

ABBREVIATIONS	GENERAL NOTES	SPECIFICATIONS
<div>(NOT ALL ARE USED)</div> <div>AC AFF AFMS AG AHU AD APPROX BDD BDD BTU CAP CD CFM CMU CO CONN CV DB DG I N O DIGITAL OUTPUT ENTERING AIR TEMPERATURE ER DF DFF DC ELEC EWS EXT ESP E EA EACP ECD FD FLA FPM FPMB FS HP HZ IN-H2O KW LAT LD LRA LWG MAX MBH MCA MISC N.J.C. NTS OA OAL OBD OC PD PH PVC RA REF RG RLA RTU SA SD SEN SG UNCORR UON VAV VFD WMS (E)</div>	<div>1. PROVIDE ALL LABUR, MATERIALS, EQUIPMENT, AND TULLS TO PERFORM ALL WORK NECESSARY FOR THE COMPLETE EXECUTION OF THE HVAC WORK AS SHOWN ON THE DRAWINGS. PIPING SHALL ESSENTIALLY BE ROUTED AND LOCATED AS INDICATED ON THE DRAWINGS. HOWEVER, ACTUAL PLACEMENT SHALL BE VERIFIED BY CONFIRMING EXACT LOCATION OF STRUCTURES AND OTHER UTILITIES IN THE FIELD AND BY CAREFUL LAYOUT PRIOR TO EXECUTION OF THE WORK. HVAC PIPING LAYOUTS ARE GENERALLY DIAGRAMATIC AND SHOULD NOT BE SCALED.</div> <div>2. ALL DISCREPANCIES ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID CONSTITUTES ACCEPTANCE OF FIELD CONDITIONS.</div> <div>3. SUPPORT DUCTS PER SMACNA FROM SUPPORT STRUCTURE.</div> <div>4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF ALL APPLICABLE LOCAL, STATE & NATIONAL CODES, STANDARDS AND AUTHORITY(S) HAVING JURISDICTION.</div> <div>5. ROUTE ALL DUCTWORK, PIPING, ACCESSORIES AS NECESSARY TO AVOID BUILDING STRUCTURE, COMPONENTS AND LIGHTING. COORDINATE ANY TRANSITIONS MADE TO DUCTWORK WITH MAXIMUM FAN PRESSURE DROP REQUIREMENTS FROM MANUFACTURER'S RECOMMENDATIONS.</div> <div>6. ALL DIMENSIONS ARE APPROXIMATE. DO NOT SCALE DRAWINGS FOR CONSTRUCTION.</div> <div>7. ALL FINISHED WORK SHALL BE FREE OF DEFECTS WITH EXISTING SURFACES MAINTAINED IN THE SAME CONDITION AS ORIGINAL.</div> <div>8. ALL DEBRIS SHALL BE PROPERLY DISPOSED OF OFF-SITE.</div> <div>9. ALL DEBRIS SHALL BE PROPERLY DISPOSED OF OFF-SITE. 9. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING AND WEATHERPROOFING INTEGRITY OF ALL PIPING AND PENETRATIONS.</div> <div>10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SUPPORTING DEVICES FOR ALL ACCESSORIES INCLUDED IN CONTRACT OR HEREIN SPECIFIED OR OTHERWISE.</div> <div>11. CONTRACTOR SHALL PROVIDE ACCESS IN HARD CEILINGS FOR ALL FIRE DAMPERS, SPIN-IN FITTINGS AND MECHANICAL EQUIPMENT AS REQUIRED</div> <div>DESIGN DATA</div> <div><div>SUMMER OUTSIDE ~ 87.8/72.6 F WINTER OUTSIDE ~ -9.1 F INDSIDE TEMP/RH ~ 75F/50%</div></div> <div>AIR DISTRIBUTION SCHEDULE</div> <div><div>TAG → SR-1 AIRFLOW → XXX</div><div>24"x24" 3-CONE ALUMINUM SUPPLY AIR DIFFUSER, 360 DEGREE FIXED PATTERN, LOUVERED FACE. SEE ARCH FOR CEILING TYPE. PROVIDE INSULATED BACK COVER, NECK TO MATCH FLEX SIZE. WHITE FINISH. CFM INDICATED ON PLANS. BASIS OF DESIGN: PRICE MODEL ASDC.</div></div> <div><div>TAG → RG-1</div><div>24"x24" LOUVERED FACE RETURN GRILLE, WHITE FINISH, ALUMINUM CONSTRUCTION. BASIS OF DESIGN: PRICE MODEL 630.</div><div>BRANCH DUCT SIZE: 0 ~ 250 CFM ~ 12x6 255 ~ 350 CFM ~ 12x8 355 ~ 475 CFM ~ 12x10 480 ~ 650 CFM ~ 12x12 655 ~ 850 CFM ~ 14x12 855 ~ 1000 CFM ~ 16x12 1005 ~ 1200 CFM ~ 18x12</div></div> <div><div>TAG → SR-1 AIRFLOW → XXX</div><div>SIDEWALL SUPPLY REGISTER, DOUBLE DEFLECTION, WHITE FINISH, ALUMINUM CONSTRUCTION. OPPOSED BLADE BALANCING DAMPER, ADJUSTABLE THROUGH FACE, BASIS OF DESIGN: PRICE MODEL 620.</div><div>CFM NECK SIZE 0-175 8x4 180-300 10x6 305-450 12x8 455-650 16x8</div></div> <div>IT IS THE RESPONSIBILITY OF ALL BIDDING CONTRACTORS TO ENSURE THAT EACH OF THEIR SUBCONTRACTORS RECEIVE THE NECESSARY DRAWINGS AND INFORMATION FOR BIDDING. MECHANICAL CONTRACTOR SHALL INDICATE TO ALL BIDDING VENDOR'S THAT EACH VENDOR SHALL REQUEST FROM THE BLUEPRINT COPY COMPANY FULL SIZE DRAWINGS PER MECHANICAL CONTRACTOR'S FOR WHICHEVER DRAWINGS HE/SHE DEEMS NECESSARY.</div>	<div>1. BASIC MATERIAL AND METHODS</div> <div>1.1. SCOPE OF WORK PROVIDE LABOR AND MATERIALS AS REQUIRED TO PROVIDE A FULLY FUNCTIONING AND COMPLETE SYSTEM AS INDICATED ON DRAWINGS. THESE DRAWINGS ARE DIAGRAMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT. FINAL LOCATIONS OF EQUIPMENT SHALL BE FIELD DETERMINED. ALL DISCREPANCIES ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMISSION OF BIDS.</div> <div>1.2. GENERAL AND SPECIAL CONDITIONS ALL DIVISION 1 SPECIFICATIONS AND ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS OUTLINED IN THE CONTRACT DOCUMENTS APPLY TO MECHANICAL SYSTEMS. ADDITIONALLY, WORK SHALL COMPLY WITH BUILDING CODE AND REGULATIONS OF THE LOCAL AUTHORITY HAVING JURISDICTION, NATIONAL FIRE PROTECTION ASSOCIATION, AND NATIONAL ELECTRICAL CODE. ALL EQUIPMENT SHALL CARRY THE UNDERWRITER'S LABORATORIES (UL) SEAL WHERE APPLICABLE.</div> <div>1.3. QUALITY CONTROL UNLESS OTHERWISE NOTED, PROVIDE NEW MATERIALS FREE OF DEFECTS. WHERE NO SPECIFIC WEIGHTS OR GRADES ARE SPECIFIED, PROVIDE MATERIALS OF AN ACCEPTED STANDARD WEIGHT AND GRADE ACCORDING TO CODE AND COVERING STANDARDS BY ASHRAE, SMACNA, NFPA, AND UL. INSTALL ALL EQUIPMENT, PIPING, DUCTWORK, AND CONTROLS IN ACCORDANCE WITH CODES, GOVERNING STANDARDS, AND MANUFACTURER'S RECOMMENDATIONS. FIRE PERFORMANCE: CHARACTERISTICS OF INSTALLED MATERIALS SHALL BE RATED IN ACCORDANCE WITH ASTM E84. MAXIMUM FLAME SPREAD RATING SHALL BE 25 AND MAXIMUM SMOKE DEVELOPED RATING SHALL BE 50.</div> <div>1.4. COORDINATION COORDINATE ALL WORK FOR PROPER LOCATION, POWER, AND UTILITY REQUIREMENTS. SCHEDULE INSTALLATIONS TO AVOID CONFLICT AMONG TRADES. ADDITIONS TO THE CONTRACT FOR COORDINATION AMONG TRADES WILL NOT BE ALLOWED.</div> <div>1.5. PENETRATIONS, CUTTING AND PATCHING SEAL ALL PIPING AND DUCT PENETRATIONS OF WALLS IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. PIPING PENETRATIONS OF RATED FLOORS AND WALLS SHALL BE SEALED WITH FIRESTOPPING MATERIAL. FLASH ALL ROOF AND WALL PENETRATIONS IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS. PROVIDE FIRE DAMPERS AT ALL RATED PENETRATIONS.</div> <div>1.6. HANGERS AND SUPPORTS PROVIDE HANGERS AND SUPPORTS FOR ALL PIPING, DUCTWORK, AND EQUIPMENT IN ACCORDANCE WITH SMACNA, MSS, ASME, AND ASHRAE STANDARDS. SUPPORT ALL ITEMS FROM INTEGRAL BUILDING STRUCTURAL MEMBERS. DO NOT HANG ITEMS FROM ROOF DECKING.</div> <div>2. NOT USED.</div> <div>3. DUCTWORK AND ACCESSORIES</div> <div>3.1. AIR DUCTS - SUPPLY AND RETURN GALVANIZED SHEET METAL WITH LOCK-FORMING QUALITY ASTM A653, 690 COATING, MILL PHOSPHATIZED FINISH FOR DUCTS EXPOSED TO VIEW. CLASS DESIGNATION SHALL BE ADEQUATE FOR PRESSURE IN DUCT SYSTEM PER TOTAL PRESSURE AS SCHEDULED FROM EQUIPMENT SHOP DRAWINGS. INSULATE SUPPLY, RETURN AND OUTSIDE AIR DUCTS WITH MINERAL FIBERGLASS BLANKETS BONDED WITH A THERMOSETTING RESIN, ASTM C 553, TYPE II, WITHOUT FACING AND WITH ALL-SERVICE JACKET MANUFACTURED FROM KRAFT PAPER, REINFORCING SCRIM, ALUMINUM FOIL, VINYL FILM, DENSITY SHALL BE MIN. 1.5 LB/CUFT. THICKNESS TO MAINTAIN AN R VALUE OF 6.</div> <div>3.2. DEDUCTIVE ALTERNATE PROVIDE RIGID FIBERGLASS DUCTS FOR SUPPLY AND RETURN AIR ACCORDING TO THE FOLLOWING: RIGID FIBERGLASS DUCTS WITH INTERIOR ACRYLIC COATING, CONFORMING TO SMACNA FSDCOS GUIDELINES. R BONDED WITH THERMOSETTING RESIN, FIRE-RESISTANT, REINFORCED, FOIL-SCRIM KRAFT PAPER FACE. UL-181, UL CLOSURE, 0 LABEL ON FACE. VAPOR BARRIER WITH 0.02 PERMEANCE, NOISE REDUCTION OF 0.65 MIN COEFFICIENT, 250°F RATED. CLOSURE SHALL BE WITH PRESSURE SENSITIVE TAPE, PLASTIC STRAPS AND GASKETING CONFORMING TO ENERGY CODE. (OWENS CORNING ENOURACORAT OR EQUAL). FITTINGS ARE TO CONFORM TO NAMA STANDARDS.</div> <div>3.3. AIR DUCTS - EXHAUST AIR 26 GA GALVANIZED SHEET METAL DUCT SYSTEM WITH LOCK FORMING QUALITY. (SNAP-LOCK)</div> <div>3.4. VOLUME CONTROL DAMPERS PROVIDE VOLUME CONTROL DAMPERS AT EACH BRANCH DUCT AND AS NECESSARY FOR PROPER SYSTEM BALANCING. PROVIDE FACTORY FABRICATED VOLUME CONTROL DAMPERS COMPLETE WITH REQUIRED LOCKING HARDWARE AND ACCESSORIES.</div> <div>3.5. FLEXIBLE CONNECTIONS PROVIDE FLEXIBLE CONNECTIONS AT ALL EQUIPMENT CONNECTIONS.</div> <div>3.6. OUTSIDE AIR DAMPERS PROVIDE 24V MOTORIZED OUTSIDE AIR DAMPER INTERLOCKED TO OPEN UPON AHU FAN OPERATION, OTHERWISE DAMPER NORMALLY CLOSED.</div> <div>4. TESTING, ADJUSTING AND BALANCING BALANCE AIRFLOWS FOR EQUIPMENT, INLETS AND OUTLETS. TEST AND BALANCE ALL SYSTEMS INSTALLED TO MATCH INDICATED AIRFLOWS WITHIN ± 10% OF INDICATED VALUES. BALANCE AIR INLETS AND OUTLETS AS INDICATED. ADJUST SYSTEMS WHERE NECESSARY. PROVIDE TEST AND BALANCE REPORT INDICATING ALL INTERMEDIATE AND FINAL VALUES. NEBB OR AABC CERTIFICATION OF TEST AND BALANCE PERSONNEL AND REPORT IS REQUIRED ON THIS PROJECT.</div> <div>5. SUBMITTALS PROVIDE 6-SETS (EACH) OF MANUFACTURER'S DATA, C&M MANUALS, ELECTRICAL DATA, DIMENSIONAL DATA AND CLEARANCES, CONNECTION DATA, COLOR SAMPLES (IF REQUIRED), AND TEST DATA FOR THE FOLLOWING: ROOFTOP UNITS, CONTROLS, EXHAUST FANS, AIR DISTRIBUTION, T&B REPORT. SHOP DRAWINGS MUST BE SUBMITTED AND APPROVED PRIOR TO ORDERING OF EQUIPMENT. ENGINEER WILL REQUIRE 7 WORKING DAYS TO REVIEW DRAWINGS.</div>
<div>CODE COMPLIANCE</div> <div>ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THESE PROJECT:</div> <div>1. NEW YORK STATE BUILDING CODE 2020. 2. NEW YORK STATE PLUMBING CODE 2020. 3. NEW YORK STATE MECHANICAL CODE 2020. 4. NEW YORK STATE ENERGY CODE 2020.</div>		

