KOREAN BBQ IN UTAH

7157 S. STATE STREET
MIDVALE, UTAH 84047

LOCATION

LEGAL DESCRIPTION

PARCEL NUMBER:	22-30-107-038-0000
ZONING:	SS
ZONING DESCRIPTION:	STATE STREET
LOT SIZE:	0.83 ACRES
LOT USE:	COMMERCIAL

LEGAL DESCRIPTION

BEG E 265.38 FT & S 1020.01 FT FR NW COR SEC 30, T2S, R1E, SLM; S 89¿42 16" E 265.3 FT; N 151.58 FT; W 75.69 FT; S 31¿56W 10 FT; W 180 FT; S 4¿00 25" W 134.15 FT TO BEG. LESS & EXCEPT BEG E 258.45 FT & 1190.31 FT S FR NW COR SD SEC 30; N04¿00'25" E 284.66 FT; S 02¿27'11" W 142.58 FT; S 04¿15'42" W 95.82 FT; S'LY ALG 44 FT RADIUS CURVE TO THE L 17.66 FT (CHD S 07 ¿14' E 17.54 FT); S 81¿48'08" E 5.29; S 43¿16'39" E38.37 FT; N 89¿42'16" W 41.69 FT TO BEG. 0.83 AC M OR L.
6034-2962 5946-702 3386-383 3039-805,806
2837-146 739-602,604 6242-1819 8863-7462
10105-2412

PROJECT DATA

BUILDING USE:	COMMERCIAL
CONSTRUCTION TYPE: PROPOSED	TYPE V-A
NUMBER OF STORY:	1 STORY
OCCUPANCY GROUP:	A-2
FLOOR AREA:	4,700 SF
OCCUPANT LOAD	

PROPOSED OCCUPANT LOAD ANALYSIS

ROOM	AREA	F.A./OCC	OCCU. LOAD
DINING AREA	2,334 SF	FIXED SEAT	179
STORAGE/MECH	459 SF	300	2
KITCHEN	620 SF	200	4
BAR	108 SF	200	1
LOCKER	48 SF	50	1
REST. RM CORRIDOR	1,131 SF	0	0
TOTAL	4700 SF		187

SCOPE OF WORK:

- TENANT IMPROVEMENT FOR KOREAN BBQ RESTAURANT ON EXISTING RESTAUNT.

APPLICABLE CODES

- 2015 INTERNATIONAL BUILDING CODE
- 2014 NATIONAL ELECTRIC CODE
- 2015 INTERNATIONAL PLUMBING CODE
- 2015 INTERNATIONAL MECHANICAL CODE
- 2015 INTERNATIONAL FUEL GAS CODE
- 2015 INTERNATIONAL ENERGY CONSERVATION CODE
- 2009 ANSI A117.1
- SALT LAKE COUNTY HEALTH DEPARTMENT REGULATION

PROJECT TEAM

OWNER:
TAG ENTERPRISE
CONTACT: MICHAEL J LEE

STRUCTURAL ENGINEER:
JUNE ENGINEERING
CONTACT: JUNE WANG
1908 SOUTH VIEN STREET
SALT LAKE CITY, UTAH 84105
TEL: 801-533-8090

ELECTRICAL ENGINEER:
PC ENGINEERING, INC
CONTACT: PHIL K. CHON
2975 WILSHIRE BLVD. #530
LOS ANGELES, CA 90010
TEL: 213-427-3605

ARCHITECT :
WOU DESIGN PARTNERS
CONTACT: HARRY KIM
3470 WILSHIRE BLVD. STE 930
LOS ANGELES, CA 90010
TEL. 213-378-3780

MECHANICAL/ PLUMBING ENGINEER:
YMC ENGINEERING, INC
CONTACT: MICHAEL LEE
6910 OSLO CIRCLE, SUITE
BUENA PARK, CA 90621
TEL: 714-562-8003

CONTRACTOR

SYMBOLS

EARTH
ROCK BASE
SAND
CONCRETE
BRICK
CONCRETE BLOCK
STONE
STEEL SECTION
INSULATION, BATT
INSULATION, RIGID
CERAMIC TILE

CEILING-MOUNTED FLUORSCENT LIGHT FIXTURE
CEILING-MOUNTED LIGHT FIXTURE W/EXHAUST FAN-5 (AIR CHANGE TO OUTSIDE AIR PER 1 HR. VIA BACKDROP DAMPER.)
WALL SURFACE-MOUNTED LIGHT (STAIR)
SURFACE-MOUNTED FLUORESCENT
2'X4' KITCHEN FLUORESCENT
FIRE SPRINKLER HEAD
RECESSED LIGHTING
EXIT LIGHT
EXIT LIGHT

PRECAST CONCRETE
COLUMN LINE
DETAIL NUMBER / SHEET NUMBER
DOOR MARK / HDWR. NUMBER
METAL LATH
WOOD FINISH
WOOD FRAMING
WOOD FRAMING
PLYWOOD
GLASS
ACOUSTIC TILE OR BOARD
GYPSUM BOARD

EXHAUST FAN
SMOKE DETECTOR
FLUORESCENT STRIP FIXTURE
RECESSED LIGHTING (FLUORESCENT)
RECESSED HALOGEN LIGHT
REVISION
ROOM NAME / ROOM NUMBER
SECTION NUMBER / SHEET NUMBER
WALL TYPE
MATCH LINE
ELEVATION LETTER / SHEET NUMBER
KEY NUMBER / SHEET NUMBER

X'-X" ⋈ X'-X" CEILING HEIGHT CHANGE

DEMOLITION NOTES

A. ALL DEBRIS SHALL BE WET AT TIME OF HANDLING TO PREVENT DUST.
B. NO STRUCTURAL MEMBER IN ANY STORY SHALL BE DEMOLISHED UNTIL THE STORY ABOVE IS COMPLETELY REMOVED.
C. THERE WILL BE NO FREE FALL DUMPING OVER EXTERIOR WALL FOR A HEIGHT OF MORE THAN 25 FEET.
D. CALL FOR INSPECTION AT LEAST 24 HOURS BEFORE STARTING WORK
E. APPROVAL OF PROTECTION FENCES AND CANOPIES IS REQUIRED PRIOR TO DEMOLITION.
F. ALL BASEMENT FILLS SHALL BE CLEAN AND UNIFORM.

