CODE GAUGE AND SIZE BOXES FOR MOUNTING AS INDICATED ON PLANS COMPLETE WITH TRIM, DOORS AND LOCKS. ALL LOCKS SHALL BE KEYPED ALIKE.

b. CIRCUIT BREAKERS SHALL BE OF THE BOLT-ON THERMAL MAGNETIC MOLDED CASE TYPE, AND SHALL HAVE THE TRIP RATINGS AND NUMBER OF POLES SHOWN IN SCHEDULES ON THE CONTRACT DRAWINGS. FOR BLANK (SPACE) COMPARTMENTS, PROVIDE FULL RATED BUS. MINIMUM GUTTER SPACES SHALL BE 5-3/4" SIDES, TOP AND BOTTOM, INCREASE FOR THROUGH FEEDERS. PROVIDE 25% COPPER GROUND BUS AND 100% COPPER NEUTRAL BUS AND INCREASE NEUTRAL BUS INDICATED.

c. LOCKING TABS SHALL BE PROVIDED ON ALL CIRCUIT BREAKERS SERVING EMERGENCY LIGHTING, FIRE ALARM SYSTEM, SECURITY SYSTEMS AND OTHER EMERGENCY OR CRITICAL EQUIPMENT AND AS NOTED ON THE CONTRACT DRAWINGS. A TOTAL OF 5 SPARE LOCKING TABS SHALL BE FURNISHED TO THE OWNER.

d. BUSES SHALL BE HARD DRAWN COPPER OF 98 PERCENT CONDUCTIVITY AND SHALL HAVE CROSS SECTIONAL AREAS LARGE ENOUGH TO LIMIT THE TEMPERATURE RISE, WHEN CARRYING FULL LOAD, TO 35 DEGREES C. ABOVE AN AMBIENT INSIDE THE ENCLOSURE OF 55 DEGREES C. AS DEFINED IN IEEE STANDARD RULES. MAIN BUS CAPACITY SHALL BE AS SHOWN ON THE CONTRACT DRAWINGS.

e. ENCLOSURES SHALL BE SURFACE OR FLUSH AS INDICATED. TRIMS SHALL BE SECURED TO PANEL WITH MACHINE SCREWS. COVERS SHALL BE HINGED DOOR-IN-DOOR CONSTRUCTION WITH CYLINDER LOCKS AND CATCHES. LOCKS MUST BE COMPATIBLE WITH BUILDING STANDARD KEY SYSTEM AND WHEN NONE EXISTS, THEY SHALL BE SIMILAR TO A YALE NO. 9111 KEY.

f. DISTRIBUTION AND SUB-DISTRIBUTION PANELBOARD SHALL BE A MINIMUM OF 30" WIDE AND 10" DEEP.

g. ALL STANDARD PANELBOARDS SHALL BE A MINIMUM OF 20" WIDE AND 5 3/4" DEEP.

h. FURNISH ALL PANELBOARDS WITH FEED-THRU LUGS UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

i. ALL NEW PANELBOARDS SHALL BE PROVIDED WITH AN ENGRAVED WHITE CORE LAMACOID NAMEPLATE, WITH 3/4 IN. WHITE LETTERING ON A BLACK BACKGROUND, WITH DESIGNATION LISTED (PANELBOARD NAME), FASTENED WITH EPOXY CEMENT OR OVAL HEAD CHROME PLATED MACHINE SCREWS.

j. THE CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN AND PROVIDED INSIDE EACH PANEL DOOR TO INDICATE EQUIPMENT AND/OR AREA SERVED. DIRECTORY HOLDER SHALL BE METAL FRAME WITH CLEAR PLASTIC, TRANSPARENT COVER. THE TYPEWRITTEN LIST INDICATING CIRCUIT NUMBERS, OUTLETS SUPPLIED AND THEIR LOCATIONS SHALL BE PROVIDED.

k. TIE-BARS SHALL NOT BE USED TO CREATE MULTI-POLE CIRCUITS. MAXIMUM 42 CIRCUITS ALLOWED.

l. ONLY ONE WIRE SHALL BE INSTALLED UNDER EACH CIRCUIT BREAKER LUG.

m. SHORT CIRCUIT RATING OF PANELBOARDS SHALL NOT BE LESS THAN AS INDICATED ON THE CONTRACT DRAWINGS OR SPECIFIED HEREIN. WHERE NOT INDICATED OR SPECIFIED THE MINIMUM SHORT CIRCUIT RATING SHALL BE EQUAL TO THE INTERRUPTING CAPACITY OF THE LOWEST RATED CIRCUIT BREAKER IN THE PANELBOARD, BUT IN NO CASE LESS THAN 10,000 AMPERES R.M.S. SYMMETRICAL FOR 208Y/120 VOLT SYSTEM. SERIES RATED PANELBOARDS SHALL BE USED TO ACHIEVE REQUIRED SHORT CIRCUIT RATINGS.

n. FOR ALL EXISTING PANELBOARDS, CONTRACTOR SHALL PROVIDE NEW CIRCUIT BREAKERS TO REPLACE EXISTING AS REQUIRED AS INDICATED ON DRAWINGS.

i.i. SMOOTHIE KING

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ELECTRICAL SPECIFICATION SHEET 2 OF 2

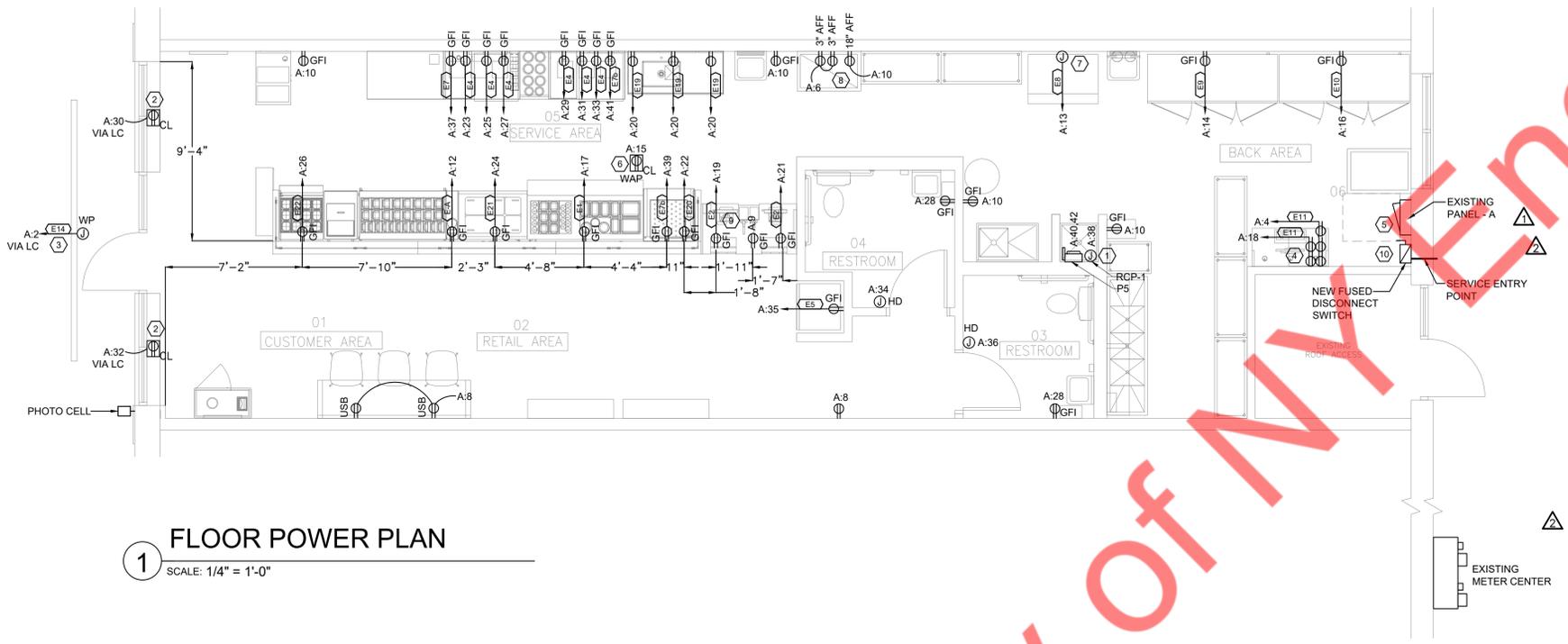
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E0.3

- POWER PLAN GENERAL NOTES:**
- ELECTRICIAN TO RUN SEPARATE CAT-6 PLENUM-RATED DATA LINES FROM INDIVIDUAL JACKS TO NETWORK BOARD THROUGH APPROPRIATE SIZED CONDUIT AND TERMINATE ENDS SO THEY CAN BE PLUGGED INTO PROPER LOCATION ON NETWORK BOARD.
 - PROVIDE TOTAL OF (4) 1 1/2" CONDUITS IN TRENCH UNDER COUNTER - (3) FOR CURRENT EQUIPMENT W/ (1) FOR FUTURE EQUIPMENT - SEE FLOOR PLAN AND DEMO PLAN.
 - ALL DATA JACKS TO HAVE DUPLEX CONFIGURATION UNLESS NOTED OTHERWISE.
 - EXPOSED AND CONCEALED EMT SHALL BE PERMITTED FOR BOTH EXPOSED AND CONCEALED WORK ACCORDING TO NEC 358.10(A) (1 TO 3).
 - WHEN INSTALLED IN ACCORDANCE WITH 358.10(B), IN CONCRETE, IN DIRECT CONTACT WITH THE EARTH, OR IN LOCATIONS PRONE TO STRONG CORROSIVE INFLUENCES.
 - IN REGIONS THAT ARE BOTH DRY AND RAINY.
 - AS LONG AS OTHER ARTICLES IN THIS CODE PERMIT IT, IN ANY HAZARDOUS (CLASSIFIED) PLACE.
 - E.C. TO VERIFY WITH AHJ FOR ANY OTHER INSTALLATION REQUIREMENTS FOR EXPOSED CONDUIT.