MECHANICAL SCHEDULES

VENTILATION CALCULATIONS

ROOM NAME	AREA	PERSONS	NO. OF	CFM PER	CFM	O.A.	O.A.	E.X.	E.X.	E.X.
	S.F.	/1000 S.F.	PEOPLE	PERSON	PER S.F.	REQUIRED	PROVIDED	REQUIRED	REQUIRED	PROVIDED
DINING	1050	70	74	7.5	0.18	736.5		-	-	-
PRODUCTION AND DISHWASH AREA	500	20	10	7.5	0.12	135		0.7	350	1000
P.O.S	160	15	3	7.5	0.12	42	1300	-	-	-
STORAGE	195	-	-	-	0.12	23		-	-	-
OFFICE	130	5	1	5	0.06	13		-	-	-
TOTAL						1300				1000

AIR BALANCE TABLE

UNIT	AREA SERVED	S.A. CFM	O.A. CFM	R.A. CFM	E.A. CFM	PRESSURE
RTU-1(E)	KITCHEN	4000	740	3260	-	+1300
RTU-2(E)	DINING	4000	560	3440	-	
EF-1(E)	KITCHEN	-	-	-	1000	-1000
BUILDING PRESSURE: POSITIVE						+300

DIFFUSER, GRILLE, REGISTER SCHEDULE

SYMBOL	MAX. CFM	NECK SIZE	FACE SIZE	MAX FPM	MAX. NC LEVEL	TYPE	CEILING GRID SIZE	FRAME TYPE	MAKE & MODEL	NOTES
ⓔ	500	14x14	24x24	500	20	GRILLE	VARIABLE	LAY-IN	TITUS / 350F	1,2,3,4

NOTES:
1. COLOR SHALL BE BAKED ENAMEL FINISH - "WHITE". COORDINATE AND CONFIRM WITH ARCHITECT BEFORE PURCHASE.
2. ALL UNITS TO BE CONSTRUCTED OF ALUMINUM.
3. DIFFUSERS AND REGISTERS SHALL HAVE INTEGRAL BUTTERFLY DAMPERS.
4. BOTH 'METALAIR' & 'TITUS' TYPE SUPPLY DIFFUSERS & RETURN AIR GRILLES ARE ACCEPTABLE, PER THE FOLLOWING SPECIFICATIONS:
'METALAIR' - SUPPLY DIFFUSER, '5000 SERIES' & RETURN AIR GRILLE, 'RH SERIES'
'TITUS' - SUPPLY DIFFUSERS 'TDC-AA SERIES' & RETURN AIR GRILLES '350F SERIES'.

FAN SCHEDULE

TAG	CFM	S.P.	RPM	TYPE	V/Hz/PH	MOTOR POWER (HP)	MANUFACTURER & MODEL NO.	ACTIVATION	REMARKS
EF-1(E)	1000	SAE	SAE	ROOF	120/60/1 (V/F)	3/4 (V/F)	GREENHECK/CUBE142 7G (V/F)	MANUAL SWITCH	SEE NOTES

NOTES:
1. ALL THE ACCESSORIES FOR THE EXISTING EXHAUST FAN TO REMAIN AS IS.
2. CONTRACTOR TO MODULATE THE SPEED OF THE FAN TO TO ACHIEVE THE EXHAUST CFM AS REQUIRED.
3. SAE- SAME AS EXISTING, VIF- VERIFY IN FIELD

PROPERTY OF NY ENGINEERS

1 DUCT SUPPORT DETAIL

SCALE: N.T.S.

2 BRANCH DUCT DETAIL

SCALE: N.T.S.

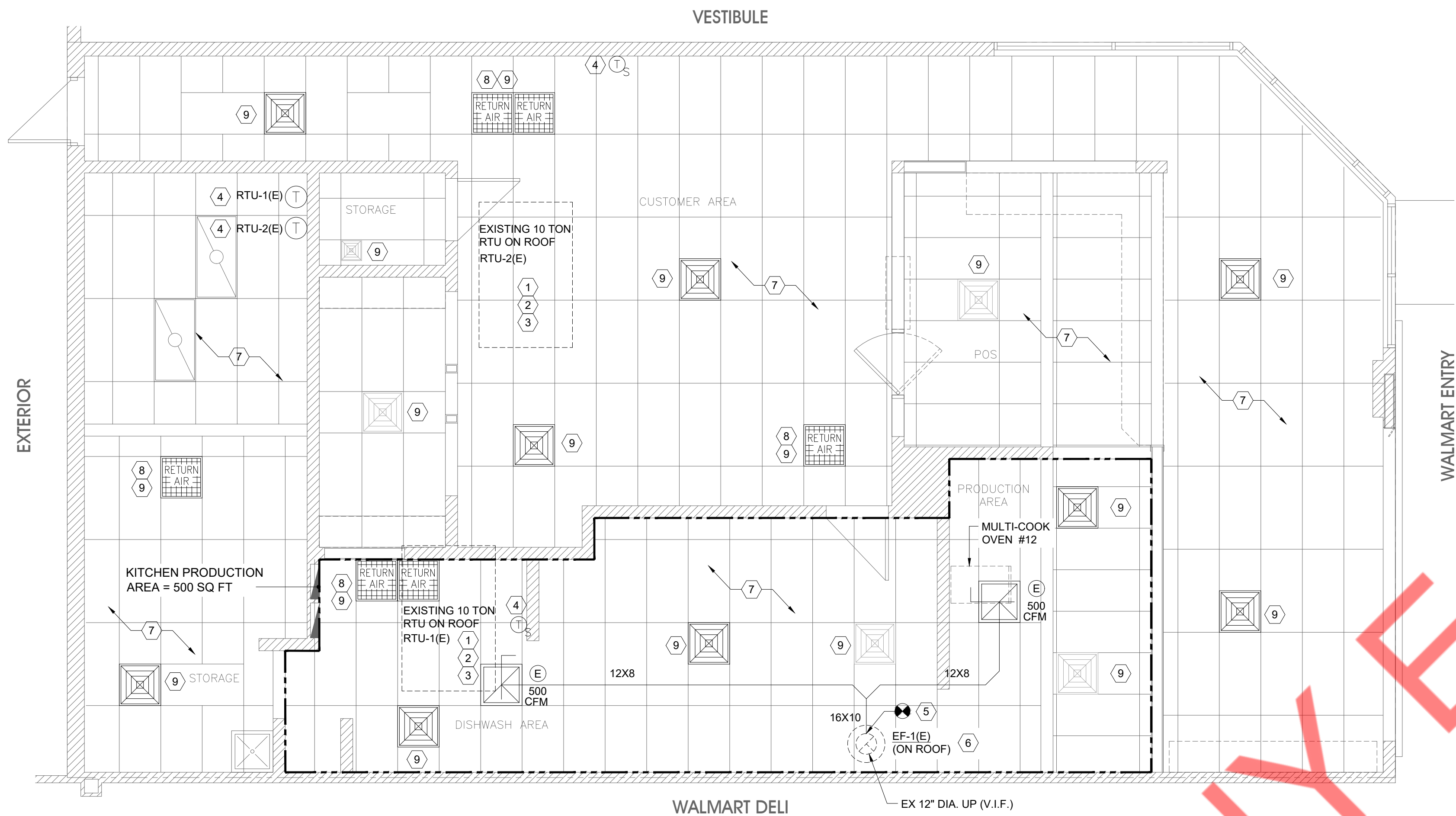
CRAVE

HOT DOGS & BARBECUE

Date	Issued For
4. 9. 25	BID & PERMIT REVIEWS
Sq. Ft.:	2,129

Mechanical Notes & Details

DATE: 03-20-2025CHECKED:
Job #:
CRAVE #: M1.0
xxx



Mechanical Plan

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

NOTE: CONDITIONS SHOWN ARE EXISTING TO REMAIN, UNLESS OTHERWISE NOTED.

EXHAUST CALCULATIONS:

KITCHEN / PRODUCTION AREA
500 SF x 0.7 = 350 CFM
MULTI-COOK OVEN (ITEM # 12) - MIN. 100 SF x 0.7 = 70 CFM
342 CFM + 70 CFM = 420 CFM
TOTAL EXHAUST REQUIRED FOR AREA = 420 CFM
TOTAL EXHAUST PROVIDED FOR AREA = 1000 CFM
*NOTE EXISTING EXHAUST FAN MAX CFM = 1475 CFM

HEAT GAIN NOTE:

- MULTI-COOK OVENS (ITEM # 12) ARE U.L. LISTED FOR VENTLESS OPERATION.
- EXHAUST GRILLE(S) @ 500 CFM (EACH) OFFSETS THE HEAT GAIN FROM THE INTERMITTENT USE OF THE OVENS.
- HVAC SYSTEM IN COMBINATION WITH THE KITCHEN EXHAUST SYSTEM OFFSETS THE LATENT (MOISTURE) LOAD OF THE COOKING AND HOLDING EQUIPMENT.