SEPARATE PERMIT REQUIRED

1. FIRE SPRINKLER

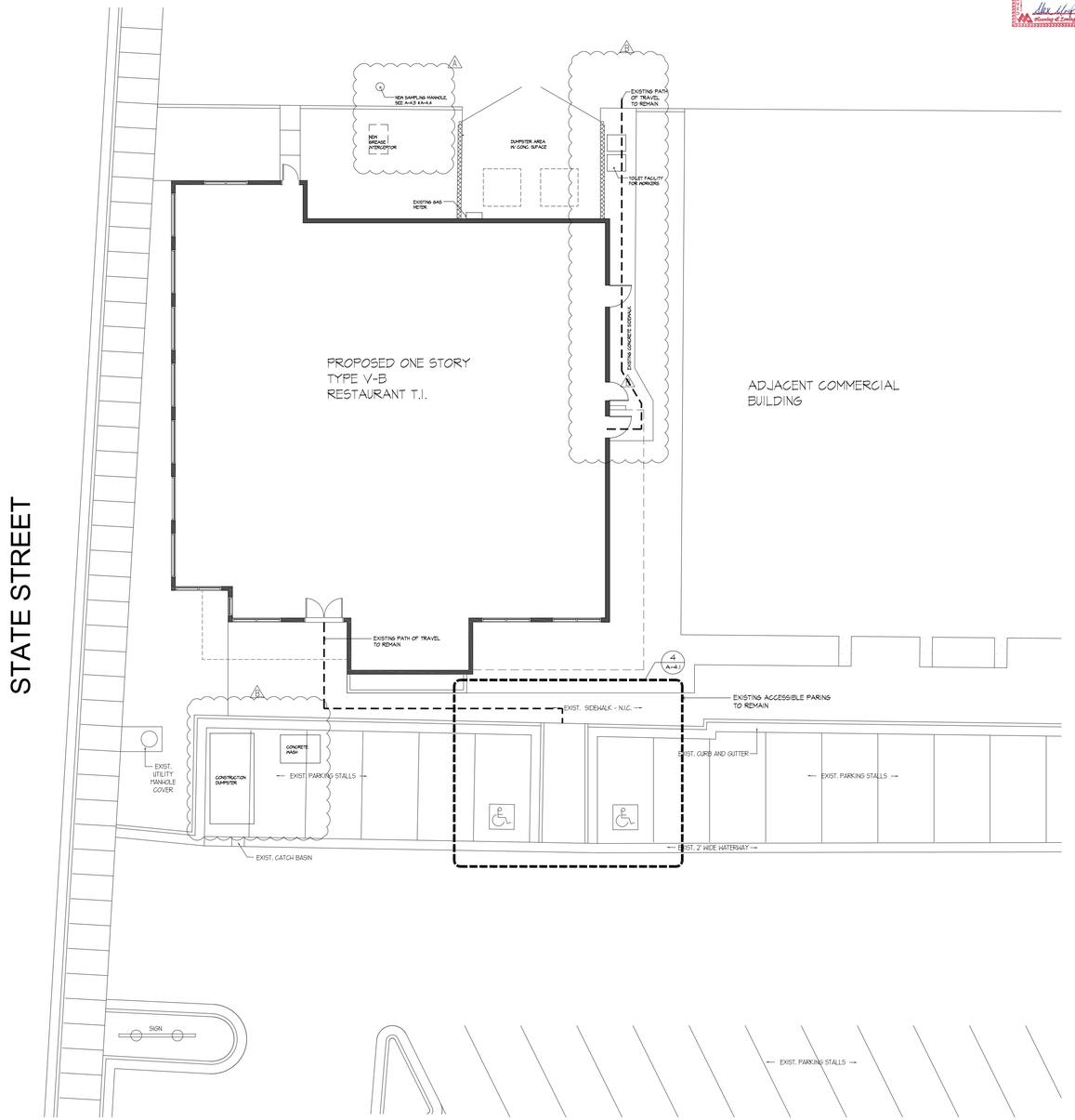
GENERAL NOTES

GONS~TION NOTES
1. EXISTING DIMENSIONS ARE (+/-) AND MUST BE FIELD VERIFIED PRIOR TO COMMENCING WITH THE WORK. SAID DIMENSIONS MAY AFFECT OTHER DIMENSIONS AS INDICATED WITH (+/-) SYMBOL.
2. THE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF EXISTING DIMENSIONS AND CONDITIONS.
3. APPROVAL TO PROCEED WITH THE WORK IS SUBJECT TO VERIFICATION OF CONDITIONS AND COMPLIANCE WITH PROCEDURES WITH LOCAL GOVERNING AGENCY.
4. CONTRACTOR IS RESPONSIBLE FOR FULL COMPLIENCE WITH ALL REQUIREMENTS DICTATED BY THE LANDLORD'S FIRE PROTECTION SYSTEMS ENGINEER DURING CONSTRUCTION AND ALL SUBSEQUENT FIELD INSPECTIONS.
5. ALL MATERIALS MUST MEET FLAME RESISTANCE REQUIREMENT OF LOCAL CODES, BUT NO LESS THAN 25 IN IN SPRINKLED AREA ABOVE THE CEILING; 75 ON STOREFRONT; AND 200 IN SPRINGLKERED AREAS.
6. WOOD BLOCKING, DECKING AND FRAMING MATERIALS ARE ONLY ALLOWED BELOW THE FINISHED CEILING LINE WHEN FIRE-RETARDANT TREATED AND MARKED AS SUCH.
7. SUPPORT WIRES FOR SUSPENDED CEILINGTS MUST NOT CONNECT TO ANY OF THE LANDLOARD'S MECHANICAL, ELECTRICAL, PLUMBING OR FIRE PROTECTION PIPING OR EQUIPMENT.
8. ANY PENETRATIONS OF OR MODIFICATIONS TO THE EXISTING STRUCTURAL SYSTEMS, CONCRETE, STEEL , ETC. MUST BE COORDINATED WITH THE LANDLORD AND LOCAL AUTHORITIES. ANY MODIFICATIONS MUST BE APPROVED BY THE LANDLORD AFTER SUBMISSION OF A DETAIL SCOPE OF WORK OUTLINE.
9. FURNISH AND INSTALL CLEAR FLEXIGLASS GUARDS TO COUNTER HEIGHT AT UNPROTECTED END WALLS WHERE VINYL WALL COVERING IS FINISHED WALL MATERIAL.
10. CLAIMS FOR ADDITIONAL COSTS DUE TO LANDLORD REQUIREMENTS ESTABLISHED AFTER AWARD OF CONTRACT SHALL BE NEGOTIATED AS A CHANGE ORDER.

NOTE: THESE DRAWINGS ARE AUGMENTED AND/OR MODIFIED BY INFORMATION CONTAINED IN A PROJECT MANUAL CONSISTING OF ALL ADDENDA, GENERAL CONDITIONS, TECHNICAL SPECIFICATION, EQUIPMENT CUT SHEETS AND LANDLORD DESIGN AND CONSTRUCTION CRITERIA USE OF THE DRAWINGS WITHOUT THE PROJECT MANUAL IS NOT ADVISED. CLAIMS FOR ADDITIONAL COSTS DUE TO LANDLORD DESIGN CRITERIA INCLUDED IN THE PROJECT MANUAL WILL NOT BE ACCEPTED.

SHEET INDEX

Midvale City
05/21/2018
Planning & Zoning Dept.