ELECTRICAL EQUIPMENT SCHEDULE										
TAG	QTY.	DESCRIPTION	MANUFACTURER	MODEL	AMPS	VOLTAGE	PHASE	CONNECTION	OUTLETS HEIGHT	REMARK
E1	1	TURBO AIR PST-72 PREP TABLE	TURBO AIR	SK-PST-72-ASSY	5.7	115	1	NEMA 5-15P	18" AFF	DED. CIR.
E2	2	POS W/ BRINK SOFTWARE	SKFI	-	-	-	-	-	18" AFF	DED. CIR.
E4	6	BLENDED STATION ADVANCE ON-COUNTER BLENDERS	VITA-MIX	36050-3813	15	120	1	20 AMP OUTLET	42" AFF	DED. CIR.
E5	1	GLASS DOOR MERCHANDISER COOLER	TURBO AIR	TGM-22RV(B)	2.2	115	1	NEMA 5-15P	18" AFF	DED. CIR.
E7	1	TURBO AIR MUR-28L-N U. C. FREEZER	TURBO AIR	SK-MUR-28L-N6_R3-1	2.1	115	1	NEMA 5-15P	18" AFF	DED. CIR.
E7b	2	TURBO AIR MUR-28L-N U. C. REFRIGERATOR	TURBO AIR	SK-MUR-28L-N6_R3-1	2.1	115	1	NEMA 5-15P	18" AFF	DED. CIR.
E8	1	ICE CUBER MACHINE	HOSHIZAKI	KM-660MAJ	15.2	115	1	HARDWIRE	-	-
E9	1	REACH-IN REFRIGERATOR ON CASTORS	TURBO AIR	ISR-72SD	5.7	115	1	NEMA 5-15P	12" AFF	DED. CIR.
E10	1	REACH-IN FREEZER ON CASTORS	TURBO AIR	YSF-72SD	5.7	115	1	NEMA 5-20P	12" AFF	DED. CIR.
E11	1	PERSONAL COMPUTER	-	-	-	-	-	-	-	DED. CIR.
E14	2	EXTERIOR SIGNAGE	TBD	TBD	-	-	-	-	-	DED. CIR.
E19	5	4 LED MENU BDS & 1 LED INSERT BOARD	COLORMARK	-	4	115	1	DUPLEX OUTLET	6" ABOVE CEILING	-
E20	1	AUTOMATIC WATER DISPENSER	VITA-MIX	ITEM # 066032	-	-	-	DUPLEX OUTLET	18" AFF	-
E21	1	GLOBAL 6D DIPPING FREEZER	GLOBAL	SKGBL6DF	4.5	115	1	NEMA 5-15P	18" AFF	-
E22	1	TURBO AIR MST-28-N	TURBO AIR	SK-MST-28-N-ASSY	3.8	115	1	NEMA 5-15P	18" AFF	DED. CIR.
E-A	1	HEATED DIPPERWELL	-	-	-	-	-	NEMA 5-15P	18" AFF	DED. CIR.

- NOTES:**
- REFER TO THE PANEL SCHEDULE FOR CIRCUIT NUMBER INFORMATION.
 - REFER TO MANUFACTURER'S INSTALLATION MANUAL FOR POWER AND CONNECTION REQUIREMENTS.
 - CONTRACTOR TO COORDINATE WITH MANUFACTURER INSTALLATION MANUAL FOR ALL POWER AND COMMUNICATION CONNECTION REQUIREMENTS.

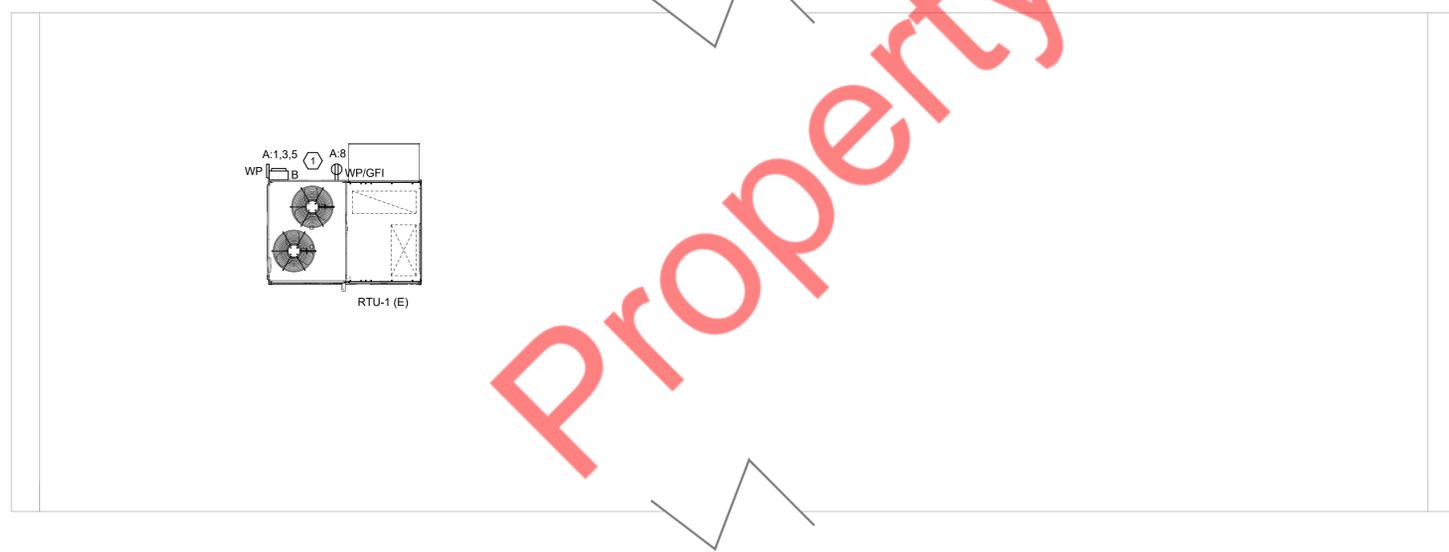


1 FLOOR POWER PLAN
SCALE: 1/4" = 1'-0"

- KITCHEN EQUIPMENT CONNECTION SCHEDULE GENERAL NOTES:**
- THIS SCHEDULE SHOWS ALL CIRCUITING INFORMATION FOR KITCHEN / FOOD SERVICE EQUIPMENT. REFER TO KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS FOR ADDITIONAL INFORMATION SUCH AS ROUGH-IN INFORMATION AND OTHER REQUIREMENTS.
 - NEMA XXX DESIGNATES NEMA PLUG TYPE AND AMPERAGE. 'HPRS' DESIGNATES HORSEPOWER-RATED SWITCH, 'FD' DESIGNATES A FUSED DISCONNECT, 'NP' DESIGNATES A NON-FUSED DISCONNECT, 'L' DESIGNATES LOCKABLE CIRCUIT BREAKER.
 - VERIFY ALL INSTALLATION REQUIREMENTS WITH FOOD SERVICE CONSULTANT AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.
 - VERIFY ALL MCA AND MOCIP REQUIREMENTS WITH SUBMITTED AND APPROVED EQUIPMENT PRIOR TO ELECTRICAL ROUGH-IN.
 - VERIFY NEMA RECEPTACLE CONFIGURATIONS WITH EQUIPMENT VENDOR PRIOR TO ELECTRICAL ROUGH-IN.
 - WHERE A CONFLICT OCCURS BETWEEN FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS AND THESE DRAWINGS, THE FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS SHALL GOVERN.
 - CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL CONDUIT, WIRE, SUPPORT SYSTEM, DISCONNECTS, AND OUTLETS TO ALLOW FOR A COMPLETE CODE COMPLIANT KITCHEN INSTALLATION AS INDICATED BY ALL ELECTRICAL AND FOOD SERVICE / KITCHEN DESIGNER'S DRAWINGS AND SPECIFICATIONS UNLESS NOTED OTHERWISE.
 - ALL ELECTRICAL EQUIPMENT LOCATED ON WALLS OF PRODUCTION KITCHEN AREAS SHALL BE A MINIMUM OF 48" AFF UNLESS NOTED OTHERWISE. ALL ELECTRICAL EQUIPMENT LOCATED ABOVE COUNTERS OF KITCHEN AREAS SHALL BE 6" ABOVE COUNTER UNLESS NOTED OTHERWISE. ALL ELECTRICAL EQUIPMENT LOCATED BELOW COUNTERS AND WITHIN CASEWORK OF KITCHEN AREAS SHALL BE 6" BELOW THE TOP OF COUNTERS UNLESS NOTED OTHERWISE.
 - REFER TO KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS FOR ADDITIONAL ROUGH-IN INFORMATION INCLUDING EXACT ROUGH-IN LOCATION AND MOUNTING HEIGHTS OF ELECTRICAL ROUGH-INS AND DEVICES. ANY DIMENSIONS NOTED ON THE KITCHEN DESIGNER'S / FOOD SERVICE DRAWINGS TAKE PRECEDENCE.
 - CONTRACTOR SHALL ENSURE THAT ALL CONDUIT ROUTED THROUGH OR NEAR CASEWORK SHALL NOT INTERFERE IN ANY WAY WITH INTENDED USE OR SERVICING OF EQUIPMENT OR COUNTERS.
 - ALL RECEPTACLES IN KITCHEN AREA SHALL BE GFCI PROTECTED. E.C. SHALL PROVIDE AND INSTALL GFCI CIRCUIT BREAKERS FOR ALL CIRCUITS FEEDING KITCHEN EQUIPMENT REQUIRING GFCI PROTECTION THAT ARE INACCESSIBLE, BEFORE OR AFTER APPLIANCE HAS BEEN INSTALLED, IF RECEPTACLE DOESN'T PROVIDE GFCI PROTECTION. NEC 210.8 AND 422.5(A).
 - LOCATIONS OF DISCONNECTS FOR EACH PIECE OF EQUIPMENT MAY NOT BE SHOWN ON PLANS. IF DISCONNECT FOR EQUIPMENT IS NOT SHOWN, CONTRACTOR TO FIELD COORDINATE LOCATION IN ACCORDANCE WITH CODE.
 - CONTRACTOR SHALL LIMIT THE AMOUNT OF EXPOSED CONDUIT. ANY EXPOSED CONDUIT SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT OR RIGID GALVANIZED STEEL CONDUIT.
 - COORDINATE EXACT LOCATION OF ALL REMOTE CONDENSING UNITS WITH HVAC AND FOOD SERVICE DRAWINGS.
 - ALL ENERGIZED EQUIPMENT AND ALL WIRING DEVICES LOCATED UNDER A HOOD SHALL SHUNT TRIP UPON ACTIVATION OF HOOD FIRE SUPPRESSION SYSTEM.
 - FUSED DISCONNECTS SHALL HAVE FUSES SIZED AS LISTED ON EQUIPMENT NAMEPLATE, OTHERWISE MATCH UPSTREAM OVERCURRENT DEVICE IF NO MAXIMUM OVER CURRENT SIZE LISTED ON EQUIPMENT, UNLESS NOTED OTHERWISE.