EXHAUST FAN REHAB NOTES

- EXISTING ROOF MOUNTED EXHAUST FAN UNIT(S) SHALL BE REUSED.
- GC / MC SHALL INSPECT, TEST, AND VERIFY FUNCTION OF EXISTING FAN UNITS. COORDINATE ANY REPAIRS NECESSARY TO MAINTAIN PROPER OPERATION OF UNIT(S)
- LABEL UNITS "CRABE"

MECHANICAL PLAN KEY NOTES

- CONTRACTOR SHALL BALANCE EACH DEVICE WITH THE CFM SHOWN ON PLAN.
- NEW DUCTWORK SHOWN ON PLAN ARE SCHEMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES FOR PIPING AND DUCTWORK ROUTING. OFFSET AND RUN PIPING, DUCTWORK INSIDE THE STRUCTURE IF REQUIRED. PROVIDE ANY EXTRA PIPING, DUCTWORK, FITTINGS, INSULATIONS AND OTHER ACCESSORIES IN ORDER TO COMPLETE THE INSTALLATION.
- EQUIPMENT SIZES, DIMENSIONS AND REQUIRED CONNECTIONS SHALL BE VERIFIED WITH THE ACTUAL EQUIPMENT SELECTED. VENDOR DRAWINGS BEFORE FABRICATION OF DUCTWORK, PIPING ETC.
- DUCT SIZES SHOWN ON PLANS ARE CLEAR INSIDE AIR STREAM DIMENSIONS.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS FOR ALL HVAC BASED ON ACTUAL EQUIPMENT SELECTED PRIOR TO INSTALLATION.
- COORDINATE WITH ALL TRADES FOR MATERIALS IN RATED AND PLENUM SPACES.
- ALL SOURCE OF MECHANICAL INTAKE SHALL MAINTAIN 10 LINEAR FEET SEPARATION BETWEEN ANY SOURCE OF EXHAUST. CONTRACTOR IS RESPONSIBLE TO ADJUST DUCT LENGTH AS NEEDED.
- MOUNT DUCTWORK AS HIGH AS POSSIBLE.
- TEST AND BALANCE AIR SYSTEMS. PROVIDE REPORT TO G.C AND OWNER.
- NEW DUCTWORK IN CONCEALED AREAS MAY BE RECTANGULAR WITH EQUIVALENT CROSS SECTIONAL FLOW AREA.
- PROVIDE FIRE OR FIRE+SMOKE DAMPER WHEREVER DUCTS ARE CROSSING FIRE/SMOKE RATED WALLS/BARRIERS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR FIRE RATINGS OF THE WALLS.
- INDOOR DUCT AND PLENUM INSULATION SCHEDULE:
UNCONDITIONED SPACES WITHIN BUILDING: R-12
WITHIN BUILDING ENVELOPE ASSEMBLY: R-12
OUTSIDE OF BUILDING: R-12
- ARCHITECTURAL LAYOUT AND DIMENSIONS FOR EQUIPMENT TO TAKE PRECEDENCE OVER MEP.

FIELD VERIFICATION NOTES

- GENERAL KITCHEN EXHAUST DESIGN WAS DEVELOPED FROM INFORMATION IN 2003 MCDONALD'S TENANT SPACE BUILD-OUT DRAWINGS.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE STARTING WORK AND AT THE COMPLETION OF DEMOLITION.
- NOTIFY ARCHITECT & ENGINEER OF ANY EXISTING CONDITIONS THAT VARY GREATLY FROM THE DEVELOPED DESIGN.
- PROVIDE PICTURES AND DRAWINGS OF FIELD CONDITIONS THAT NEED TO BE ADDRESSED BY THE ARCHITECT & ENGINEER.

HVAC SYSTEM NOTE

EXISTING MECHANICAL HVAC SYSTEM SHALL REMAIN FOR REUSE, INCLUDING ROOF TOP UNIT(S), DUCTWORK, DIFFUSERS & GRILLES, ETC.. REFER TO ROOF TOP UNIT REHAB NOTES FOR ADDITIONAL INFO.

ROOF TOP UNIT REHAB NOTES

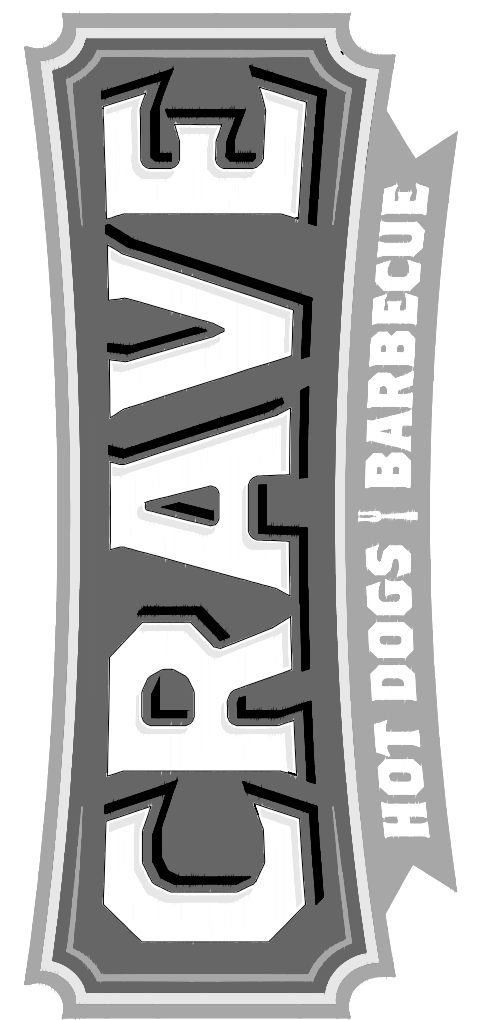
- EXISTING HVAC ROOF TOP UNIT(S) SHALL BE REUSED.
- GC / MC SHALL INSPECT, TEST, AND SERVICE EXISTING ROOF TOP UNITS.
- SERVICE OF THE EXISTING UNIT(S) SHALL INCLUDE:
 - REPLACE ALL BELTS
 - REPLACE ALL FILTERS
 - CLEAN COILS
 - CHECK AND FILL REFRIGERANT
- ANY ADDITIONAL REPAIRS REQUIRED SHALL BE COORDINATED WITH TENANT AS A CHANGE-ORDER.
- LABEL UNITS "CRABE"

MECHANICAL PLAN KEY NOTES

- APPROXIMATE LOCATION OF EXISTING ROOFTOP UNIT ON THE ROOF. EXISTING RTU TO REMAIN WITH ALL SUPPORTS AND ACCESSORIES.
- CONTRACTOR TO MODULATE THE FRESH AIR TAP FOR THE EXISTING RTU ON THE ROOF TO MATCH THE VALUES IN SIR BALANCE TABLE. REFER TO AIR BALANCE TABLE FOR THE OUTSIDE AIR CFM ON SHEET M1.0.
- REUSE EXISTING SMOKE DETECTOR. IF SMOKE DETECTOR IS NOT IN SATISFACTORY WORKING CONDITION, THEN INSTALL NEW SMOKE DETECTOR IN RETURN DUCT & IT SHALL BE FURNISHED/INSTALLED BY MECHANICAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR TO SHUT DOWN CORRESPONDING RTU UNDER ALARM CONDITIONS. ALL WIRING SHALL BE IN CONDUIT PER NEC. DUCT SMOKE DETECTOR SHALL COMPLY WITH UL 268A.
- CONTRACTOR TO VERIFY IN FIELD THE LOCATION AND CONDITION OF EXISTING THERMOSTAT AND TEMPERATURE SENSOR. REUSE, IF IN SATISFACTORY WORKING CONDITION OR REPLACE IN KIND.
- CONNECT NEW EXHAUST DUCT TO FAN EF-1(E) ON THE ROOF.
- APPROXIMATE LOCATION OF EXISTING EXHAUST FAN ON THE ROOF. EXISTING FAN TO REMAIN WITH ALL SUPPORTS AND ACCESSORIES. VERIFY IN FIELD IF EXHAUST FAN IS AVAILABLE ON THE ROOF. IF NOT, PROVIDE NEW IN KIND WITH SAME SPECIFICATIONS.
- EXISTING DUCTWORK WITH ACCESSORIES FOR EXISTING RTUs TO REMAIN.
- MODULATE THE RETURN AIR CFM FOR EXISTING RTUs TO MATCH WITH AIR BALANCE TABLE ON SHEET M1.0.
- EXISTING SUPPLY/RETURN AIR DIFFUSER TO REMAIN WITH ACCESSORIES. RELOCATE AS NECESSARY TO MATCH WITH NEW ARCHITECTURAL CEILING LAYOUT.

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Date	Issued For
4, 9, 25	BID & PERMIT REVIEWS
Sq. Ft.:	2,129

Mechanical
Floor Plan

DATE: 03-20-2025CHECKED:

Job #:

CRABE #: M2.0
xxx

ELECTRICAL NOTES		
GENERAL REQUIREMENTS	MATERIALS AND METHODS	DEMOLITION GENERAL NOTES
<div>1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND TOOLS TO PERFORM ALL WORK NECESSARY FOR THE COMPLETE EXECUTION OF THE ELECTRICAL WORK AS SHOWN ON THE DRAWINGS.</div> <div>2. PROVIDE WORK NOT SPECIFICALLY SHOWN OR SPECIFIED, YET REQUIRED TO INSURE PROPER AND COMPLETE OPERATIONS OF ALL SYSTEMS AND TO SATISFY THE DESIGN INTENT IN THE WORK AND TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.</div> <div>3. LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED UNDER THE ELECTRICAL CONTRACTORS' SCOPE OF WORK SHALL BE PERFORMED BY EXPERIENCED MECHANICS OF THE PROPER TRADE AND ALL WORKMANSHIP SHALL BE FIRST CLASS AND SHALL BE IN COMPLIANCE WITH THE SPECIFIC REQUIREMENTS OF THE CONTRACT DRAWINGS.</div> <div>4. ALL DISCREPANCIES ON DRAWING SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID CONSTITUTES ACCEPTANCE OF FIELD CONDITIONS.</div> <div>5. ALL DIVISION 1 SPECIFICATIONS AND ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS OUTLINED IN THE CONTRACT DOCUMENTS SHALL APPLY TO ELECTRICAL SYSTEMS.</div> <div>6. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF ALL APPLICABLE LOCAL, STATE & NATIONAL CODES, STANDARDS AND AUTHORITY(S) HAVING JURISDICTION.</div> <div>7. ALL MATERIALS PROVIDED BY THE CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS AND SHALL BE UL LISTED FOR THE INTENDED APPLICATION.</div> <div>8. THE ELECTRICAL DRAWING ARE NOT TO BE SCALED. WHERE SPECIFIC DETAILS AND DIMENSIONS FOR ELECTRICAL WORK ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL TAKE MEASUREMENTS AND MAKE LAYOUTS AS REQUIRED FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK.</div> <div>9. CONTRACTOR SHALL OBTAIN AND FURNISH ALL PERMITS, AND ARRANGE FOR ALL REQUIRED INSPECTIONS.</div> <div>10. CONTRACTOR SHALL OBTAIN AND FURNISH ALL PERMITS, AND ARRANGE FOR ALL REQUIRED INSPECTIONS.</div> <div>11. THE CONTRACT DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS, LOCATION OF SWITCHES, PANELBOARDS, CONDUITS, AND OTHER WORK. FIELD VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION OF WORK.</div> <div>12. ALL DISCONNECT SWITCHES AND STARTERS FOR THE MECHANICAL EQUIPMENT SHALL BE SIZED AND PROVIDED BY THE ELECTRICAL CONTRACTOR AND INSTALLED AND CIRCUITED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. INSTALL SWITCHES IN ACCESSIBLE LOCATIONS. PRIOR TO INSTALLATION OF ANY ELECTRICAL WORK RELATED TO NEW HVAC CIRCUITS, THE ELECTRICAL CONTRACTOR SHALL REVIEW THE MECHANICAL SHOP DRAWINGS FOR ACTUAL CIRCUIT REQUIREMENTS.</div> <div>13. THE ELECTRICAL CIRCUITS, COMPONENTS, AND CONTROLS ARE SELECTED AND SIZED FOR THE EQUIPMENT SPECIFIED AND OR SHOWN. IF SUBSTITUTIONS AND/OR EQUIVALENT EQUIPMENT ARE FURNISHED, IT SHALL BE THE RESPONSIBILITIES OF ALL PARTIES CONCERNED, INVOLVED IN AND FURNISHING THE SUBSTITUTE AND/OR EQUIVALENT EQUIPMENT TO VERIFY AND COMPARE THE ELECTRICAL CHARACTERISTICS OF THAT FURNISHED TO THAT SHOWN.</div> <div>14. FIELD COORDINATE EXACT ELECTRICAL CONNECTION POINTS TO EQUIPMENT PRIOR TO ROUGH IN OF ELECTRICAL COMPONENTS.</div> <div>15. FIELD DETERMINE EXACT MOUNTING LOCATION OF DUCT MOUNTED SMOKE DETECTORS. INSTALL PER NFPA AND MANUFACTURER'S WRITTEN INSTRUCTIONS.</div> <div>16. COORDINATE MOUNTING LOCATIONS OF LIGHTING SWITCHES, F/A DEVICES, TV, DATA/TEL OUTLETS, AND RECEPTACLES WITH MILLWORK, PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS FOR WALL CONSTRUCTION TYPES.</div> <div>17. COORDINATE MOUNTING LOCATIONS OF RECEPTACLE AND TV AND DATA OUTLETS WITH OWNER REPRESENTATIVE PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS FOR WALL CONSTRUCTION TYPES.</div> <div>18. PROVIDE A 120V RECEPTACLE AND SWITCHED LIGHTING OUTLET WITH LAMP WITHIN 3FT. OF THE SERVING SIDE OF ALL ELECTRICALLY OPERATED MECHANICAL EQUIPMENT INSTALLED IN ATTICS AND CRAWL SPACES.</div> <div>19. THE CONTRACTOR SHALL PROVIDE ALL CHANNEL AND ANGLE SUPPORTING SYSTEMS, HANGERS, ANCHORS, SLEEVES, BRACKETS, FABRICATED ITEMS, AND HARDWARE AS REQUIRED TO PROVIDE SECURE SUPPORT, PER N.E.C., FOR ALL ELECTRICAL COMPONENTS FROM THE BUILDING STRUCTURE.</div> <div>20. SPECIFIED CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY. FIELD COORDINATE ACTUAL ROUTING OF CONDUITS.</div> <div>21. PROVIDE TEMPORARY LIGHTING AND POWER AS REQUIRED FOR ALL SUBS AND TO SUIT JOB CONDITIONS.</div> <div>22. ALL MOUNTING HEIGHTS INDICATED ARE MEASURED FROM THE FINISHED FLOOR INSIDE, OR FINISHED GRADE OUTSIDE.</div> <div>23. WHERE CONCEALED BY INACCESSIBLE FINISHES, PROVIDE ACCESS DOORS TO ELECTRICAL JUNCTION AND PULL BOXES, CONTROL DEVIDES, AND EQUIPMENT, DISCONNECT SWITCHES AND ALL OTHER ITEMS REQUIRING MAINTENANCE, ADJUSTING, OR SERVICE. COORDINATE LOCATION OF ACCESS PANELS PANELS WITH ARCHITECT AND ALL AFFECTED TRADES.</div> <div>24. PROVIDE FINAL CLEANUP AND CONDUCT FIELD TESTS AFTER INSTALLATION OF ALL ELECTRICAL WORK. ADJUST ITEMS TO THE SATISFACTION OF THE OWNER, ARCHITECT, AND ENGINEER. LEAVE PANEL BOARD INTERIOR CLEAN AND FREE FROM CONSTRUCTION DEBRIS. NEATLY DRESS ALL WIRING, AND RE-TIGHTEN ALL TERMINATIONS PER MANUFACTURERS' RECOMMENDATIONS.</div> <div>25. TEST RESISTANCE OF GROUNDING ELECTRODE SYSTEM TO EARTH TO ACHIEVE A MINIMUM OF 10 OHMS. PROVIDE ADDITIONAL ELECTRODE TO OBTAIN ADEQUATE READING.</div> <div>26. MAINTAIN ON THE JOBSITE IN GOOD CONDITION ONE SET OF UP TO DATE AS-BUILT ELECTRICAL DRAWINGS THE LOCATION OF ALL CONCEALED CONDUIT RUNS AND ALL WORK WHICH IS INSTALLED DIFFERENTLY THAN IN THE LOCATION AND MANNER INDICATED ON THE DRAWINGS. PROVIDE A COPY OF THESE PLANS FOR THE OWNER.</div> <div>27. UPON COMPLETION OF PROJECT, BALANCE PANELBOARD LOADS AMONG PHASES IN NEW PANELBOARDS WITHIN 10% OF EACH OTHER.</div> <div>28. PROVIDE A FULL ONE YEAR WARRANTY ON ALL ELECTRICAL LABOR, AND MATERIALS INSTALLED IN THIS PROJECT, STARTING FROM THE ISSUACE OF THE OWNERS CERTIFICATE OF OCCUPANCY.</div> <div>29. CONTRACTOR SHALL ADJUST WIRE SIZES TO ACCOUNT FOR VOLTAGE DROPPED AS REQUIRED BY THE NORTH CAROLINA BUILDING CODE TO LIMIT VOLTAGE DROP ON FEEDERS TO MAXIMUM OF 2%, AND BRANCH CIRCUITS TO 3%</div>	<div>1. ALL WIRE SHALL BE COPPER TYPE "THHN/ THWN," SOLID FOR SIZES #10 AND #12, AND STRANDED FOR #8 AND LARGER UNLESS OTHERWISE NOTED. ALUMINUM WIRE MAY ONLY BE USED WHERE SPECIFICALLY NOTED. MINIMUM ALUMINUM WIRE SIZE SHALL BE #10.</div> <div>2. MINIMUM WIRE SIZE SHALL BE #12 AWG. FOR BRANCH CIRCUITS OVER 100' MINIMUM HOMERUN TO PANEL SHALL BE #10 AWG.</div> <div>3. ALL WIRE SHALL BE INSTALLED IN CONDUIT, UNLESS OTHERWISE NOTED. MINIMUM HOMERUN SIZE SHALL BE 3/4". 1/2" CONDUIT MAY BE USED BETWEEN DEVICES. ALL CONDUIT SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING WALLS AND FLOORS. MINIMUM U.G. CONDUIT HOMERUN SHALL BE 3/4". MC CABLE MAY BE USED PER THE NEC, WHERE CONCEALED.</div> <div>4. PROVIDE (3) SPARE 1" CONDUIT STUB-UPS FROM RECESSED PANELS TO ABOVE CEILING FOR FUTURE USE.</div> <div>5. ALL CONDUITS INSTALLED IN DRY INTERIOR LOCATIONS SHALL BE ELECTRICAL METALLIC TUBING, UNLESS OTHERWISE NOTED.</div> <div>6. ALL CONDUITS INSTALLED IN EXTERIOR LOCATIONS SHALL BE RIGID SCH.80 PVC. ALL CONDUITS INSTALLED UNDERGROUND SHALL BE RIGID SCH.40 PVC. BURIED PER NEC. ALL U.G. CONDUITS INSTALLED IN AREAS COVERED BY ART. 517 SHALL BE METAL.</div> <div>7. ALL EXTERIOR EQUIPMENT SHALL BE CONNECTED WITH LIQUID TIGHT FLEXIBLE METAL CONDUIT AND WEATHERPROOF FITTINGS.</div> <div>8. INSTALL ALL RACEWAYS, BOXES, ENCLOSURES, AND CABINETS AS INDICATES AND INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.</div> <div>9. OUTLET AND SWITCH BOXES SHALL BE STEEL IN DRY LOCATIONS AND CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS AND OR OF SPECIAL CONSTRUCTION TO SUIT SPECIFIC SITUATIONS. ALL BOXES SHALL BE RECESSED FLUSH IN WALLS AND/ OR NON-READILY ACCESSIBLE AREAS.</div> <div>10. INSTALL COMPONENTS AND EQUIPMENT TO PROVIDE MAXIMUM POSSIBLE HEADROOM WHERE MOUNTING HEIGHTS OR OTHER LOCATION CRITERIA ARE NOT INDICATED.</div> <div>11. MAINTAIN ALL WORKING CLEARANCES AROUND EQUIPMENT AS REQUIRED BY THE N.E.C. INSTALLED PANELBOARDS WITH TOP OF TRIM AT 6'-6" ABOVE FINISHED FLOOR.</div> <div>12. ALL BRANCH AND FEEDER CIRCUITS SHALL CONTAIN A GROUNDING CONDUCTOR, UNLESS OTHERWISE NOTED, AND BE SIZED AND BONDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRIC CODE. ALL GROUNDING CONDUCTORS SHALL BE COPPER, U.O.N.</div> <div>13. ALL PANELBOARDS, DISCONNECT SWITCHES AND SYSTEM PANELS SHALL BE SQUARE D, GE OR EQUAL AND HAVE PLASTIC LAMINATE NAMEPLATES FOR IDENTIFYING SYSTEM FUNCTION AND CHARACTERISTICS.</div> <div>14. FIRE SEAL ALL CONDUIT PENETRATIONS IN FIRE RATED WALLS AND FLOORS BACK TO INTIAL RATING. ALL CONDUIT ROOF PENETRATIONS AS REQUIRED TO PROVIDE WEATHERPROOF SEALS. COORDINATED WITH OTHER TRADES AND ROOFING CONTRACTOR.</div> <div>15. ALL WIRING DEVICES INSTALLED SHALL BE COMMERCIAL GRADE AND MANUFACTURED BY LEVITON, P&S OR HUBBELL. ALL DEVICES INSTALLED IN FINISHED AREAS SHALL BE BLACK WITH MATCHING NON-METALLIC FACEPLATES. FIELD VERIFY ACTUAL COLOR PRIOR TO ORDERING WITH OWNER OR TENANT.</div> <div>16. ALL DISCONNECT SWITCHES SHALL BE RATED HEAVY DUTY, AND NEMA 3R WHERE INSTALLED OUTDOORS.</div> <div>17. SWITCH AND OUTLET BOXES SHALL NOT BE INSTALLED WITHIN THE SAME STUD-CAVITY IN RATED PARTITIONS AND DEMISING WALLS.</div> <div>18. PROVIDE SUPPLEMENTAL WIRE-TYPE SUPPORT OF ALL LAY-IN LIGHTING FIXTURES FROM BUILDING STRUCTURE. LIGHTING FIXTURES WEIGHING LESS THAN 10 POUNDS SHALL HAVE ONE #12 GAGE HANGER WIRE CONNECTED FROM THE LIGHTING FIXTURE TO THE STRUCTURE ABOVE. LIGHTING FIXTURE WEIGHING MORE THAN 10 POUNDS SHALL HAVE TWO #12 GAGE WIRES ATTACHED AT OPPOSING CORNERS OF THE LIGHTING FIXTURE.</div> <div>19. PROVIDE NYLON PULLSTRINGS IN ALL RACEWAYS.</div> <div>20. ALL WIRING SHALL COMPLY WITH NEC 300.22(C)(1), FBC M602.2.1.1 AND FBC M602.2.1.4 FOR PLENUM CEILING SPACES.</div> <div>21. TELEPHONE TERMINAL BOARD SHALL BE 4'X8'X3/4" PLYWOOD PAINTED ALL SIDES WITH FIRE RESISTANT PAINT UNLESS OTHERWISE NOTED.</div>	<div>1. BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.</div> <div>2. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS, CONNECTIONS AND DISRUPTIONS EFFECTING OTHER TRADES (MECHANICAL AND ELECTRICAL), INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.</div> <div>3. DEMOLITION DRAWINGS (SEE ARCHITECTURAL SHEETS) ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.</div> <div>4. REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.</div> <div>5. THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.</div> <div>6. ALL EQUIPMENT, LIGHTING FIXTURES, DEVICES, AND ASSOCIATED WIRING INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS. NO EQUIPMENT, WIRING, OR CONDUIT SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.</div> <div>7. ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY PIPING OR CONDUIT WHICH MUST REMAIN ACTIVE, HE SHALL IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.</div> <div>8. ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.</div> <div>9. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.</div>
SYMBOLS		
LIGHTING		
⚡ 125V AC SINGLE POLE 20 AMP SWITCH.		
⚡ a,b,c 125V AC SINGLE POLE 20 AMP SWITCH, LIGHTING CONTROLLED BY SWITCH INDICATED WITH LOWERCASE LETTER.		
⚡ D 125V AC SINGLE POLE 20 AMP DIMMER SWITCH.		
⚡ WP 125V AC SINGLE POLE 20 AMP SWITCH, WEATHER RESISTANT.		
⚡ OS WALL MOUNTED OCCUPANCY SENSOR.		
COMMUNICATIONS		
◀ D TELECOMMUNICATIONS OUTLET, RECESSED DOUBLE GANG JUNCTION BOX WITH SINGLE-GANG MID-RING AND BLANK PLATE AT 18" AFF. UON, PROVIDE 3/4" C WITH CAT-6 CABLING TO LOCATION(S) PER PLAN.		
POWER AND WIRING		
▬ PANELBOARD AS SCHEDULED		
☐ FUSED DISCONNECT SWITCH, NEMA 1 (INDOOR) OR NEMA 3R (OUTDOOR). SWITCH MUST BE CAPABLE OF BEING LOCKED IN THE OPEN (OFF) POSITION.		
☐ NON-FUSED (NF) DISCONNECT SWITCH, NEMA 1 (INDOOR) OR NEMA 3R (OUTDOOR). SWITCH MUST BE CAPABLE OF BEING LOCKED IN THE OPEN (OFF) POSITION.		
☐ J JUNCTION BOX. CODE SIZED FOR APPLICATION.		
▬ RACEWAY CONCEALED ABOVE CEILING, IN WALLS OR EXPOSED.		
- - - RACEWAY CONCEALED BELOW FLOOR, ROOF, OR GRADE.		
↖ HOMERUN TO PANELBOARD, NUMBER OF CIRCUITS INDICATED IN LABEL. PROVIDE GREEN INSULATED GROUNDING CONDUCTOR IN ALL POWER AND LIGHTING RACEWAYS, NOT SHOWN ON PLANS.		
⏏ GROUND		
WIRING DEVICES		
⏏ 125V AC 20 AMP DUPLEX RECEPTACLE, NEMA 5-20R OR AS INDICATED IN EQUIPMENT SCHEDULE.		
⏏ WP 125V AC 20 AMP DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT CIRCUIT INTERRUPTER, RECEPTACLE SHALL BE LISTED AS WEATHER RESISTANT.		
⏏ GFI 125V AC 20 AMP DUPLEX RECEPTACLE, NEMA 5-20R, WITH GROUND FAULT INTERRUPTER.		
⏏ 125V AC 20 AMP DUPLEX RECEPTACLE, NEMA 5-20R, FLUSH-MOUNTED IN CEILING.		
⏏ 125V AC 20 AMP DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R		
M Sw MOTOR SWITCH		
OS CEILING MOUNTED OCCUPANCY SENOR.		