EXIST. ACCESSIBLE PARKINGS, PATH OF TRAVEL AND ALL PARKING LAYOUT TO REMAIN (NO CHANGE)

1 SITE PLAN
Scale: 3/32" = 1'-0"

WOU
DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010

- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

STATE OF UTAH
HOEJUN KIM
No. 10716806-0301
6-12-2018
LICENSED ARCHITECT

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS
1 CORRECTION SWPPP 4-19-18
2 CORRECTION BLDG. 4-26-18

NO.	ISSUE	DATE

PROJECT DATA
PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

SHEET NAME
TITLE SHEET & SITE PLAN

SHEET NUMBER
A-0.1

HEALTH DEPARTMENT NOTES

GENERAL REQUIREMENTS

FOOD SERVICE FACILITY OWNERS/CONTRACTORS/DESIGN PROFESSIONALS ARE REQUIRED TO SUBMIT PLANS TO THE BUREAU OF FOOD PROTECTION BEFORE CONSTRUCTING A NEW FOOD SERVICE FACILITY, CONVERTING AN EXISTING STRUCTURE FOR USE AS A FOOD SERVICE FACILITY, REMODELING OF A FOOD SERVICE FACILITY, OR CHANGING THE TYPE OF FOOD SERVICE OR FOOD OPERATION.

NOTE: REMODELING IS DEFINED AS CHANGE IN DESIGN AND EQUIPMENT INVOLVING 50% OR MORE OF THE FOOD PREPARATION AREA OR SIGNIFICANT CHANGES FROM THE ORIGINAL DESIGN OR OPERATION OF THE FACILITY.

PLANS MUST BE DRAWN IN A CONCISE, DETAILED, AND PROFESSIONAL MANNER. WHILE IT IS NOT A REQUIREMENT THAT PLANS BE PROFESSIONALLY DRAWN, THEY MUST INCLUDE SUFFICIENT INFORMATION AND DETAIL TO DEMONSTRATE COMPLIANCE WITH HEALTH DEPARTMENT REQUIREMENTS. INCOMPLETE PLANS WILL NOT BE REVIEWED. CONSTRUCTION MUST BEGIN WITHIN 6 MONTHS (180 DAYS) OF PLAN APPROVAL. PLEASE CONTACT US AT 385-468-3845 IF YOU REQUIRE MORE TIME.

EQUIPMENT—GENERAL

ALL FOOD SERVICE EQUIPMENT MUST BE COMMERCIAL GRADE AND MUST MEET THE STANDARDS OF THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/ NATIONAL SANITATION FOUNDATION INTERNATIONAL (NSF) OF DESIGN, MATERIALS AND WORKMANSHIP. AN ANSI/NSF OR OTHER NATIONALLY RECOGNIZED TESTING AGENCY SEAL IS USUALLY A GOOD INDICATOR THAT THE EQUIPMENT MEETS FOOD CODE REQUIREMENTS. IN GENERAL, WOOD IS PROHIBITED FROM USE IN FOOD PREPARATION AREAS FOR TABLE LEGS, SHELVING, ETC.

EQUIPMENT MUST BE INSTALLED TO FACILITATE THE CLEANING OF EQUIPMENT AND ALL ADJACENT AREAS. EQUIPMENT, INCLUDING ICE MAKERS AND ICE STORAGE EQUIPMENT, SHOULD NOT BE STORED UNDER EXPOSED OR UNPROTECTED SEWER LINES, OPEN STAIRWELLS OR OTHER SOURCES OF CONTAMINATION.

TABLE-MOUNTED EQUIPMENT

UNLESS PORTABLE, TABLE MOUNTED EQUIPMENT SHOULD BE INSTALLED ON 4-INCH LEGS OR SEALED TO THE TABLE USING SILICONE CAULK. PIECES OF TABLE MOUNTED EQUIPMENT SHOULD BE KEPT AT LEAST SIX INCHES APART TO ENSURE ACCESS FOR CLEANING, OR THEY SHOULD BE SEALED TOGETHER.

FIXED EQUIPMENT

FIXED EQUIPMENT SHOULD BE INSTALLED WITH SUFFICIENT SPACE BETWEEN ADJACENT EQUIPMENT, FLOORS, WALLS, CABINETS, AND CEILINGS TO FACILITATE PROPER CLEANING, OR IMMOVABLE EQUIPMENT SHOULD BE SEALED TO ADJACENT FIXED-IN-PLACE EQUIPMENT, FLOORS, WALLS, OR CEILINGS WITH SILICONE CAULK. FLOOR-MOUNTED EQUIPMENT THAT IS NOT EASILY MOVABLE OR MOUNTED ON WHEELS/CASTERS MUST HAVE LEGS THAT PROVIDE AT LEAST SIX INCHES CLEARANCE FROM THE FLOOR. THIS CLEARANCE SHOULD BE MEASURED FROM THE LOWEST OBSTRUCTION UNDER THE PIECE OF EQUIPMENT.

NOTE: IF YOU CAN SLIDE A BUSINESS CARD BETWEEN EQUIPMENT AND A WALL OR OTHER EQUIPMENT, IT MUST BE SEALED.

RECOMMENDED EQUIPMENT SPACING FROM WALLS, PROVIDED ACCESS IS AVAILABLE FROM BOTH ENDS:

EQUIPMENT LENGTH (A)	SPACE FROM WALLS AND EQUIPMENT (B)
4 FEET OR LESS	6 INCHES
4 FEET TO 8 FEET	12 INCHES
8 FEET OR MORE	18 INCHES

NOTE: FOR LONG BANKS OF EQUIPMENT, CONSIDER INTEGRATING MOVEABLE EQUIPMENT ON CASTORS WITH STATIONARY EQUIPMENT ON LEGS TO FACILITATE CLEANING AND SERVICE ACCESS. A KEEPER CHAIN SHOULD BE INSTALLED WITH ALL FLEXIBLE UTILITY CONNECTIONS.

IF FIXED EQUIPMENT IS INSTALLED ON A RAISED FLOOR PLATFORM, THE PLATFORM SHOULD BE A MINIMUM OF TWO INCHES HIGH WITH A $\frac{1}{4}$ INCH RADIUS. EQUIPMENT SHOULD OVERHANG THE BASE BY ONE TO FOUR INCHES. EQUIPMENT MUST BE SEALED TO THE FLOOR USING SILICONE CAULK.

CONDUIT/UTILITY LINES

ALL CONDUITS AND EXPOSED UTILITY LINES (PLUMBING, GAS, ELECTRICAL, REFRIGERATION, ETC.) MUST BE KEPT AT LEAST 6 INCHES OFF THE FLOOR AND INSTALLED SO AS TO NOT INTERFERE WITH CLEANING. ANY INSULATION ON UTILITY LINES MUST BE SMOOTH, NON-ABSORBENT, AND EASY TO CLEAN. EQUIPMENT SHOULD BE INSTALLED TO PROVIDE A MINIMUM 36-INCH AISLE WORKING SPACE.

REFRIGERATION

REFRIGERATION AND FREEZER FACILITIES ARE REQUIRED TO MAINTAIN POTENTIALLY HAZARDOUS FOODS DURING STORAGE, TRANSPORTATION, DISPLAY, AND SERVICE. REFRIGERATION EQUIPMENT MUST MEET NSF STANDARD #7 OR BE OF EQUIVALENT CONSTRUCTION. BEVERAGE COOLING CASES ARE NOT ACCEPTABLE FOR THE STORAGE OF POTENTIALLY HAZARDOUS FOODS. IF ICE IS TO BE USED FOR COOLING, THE ICE-MAKING UNIT MUST BE DESIGNED AND SIZED TO MEET THE ANTICIPATED DEMAND.