- ELECTRICAL FLOOR POWER PLAN KEY NOTES:**
- E.C. TO COORDINATE THE EXACT LOCATION AND ELECTRICAL REQUIREMENT OF PLUMBING EQUIPMENT WITH PLUMBING CONTRACTOR. PROVIDE THE ELECTRICAL CONNECTION AS PER PLUMBING EQUIPMENT REQUIREMENT IN THE FIELD. INFORM ENGINEERS FOR ANY DISCREPANCY FOUND.
 - PROVIDE CEILING MOUNTED RECEPTACLES FOR SHOW WINDOW AS REQUIRED BY CODE. VERIFY EXACT LOCATION OF OUTLETS WITH ARCHITECT.
 - JUNCTION BOX WITH TOGGLE DISCONNECT PER NEC FOR CONNECTION TO BUILDING MOUNTED SIGNAGE. VERIFY EXACT LOCATION AND CONNECT TO SIGN PER MANUFACTURER'S INSTRUCTION.
 - PROVIDE DEDICATED CIRCUIT / GROUND INSULATED AND ISOLATED DATA / PHONE JACK.
 - CLEAR WORKING & DEDICATED SPACE SHALL BE PROVIDED FOR THE ELECTRICAL PANELS IN ACCORDANCE WITH THE NEC 110.26.
 - E.C. SHALL COORDINATE WITH ARCHITECT/OWNER/VENDOR FOR EXACT LOCATION OF CEILING MOUNTED RECEPTACLE FOR INTERIOR ACCESS POINT IN THE FIELD.
 - PROVIDE LOCKOUT ON BREAKER IN PANEL.
 - E.C. SHALL COORDINATE WITH ARCHITECT/OWNER FOR REQUIREMENTS OF THESE THREE DUPLEX RECEPTACLE IN THE KITCHEN. PROVIDE IF REQUIRED.
 - PROVIDE DEDICATED CIRCUIT / GROUND INSULATED / ISOLATED AND DATA JACKS.
 - PROVIDE NEW FUSED DISCONNECT SWITCH 200A, 208Y/120V, 3 PHASE FOR EXISTING PANEL "A" 200A, MLO, 208Y/120V, 3 PHASE. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER IN FIELD.

- ELECTRICAL ROOF POWER PLAN KEY NOTES:**
- E.C. TO VERIFY OPERABLE CONDITIONS, RATINGS AND EXACT LOCATION OF THE MECHANICAL EQUIPMENTS IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.



2 ROOF POWER PLAN
SCALE: 1/4" = 1'-0"

SMOOTHIE KING

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SHEET NAME: _____
ELECTRICAL POWER PLAN
SHEET NUMBER: _____
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PANEL: A (EXISTING)												MOUNTING: SURFACE			
208Y/120	VOLTS	PHASE		3						DEMAND LOAD	53.91	PANEL LOCATION: BOH			
200A	MLO	WIRE		4						DEMAND CURRENT	149.80	FED FROM: EXISTING METER			
NOTE: L : LIGHTING, H : HVAC LOAD, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)															
CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA)			MINIMUM BRANCH CIRCUIT	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.	
						A	B	C							
1			H	5.52		6.72			2#12 + 1#12G, 3/4" C	1.20	L	EXTERIOR SIGNAGE	20**	2	
3	50/3P	RTU-1 (E)	H	5.52	EXISTING	6.06			2#12 + 1#12G, 3/4" C	0.54	R	E11 - PERSONAL COMPUTER	20**	4	
5			H	5.52			6.72		2#12 + 1#12G, 3/4" C	1.20	R	IPAD AND PRINTER RECEPTACLE	20**	6	
7	20	INTERIOR LIGHTING	L	1.00	2#12 + 1#12G, 3/4" C	1.72			2#12 + 1#12G, 3/4" C	0.72	R	RETAIL AREA GENERAL & SERVICE RECEPTACLES	20**	8	
9	20	POS RECEPTACLE	R	0.18	2#12 + 1#12G, 3/4" C		1.08		2#12 + 1#12G, 3/4" C	0.90	R	KITCHEN GENERAL RECEPTACLES	20**	10	
11	20	TIME CLOCK	L	0.50	2#12 + 1#12G, 3/4" C			1.00	2#12 + 1#12G, 3/4" C	0.50	E	E-A - HEATED DIPPERWELL	20**	12	
13	20**	E8 - ICE CUBER MACHINE	E	1.82	3#12 + 1#12G, 3/4" C	2.50			2#12 + 1#12G, 3/4" C	0.68	E	E9 - REACH-IN REFRIGERATOR	20**	14	
15	20**	ACCESS POINT CEILING REC.	R	0.18	2#12 + 1#12G, 3/4" C		0.86		2#12 + 1#12G, 3/4" C	0.68	E	E10 - REACH-IN FREEZER	20**	16	
17	20**	E1 - PST-72 PREP TABLE	E	0.68	2#12 + 1#12G, 3/4" C			1.04	2#12 + 1#12G, 3/4" C	0.36	O	E11 - PERSONAL COMPUTER	20**	18	
19	20**	E2 - POS W/ BRINK SOFTWARE	O	1.20	2#12 + 1#12G, 3/4" C	1.74			2#12 + 1#12G, 3/4" C	0.54	O	E19 - 4 LED MENU BDS & 1 LED INSERT BOARD	20**	20	
21	20**	E2 - POS W/ BRINK SOFTWARE	O	1.20	2#12 + 1#12G, 3/4" C		1.38		2#12 + 1#12G, 3/4" C	0.18	O	E20 - AUTOMATIC WATER DISPENSER	20**	22	
23	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C			2.34	2#12 + 1#12G, 3/4" C	0.54	E	E21 - DIPPING FREEZER	20**	24	
25	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C	2.26			2#12 + 1#12G, 3/4" C	0.46	E	E22 - MST-28-N	20**	26	
27	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C		2.16		2#12 + 1#12G, 3/4" C	0.36	R	RESTROOM GFI RECEPTACLES	20**	28	
29	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C			3.60	2#12 + 1#12G, 3/4" C	1.80	L	SHOW WINDOW RECEPTACLE	20**	30	
31	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C	3.00			2#12 + 1#12G, 3/4" C	1.20	L	SHOW WINDOW RECEPTACLE	20**	32	
33	20**	E4 - BLENDING STATION	E	1.80	2#12 + 1#12G, 3/4" C		2.80		2#12 + 1#12G, 3/4" C	1.00	O	HAND DRYER	20**	34	
35	20**	E5 - MERCHANDISER COOLER	E	0.26	2#12 + 1#12G, 3/4" C			1.26	2#12 + 1#12G, 3/4" C	1.00	O	HAND DRYER	20**	36	
37	20**	E7 - U.C. FREEZER	E	0.25	2#12 + 1#12G, 3/4" C	0.75			2#12 + 1#12G, 3/4" C	0.50	O	RCP-1	20**	38	
39	20**	E7b - U.C. REFRIGERATOR	E	0.25	2#12 + 1#12G, 3/4" C		4.75		2#12 + 1#12G, 3/4" C	4.50	O	PS - WATER HEATER	60/2P**	40	
41	20**	E7b - U.C. REFRIGERATOR	E	0.25	2#12 + 1#12G, 3/4" C		4.75		2#12 + 1#12G, 3/4" C	4.50	O	PS - WATER HEATER	60/2P**	42	
						18.69	19.09	20.71							
LOAD CLASSIFICATION				CONNECTED LOAD (KVA)			DEMAND FACTOR			DEMAND LOAD (KVA)			PANEL TOTAL LOAD		
TOTAL LIGHTING	L		5.70	125%		7.13				TOTAL CONNECTED LOAD	58.49	KVA			
TOTAL RECEPTACLE	R		4.08	100%		4.08				TOTAL DEMAND LOAD	53.91	KVA			
TOTAL HVAC	H		16.56	100%		16.56				TOTAL CONNECTED CURRENT	162.54	AMP			
TOTAL MOTOR	M		0.00	100%		0.00				TOTAL DEMAND CURRENT	149.80	AMP			
TOTAL EQUIPMENTS	E		17.17	65%		11.16									
TOTAL OTHER	O		14.98	100%		14.98									

PANEL SCHEDULE GENERAL NOTES:

- BREAKERS IN EXISTING PANEL SHALL BE REPLACED WITH THE BREAKER RATING AS SHOWN ON THE PANEL SCHEDULE.
- E.C. TO VERIFY THE RATINGS AND OPERABLE CONDITIONS OF EXISTING PANELS AND BREAKERS IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.

PANEL SCHEDULE GENERAL NOTES:

- ELECTRICAL CONTRACTOR SHALL VERIFY THE BREAKER AND CABLE RATING WITH EQUIPMENT SUPPLIER/OWNER AND ACCORDINGLY UPDATE THE BREAKER RATING CABLE SIZE IN FIELD.
- GFI MARKED ON THE POWER PLAN INDICATES THAT THE CIRCUIT SHALL BE GFCI PROTECTED. E.C. SHALL PROVIDE GFCI BREAKER FOR THE GFI MARKED RECEPTACLES. IF EITHER RECEPTACLE IS NOT ACCESSIBLE OR NOT AVAILABLE.
- PROVIDE HACR BREAKER FOR HVAC UNITS. COORDINATE WITH HVAC DRAWINGS.
- PROVIDE LOCKING DEVICES ON CIRCUIT BREAKER WHERE EVER REQUIRED.
- E.C. TO VERIFY SCOPE OF WORK WITH OWNER/ARCHITECT. PRIOR TO BID.
- VERIFY EXACT POWER DISTRIBUTION IN FIELD.