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Date Issued For

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Sq. Ft.: 2,129

Electrical
Specification
And Symbol List

DATE:03-20-2025 CHECKED: NYE

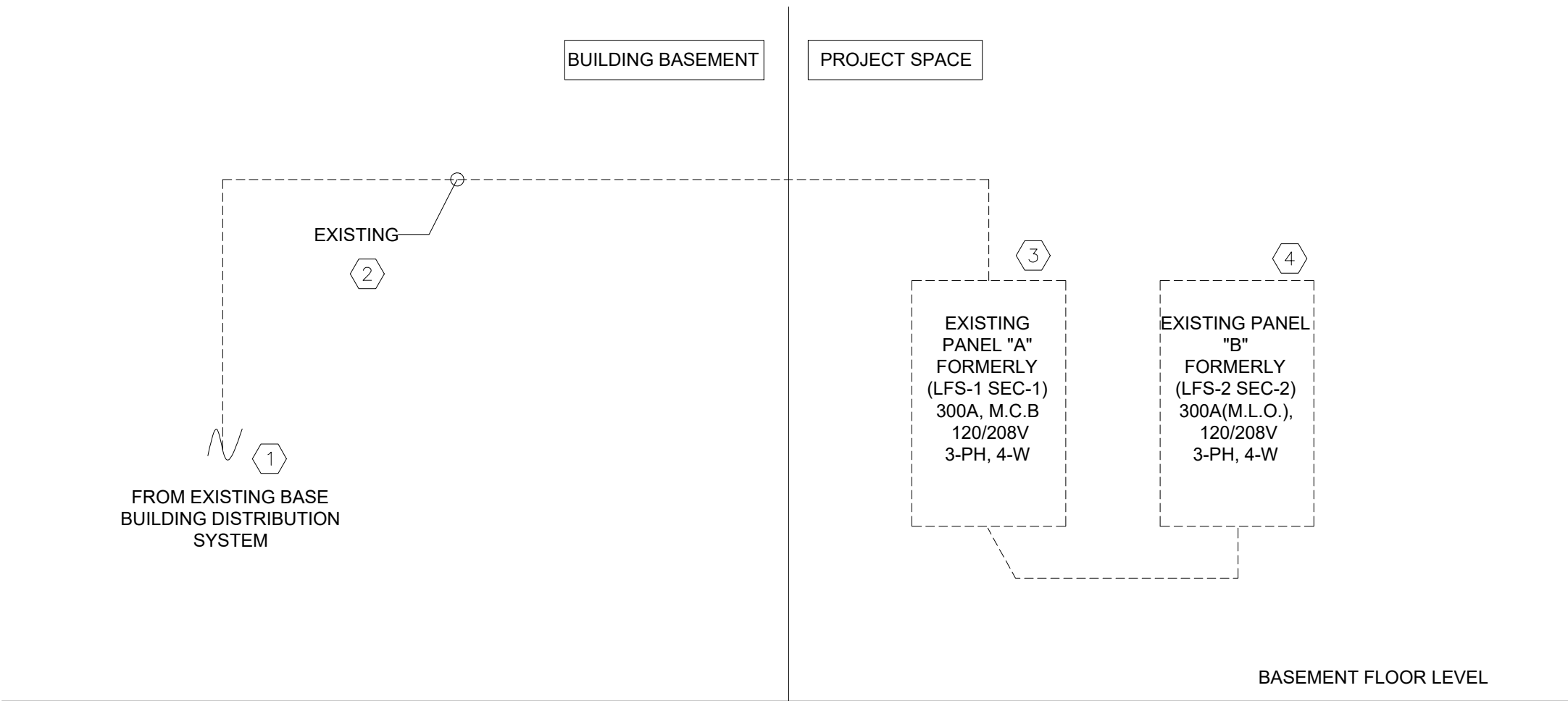
Job #:

Crave #: E1.0

xxx

ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)
1	1	HOT DOG GRILL	STAR	75C-120V	14.4	1.73		120	1	60		X	5-15P	18"
3	1	SQUEEZE BOTTLE WARMER	SERVER PRODUCTS	88810 SBW	4.1	0.5		120	1	60		X	5-15P	18"
4	1	REFRIGERATED SANDWICH/SALAD PREP TABLE	SEAGATE	SP8P1M	4.3	-	1/2	115	1	60		X	5-15P	18"
8	1	MICROWAVE	AMANA COMM. (ACP)	RCS10TS	13.0	1.6		120	1	60		X	5-15P	42"
12	1	MULTI-COOK OVEN (4-CHAMBER)	ALTO-SHAAM	VMC-H4	32.36	10.6-13.9		208 / 240	3	60		X	15-50P	60"
13	1	TWO DOOR REACH IN FREEZER	SEAGATE	SB54F	9	-	1	115	1	60		X	5-15P	18"
14	2	COUNTER TOP WARMER	NEMCO	6055A-43	12.5	1.5		120	1	60		X	5-15P	18"
16	1	HEATED HOLDING PROOFING CABINET	METRO	C519-CFC-U	16.0	2		120	1	60		X	5-20P	18"
27	1	CO2 SYSTEM	NUCO2	XACT-MIX-30	20.0			120	1	60		X	5-15P	18"
31	1	MULTI PRODUCT WARMING STATION	HATCO	MPWS-36	14.2	2.8		120/208	1	60		X	L14-20P	30"
35	1	SODA DISPENSER 8 VALVE MACHINE	LANCER	IBD 30"- 8 VALVE	3.6	-		115	1	60		X	5-15P	18"
39	1	ICE CUBER & WATER FILTER	SCOTTSMAN	N0422A-1	12.9	1.75		115	1	60		X	-	72"
50	2	60" UNDERCOUNTER REFRIGERATOR	SEAGATE	UC61R	3	-	3/8	115	1	60		X	-	18"
51	2	DOUBLE DOOR REACH-IN REFRIGERATOR	SEAGATE	SB54R	4.5	-	1/4	115	1	60		X	5-15P	18"
53	1	SIDE BY SIDE BELGIAN WAFFLE MAKER	WARING	VWV250X2	20	2.4		120	1	60		X	5-20P	42"
54	1	HOT FOOD WELLS DROP-IN UNIT	ALTO SHAAM	300-HW/D6	15	1.8		120	1	60		X	5-20P	42"
55	1	POUR-OVER COFFEE BREWER	BLOOMFIELD	8774	12.5	1.5		120	1	60		X	5-15P	42"





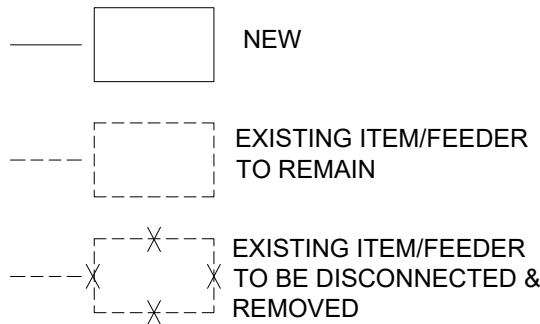
RISER DIAGRAM KEYED WORK NOTES:

- EXISTING ELECTRICAL SERVICE FROM BASE BUILDING(WALMART) SHALL REMAIN. E.C SHALL GET INFORMATION ABOUT THE EXISTING POWER DISTRIBUTION PRIOR TO COMMENCING ANY WORK AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCIES. BASE BID ACCORDINGLY.
- EXISTING INCOMING FEEDERS TO REMAIN. E.C. TO VERIFY OPERABLE CONDITION OF FEEDER'S IN FIELD AND PROVIDE NEW IF FOUND INOPERABLE. BASE BID ACCORDINGLY
- EXISTING 300A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL A ("LFS -1 SEC-1") TO REMAIN. E.C TO FIELD VERIFY THE EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL, REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.
- EXISTING 300A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL B ("LFS -2 SEC-2") TO REMAIN. E.C TO FIELD VERIFY THE EXACT SIZE, LOCATION & OPERABLE CONDITION OF THE PANEL, REPLACE IF INOPERABLE. BASE BID ACCORDINGLY.

RISER DIAGRAM GENERAL NOTES:

- ELECTRICAL CONTRACTOR TO COORDINATE FAULT CURRENT (Isc) RATING WITH UTILITY COMPANY AND AHJ PRIOR TO COMMENCING ANY WORK.
- ABOVE RISER DIAGRAM IS FOR REFERENCE PURPOSES ONLY. E.C. SHALL VERIFY EXACT POWER DISTRIBUTION IN FIELD AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY.
- E.C. SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION.
- E.C TO CHANGE THE TAG OF THE PANELS.

ELECTRICAL RISER SYMBOLS:



Electrical Riser Diagram

SCALE :N.T.S



Electrical Panel Schedule

SCALE :N.T.S



PANEL SCHEDULE GENERAL NOTES

E.C SHALL VERIFY EXACT SPARE BREAKER AVAILABLE IN ALL THE EXISTING PANELS AND ADJUST THE CIRCUIT AS PER REQUIREMENT. REPORT TO ENGINEER FOR ANY DISCREPANCY.