REFRIGERATION AND FREEZER STORAGE INVOLVES FOUR MAJOR AREAS:

1. UNITS FOR SHORT-TERM HOLDING OF PERISHABLE AND POTENTIALLY HAZARDOUS FOOD ITEMS CONVENIENTLY LOCATED AT POINTS OF FOOD PREPARATION (REACH-IN REFRIGERATORS).
2. REFRIGERATION AND FREEZER UNITS FOR LONG-TERM STORAGE LOCATED NEAR DELIVERY OR RECEIVING AREAS (WALK-IN COOLERS AND WALK-IN FREEZERS).
3. UNITS FOR QUICK CHILLING OF FOODS (BLAST CHILLERS AND RAPID PULL-DOWN UNITS).
4. DISPLAY STORAGE FOR CUSTOMER SERVICE (SALAD BARS AND DISPLAY CASES).

IF POTENTIALLY HAZARDOUS FOODS THAT REQUIRE COOLING ARE PREPARED A DAY OR MORE IN ADVANCE OF INTENDED SERVICE, A RAPID COOLING METHOD CAPABLE OF COOLING THE FOOD FROM 135° F TO 41° F WITHIN 6 HOURS IS REQUIRED (135° F TO 70° F WITHIN 2 HOURS AND 70° F TO 41° F WITHIN 4 HOURS). THIS MAY BE A BLAST CHILLER, ICE BATH, REDUCING THE VOLUME OF FOOD IN AN INDIVIDUAL CONTAINER TO LESS THAN 4Δ DEEP, A LOOSE COVERING ON THE CONTAINER TO FACILITATE HEAT TRANSFER, PREPARING SMALLER BATCHES CLOSER TO PERIODS OF SERVICE, OR OTHER APPROVED METHOD.

NOTE: ONLY 30% OF REFRIGERATION RATED COOLING CAPACITY IS AVAILABLE FOR COOLING FOOD.

ALL REFRIGERATION UNITS MUST HAVE A NUMERICALLY-SCALED THERMOMETER ACCURATE TO ± 3° F. THE SENSING UNIT MUST BE LOCATED TO MEASURE THE AIR TEMPERATURE IN THE WARMEST PART OF THE UNIT. REFRIGERATION AND FREEZER UNITS, UNLESS DESIGNED FOR SUCH USE, SHOULD NOT BE LOCATED DIRECTLY ADJACENT TO COOKING OR OTHER HEAT-PRODUCING EQUIPMENT. REFRIGERATION AND FREEZER UNITS SHOULD NOT BE INSTALLED OUTSIDE OF THE BUILDING IF UNPACKAGED FOODS WILL BE TRANSPORTED FROM THE FACILITY TO THE FOOD ESTABLISHMENT.

WHEN ASSESSING THE REFRIGERATION NEEDS, SHELVING SPACE WITHIN REFRIGERATION AND FREEZER UNITS SHOULD BE DESIGNED TO PREVENT CROSS-CONTAMINATION OF FOODS AND PROVIDE MAXIMUM AIR FLOW. CONSIDERATION MUST BE GIVEN TO SEPARATING RAW MEAT, FISH, AND POULTRY FROM READY-TO-EAT FOODS SUCH AS PRODUCE AND PRE-PREPARED ITEMS.

A SUGGESTED FORMULA TO ESTABLISH REQUIRED REFRIGERATION STORAGE CAPACITY IS AS FOLLOWS:

NOTE: ONLY 40% OF ANY WALK-IN PROVIDES USEABLE SPACE.

TOTAL INTERIOR VOLUME NEEDED = VOLUME PER MEAL (FT^3) X # OF MEALS/.40 X HEIGHT OF UNIT

BELOW ARE TYPICAL MEAL VOLUMES FOR EACH OF THREE TYPES OF REFRIGERATED STORAGE:

1. MEAT AND POULTRY 0.010 TO 0.030 FT^3/MEAL
2. DAIRY 0.007 TO 0.015 FT^3/MEAL
3. VEGETABLES AND FRUIT 0.020 TO 0.040 FT^3/MEA

FOOD PROTECTION

WHILE ON DISPLAY, DURING SERVICE, OR WHILE BEING HELD HOT OR COLD, ALL FOOD MUST BE ADEQUATELY PROTECTED FROM CONTAMINATION BY THEUSE OF PACKAGING; SERVICE LINE, STORAGE OR SALAD BAR PROTECTIVE DEVICES (SNEEZE GUARD); DISPLAY CASES; OR OTHER EFFECTIVE MEANS, INCLUDING DISPENSERS.

SEPARATE AREAS SHOULD BE DESIGNED AND OPERATED TO SEGREGATE FOOD HANDLING OPERATIONS INVOLVING RAW AND FINISHED FOOD PRODUCTS.

WHERE FROZEN DESSERTS OR OTHER MOIST FOODS ARE BEING PORTIONED AND DISPENSED, RUNNING WATER DIPPER WELLS OR OTHER APPROVED METHODS SHOULD BE PROVIDED FOR THE IN-USE STORAGE OF DISPENSING UTENSILS.

FOOD GUARDS

FOOD (SNEEZE) GUARDS SHOULD BE DESIGNED AND INSTALLED TO INTERCEPT A DIRECT LINE BETWEEN A CUSTOMER'S MOUTH AND FOODS ON DISPLAY. ON THE AVERAGE, THE VERTICAL DISTANCE FROM THE CUSTOMER'S MOUTH TO THE FLOOR IS 4 FT. 6 INCHES TO 5 FEET. THIS AVERAGE HEIGHT MUST BE ADJUSTED FOR CHILDREN IN EDUCATIONAL FACILITIES OR OTHER SPECIAL INSTALLATIONS.

WASTE LINES

WASTE LINES AND ROOF DRAINS SHOULD NOT BE POSITIONED DIRECTLY ABOVE FOOD PREPARATION AREAS, FOOD SERVICE AREAS, FOOD STORAGE AREAS, AND WAREWASHING AREAS. IF WASTE LINES OR ROOF DRAINS ARE OVER FOOD STORAGE AREAS, SEAMLESS GUTTERS OR OTHER PROTECTIVE DEVICES MUST BE INSTALLED UNDER THE PIPES TO DIVERT LEAKAGE AWAY FROM THE FOOD STORAGE AREA.

HOT HOLDING/REHEATING

IF POTENTIALLY HAZARDOUS FOODS ARE PREPARED AND HELD FOR HOT SERVICE, HOT FOOD HOLDING FACILITIES MUST BE PROVIDED AND MUST MAINTAIN POTENTIALLY HAZARDOUS FOODS AT AN INTERNAL TEMPERATURE OF 135° F OR ABOVE DURING DISPLAY, SERVICE, OR HOT HOLDING PERIODS. HEAT LAMPS HAVE NOT BEEN FOUND TO BE EFFECTIVE FOR THIS PURPOSE.