PANEL SCHEDULE ABBREVIATIONS:

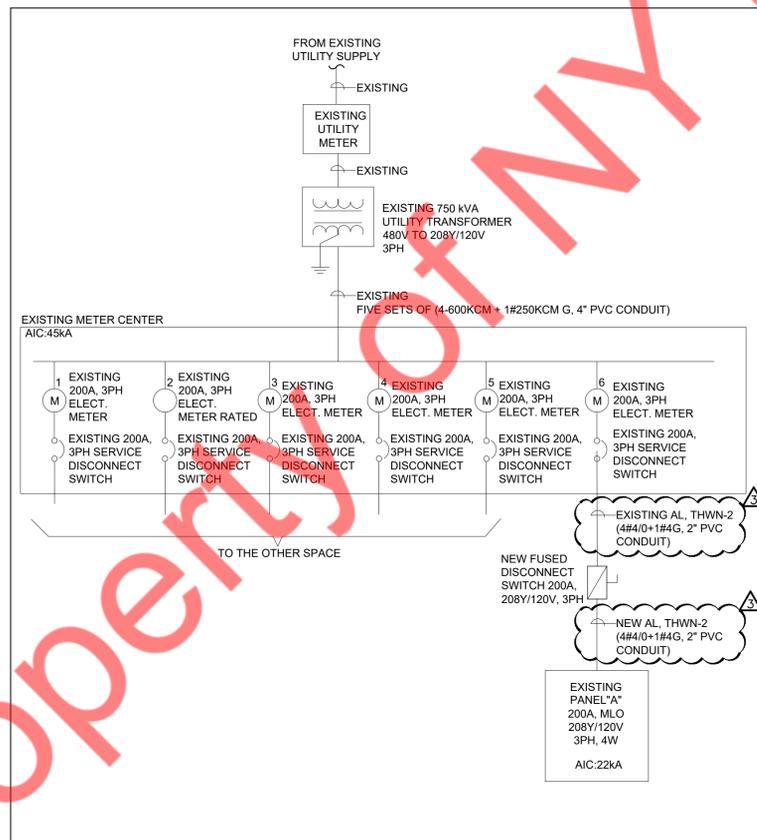
- L=LIGHTING
R=RECEPTACLE
H=HVAC
M=MOTOR
O=OTHER
- (**) NEW BREAKER IN EXISTING PANEL
(***) PROVIDE HACR BREAKER

	FAULT CURRENT CALCULATIONS			
	LOCATION OF FAULT CURRENT			
	X1	X2	X3	X4
FEEDER LENGTH	-	50 ft	40 ft	3 ft
FEEDER SIZE	-	600	400	4/0
QYT (PER PHASE)	-	5	1	1
TYPE	-	Three-conductor cable	Three-conductor cable	Three-conductor cable
CONDUIT	-	Non-magnetic	Steel	Steel
WIRE	-	AL, 600V	AL, 600V	AL, 600V
I total s.c. (L-L-L)	42289A	37193A	17648A	16979A
V (L-L)	208V	208V	208V	208V
KVA	750	-	-	-
VOLTAGE secondary	208	-	-	-
%Z	5.47	-	-	-
%Z total	-10% (Max Fault)	-	-	-

NOTE: THE ABOVE CALCULATION IS BASED ON EATON BUSSMANN SERIES FAULT CALCULATION.

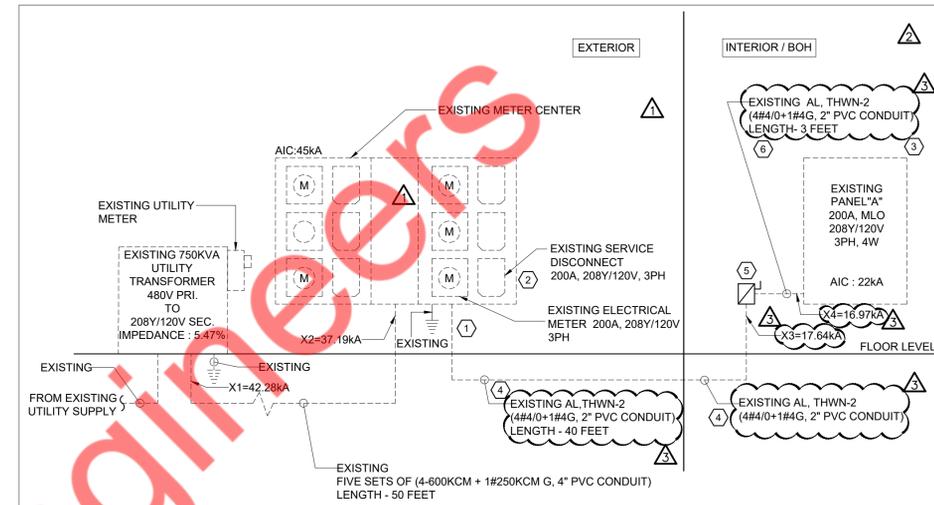
4 FAULT CURRENT CALCULATION

SCALE: NTS



3 ELECTRICAL SINGLE LINE DIAGRAM

SCALE: NTS



RISER DIAGRAM GENERAL NOTES

- ELECTRICAL CONTRACTOR TO COORDINATE FAULT CURRENT (ISC) RATING WITH UTILITY COMPANY AND AHJ AND CALCULATE ACTUAL AIC REQUIRED PRIOR TO BID.
- E.C. TO VERIFY EXACT POWER DISTRIBUTION IN FIELD. VERIFY SCOPE OF WORK WITH OWNER/LANDLORD PRIOR TO BID.
- ENSURE THE COMBINED VOLTAGE DROP OF THE FEEDER AND BRANCH CIRCUIT SHALL NOT EXCEED 5% PER CODE.
- THE PART OF RISER MARKED AS EXISTING IS FOR REFERENCE PURPOSE ONLY. E.C. SHALL VERIFY THE RISER IN THE FIELD. INFORM THE ENGINEER ON RECORD OF ANY DISCREPANCY FOUND.
- VERIFY THE LOCATION, RATING, AND OPERABLE CONDITION OF ALL THE EXISTING DEVICES BEING REUSED. REPLACE IF FOUND INOPERABLE (WITHIN THE SCOPE OF WORK). BASE BID ACCORDINGLY.
- ADDITION OR ALTERATION TO THE EXISTING SYSTEM SHALL NOT BE DONE WITHOUT THE WRITTEN CONSENT OF THE OWNER.
- E.C. TO VERIFY ENGINEER SPECIFIED TERMINATION TEMPERATURE (60, 75, 90, OR DUAL RATED). INFORM EOR OF ANY DISCREPANCY.

ELECTRICAL RISER SYMBOL

- NEW
- EXISTING ITEM/FEEDER TO REMAIN
- EXISTING ITEM/FEEDER TO BE DISCONNECTED & REMOVED

RISER ABBREVIATIONS:

- M = METER
AL = ALUMINIUM
THWN-2 = CABLE INSULATION CLASS

RISER DIAGRAM KEY NOTES

- EXISTING ELECTRICAL SERVICE FEEDER FROM EXISTING METER CENTER FOR THE PROJECT SPACE TO REMAIN. VERIFY LOCATION, RATING, AND OPERABLE CONDITION IN THE FIELD. INFORM THE ENGINEER ON RECORD OF ANY DISCREPANCY. BEFORE BID.
- E.C. TO VERIFY THE LOCATION AND OPERABLE CONDITION OF THE EXISTING METER AND SERVICE DISCONNECT IN THE FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- EXISTING PANEL TO REMAIN. E.C. TO VERIFY EXISTING PANEL RATING, OPERABLE CONDITION AND EXACT LOCATION IN FIELD. REPLACE IF FOUND INOPERABLE. BASE BID ACCORDINGLY.
- E.C. TO VERIFY RATING AND OPERABLE CONDITION OF CABLE IN FIELD. REPLACE IF EXISTING FEEDER IS EITHER UNDERRATED OR INOPERABLE. INFORM EOR OF ANY DISCREPANCY PRIOR TO THE BID.
- PROVIDE NEW FUSED DISCONNECT SWITCH 200A, 208Y/120V, 3 PHASE FUSED AT 200A FOR EXISTING PANEL "A" 200A, MLO, 208Y/120V, 3 PHASE. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER IN FIELD.
- E.C. TO VERIFY THE FEEDER IN THE FIELD. PROVIDE NEW IF REQUIRED.

1 ELECTRICAL RISER DIAGRAM

SCALE: NTS

	BUILDING LOAD SUMMARY		
	ELECTRICAL SERVICE (AMP) APPROXIMATE	DEMAND CURRENT (AMP) APPROXIMATE	DEMAND LOAD (KVA) APPROXIMATE
METER-1	200	150	54.04
METER SOCKET	200	165	59.44
METER-3	200	145	52.24
METER-4	200	155	55.84
METER-5	200	160	57.64
METER-6	200	149.80	53.91
TOTAL BUILDING LOAD	1200.00	924.80	333.10
TOTAL UTILITY SERVICE DEMAND AMPS	1200.00	1665.48	750.00

2 BUILDING SERVICE LOAD SUMMARY

SCALE: NTS

W. SMOOTHIE KING

NO.	DATE	DESCRIPTION
01	05/16/24	PERMIT SET
02	06/06/24	REVIEW COMMENTS
03	06/26/24	REVIEW COMMENTS
04	08/26/24	REVIEW COMMENTS

CHECKED BY: _____
ARCH. PROJECT NO.: _____
M0524001.0
SHEET NAME: _____

ELECTRICAL RISER & SINGLE LINE DIAGRAM & PANEL SCHEDULE

SHEET NUMBER

E3.0



Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: SMOOTHIE KING
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:
MICHAEL TOBIAS
382 NE 191ST STREET SUITE 49674,
MIAMI, FL 33179

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B X C)
1-RESTAURANT (Retail)	1310	1.26	1651
Total Allowed Watts =			1651

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
RESTAURANT (Retail 1310 sq.ft.)				
LED: R: Other:	1	21	13	273
LED: L1: Other:	1	9	30	270
LED: L2: Other:	1	8	32	256
LED: S: Other:	1	4	12	48
LED: A: Other:	1	3	10	30
Total Proposed Watts =				877