PANEL: (LFS- 1 SEC - 1) (A)										MOUNTING:		RECESSED					
208Y/120		VOLTS,		3		PHASE,		4		WIRE		LOCATION:		DISHWASH AREA			
MAIN CB		300A		M.L.O.		NA		BUS:		300A		MIN,		FED FROM:		EXISTING ELECTRICAL SERVICE	
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	20	LIGHTING-STORAGE, DISHWASH AREA, PRODUCTION	L	1.40	2#12, #12G, #3/4"C	1.90			2#12, #12G, #3/4"C	0.5	O	CUSTOMER AREA FANS	20	2			
3	20	LIGHTING- CUSTOMER AREA, STORAGE	L	1.25	2#12, #12G, #3/4"C		1.25							4			
5	20	LIGHTING- POS AND ENTRY AREA	L	1.25	2#12, #12G, #3/4"C			1.25				SPARE	20-2P	6			
7	20	SPARE				0.00						SPACE	20	8			
9	20	SHOW WINDOW RECEPTACLE	L	1.50	2#12, #12G, #3/4"C		1.50					SPACE	20	10			
11	20	SHOW WINDOW RECEPTACLE	L	1.50	2#12, #12G, #3/4"C			1.50				SPACE	20	12			
13	20	SHOW WINDOW RECEPTACLE	L	0.90	2#12, #12G, #3/4"C	0.90								14			
15		SPACE					0.00					SPARE	30-3P	16			
17		SPACE						0.00						18			
19		SPACE				0.00								20			
21		SPACE					0.00					SPARE	30-3P	22			
23		SPACE						0.00						24			
25		SPACE				3.96				3.96	E			26			
27		SPACE					3.96		2#8, #10G, #3/4"C	3.96	E	12_MULTI-COOK OVEN	40-3P	28			
29		SPACE						3.96		3.96	E			30			
31		SPACE				0.00						SPARE	20	32			
33							0.00					SPARE	20	34			
35	30-2P	SPARE						0.00				SPACE		36			
37		SPACE				0.00						SPACE		38			
39		SPACE					0.00					SPACE		40			
41	20	SPARE						0.00				SPACE		42			
TOTAL CONNECTED LOAD (KVA)						6.76	6.72	6.72									

PANEL: (LFS-2 SEC-2) (B)										MOUNTING:		RECESSED		
208Y/120	VOLTS,	3	PHASE,	4	WIRE	LOCATION:					DISHWASH AREA			
MAIN CB	NA	M.L.O.	300A	BUS:	300A	MIN,	FED FROM:					EXISTING ELECTRICAL SERVICE		
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	20	STOP NOT CONNECTED				0.90			2#12, #12G, #3/4"C	0.9	O	POS	20	2
3	20	STOP NOT CONNECTED					0.18		2#12, #12G, #3/4"C	0.18	R	GENERAL RECEPTACLE	20	4
5	20	38_SODA DISPNSER	E	1.23	2#12, #12G, #3/4"C			1.59	2#12, #12G, #3/4"C	0.36	E	50_UNDERCOUNTER RIFRIGERATOR	20	6
7	20	39_ICE MACHINE WITH WATER FILTER	E	1.48	2#12, #12G, #3/4"C	1.84			2#12, #12G, #3/4"C	0.36	E	50_UNDERCOUNTER RIFRIGERATOR	20	8
9	20	16_HEATED HOLDING PROOFING CABINET	E	1.84	2#12, #12G, #3/4"C		2.02		2#12, #12G, #3/4"C	0.18	R	TICKET PRINTER	20	10
11	20	1_HOT DOG GRILL	E	1.50	2#12, #12G, #3/4"C			2.08	2#12, #12G, #3/4"C	0.58	E	14_COUNTER TOP WARMER	20	12
13	20	3_SQUEEZE BOTTLE WARMER	E	0.50	2#12, #12G, #3/4"C	1.08			2#12, #12G, #3/4"C	0.58	E	14_COUNTER TOP WARMER	20	14
15	20	4_REFRIGERATED SANDWICH/SALAD PREP TABLE	E	0.49	2#12, #12G, #3/4"C		0.99		2#12, #12G, #3/4"C	0.50	R	30_KDS ORDER	20	16
17	20	54_HOT FOOD WELLS-DROP IN UNIT	E	1.50	2#12, #12G, #3/4"C			2.00	2#12, #12G, #3/4"C	0.50	R	30_KDS ORDER	20	18
19	20	51_DOUBLE DOOR REACH IN REFRIGERATOR	E	0.50	2#12, #12G, #3/4"C	0.50						SPACE		20
21	20	51_DOUBLE DOOR REACH IN REFRIGERATOR	E	0.50	2#12, #12G, #3/4"C		2.00		2#12, #12G, #3/4"C	1.50	E	55_COFFEE BREWER	20	22
23	20	13_TWO DOOR RACH IN REFRIGERATOR	E	1.04	2#12, #12G, #3/4"C			2.54	2#12, #12G, #3/4"C	1.50	E	8_MICROWAVE	20	24
25		SPACE				0.90			2#12, #12G, #3/4"C	0.90	R	GENERAL RECEPTACLE	20	26
27	20	CO2 SYSTEM	E	1.80	2#12, #12G, #3/4"C		2.70		2#12, #12G, #3/4"C	0.90	R	GENERAL RECEPTACLE	20	28
29	20	MGR'S DESK	R	1.08	2#12, #12G, #3/4"C			1.98	2#12, #12G, #3/4"C	0.90	R	GENERAL RECEPTACLE	20	30
31	20	EF-1(EXIST)	M	0.75	2#12, #12G, #3/4"C	1.65			2#12, #12G, #3/4"C	0.90	R	GENERAL RECEPTACLE	20	32
33	20	GENERAL RECEPTACLE	R	1.44	2#12, #12G, #3/4"C		2.83			1.39	E	35_MULTI PRODUCT WARMING STATION	20-2P	34
35	20	SPARE						1.39	2#12, #12G, #3/4"C	1.39	E			
37	20	SPARE				1.20				1.20	E	53_WAFFLE MAKER	20-2P	38
39							1.20		2#12, #12G, #3/4"C	1.20	E			
41	20-2P	SPARE						0.00				SPARE	20	42
TOTAL CONNECTED LOAD (KVA)						8.07	11.92	11.57						

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Electrical Riser Diagram & Panel Schedule

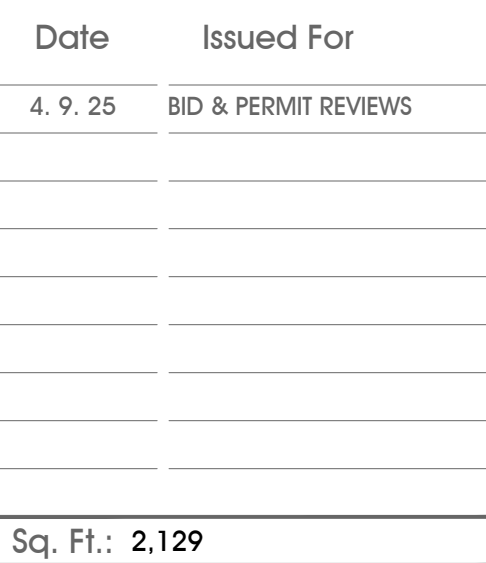
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PLUMBING GENERAL NOTES AND SPECIFICATIONS














1. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, AND TOOLS TO PERFORM ALL WORK NECESSARY FOR THE COMPLETE EXECUTION OF THE PLUMBING WORK AS SHOWN ON THE DRAWINGS. PIPING SHALL ESSENTIALLY BE ADJUSTED TO THE INDICATED LOCATIONS OF THE DRAWINGS. HOWEVER, ACCEPTED PLACEMENT SHALL BE VERIFIED BY CONFIRMING EXACT LOCATION OF STRUCTURES AND OTHER UTILITIES IN THE FIELD AND BY CAREFUL LAYOUT PRIOR TO EXECUTION OF THE WORK. PLUMBING DRAWINGS ARE GENERALLY DIAGRAMMATIC AND SHOULD NOT BE SCALED.
2. PROVIDE WORK NOT SPECIFICALLY SHOWN OR SPECIFIED, YET REQUIRED FOR PROPER AND COMPLETE OPERATION OF ALL SYSTEM AND TO SATISFY THE DESIGN INTENT. COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.
3. LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED UNDER THE PLUMBING CONTRACTORS' SCOPE OF WORK SHALL BE PERFORMED BY EXPERIENCED MECHANICS OF THE PROPER TRADE AND ALL WORKMANSHIP SHALL BE FIRST CLASS AND SHALL BE IN COMPLIANCE WITH THE SPECIFIC REQUIREMENTS OF THE CONTRACT DRAWINGS.
4. ALL DISCREPANCIES ON DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID CONSTITUTED ACCEPTANCE OF FIELD CONDITIONS.
5. SEE ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS, MOUNTING HEIGHT, DIMENSIONS AND ADDITIONAL REQUIREMENTS NOT COVERED ON THESE DRAWINGS.
6. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF ALL APPLICABLE LOCAL, STATE & NATIONAL CODES, STANDARDS & AUTHORITY(S) HAVING JURISDICTION.
7. CONTRACTOR SHALL OBTAIN AND FURNISH ALL PERMITS, AND ARRANGE FOR ALL REQUIRED INSPECTIONS.
8. CONTRACTOR SHALL INSPECT THE SITE FOR FIELD VERIFICATION OF ALL ASPECTS OF THE PROJECT PRIOR TO BIDDING.
9. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES.
10. ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, OR IN CHASES. PIPING EXPOSED SHALL BE SLOPED AND PAINTED TO MATCH ARCHITECTURAL FINISHED. PIPING IN MECHANICAL ROOMS MAY BE SLOPED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING AND WEATHERPROOFING INTEGRITY OF ALL PIPING AND PENETRATION.
12. CONTRACTOR SHALL INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
13. DO NOT PENETRATE WALL FOOTINGS WITH PIPING. COORDINATE WITH GENERAL CONTRACTOR TO DROP FOOTINGS AS REQUIRED TO CLEAR PLUMBING SERVICES. WHERE ABSOLUTELY NECESSARY, ALL PIPING PENETRATING BEARING WALL OR FOOTING MUST BE SLEEVED AND LOCATION APPROVED BY THE STRUCTURAL ENGINEER.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SUPPORTING DEVICES FOR ALL FIXTURES INCLUDED IN CONTRACT, OR HEREIN SPECIFIED, OR OTHERWISE.
15. WALL BRACKETS, HANGERS, SUPPORTS, ETC. SHALL BE PROVIDED WHERE REQUIRED IN ACCORDANCE WITH THE BEST STANDARD PRACTICE OF THE TRADE AND AS PER CODE. ADDITIONAL SUPPORTS SHALL BE PROVIDED TO TRANSMIT LOADS TO THE MAIN STRUCTURE WHERE REQUIRED. ALL EXPOSED SUPPORTS SHALL BE HOT DIPPED GALVANIZED OR FIBER GLASS REINFORCED "UNISTRUT" TYPE INCLUDING HARDWARE. MAXIMUM HORIZONTAL SPACING:
 - CAST IRON 5'-0" ON CENTER (10' PIPE LENGTHS MAY BE 10'-0" SPACING)
 - COPPER 6'-0" ON CENTER FOR 1-1/4" AND SMALLER
10'-0" ON CENTER FOR 1-1/2" AND LARGER
 - CPVC 4'-0" ON CENTER FOR 1/2" THRU 1"
4'-0" ON CENTER FOR 1-1/4" AND LARGER
 - PVC 4'-0" ON CENTER
16. STORM DRAIN, CONDENSATE DRAIN, SANITARY WASTE AND VENT PIPING SHALL BE COLLECTED AND TERMINATED AT A POINT SHOWN ON THE DRAWINGS. PIPING SHALL BE SCHEDULE 40 TYPE DWV PIP WITH SOLVENT WELD JOINTS, EXCEPT FOR RETURN AIR PLENUM AREAS WHERE SERVICE WEIGHT CAST IRON PIPE, WITH HUB AND SPIGOT FITTINGS OR PVC PIPING WITH 1" THICK FIRE WRAP INSULATION SEALED TO PROVIDE $FS^2/SD = 25/50$ SHALL BE USED. FIRE WRAP INSULATION SHALL BE 5A FIRE RATED PLENUM AIR GAP BY 3M OR APPROVED EQUIVALENT.
17. ALL DRAINAGE PIPING 2" AND LARGER SHALL HAVE A MINIMUM SLOPE OF $X/8"$ PER FOOT. PIPING 2-1/2" AND SMALLER SHALL HAVE A MINIMUM SLOPE OF $X/8"$ PER FOOT UNLESS OTHERWISE NOTED.
18. VENT PIPING SHOWN ON FLOOR PLANS IS ONLY INDICATIVE EXCEPT FOR VTR LOCATIONS.
19. BUILDING DOMESTIC WATER PIPING (ABOVE FLOOR) SHALL BE CPVC PLASTIC PIPE AND FITTINGS. PROVIDE TRANSITION FITTINGS AS REQUIRED TO INSTALL VALVES, FIXTURE SOPS, EQUIPMENT AND OTHER COMPONENTS. PIPE AND FITTING SHALL CONFORM TO ASTM - 1784. WATER PIPING IN RETURN AIR PLENUM AREAS SHALL BE TYPE L HARD COPPER TUBE OR CPVC PIPING WITH 1" THICK FIRE WRAP INSULATION SEALED TO PROVIDE $FS^2/SD = 25/50$. FIRE WRAP INSULATION SHALL BE 5A FIRE RATED PLENUM AIR GAP BY 3M OR APPROVED EQUIVALENT. ALL EXPOSED PIPING SHALL BE TYPE L HARD COPPER TUBE PAINTED TO MATCH.
20. ALL MATERIALS PROVIDED BY THE CONTRACTOR SHALL BE NEW AND FREE OF DEFECTS AND SHALL BE IT LISTED FOR THE INTENDED APPLICATION.
21. ALL HAND SINKS AND LAVATORIES SHALL BE PROVIDED WITH TEMPERED WATER AND TEMPERATURE SET TO 110°F MAXIMUM.
22. HOT AND COLD WATER SUPPLY PIPING AND DRAIN PIPING UNDER HANDICAPPED LAVATORIES SHALL BE INSULATED PER ASHRAE 90.1 DISABILITIES ACT, WITH FACTORY FABRICATED SEAMLESS MICROBIAL PVC RESIN INSULATION.
23. VALVES AND FITTINGS SHALL BE OF SAME SIZE AS LINE IN WHICH THEY ARE INSTALLED.
24. INSTALL WATER HAMMER ARRESTORS AT EACH FIXTURE, OR BATTERY OF FIXTURES WHERE REQUIRED. ARRESTORS SHALL BE FACTORY FABRICATED. INSTALL ARRESTORS AND SIZE PER PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH-201. AIR CHAMBERS SHALL NOT BE CONSIDERED AND DRAINAGE TO WATER HAMMER ARRESTORS AS SPECIFIED.
25. ALL WATER SUPPLY AND DRAINAGE LINES SHALL BE INSTALLED AS CLOSE TO PLANS AS POSSIBLE WITH NO CHANGE IN SIZING.
26. BALL VALVES $X/8"$ THROUGH 2" SHALL BE TWO PIECE - 600 WOG, TEFLON SEATS, ANSI 316 STAINLESS STEEL BALL AND STEM (EXTENSION STEM ON INSULATED HOT WATER AND TEMPERED HOT WATER), BRONZE BODY WITH THREADED OR SOLDER ENDS.