IF POTENTIALLY HAZARDOUS FOODS THAT REQUIRE RE-HEATING PRIOR TO SERVICE ARE PREPARED IN ADVANCE OF INTENDED SERVICE, RE-HEATING EQUIPMENT CAPABLE OF RAISING THE INTERNAL TEMPERATURE OF POTENTIALLY HAZARDOUS FOODS TO AT LEAST 165° F WITHIN 2 HOURS MUST BE PROVIDED. STEAM TABLES, BAINMARIES, WARMERS, CROCK POTS, AND SIMILAR HOT FOOD HOLDING UNITS ARE NOT EFFECTIVE FOR THE RAPID HEATING OF POTENTIALLY HAZARDOUS FOODS. FOOD PRODUCT THERMOMETERS ACCURATE TO ± 2° F ARE REQUIRED TO MONITOR TEMPERATURES.

NOTE: THERMOCOUPLE THERMOMETERS ARE RECOMMENDED DUE TO INCREASED ACCURACY AND SPEED OF READING, ESPECIALLY WHEN DEALING WITH THIN FOODS AND THE QUICK MONITORING OF COOLING TEMPERATURES.

HANDWASHING

HANDWASHING SINKS MUST BE PROVIDED AND LOCATED CONVENIENT TO ALL FOOD PREPARATION AREAS, UTENSIL WASHING AREAS, TOILET ROOMS, AND CUSTOMER AREAS OF CONVENIENCE STORES. HANDWASHING SINKS MUST BE LOCATED WITHIN A REASONABLE DISTANCE (15 FEET SUGGESTED DISTANCE, AND NO MORE THAN 25 FEET) FROM EACH AREA OF USE AND MUST NOT REQUIRE ENTERING ANOTHER ROOM FOR USE. ADDITIONAL HAND SINKS MAY BE EQUIRED, DEPENDING ON THE CONFIGURATION OF EQUIPMENT AND LOCATION OF WORK AREAS IN THE FOOD SERVICE FACILITY. EACH HANDWASHING SINK MUST BE PROVIDED WITH HOT AND COLD WATER BY MEANS OF A MIXING VALVE. EACH HANDWASHING SINK MUST BE PROVIDED WITH HAND CLEANER, A HAND DRYING DEVICE OR SINGLE USE SANITARY TOWELS IN A PERMANENTLY INSTALLED DISPENSER, AND A WASTE RECEPTACLE.

METERING FAUCETS

IF USED, SELF-CLOSING OR METERING FAUCETS MUST BE ADJUSTED TO REMAIN ON A MINIMUM OF 15 SECONDS WITHOUT THE NEED FOR REACTIVATION.

NOTE: HAND SINKS USED BY FOOD EMPLOYEES SHOULD HAVE KNEE, FOOT, INFRARED SENSOR, OR WRIST OPERATED FAUCETS.

THE HANDWASHING SINK MUST BE ACCESSIBLE AT ALL TIMES. IT SHOULD NOT BE LOCATED WHERE ACCESS MAY BE EASILY BLOCKED BY WASTE CONTAINERS, CARTS, ETC. THE HANDWASHING SINK MAY BE USED FOR NO PURPOSE OTHER THAN HAND WASHING. SINKS USED FOR FOOD PREPARATION OR EQUIPMENT WASHING MAY NOT BE USED FOR HANDWASHING.

SPLASH SHIELDS

SPLASH PROTECTION IS REQUIRED WHEN HANDWASHING SINKS ARE LOCATED WITHIN 18 INCHES OF FOOD CONTACT SURFACES, FOOD STORAGE, SHELVES, FOOD SERVICE AREAS, FOOD PREPARATION SINKS, OR WAREWASHING SINKS. THE SPLASH SHIELD MUST PROTECT FOOD CONTACT SURFACES AND WAREWASHING SURFACES FROM SPLASH. SPLASH SHIELDS SHOULD BE CONSTRUCTED OF STAINLESS STEEL OR OTHER DURABLE WATER RESISTANT MATERIALS.

HAND SANITIZERS

HAND SANITIZERS STATIONS, IF INSTALLED, MUST BE LOCATED ADJACENT TO HAND WASHING SINKS. HAND SANITIZERS MAY NOT BE USED AS A REPLACEMENT FOR ADEQUATE HANDWASHING.

DRY STORAGE

THE DRY STORAGE SPACE REQUIRED DEPENDS UPON THE MENU, NUMBER OF MEALS, QUANTITIES PURCHASED, AND FREQUENCY OF DELIVERY. THE MINIMUM SPACE RECOMMENDED IS 25% OF ALL KITCHEN AREAS, BASED ON ALL-TOWALL DIMENSIONS. IT MUST BE SUFFICIENT TO STORE FOOD AND EQUIPMENT SIX INCHES OFF THE FLOOR. THE LOCATION OF THE STORAGE ROOM SHOULD BE ADJACENT TO THE FOOD PREPARATION AREA AND CONVENIENT TO RECEIVING. AN EXTERIOR DOOR SHOULD BE NEAR THE DRY STORAGE AREA TO MINIMIZE DELIVERY TRAFFIC THROUGH FOOD PREPARATION AREAS. STORAGE ROOM TEMPERATURES OF 50° F TO 70° F ARE RECOMMENDED.

SHELVES MAY BE CONSTRUCTED OF SUITABLE FINISHED WOOD, DURABLE PLASTIC OR CORROSION-RESISTANT METAL. THE HIGHEST SHELF FOR PRACTICAL USE SHOULD BE NO MORE THAN 7 FEET OFF THE FLOOR. THE LOWEST SHELF SHOULD BE AT LEAST 6 INCHES FROM THE FLOOR. SPACING BETWEEN SHELVES SHOULD BE 15 INCHES.

A SUGGESTED FORMULA USED IN ESTIMATING REQUIRED DRY STORAGE SPACE IS AS FOLLOWS:

REQUIRED STORAGE ARE (FT^2) = VOLUME PER MEAL X # OF MEALS BETWEEN DELIVERIES/AVERAGE HEIGHT X FRACTION OF USEABLE STOREROOM FLOOR OF STOREROOM AREA

1. VOLUME PER MEAL = 0.025 TO 0.050 FT^3/MEAL SERVED
2. USEABLE STOREROOM HEIGHT = 4 TO 7 FEET
3. STORAGE TIME BETWEEN DELIVERIES = 3 TO 14 DAYS
4. FRACTION OF USEABLE STOREROOM FLOOR AREA = 0.3 TO 0.6

WAREWASHING

ADEQUATE FACILITIES MUST BE PROVIDED TO STORE DIRTY DISHES AND EQUIPMENT PRIOR TO WASHING AND SANITIZING. STORAGE FACILITIES MUST BE PROVIDED FOR THE STORAGE OF CLEANED AND SANITIZED UTENSILS AND EQUIPMENT AT LEAST 6 INCHES ABOVE THE FLOOR ON FIXED SHELVES OR IN ENCLOSED CABINETS PROTECTED FROM SPLASH, DUST, OR OTHER SOURCES OF CONTAMINATION. WAREWASHING SINKS AND MECHANICAL WAREWASHING MACHINES MAY NOT BE DIRECTLY CONNECTED TO THE SEWER.