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

MICHAEL TOBIAS
Name - Title Signature Date 05/03/24

Project Title: SMOOTHIE KING - MINT HILL, NC Report date: 05/03/24
Page 1 of 5



Inspection Checklist

Energy Code: 2015 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: SMOOTHIE KING - MINT HILL, NC Report date: 05/03/24
Page 2 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15]	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1 [EL18]	Occupancy sensors installed in required spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1, C405.2.2.3 [EL23]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.2.1 [EL22]	Automatic controls to shut off all building lighting installed in all buildings.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.3 [EL16]	Daylight zones provided with individual controls that control the lights independent of general area lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.3, C405.2.3.1, C405.2.3.2 [EL20]	Primary sidelighted areas are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.3, C405.2.3.1, C405.2.3.3 [EL21]	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.4 [EL4]	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4 [EL8]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.3 [EL6]	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: SMOOTHIE KING - MINT HILL, NC Report date: 05/03/24
Page 3 of 5

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [F17]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.4.1 [F18]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
C408.2.5.1 [F16]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [F13]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
Project Title: SMOOTHIE KING - MINT HILL, NC Report date: 05/03/24
Page 4 of 5

Project Title: SMOOTHIE KING - MINT HILL, NC Report date: 05/03/24
Page 5 of 5

SMOOTHIE KING

DESCRIPTION
PERMIT SET
REVIEW COMMENTS

NO. DATE

05/16/24 05/24/24

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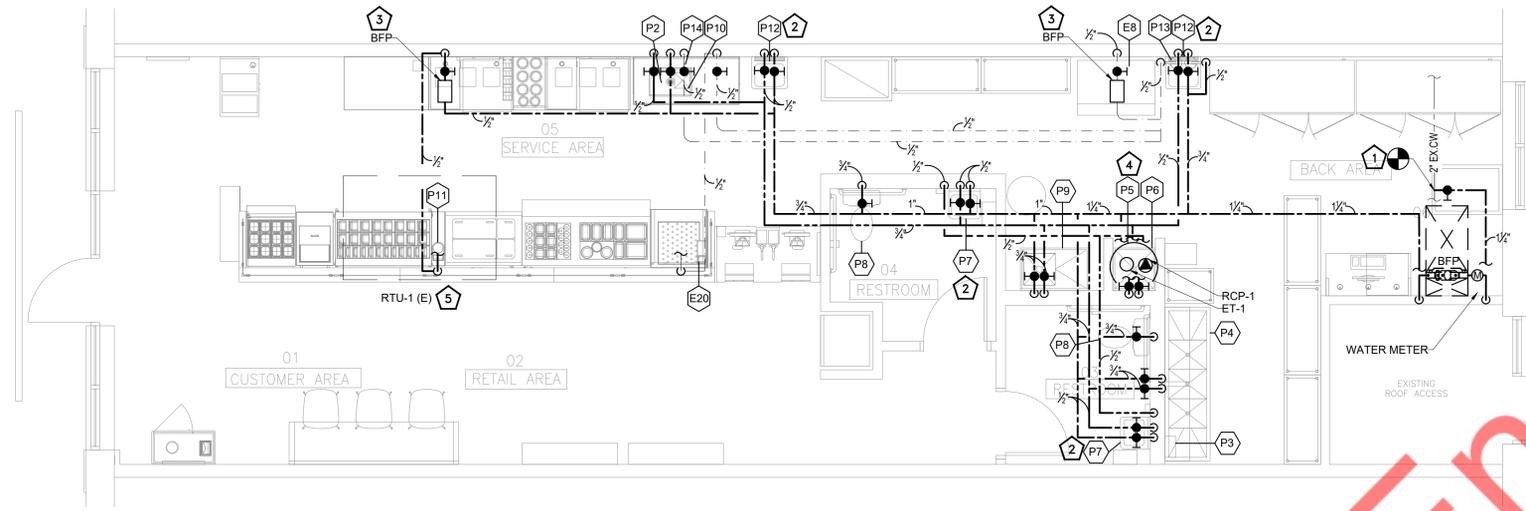
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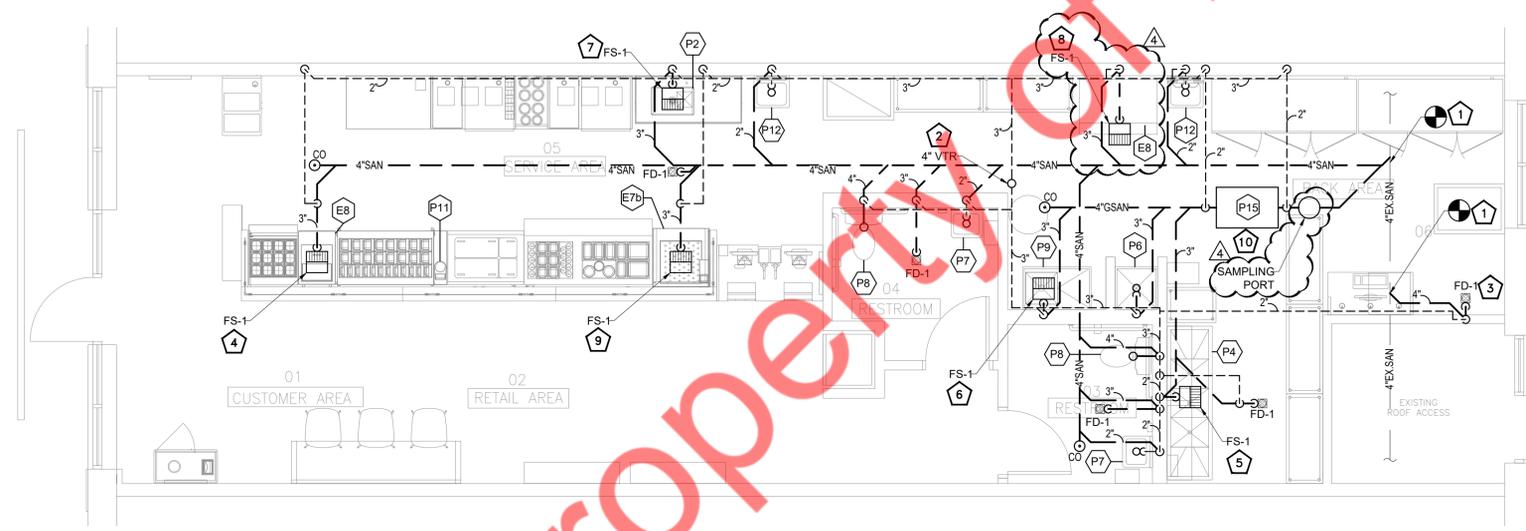
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2 DOMESTIC WATER PIPING PLAN
1/4" = 1'-0"

- WATER PIPING KEYED NOTES:**
- CONNECT NEW 1-1/4" CW PIPING WITH RPZ, WATER METER AND TIE-INTO THE EXISTING WATER MAIN LINE IN SPACE. CONTRACTOR TO FIELD VERIFY ROUTING, LOCATION OF EXISTING CW LINE. CONTRACTOR TO FIELD VERIFY AVAILABILITY OF EXISTING WATER METER, RPZ SIZE AND LOCATION. PROVIDE NEW IF NOT EXISTING. BASE BID ACCORDINGLY.
 - PROVIDE ASSE 1070 OR SIMILAR APPROVED TEMPERING VALVE FOR LAVATORIES AND HAND SINK. SET AT TEMPERATURE TO A MAXIMUM 110 °F.
 - PROVIDE ASSE 1022 APPROVED BACKFLOW PREVENTER TO EQUIPMENT FOR BACKFLOW PREVENTION. INSTALL BFP AN ACCESSIBLE LOCATION.
 - ROUTE WATER HEATER T&P RELIEF TO MOP SINK.
 - CONTRACTOR TO FIELD VERIFY GAS CONNECTION TO RTU-1(E) AND ENSURE GAS PIPING IS IN GOOD CONDITION. REPLACE PIPING IF REQUIRED.

- GENERAL NOTES:**
- CWHM PIPING TO BE PROVIDED WITH INSULATION AS PER 2015 IECC- ENERGY CONSERVATION(REFER SHEET P-0)
 - PROVIDE BRANCH PRV IF PRESSURE EXCEEDS 80 PSI.
 - CONTRACTOR TO FIELD VERIFY FEASIBILITY OF SLAB PENETRATION AS PER STRUCTURAL REQUIREMENT.
 - PROVIDE ACCESS PANELS FOR WATER HAMMER ARRESTOR, CLEANOUTS & SHUT-OFF VALVES AS REQUIRED.
 - REFER RISER DIAGRAMS FOR ALL PIPE SIZES.
 - ANY ROOF PENETRATION SHALL BE PERFORMED BY LANDLORD'S ROOFERS AT LANDLORD OPTION, A BONDED ROOFER APPROVED IN ADVANCE BY LANDLORD.
 - PROVIDE TRAP PRIMER/ SEAL ON FLOOR DRAIN AS PER LOCAL JURISDICTION.
 - ANY UNUSED FLOOR DRAIN AND PIPING MUST BE COMPLETELY REMOVED OR CAPPED. DO NOT ABANDON IN PLACE.