CODE COMPLIANCE

ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS, AND AMENDED BY THE INSPECTING AUTHORITY. NOTHING IN THESE DRAWINGS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHERS APPLICABLE TO THESE PROJECT:

1. NEW YORK STATE BUILDING CODE 2020.
2. NEW YORK STATE PLUMBING CODE 2020.
3. NEW YORK STATE MECHANICAL CODE 2020.
4. NEW YORK STATE ENERGY CODE 2020.

PLUMBING SPECIALTIES SCHEDULE

SYMBOL	DESCRIPTION	EQUIPMENT BASIS OF DESIGN	CONNECTION SIZE	REMARKS	SUBMITTAL REQUIRED
X, FD 	EXISTING FLOOR DRAIN	WATTS FD-100-A-7	3"	ROUND HEEL-PROOF TYPE STRAINER, SCHEDULE 40 GASKET, TRAP PRIMER CONNECTION. SEE FLOOR DRAIN DETAIL.	NO
D 	FLOOR DRAIN	WATTS FD-100-A-7	3"	ROUND HEEL-PROOF TYPE STRAINER, SCHEDULE 40 GASKET, TRAP PRIMER CONNECTION. SEE FLOOR DRAIN DETAIL.	YES
X, FS 	EXISTING FLOOR SINK	WATTS FS-500-4-150-DS	3"	12" SQUARE X 6" DEEP SANITARY FLOOR SINK, 1/2" GRATE, DOME BOTTOM STRAINER. SEE FLOOR SINK DETAIL, INSTALLED BY PLUMBING CONTRACTOR.	NO
FD 	FUNNEL FLOOR DRAIN	ZURN Z1019	3"	DURA COATED CAST IRON COMBINATION FUNNEL AND TRAP DRAIN, COMPLETE WITH BRONZE BOTTOM CLEANOUT PLUG.	YES
X, TMV 	THERMOSTATIC MIXING VALVE	LEONARD VALVE -170LF	1/2"	SEE THERMOSTATIC MIXING VALVE DETAIL	NO
X, FCO 	EXISTING FLOOR/EXTERIOR CLEANOUT	WATTS CO-200-R	EQUAL TO PIPE SIZE UP TO 4"	INSTALL FLUSH WITH FINISHED FLOOR OR GRADE	NO
CO 	WALL CLEANOUT	WATTS CO-590-RD	EQUAL TO PIPE SIZE UP TO 4"	MINIMUM 12" AFF SURFACE	NO
WA-1 	WATER HAMMER ARRESTOR	PPP, INC.- SC -500A	1/2"	USE PDI WH201 STANDARDS	NO
SV 	CIRCUIT SETTER VALVE	WATTS-LF-CSM -61M1-1	3/4"	SET VALVE TO 3 GPM	NO
V 	BALL VALVE	WATTS-FBV-4	EQUAL TO PIPE SIZE	FULL PORT QUARTER TURN	NO
V 	CHECK VALVE	WATTS-LF600	EQUAL TO PIPE SIZE		NO
V 	GATE VALVE				NO
LV 	BALANCING VALVE				NO

NOTES:

1. ALL DEVICES SHALL BE INSTALL ACCORDING TO THE MANUFACTURER INSTRUCTIONS AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
2. THE DEVICE DESCRIPTION IN THE SCHEDULE TAKES PRECEDENCE OVER MODEL NUMBERS, FIXTURE SUPPLIER SHALL PROVIDE REQUIRED ACCESSORIES AND OPTIONS FOR THE INTENDED INSTALLATION AND USE.
3. MANUFACTURER AND MODEL NUMBER INTENDED FOR LEVEL OF QUALITY, SUBSTITUTING MAY BE SUBMITTED IF QUALITY MEETS THIS LEVEL.

PLUMBING SYMBOLS

	TEE – TURNED DOWN		BALL VALVE
	TEE – TURNED UP		SHUT OFF VALVE
	SANITARY SEWER		BACKFLOW PREVENTER
	GREASE WASTE		CIRCUIT SETTER VALVE
	DOMESTIC COLD WATER		WHA WATER HAMMER ARRESTOR
	DOMESTIC HOT WATER		T & P RELIEF VALVE
	DOMESTIC HOT WATER RETURN		TMV THERMOSTATIC MIXING VALVE
	FILTERED WATER		FD FLOOR DRAIN
	PLUMBING VENT		FS FLOOR SINK
	UNION		FCO FLOOR CLEANOUT
	ELBOW – TURNED		WCO WALL CLEANOUT
	ELBOW – TURNED UP		NEW CONNECTION
	CHECK VALVE		

PLUMBING FIXTURE SCHEDULE

MARK #	DESCRIPTION	MFR/MODEL	RUNOUT SIZES (MINIMUM)				FAUCET / VALVE ASSEMBLY BASIS OF DESIGN	STRAINER, DRAIN & TRAP BASIS OF DESIGN	REMARKS
			CW	HW	WASTE	VENT			
24	MOP SINK	EXISTING	E	E	E	E	EXISTING	EXISTING	EXISTING
19	SINK, SCULLERY, 3 COMPARTMENTS	BK RESOURCES MODEL NO. BK3-1824-14-18T	3/4"	3/4"	3"	2"	BK-CSPR-WB-AF12-C Commercial low flow Pre-Rinse Assembly, with add-on faucet	-	18" drainboards on left and right, 9" high backsplash, 8" o.c. splash mount faucet holes, 1-1/2"
18	SINK, HAND, WALL MOUNT	BK RESOURCES MODEL NO. BKHS-D-1410-SS-P-G	1/2"	1/2"	2"	1 1/2"	4" O.C. DECK MOUNT FAUCET (BKD-3G-G)	BK-LWR-1 Twist LeverDrainits 3-1/2" opening, 2" male & 1-1/2" female NPT drain outlet	
-	WATER FILTER	EVERPURE EV9324-21 INSURICE SINGLE PF-120002 FILTRATION SYSTEM	3/4"	-	3"	2"	-	-	ROUTE WASTE INDIRECTLY TO FLOOR DRAIN.

NOTES:

1. PROVIDE CHROME PLATED BRASS ADJUSTABLE P-TRAPS AND SUPPLY STOPS AND ESCUTCHEON PLATES AS REQUIRED FOR EACH FIXTURE.
2. NO SUBSTITUTIONS WITHOUT ENGINEER OR ARCHITECT APPROVAL. OTHER MANUFACTURERS OFFERING EQUIVALENT PRODUCTS:
- FOR VITREOUS CHINA FIXTURES: CRANE, ELJER, KOHLER.
- FOR WATER CLOSET SEATS: BEMIS, OLSONITE.
- FOR SUPPLY FITTINGS: AMERICAN STANDARD, KOHLER, T&S BRASS.
- FOR ELECTRIC WATER COOLERS: HALSEY-TAYLOR, HAWS, SUNROC, OASIS.
- FOR CARRIERS: JAY R. SMITH, JOSAM, WADE, WATTS.
3. ALL FIXTURES SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
4. DESCRIPTION OF FIXTURE IN SCHEDULE TAKES PRECEDENCE OVER MODEL NUMBERS. FIXTURE SUPPLIER SHALL PROVIDE REQUIRED ACCESSORIES AND OPTIONS FOR THE INTENDED INSTALLATION AND USE.
- ABBREVIATIONS:
- | | |
|---------------------------------------|--------------------------|
| ADA = AMERICANS WITH DISABILITIES ACT | AFF = ABOVE FINISH FLOOR |
| GPF = GALLONS PER FLUSH | V.C. = VITREOUS CHINA. |
| C.P.B. = CHROME PLATED BRASS | |

SUPPLY FIXTURE UNIT SCHEDULE

MARK#	FIXTURE QUANTITY	FIXTURE	SUPPLY	
			SFU	TOTAL
24	1	EXISTING MOP SINK	3	3
19	1	3 COMPARTMENT SINK	3	3
18	2	SINK, HAND, WALL MOUNT	2	4
38	1	DISPENSER, SODA	.5	.5
39	1	ICE MAKER W/O BIN	.5	.5
TOTAL:			11	

MIN. 1" PIPING REQUIRED

FOOD SERVICE EQUIPMENT CONNECTION SCHEDULE

MARK#	FIXTURE QUANTITY	FIXTURE	COLD WATER SIZE (IN)	HOT WATER SIZE (IN)	FILTERED WATER SIZE (IN)	DIRECT DRAIN SIZE (IN)	INDIRECT DRAIN SIZE (IN)
24	1	EX. MOP SINK	E	E	--	E	--
19	1	SINK, NSF, 3 COMP	E	E	--	--	E
18	2	SINK, HAND, WALL MOUNT	E	E	--	E	--
38	1	DISPENSER, SODA	--	--	1/2"	--	--
39	1	ICE MAKER W/O BIN	--	--	1/2"	--	3/4"
-	1	WATER FILTER	3/4"	--	--	--	3/4"

NOTES:

1. REFER TO ARCHITECTURAL EQUIPMENT SHEETS FOR ADDITIONAL INFORMATION AND HEIGHTS.
2. NUMBER TAGS CORRESPOND TO FOOD SERVICE EQUIP. TAGS SHOWN ON ARCHITECTURAL FOOD SERVICE DRAWINGS. ALL KITCHEN EQUIP. LISTED PROVIDED BY EQUIP. SUPPLIER, ROUGH-IN FINAL CONNECTIONS BY PLUMBING CONTRACTOR.
3. FV = FIELD VENTURE WITH EXACT EQUIP. ON SITE.
4. CW = CHECK VALVE SHALL BE WATTS MODEL SD-3 DUAL VALVE WITH ATMOSPHERIC VENT.