MANUAL WAREWASHING

A 3-COMPARTMENT SINK MEETING NSFI STANDARD #2 MUST BE PROVIDED FOR MANUAL WASHING AND SANITIZING OF UTENSILS AND EQUIPMENT. THE 3-COMPARTMENT SINK MUST BE CONVENIENTLY LOCATED FOR EASY ACCESS BY FOOD EMPLOYEES.

NOTE: THIS IS IN ADDITION TO ANY MECHANICAL WAREWASHER.

EACH COMPARTMENT OF THE 3-COMPARTMENT SINK MUST BE LARGE ENOUGH TO ACCOMMODATE THE LARGEST PIECE OF EQUIPMENT. EACH COMPARTMENT MUST BE PROVIDED WITH AN ADEQUATE SUPPLY OF HOT AND COLD POTABLE WATER TWO DRAINBOARDS SHOULD BE PROVIDED EQUAL IN SIZE TO THAT OF THE SINK COMPARTMENTS. WORKING SUPPLIES OF CLEANERS AND SANITIZERS MUST BE STORED IN AN APPROVED LOCATION. A RECOMMENDED STORAGE LOCATION IS ON A WIRE SHELF BELOW THE DRAINBOARDS OF THE 3-COMPARTMENT SINK.

MECHANICAL WAREWASHING

FOR MECHANICAL WAREWASHING, A WAREWASHING MACHINE MEETING NSFI STANDARD #3 SHOULD BE PROVIDED. THE CAPACITY OF THE WAREWASHING MACHINE SHOULD BE BASED ON THE PEAK NUMBER AND TYPE OF DISHES, UTENSIL, FLATWARE, EQUIPMENT, ETC., THAT MUST BE WASHED PER HOUR.

NOTE: ONLY 70% OF THE LISTED NSFI CAPACITY, IN RACKS PER HOUR, SHOULD BE CONSIDERED AS AN AVERAGE WORKING CAPACITY.

EACH 20 X 20-INCH DISHRACK WILL ACCOMMODATE APPROXIMATELY:

16 NINE-INCH DINNER PLATES
25 WATER GLASSES
16 COFFEE CUPS
100 PIECES OF FLATWARE
THE PLACE SETTINGS FOR FOUR SEATS = 1 DISHRACK.

CHEMICAL SANITIZATION

THE FOLLOWING REQUIREMENTS APPLY TO CHEMICAL SANITIZING WAREWASHERS:

- ADDITIONAL DRAINBOARD/DRYING SPACE MAY BE REQUIRED DUE TO THE INCREASED DRYING TIME OF EQUIPMENT AND DISHES WASHED IN A LOW TEMPERATURE WAREWASHER.
- CHEMICALS MUST BE AUTOMATICALLY FED INTO THE MACHINE;
- THE CHEMICAL SANITIZING FEEDER MUST BE APPROVED FOR THE SPECIFIC MAKE AND MODEL OF MACHINE IN QUESTION;
- AN APPROVED CHEMICAL TEST KIT MUST BE AVAILABLE AND MUST BE USED; AND
- A VISUAL FLOW INDICATOR MUST BE PROVIDED TO MONITOR THE OPERATION OF THE SANITIZING AGENT FEED.
-

HOT WATER SANITIZATION

THE FOLLOWING REQUIREMENTS APPLY TO HOT WATER SANITIZING WAREWASHERS:

- A BOOSTER HEATER IS REQUIRED TO RAISE THE WATER TEMPERATURE FROM 140° F TO 180° F THE BOOSTER HEATER SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE WAREWASHER TO MINIMIZE HEAT LOSS.
- A MAXIMUM REGISTERING THERMOMETER OR OTHER APPROVED DEVICE IS REQUIRED TO MONITOR WAREWASHER PERFORMANCE.

NOTE: A HIGH TEMPERATURE WAREWASHER MAY NOT BE CONVERTED TO A LOW TEMPERATURE WAREWASHER WITHOUT BEING RE-CERTIFIED BY THE MANUFACTURER.

HOT WATER REQUIREMENTS

THE HOT WATER SUPPLY MUST BE SUFFICIENT TO MEET THE CONTINUOUS AND PEAK HOT WATER DEMANDS OF THE ESTABLISHMENT. FOOD SERVICE FACILITIES WHICH DO NOT CONTAIN CRITICAL PLUMBING FIXTURES (MECHANICAL WAREWASHING MACHINE, GLASS WASHERS, OR OTHER HIGH HOT WATER DEMAND EQUIPMENT) MAY HAVE A WATER HEATER WITH A MINIMUM OF 50 GALLONS STORAGE CAPACITY AND AN INPUT HEATING CAPACITY OF 50,000 BTU OR 11 KW. IF THEY HAVE NO MORE THAN THE FOLLOWING EQUIPMENT:

1. THREE HANDSINKS
2. ONE MOP SINK
3. ONE 3-COMPARTMENT SINK (16 X 20 X 14Δ MAXIMUM)
4. ONE VEGETABLE/FOOD PREP SINK

FLOORS, WALLS, CEILING

THE FOLLOWING ARE GENERAL REQUIREMENTS FOR WALLS, FLOORS, AND CEILINGS IN FOOD SERVICE FACILITIES:

- THERE MUST BE COVING AT FLOOR-WALL JUNCTURES WITH A RECOMMENDED $\frac{1}{4}$ INCH RADIUS AND 4 INCHES IN HEIGHT THAT IS COMPATIBLE WITH BOTH WALL AND FLOOR COVERING.
- STUDS, JOISTS, AND RAFTERS MAY NOT BE EXPOSED IN FOOD PREPARATION AREAS, EQUIPMENT, AND UTENSIL WASHING AREAS, TOILET ROOMS, AND VESTIBULES.
- ANY ACOUSTICAL CEILING TILE (ACT) USED IN FOOD PREPARATION AREAS, EQUIPMENT AND UTENSIL WASHING AREAS, TOILET ROOMS, AND VESTIBULES MUST BE SMOOTH, NON-ABSORBENT, CLEANABLE, AND NON-POROUS.
- ALL SURFACES IN PREPARATION AREAS, EQUIPMENT AND UTENSIL WASHING AREAS, TOILET ROOMS, AND VESTIBULES MUST BE LIGHT COLORED, SMOOTH, NON-ABSORBENT, AND EASILY CLEANABLE.
- WALLS BEHIND OR ADJACENT TO SINKS, WAREWASHERS, MOP SINKS, URINALS, TOILETS, AND DRINKING FOUNTAINS MUST BE COVERED WITH A DURABLE WATERPROOF MATERIAL. MARLITE, PAINTED GYPSUM BOARD, AND SIMILAR MATERIALS ARE NOT APPROVED FOR THIS PURPOSE.
- CARPETING IS PROHIBITED IN PREPARATION AREAS, EQUIPMENT AND UTENSIL WASHING AREAS, TOILET ROOMS, WAIT STATIONS, STORAGE ROOMS, AND OTHER AREAS EXPOSED TO MOISTURE.
- FLOOR FINISHES MUST BE OF DURABLE, LIGHT-COLORED, WATER-PROOF, GREASE-RESISTANT, AND CLEANABLE MATERIALS EXTENDING AT LEAST 3 FEET FROM THE SERVING SIDE OF BUFFETS, SALAD BARS, AND BEVERAGE STATIONS.
- CONCRETE BLOCK, IF USED, MUST BE RENDERED NON-POROUS AND SMOOTH BY THE APPLICATION OF APPROVED BLOCK FILLER, FOLLOWED BY THE APPLICATION OF EPOXY-TYPE PAINT.
- PROTECTIVE CORNER GUARDS ARE RECOMMENDED IN ALL HIGH TRAFFIC AREAS.
- ALTERNATE MATERIALS MUST BE SUBMITTED TO THE HEALTH DEPARTMENT FOR EVALUATION.