1 SANITARY PIPING PLAN
1/4" = 1'-0"

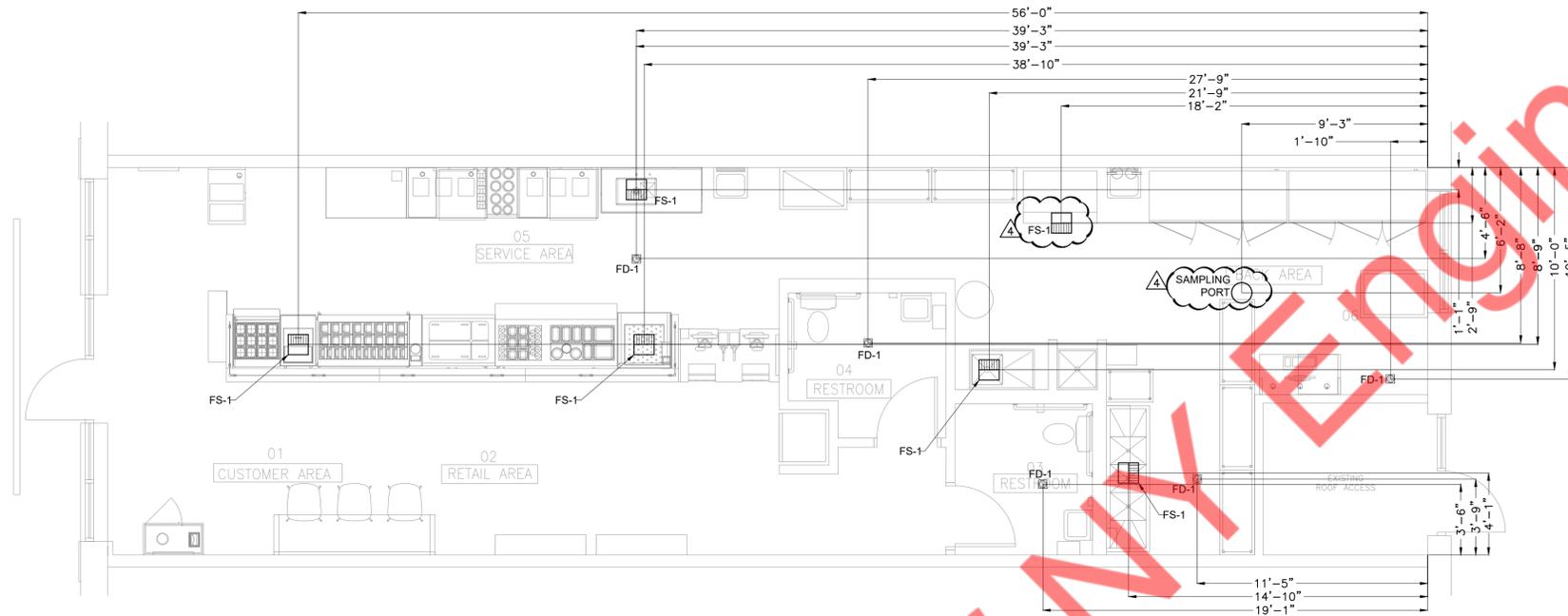
- SANITARY KEYED NOTES:**
- CONNECT NEW 4" SANITARY LINE TO EXISTING SANITARY WASTE LINE IN SPACE. CONTRACTOR TO FIELD VERIFY EXISTING SANITARY SIZE, LOCATION, FLOW DIRECTION ROUTING AND INVERT PRIOR TO BID.
 - NEW 4" VENT UP THROUGH ROOF. CONTRACTOR TO FIELD VERIFY LOCATION, SIZE, ROUTING ON SITE.
 - INDIRECT DRAIN FROM THE RPZ TO FLOOR DRAIN WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM DIPPING WELL AND ICE BIN TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM 3 COMP SINK TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM PREP SINK TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM BLENDER SINK TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM ICE CUBER MACHINE TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - INDIRECT WASTE FROM WATER DISPENSER TO ADJACENT FLOOR SINK WITH APPROVED AIR GAP.
 - NEW SCHIER GB2 GREASE INTERCEPTOR WITH 50 GPM FLOW. INSTALL GREASE INTERCEPTOR AS SHOWN ON PLAN AND AS PER THE MANUFACTURER'S RECOMMENDATION. CONTRACTOR TO COORDINATE FINAL LOCATION AND SIZE OF GREASE INTERCEPTOR AS PER THE LOCAL HEALTH JURISDICTION AND BASE BID ACCORDINGLY.

Property of NY Engineers

iS SMOOTHIE KING

NO.	DATE	PERMIT SET	DESCRIPTION
01	05/16/24	01/15/24	HEALTH & ALL COMMENTS
02			
03			
04			
05			
06			
07			
08			
09			
10			

DRAWN BY _____ NTE
 CHECKED BY _____ NTE
 ARCH. PROJECT NO.: _____
 M0524001.0
 SHEET NAME _____
 PLUMBING FLOOR PLANS
 SHEET NUMBER _____
P2.0



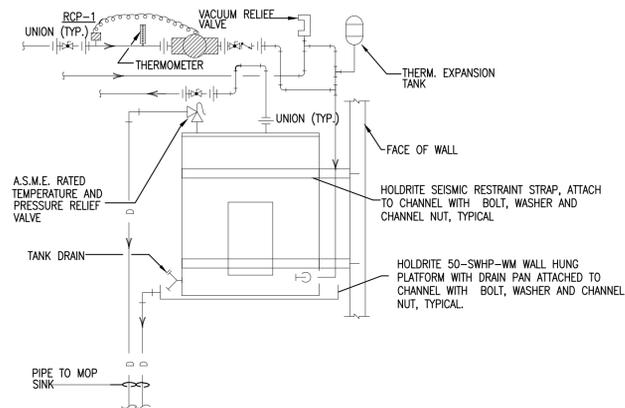
1 PLUMBING DIMENSIONAL PLAN
 P2.1 1/4" = 1'-0"

Property of NKEngineers

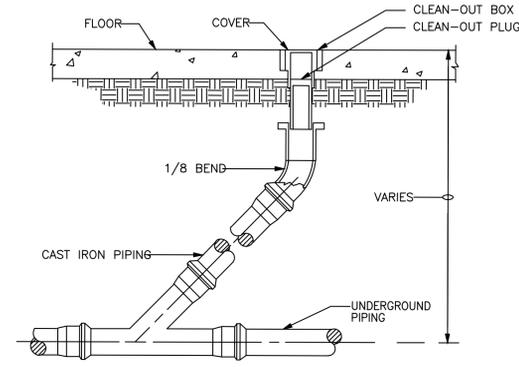
SMOOTHIE KING

NO.	DATE	PERMIT SET	DESCRIPTION
0	05/16/24		
1	05/15/24	HEALTH & ALL COMMENTS	
2			
3			
4			

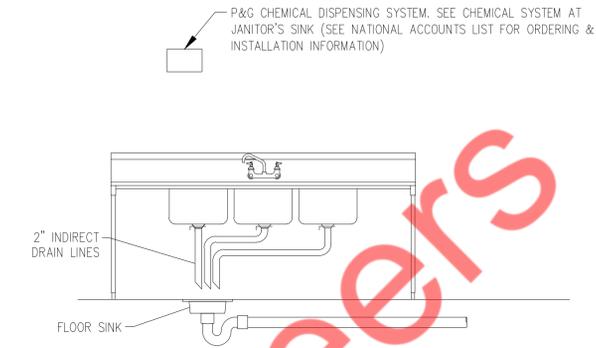
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 CHECKED BY: _____ NTE
 ARCH. PROJECT NO.: _____
 M0524001.0
 SHEET NAME: _____
 PLUMBING DIMENSIONAL PLAN
 SHEET NUMBER: P2.1



1 ELECTRIC STORAGE WATER HEATER
P3.1 N.T.S

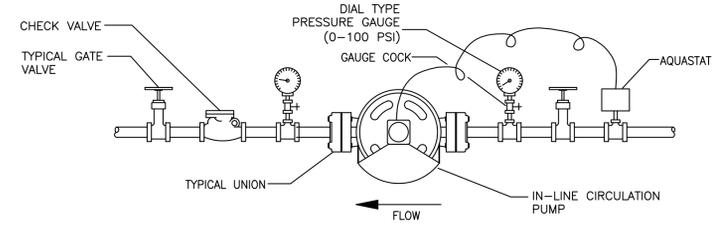


2 FLOOR CLEANOUT DETAIL
P3.1 N.T.S

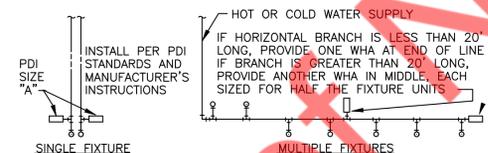


- COMMENTS:
- ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS. HUBLESS CAST IRON PIPE, FITTINGS AND CONNECTORS ALL AROUND SINK AND TRAP. CONNECT GREASE TRAP FROM CENTER COMPARTMENT.
 - COORDINATE INDIVIDUAL BAY DRAINAGE, AIR GAP, & DRAIN FUNNEL WITH LOCAL CODE REQUIREMENTS.

3 3 COMP SINK DETAILS
P3.1 N.T.S

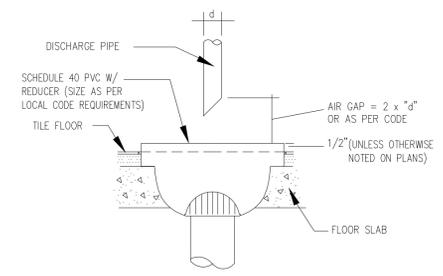


4 INLINE RECIRCULATING PUMP DETAIL
P3.1 N.T.S

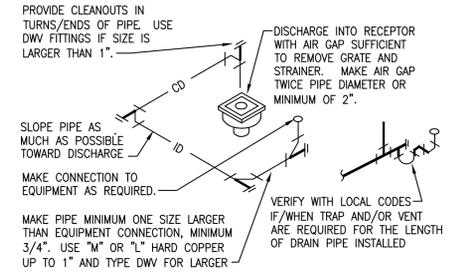


SINGLE FIXTURE			MULTIPLE FIXTURES	
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD	FIXTURE UNIT TABULATION	
			FIXTURE	
A	1/2"	1-11	VALVE WATER CLOSET	10 --
B	3/4"	12-32	TANK WATER CLOSET	5 --
C	1"	33-60	URINAL	5 --
D	1-1/4"	61-113	LAVATORY/SINK	1.5 1.5
E	1-1/2"	114-154	JANITOR'S SINK	3 3
F	2"	154-330	SHOWER/BATHTUB	2 2

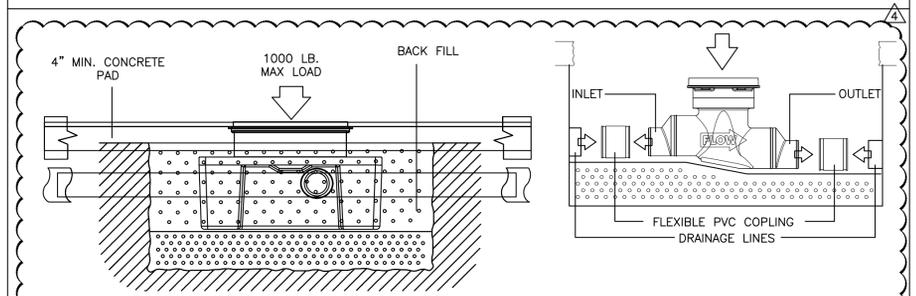
PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANS #112-28.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE.