DRAIN FIXTURE UNIT SCHEDULE

MARK #	FIXTURE QUANTITY	FIXTURE	DRAIN	
			DFU	TOTAL
24	1	EXISTING MOP SINK	3	3
EX. FD	1	EXISTING FLOOR DRAIN	5	5
18	2	SINK, HAND, WALL MOUNT	1	2
EX. FS	5	EXISTING FLOOR SINK	5	25
FFD	1	FUNNEL FLOOR DRAIN 38 39	5	5
			TOTAL:	40

BACKFLOW PREVENTER SCHEDULE

TAG	LOCATION	MODEL	ASSE
BFP-1	ICE MACHINE, HOT FOOD WELL	WATTS LF9D DCV	1012
BFP-2	SODA DISPENSER	WATTS SD-3 DCV	1022

NOTE:
 1. VERIFY BACKFLOW VALVE REQUIREMENTS FOR APPROVAL FOR ALL EQUIPMENT WITH AUTHORITIES HAVING JURISDICTIONS PRIOR TO INSTALLATION.
 2. ENSURE ISOLATION VALVE BEFORE AND AFTER BFP FOR MAINTENANCE.

GREASE INTERCEPTOR CALCULATION (DFU/GPM)

MARK#	FIXTURE QUANTITY	FIXTURE	GPM PER FIXTURE	TOTAL GPM
19	3	3 COMP SINK	13.09	39.27

TOTAL VOLUME = 39.27 X 30 MIN. RETENTION TIME = 6 GALLONS

NOTE:
 MINIMUM 1000 GALLON GREASE INTERCEPTOR REQUIRED.
 EXISTING GREASE INTERCEPTOR IS OF 5000 GALLONS

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Plumbing Schedules

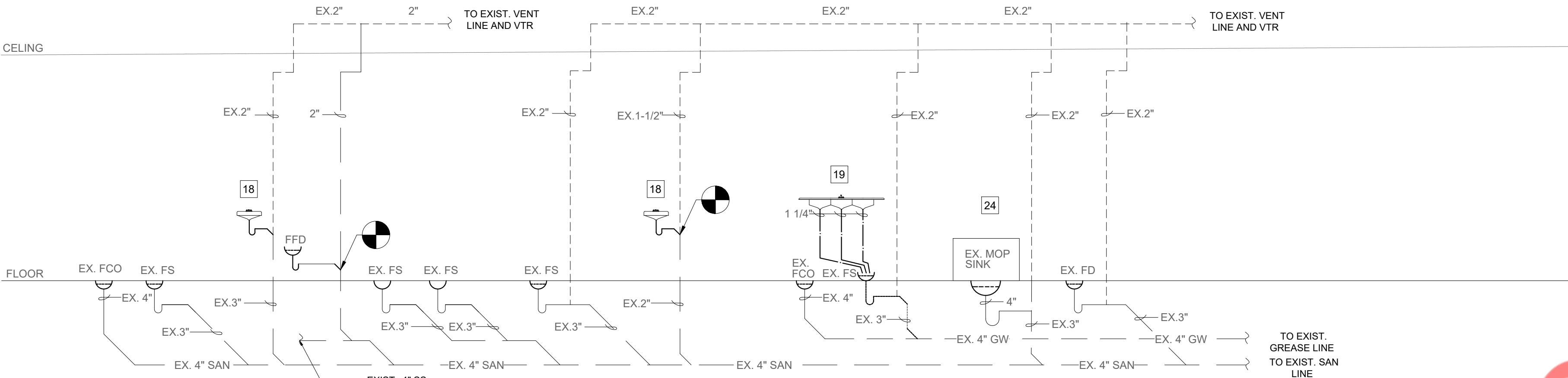
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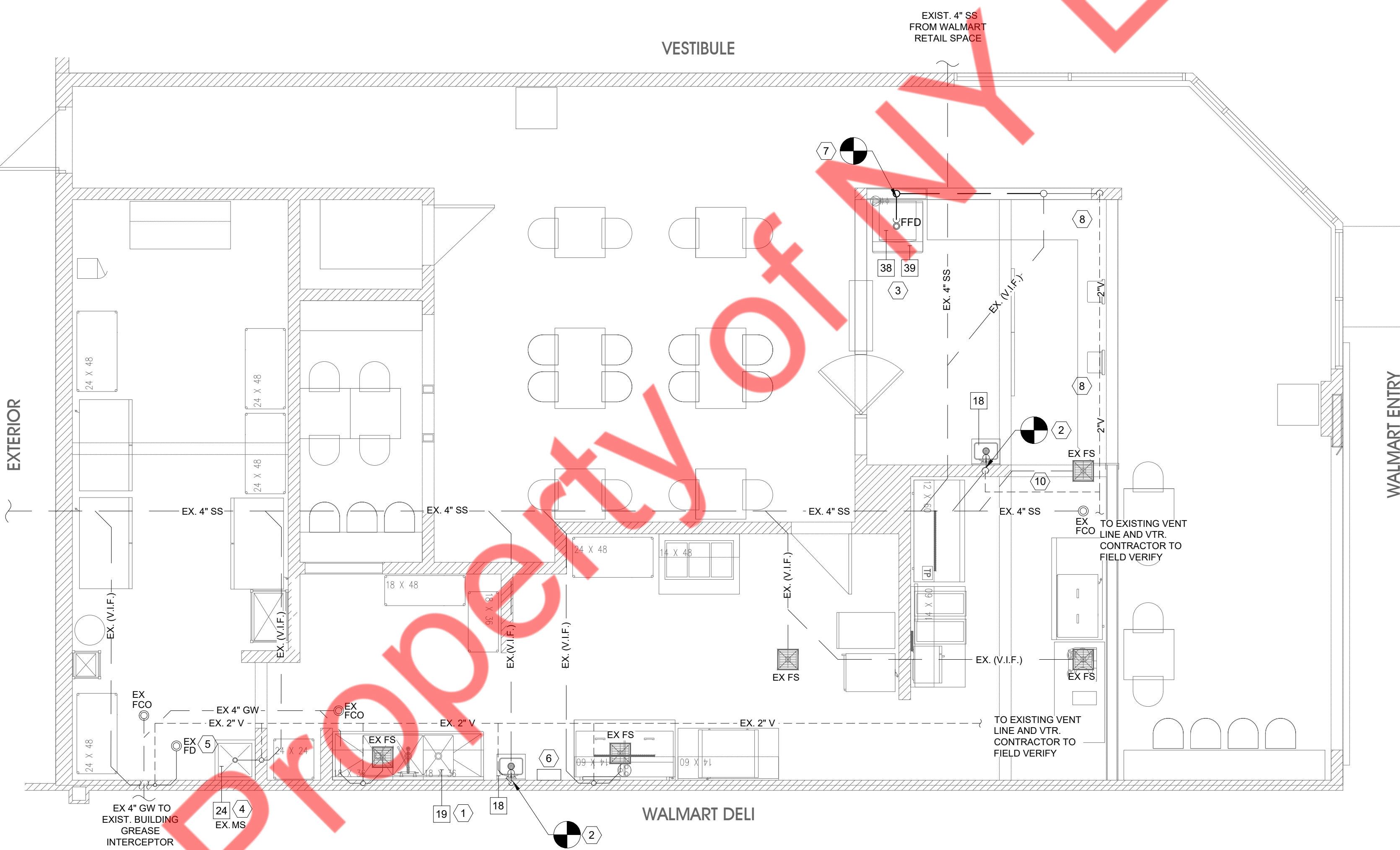
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SANITARY RISER DIAGRAM

N.T.S.



Plumbing Sanitary Floor Plan

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

PLUMBING SYMBOLS			
--- SS ---	SANITARY SEWER	--- EX.CW ---	EX. DOMESTIC COLD WATER
--- GW ---	GREASE WASTE	--- EX.HW ---	EX. DOMESTIC HOT WATER
--- CW ---	DOMESTIC COLD WATER	--- EX.SS ---	EX. SANITARY SEWER
--- HW ---	DOMESTIC HOT WATER	--- EX.GW ---	EX. GREASE WASTE
--- HWR ---	HOT WATER RETURN	↑ CV	CHECK VALVE
---	FILTERED WATER	◇ GV	GATE VALVE
		◇ TMV	THERMOSTATIC MIXING VALVE

EQUIPMENT SCHEDULES #

ITEM #	QTY.	DESCRIPTION
18	2	HAND SINK WITH FAUCET
19	1	THREE COMPARTMENT SINK
24	1	MOP SINK WITH FAUCET (EXISTING)
38	1	SODA/BEVERAGE DISPENSER - NIKEC - BY OWNER OR PURVEYOR
39	1	ICE CUBER & WATER FILTER

GENERAL PLUMBING NOTES:

- PLUMBER TO DO ALL ROUGH INS AND MAKE FINAL CONNECTION TO EQUIPMENT.
- PLUMBER TO ACCOMMODATE ALL PREVAILING PLUMBING CODES AS REQUIRED.
- ALL DIMENSIONS FOR CONNECTIONS TO THE FIXTURES SHOULD COME OUT OF THE WALL OR PARTITIONS AT REAR. ALL DIMENSIONS ARE FROM FINISHED WALLS OR COLUMNS.
- PLUMBER TO EXTEND ALL INDIRECT WASTE LINES FROM EVAPORATOR COILS, COMPRESSORS, ICE MACHINES, STEAM TABLES, ETC. TO NEAREST FLOOR SINK AS REQUIRED.
- OLD 3-COMP SINK WAS REPLACE WITH NEWER MODEL. NO OTHER FIXTURE WAS ADDED OR REMOVED FROM GREASE WASTE LINE. NO SIGNIFICANT CHANGE TO GREASE INTERCEPTOR LOAD.

PLUMBING PLAN KEYED NOTES:

- ROUTE INDIRECT WASTE FROM NEW 3-COMPARTMENT SINK #19 (INSTALLED AT FORMER 3-BAY SINK LOCATION) TO EXISTING FLOOR SINK WITH APPROVED AIR GAP. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- CONNECT NEW HAND SINK TO EXISTING WASTE STUBBED OUT OF WALL (AT FORMER HAND SINK LOCATION). CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- ROUTE INDIRECT DRAIN FROM ICE CUBER(#TAG 39) / SODA MACHINE(#TAG 38) TO NEW FUNNEL FLOOR DRAIN(FFD) WITH APPROVED AIR GAP.
- EXISTING FLOOR MOUNTED MOP SINK(#TAG 24) WITH EXISTING SAN & VENT CONNECTIONS TO REMAIN. CLEAN AND REPAIR AS REQUIRED TO ASSURE PROPER OPERATION, PROVIDE NEW MOP HANGER / UTILITY BAR. SEE DETAIL.
- EXISTING FLOOR DRAIN SHALL REMAIN, INSPECT AND SERVICE AS REQUIRED TO ASSURE PROPER OPERATION.
- ROUTE INDIRECT WASTE FROM NEW WATER FILTER TO EXISTING FLOOR SINK(EX-FS) BELOW WITH APPROVED AIR GAP. CONTRACTOR TO CONFIRM WITH OWNER FOR EXACT LOCATION.
- CONNECT NEW FUNNEL FLOOR DRAIN(FFD) TO EXISTING WASTE STUBBED OUT OF WALL FORMER. CONTRACTOR TO VERIFY EXACT LOCATION IN FIELD.
- ROUTING SHOWN IS TENTATIVE. CONTRACTOR TO FIELD VERIFY IF THERE IS EXISTING VENT LINE FOR THE EXISTING SAN LINE. IF NOT EXISTING PROVIDE NEW AS SHOWN & CONNECT TO EXISTING VENT LINE.

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Date Issued For

4. 9. 25 BID & PERMIT REVIEWS

Sq. Ft.: 2,129

Plumbing Sanitary
Floor Plan & Riser
Diagram

DATE: CHECKED: NYE

Job #:

CRAVE #: P2.0

xxx