PLUMBING

ALL PLUMBING MUST BE DESIGNED, INSTALLED, AND MAINTAINED ACCORDING TO THE REQUIREMENTS OF THE INTERNATIONAL PLUMBING CODE. AN ADEQUATE SUPPLY AND PRESSURE OF HOT WATER AND COLD WATER MUST BE PROVIDED TO MEET THE NEEDS OF THE FOOD SERVICE FACILITY. WATER MUST COME FROM A PUBLIC WATER SUPPLY OR A HEALTH DEPARTMENT APPROVED PRIVATE WATER SUPPLY. ALL SEWAGE AND LIQUID WASTES MUST BE DISPOSED OF BY MEANS OF A PUBLIC SEWER OR A HEALTH DEPARTMENT APPROVED INDIVIDUAL WASTE WATER TREATMENT SYSTEM.

CROSS-CONNECTIONS

THERE SHALL BE NO CROSS CONNECTIONS BETWEEN THE POTABLE WATER SUPPLY AND ANY NONPOTABLE OR QUESTIONABLE WATER SUPPLY. THE POTABLE WATER SYSTEM MUST BE INSTALLED TO PRECLUDE THE POSSIBILITY OF BACKFLOW.

DEVICES MUST BE INSTALLED TO PROTECT AGAINST BACKFLOW AND BACK-SIPHONAGE AT ALL FIXTURES UNLESS AN AIR GAP IS PROVIDED. THE AIR GAP MUST BE AT LEAST TWICE THE DIAMETER OF THE WATER SUPPLY INLET, BUT NOT LESS THAN ONE INCH BETWEEN THE WATER SUPPLY AND THE FIXTURE'S FLOOD LEVEL RIM. WATER SUPPLIES TO CARBONATORS MUST BE PROTECTED BY A VENTED DUAL-CHECK VALVE MEETING THE REQUIREMENTS OF ASSE 1022.

INDIRECT WASTE CONNECTIONS

INDIRECT WASTE CONNECTIONS MUST BE PROVIDED FOR EQUIPMENT SUCH AS WAREWASHING MACHINES, 3- COMPARTMENT WAREWASHING SINKS, FOOD PREPARATION SINKS, PRE-RINSE SINKS, BAR SINKS, ICE MACHINES, STEAM TABLES, SALAD BARS, DIPPER WELLS, WALK-IN REFRIGERATORS OR FREEZER CONDENSATE.

FLOOR DRAINS

FLOOR DRAINS SHOULD BE LOCATED IN AREAS THAT REQUIRE FREQUENT WATER FLUSHING TO CLEAN THE FLOOR OR EQUIPMENT. FLOOR DRAINS ARE REQUIRED IN TOILET ROOMS. FLOOR DRAINS MAY NOT BE INSTALLED IN WALK-IN REFRIGERATION UNITS.

GREASE TRAPS

GREASE TRAPS AND INTERCEPTORS, WHERE REQUIRED, MUST BE ACCESSIBLE FOR CLEANING. WATER ABOVE 140° F OR FOOD WASTE GRINDERS MAY NOT DISCHARGE INTO A GREASE TRAP.

NOTE: CONTACT YOUR LOCAL SEWER DISTRICT FOR SPECIFIC GREASE TRAP/INTERCEPTOR REQUIREMENTS, I.E., SIZE, LOCATION, TYPE, ETC.

TOILET ROOMS/DRESSING ROOMS

TOILET FACILITIES MUST BE INSTALLED ACCORDING TO THE REQUIREMENTS OF THE INTERNATIONAL PLUMBING CODE. THE NUMBER OF FIXTURES REQUIRED IS DETERMINED BY THE LOCAL BUILDING OFFICIAL BASED ON THE REQUIREMENTS OF THE UNIFORM BUILDING CODE, APPENDIX CHAPTER 29. TOILET ROOMS MUST INCLUDE A HAND SINK IN OR ADJACENT TO THE TOILET ROOM, BE EQUIPPED WITH HOT AND COLD RUNNING WATER, HAND CLEANER, AND A HAND DRYING DEVICE OR SINGLE-USE SANITARY TOWELS. TOILET ROOMS MUST BE COMPLETELY ENCLOSED AND HAVE TIGHT-FITTING, SOLID, SELF-CLOSING DOORS. TOILET ROOMS MUST BE MECHANICALLY VENTED TO THE OUTSIDE. MECHANICAL VENTILATION MUST PROVIDE A COMPLETE AIR CHANGE EVERY 15 MINUTES. EACH TOILET ROOM MUST HAVE A WASTE CONTAINER. WOMEN'S TOILET ROOMS MUST HAVE A COVERED WASTE CONTAINER FOR SANITARY HYGIENE PRODUCTS. TOILET ROOMS MUST BE ACCESSIBLE AT ALL TIMES. CUSTOMERS MAY NOT PASS THROUGH FOOD PREPARATION AREAS, STORAGE AREAS, OR DISHWASHING AREAS TO USE THE TOILET FACILITIES. SEPARATE TOILET ROOMS ARE NOT REQUIRED FOR EMPLOYEES AND CUSTOMERS.

IF EMPLOYEES CHANGE CLOTHES ON SITE, A DRESSING ROOM SHOULD BE PROVIDED WHERE THEY MAY CHANGE CLOTHES AND STORE PERSONAL POSSESSIONS. THIS AREA CANNOT BE IN AREAS USED FOR STORING, PREPARING, OR SERVING FOOD; OR FOR WASHING OR STORING UTENSILS.

IF DRESSING ROOMS ARE NOT REQUIRED, SUITABLE FACILITIES MUST BE PROVIDED FOR STORING EMPLOYEE PERSONAL BELONGINGS.

INSECT CONTROL

OPENINGS TO THE OUTSIDE MUST BE EFFECTIVELY PROTECTED AGAINST THE ENTRANCE OF RODENTS AND INSECTS BY THE INSTALLATION OF TIGHT-FITTING, SELF-CLOSING DOORS; CLOSED WINDOWS; SELF-CLOSING SERVING WINDOWS AT DRIVETHROUGHS; SCREENS; CONTROLLED AIR CURRENTS; VESTIBULES OR OTHER APPROVED METHODS.

SCREENED DOORS MUST BE SELF-CLOSING. SCREENING MATERIAL MUST NOT BE LESS THAN SIXTEEN MESH TO THE INCH.

OPENINGS AROUND PIPES, CONDUITS, OR WIRING ENTERING THE BUILDING MUST BE ADEQUATELY SEALED. ALL FOUNDATIONS MUST BE RODENT PROOF.