7 FLOOR SINK DETAILS
P3.1 N.T.S



5 INDIRECT/CONDENSATE DRAIN
P3.1 N.T.S



NOTE: INSTALL GREASE INTERCEPTOR AND SAMPLING PORT AS PER LOCAL, HEALTH DEPARTMENT CODE, MANUFACTURE INSTALLATION GUIDE.

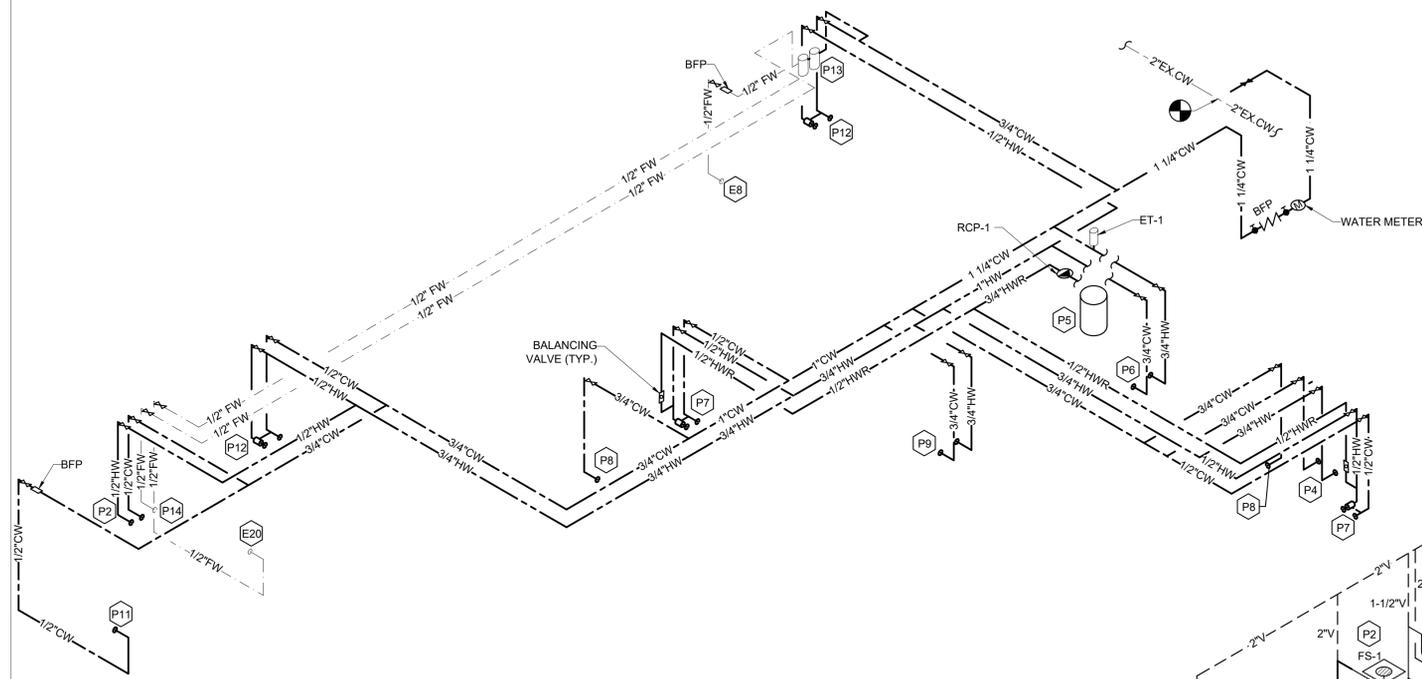
8 TYPICAL GREASE INTERCEPTOR AND SAMPLING PORT DETAILS
P3.1 N.T.S

6 WATER HAMMER ARRESTORS
P3.1 N.T.S

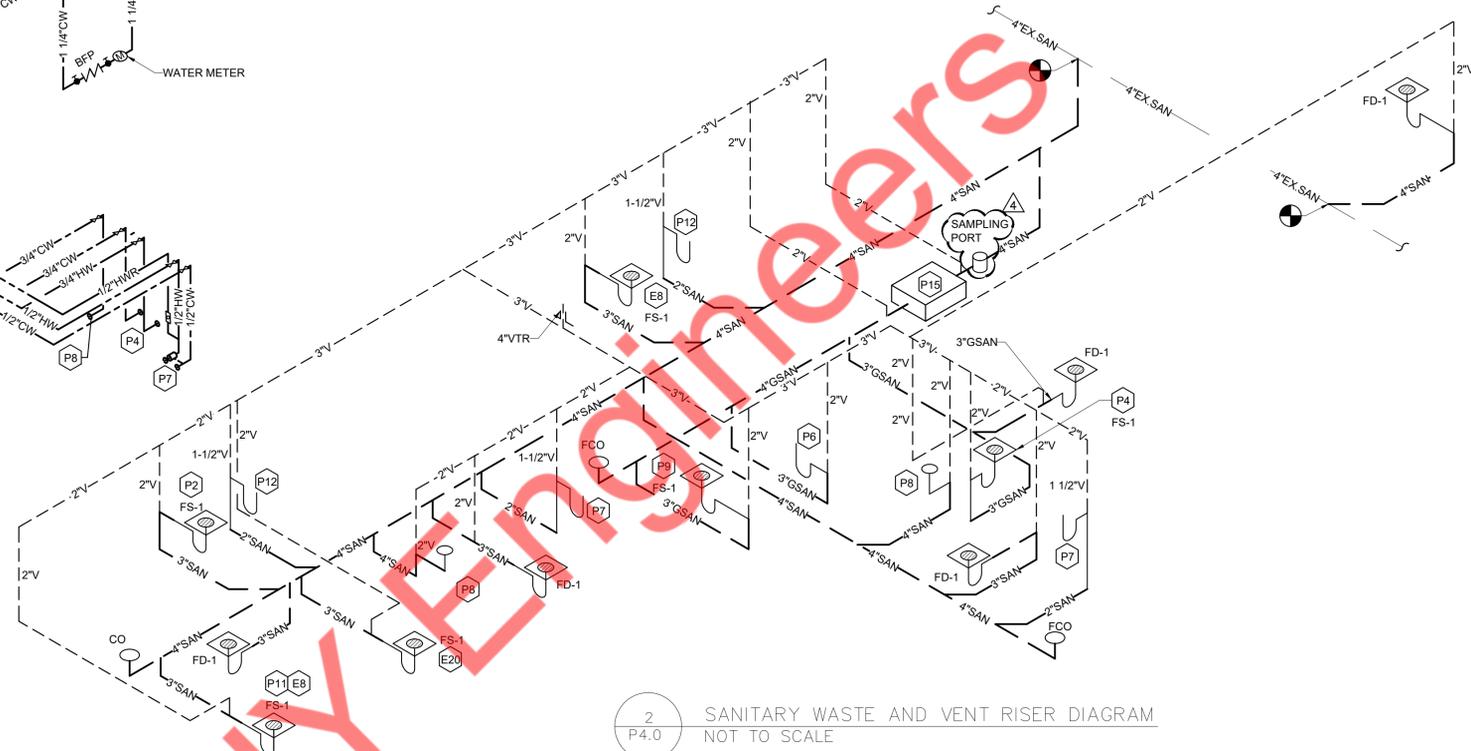
W. SMOOTHIE KING

NO.	DATE	DESCRIPTION
1	05/16/24	PERMIT SET
2	05/16/24	HEALTH & LL COMMENTS

DRAWN BY: NTE
CHECKED BY: NTE
ARCH. PROJECT NO.:
M0524001.0
SHEET NAME:
PLUMBING DETAILS (2 OF 2)
SHEET NUMBER:
P3.1



1 DOMESTIC WATER RISER DIAGRAM
P4.0 NOT TO SCALE



2 SANITARY WASTE AND VENT RISER DIAGRAM
P4.0 NOT TO SCALE

FOOD SERVICE PLUMBING EQUIPMENT SCHEDULE

TAG NO.	DESCRIPTION	MANUFACTURER	MODEL	WASTE		VENT	CW	HW	FW	NOTES
				DIRECT	INDIRECT					
P2	BLENDER SINK (STANDARD)	FF&E SUPPLIER	F835-25	-	2"	-	1/2"	1/2"	-	35 STRAINER, MCGUIRE MODEL 8903 P-TRAP WITH CLEANOUT PROVIDE FLOOR SINK. BOWL SIZE 24"W X 16"D X 12" H LEFT TO RIGHT PREP LINE SET UP
P3	SANITARY CHEMICAL DISPENSER SYSTEM	SSDC	-	-	-	-	-	-	-	ECOLAB TO INSTALL THE SANITARY CHEMICAL SYSTEM ONCE THE 3 COMP. SINK IS IN PLACE.
P4	S/S 3 COMP SINK	FF&E SUPPLIER	-	-	2"	2"	3/4"	3/4"	-	DRAINBOARD ON BOTH SIDES-PROVIDE FLOOR SINK (3)SINK BOWLS EA. 16"W X 20"D X 12"H SILICON AROUND SINK AT WALL
P5	WATER HEATER	A.O SMITH	DEL-50	-	3/4"	-	1"	1"	-	-
P6	MOP SINK	-	FLOOR MODEL	3"	-	2"	3/4"	3/4"	-	-
P7	WALL HUNG LAVATORY	AMERICAN STD.	0355.012	2"	-	1 1/2"	1/2"	1/2"	-	TOP OF FRONT RIM MOUNTED AT 34" AFF
P8	TOILET (ADA COMPLIANT)	AMERICAN STD.	FLOOR MODEL	-	4"	2"	1/2"	-	-	PROVIDE OPEN FRONT SEAT. INSTALL TOP OF SEAT @ 18" AFF
P9	PREP. SINK	FF&E SUPPLIER	-	-	2"	-	3/4"	3/4"	-	DRAINBOARD ON LEFT SIDE-PROVIDE FLOOR SINK
P11	DIPPERWELL WELL SELF	FF&E SUPPLIER	F835-16	-	1 1/2"	-	1/2"	-	-	PROVIDE ASSE 1022 BACKFLOW PREVENTER
P12	S/S HAND SINK	FF&E SUPPLIER	MMS10900101 CJBF	2"	-	1/2"	1/2"	1/2"	-	WITH SPLASH GUARDS AT REAR AND SIDES. EACH HAND SINK TO INCLUDE S.S. PAPER TOWEL HOLDER AND S.S. SOAP DISPENSER W/ ORDER
P13	WATER FILTER	WESTERN PURIFIER	SK-HWFS07	-	-	-	1/2"	-	-	1/2" PEX TUBING TO SPIGOT. INDEPENDENT 1/2" COPPER TUBING TO ICE MACHINE
P14	WATER SPIGOT	WESTERN PURIFIER	-	-	-	-	-	-	1/2"	TUBING TO SPIGOT FROM FILTER
P15	GREASE TRAP	SCHIER	GB2	-	4"	2"	-	-	-	GREASE INTERCEPTOR SCHEDULE
E8	ICE CUBER MACHINE	HOSHIZAKI	-	-	-	-	-	-	1/2"	-
E20	ICE CUBER BIN	HOSHIZAKI	-	-	3/4"	-	-	-	-	ALL DRAINS TO BE ROUTED SEPARATELY.
E23	AUTOMATIC WATER DISPENSER	VITA-MIX	ITEM # 066032	-	-	-	-	-	-	-
FD-1	FLOOR DRAIN	-	-	3"84"	-	2"	-	-	-	-
FS-1	FLOOR SINK	-	-	3"	-	2"	-	-	-	-

PUMP SCHEDULE

TAG	DESCRIPTION	TYPE	CAPACITY		ELECTRICAL DATA			SELECTION BASED ON		REMARKS/OPTIONS	
			GPM	HEAD (FT.)	HP	V	PH	HZ	MANUFACTURER		MODEL NUMBER
RCP-1	HOT WATER RECIRC. PUMP	IN-LINE	2.0	9	1/12	120	1	60	BELL & GOSSETT	PL-30-B	NOTE 1.2

OPTIONS (ALL RCP UNITS)
 - AQUA-STAT & NIGHT TIMER - BALANCING VALVE & CHECK VALVE
 - FLANGED PUMP - MAINTENANCE BALL VALVES ON BOTH SIDES OF PUMP

NOTES:
 1. SET AQUA-STAT WITH SET POINT 10 DEGREES BELOW SYSTEM SUPPLY TEMP. 2. INSTALL RECIRCULATION PUMP PER MANUFACTURERS REQUIREMENTS.

EXPANSION TANKS

UNIT NUMBER	MANUFACTURER & MODEL NUMBER	SERVICE	TANK VOLUME (GAL)	ACCEPTANCE VOLUME (GAL)	PRESSURE RATING (PSI)	DIMENSIONS		OPERATING WEIGHT (LBS)	NOTES	
						DIAMETER (INCH)	HEIGHT (INCH)			
ET-1	1	AMTROL	ST-5	2	0.9	150	8	12.5	25	1

GENERAL NOTES:
 1. SET THE TANK PRESSURE TO EQUAL THE SYSTEM OPERATING PRESSURE. TANK MUST BE DRAINED BEFORE ADJUSTING SET PRESSURE.
 2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS ON INCOMING COLD WATER LINE.

ELECTRIC WATER HEATER

UNIT	MANUFACTURER & MODEL NUMBER	MAXIMUM PRESSURE (PSI)	UNIT CAPACITY			SYSTEM OUTLET TEMP OF RISE (°F)	NUMBER OF ELEMENTS	KW PER ELEMENT	SIMULTANEOUS / NON-SIMULTANEOUS	POWER (KW)	V	PH	HZ	HEIGHT (INCH)	DIAMETER (INCH)	SHIPPING WEIGHT (LB)
			STORAGE (GAL)	RECOVERY (GPH)	DEGREE RISE (°F)											
P5	DEL-50	150	50	41	90	140	2	4.5	SIMULTANEOUS	9	208	1	60	36"	26-1/2"	172

MIXING VALVE SCHEDULE

TAG	DESCRIPTION	MAXIMUM GPM	MINIMUM GPM	PRESSURE LOSS	SELECTION BASED ON		REMARKS/OPTIONS
					MANUFACTURER	MODEL NUMBER	
MV-1	THERMOSTATIC MIXING VALVE	3.5	.25	5	LEONARD	270-LF	NOTE 1, A

OPTIONS (ALL UNITS)
 - LEAD FREE NSF APPROVED
 - PROVIDE T-STAT ON TEMPERED LINE

ADDITIONAL OPTIONS (UNITS AS NOTED)
 A: ASSE 1070 APPROVED, SET @ 110° F. 1/2" INLETS/ 1/2" OUTLET, MOUNT BELOW FIXTURE

NOTES:
 1. INSTALL MIXING VALVE PER MANUFACTURERS REQUIREMENTS. PROVIDE ALL PIPING AND VALVES PER O&M MANUAL.

GREASE INTERCEPTOR SIZING CALCULATION

FIXTURE	QUANTITY	DIMENSIONS		VOLUME CUBIC INCHES	PERCENTAGE USAGE(%)	ACTUAL USAGE (GALLONS)	FLOW RATE(GPM)			
		LENGTH(IN)	DEPTH(IN)				1 MIN.	2 MIN.		
3 COMP SINK	1	20	16	12	11520	49.87	0.75	37.40	18.7	
PREP SINK	1	18	18	12	3888	16.83	0.75	12.62	6.31	
MOP SINK	1	24	24	10	5760	24.93	0.75	18.70	9.35	
TOTAL:							68.72	34.36		

PROPOSED GREASE INTERCEPTOR: SCHIER GB2

GREASE INTERCEPTOR SCHEDULE

ITEM	SERVICE	LOCATION	FLOW CAPACITY (GPM)	GREASE CAPACITY (LBS)	LIQUID CAPACITY (GALLON)	MANUFACTURER AND MODEL
GREASE INTERCEPTOR	KITCHEN WASTE	UNDER GROUND INTERIOR	50	127	20	SCHIER MODEL GB2

NOTE- CONTRACTOR TO PROVIDE ALL REQUIRED ACCESSORIES FOR SATISFACTORY WORKING OF GREASE TRAP AS PER SITE CONDITIONS.

HOT WATER CALCULATION

FIXTURE	QUANTITY	GPH PER FIXTURE	TOTAL GPH
3 COMPARTMENT SINK	1	37.5	37.5
BLENDER SINK	1	5	5
1 COMPARTMENT SINK	1	5	5
MOP SINK	1	15	15
HAND SINK	2	5	10
LAVATORY	2	5	10
TOTAL			77.5

AS PER ASHRAE HANDBOOK HVAC APPLICATIONS CHAPTER 51 SERVICE WATER HEATING TABLE 11.
 DEMAND FACTOR 70%
 PROBABLE DEMAND = 54.25 GPH
 STORAGE FACTOR = 100%
 REQUIRED VOLUME = 54.25 GPH
 SELECTED WATER HEATER CAPACITY IS 50 GALLON.
 AS PER MANUFACTURERS WATER HEATER RECOVERY CALCULATIONS:
 1 KW = 4.55 GPH RECOVERY AT 90° F TEMPERATURE RISE.
 FOR 9 KW = 41 GPH.

SMOOTHIE KING

DESCRIPTION

DATE: 05/16/24
 PERMIT SET: 05/16/24
 HEALTH & ALL COMMENTS: 05/16/24

NO. 0

DRAWN BY: NTE

CHECKED BY: NTE

ARCH. PROJECT NO.: M0524001.0

SHEET NAME

PLUMBING RISERS AND SCHEDULES

SHEET NUMBER

P4.0



COMcheck Software Version 4.1.5.5

Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: SMOOTHIE KING
 Location: Mint Hill, North Carolina
 Climate Zone: 3a
 Project Type: Alteration

Construction Site: _____ Owner/Agent: _____ Designer/Contractor:
 MICHAEL TOBIAS
 382 NE 191ST STREET SUITE 49674,
 MIAMI, FL 33179

Mechanical Systems List

Quantity System Type & Description
 1 P5:
 Electric Storage Water Heater, Capacity: 50 gallons w/ Circulation Pump
 Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

MICHAEL TOBIAS 05/03/24
 Name - Title Signature Date

Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 1 of 6



COMcheck Software Version 4.1.5.5

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 100.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR3] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 2 of 6

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6] ¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C404.6.1, C404.6.2 [PL3] ¹	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C404.6.3 [PL7] ¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] ¹	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 3 of 6

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME4] ¹	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.6.2 [ME115] ¹	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.8 [ME116] ¹	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and safety hood rating requirements and maximum exhaust rate criteria.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C408.2.2.1 [ME53] ¹	Air outlets and zone terminal devices have means for air balancing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.5, C403.5.1, C403.5.2 [ME123] ¹	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 4 of 6

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C404.3 [F11] ¹	Heat traps installed on supply and discharge piping of non-circulating systems.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.4 [F125] ¹	All piping insulated in accordance with section details and Table C403.2.10.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C404.6.1 [F112] ¹	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 5 of 6

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C404.3 [F11] ¹	Heat traps installed on supply and discharge piping of non-circulating systems.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.4 [F125] ¹	All piping insulated in accordance with section details and Table C403.2.10.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C404.6.1 [F112] ¹	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Project Title: SMOOTHIE KING - MINTHILL, NC Report date: 05/03/24
 Page 6 of 6

SMOOTHIE KING

DESCRIPTION

PERMIT SET
REVIEW COMMENTS

DATE
05/16/24
05/23/24

NO.
0
A

DRAWN BY

CHECKED BY

ARCH. PROJECT NO.:

M0524001.0

SHEET NAME

PLUMBING COMCHECK

SHEET NUMBER

P5.0