LOADING DOCKS AND DELIVERY DOORS MUST BE PROVIDED WITH EFFECTIVE AIR CURTAINS OR VESTIBULES WITH SELFCLOSING DOORS.

NOTE: IT IS RECOMMENDED THAT OUTSIDE LIGHTING AROUND LOADING AREAS AND ENTRANCES BE SODIUM VAPOR TO DECREASE INSECT ATTRACTION.

SHIELDING

PROTECTIVE SHIELDING FOR LIGHT FIXTURES IS REQUIRED IN ALL FOOD PREPARATION, DISPLAY, SERVICE, STORAGE, AND UTENSIL WASHING AREAS. EXPLOSION TUBES WITH END CAPS OR SHATTERPROOF BULBS MAY BE USED. HEAT LAMPS SHOULD BE PROTECTED AGAINST BREAKAGE BY SURROUNDING AND EXTENDING A SHIELD BEYOND THE BULB, LEAVING ONLY THE FACE OF THE BULB EXPOSED. SHATTERPROOF BULBS MAY BE USED INSTEAD OF SHIELDING.

VENTILATION

VENTILATION IN FOOD SERVICE FACILITIES MUST COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE. A TYPE I HOOD (WITH FILTERS) MUST BE INSTALLED AT OR ABOVE ALL COMMERCIAL FOOD HEAT PROCESSING APPLIANCES THAT PRODUCE GREASE, VAPORS OR SMOKE. A TYPE I OR TYPE II (WITHOUT FILTERS) HOOD MUST BE INSTALLED AT OR ABOVE ALL COMMERCIAL FOOD HEAT PROCESSING EQUIPMENT THAT PRODUCES FUMES, STEAM, ODORS, OR HEAT. HOODS MUST BE DESIGNED AND INSTALLED IN CONFORMANCE WITH NFPA BULLETIN 96.

WHEN VENTED TO THE OUTSIDE, THE VENTILATION SYSTEM MAY NOT CREATE AN UNSANITARY, HARMFUL OR UNLAWFUL DISCHARGE.

REMOVABLE FILTERS MUST BE OF A SIZE THAT ALLOWS FOR CLEANING IN A WAREWASHING MACHINE OR POT SINK.

FILTERS MUST BE INSTALLED AT AN ANGLE OF NOT LESS THAN 45° FROM THE HORIZONTAL. THE INSIDE EDGE OF A CANOPY-TYPE COMMERCIAL COOKING HOOD MUST OVERHANG OR EXTEND A HORIZONTAL DISTANCE OF NOT LESS THAN 6 INCHES BEYOND THE EDGE OF THE COOKING SURFACE. THE VERTICAL DISTANCE BETWEEN THE LIP OF THE HOOD AND THE COOKING SURFACE MUST NOT EXCEED 4 FEET.

WASTE HANDLING

GARBAGE AND REFUSE CONTAINERS, DUMPSTERS, AND COMPACTOR SYSTEMS LOCATED OUTSIDE THE BUILDING MUST BE STORED ON OR ABOVE A SMOOTH SURFACE OF NON-ABSORBENT MATERIAL SUCH AS 4 INCHES OF SEALED CONCRETE OR SEALED ROAD-GRADE ASPHALT. ALL GARBAGE OR REFUSE CONTAINERS MUST BE DURABLE, EASILY CLEANABLE, NON-ABSORBENT, LEAK-PROOF, AND PROVIDED WITH TIGHT-FITTING LIDS. GARBAGE AND REFUSE CONTAINERS MUST BE LOCATED AS FAR AS POSSIBLE FROM THE FOOD SERVICE FACILITY DOORS AND WINDOWS. INSIDE GARBAGE OR REFUSE STORAGE ROOMS MUST BE CONSTRUCTED OF EASILY CLEANABLE, NON-ABSORBENT, WASHABLE MATERIALS AND MUST BE INSECT AND RODENT PROOF. AN ADEQUATE NUMBER OF WASTE CONTAINERS MUST BE PROVIDED TO ACCOMMODATE THE NEEDS OF THE FOOD SERVICE FACILITY. COLLECTION FREQUENCY MUST BE SUFFICIENT TO PREVENT THE ACCUMULATION OF REFUSE.

JANITORIAL

JANITORIAL STATIONS MUST BE PROVIDED FOR GENERAL CLEANUP ACTIVITIES IN ALL FOOD SERVICE FACILITIES. EACH STATION MUST INCLUDE A CURBED CLEANING FACILITY (BUILT ON-SITE OR A LISTED CURBED SINK) OR A WALL-MOUNTED JANITORIAL SINK. ALL THREADED HOSE BIBS MUST BE PROTECTED AGAINST BACKFLOW. NOTE: RESIDENTIAL POLYETHYLENE OR FIBERGLASS LAUNDRY TUBS ARE NOT APPROVED.

JANITORIAL STATIONS SHOULD BE CONVENIENTLY PLACED FOR MAINTAINING FOOD SERVICE AREAS. THEY MUST BE ON THE SAME FLOOR LEVEL AS THE FOOD SERVICE AREA AND WITHIN A REASONABLE DISTANCE OF THE AREA OF USE.

SPACE MUST BE ALLOWED ADJACENT TO THE MOP SINK FOR THE STORAGE OF MOP BUCKETS AND OTHER CLEANING EQUIPMENT. DRYING RACKS MUST BE PROVIDED FOR MOP HEADS.

CHEMICAL DISPENSERS MUST BE PLACED SO THEY WILL NOT INTERFERE WITH MAINTENANCE EQUIPMENT OR USE.

CHEMICAL DISPENSERS MUST COMPLY WITH SECTION 608.16.7 OF THE INTERNATIONAL PLUMBING CODE.

LAUNDRY/LINEN STORAGE

STORAGE AREAS SHOULD BE PROVIDED FOR LINENS AND APRONS. CLEAN LINENS AND APRONS MUST BE PROTECTED FROM CONTAMINATION AND STORED AWAY FROM SOILED LINENS AND APRONS.

IF A LAUNDRY ROOM IS PROVIDED, IT MUST BE SEPARATE FROM FOOD SERVICE OPERATIONS. IF A CLOTHES WASHING MACHINE IS PROVIDED, A DRYER MUST ALSO BE PROVIDED UNLESS LAUNDERED CLOTHS ARE USED WET.

CHEMICALS/TOXICS STORAGE

AREAS MUST BE DESIGNATED FOR TOXIC MATERIAL STORAGE THAT IS AWAY FROM FOOD AND CLEAN UTENSILS. SEPARATE FACILITIES MUST BE PROVIDED FOR STORING PESTICIDES (SECURED CABINET).

AMERICANS WITH DISABILITIES ACT (ADA)

PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) SHOULD BE TAKEN INTO ACCOUNT IN ALL FOOD SERVICE FACILITY DESIGN.

UTAH INDOOR CLEAN AIR ACT (UICAA)

UNDER PROVISIONS OF THE UTAH INDOOR CLEAN AIR ACT (UICAA), SMOKING IS PROHIBITED IN ALL PUBLICLY OWNED BUILDINGS AND OFFICES EXCEPT AS PROVIDED IN 26-38-3, SUBSECTION 2 OF UICAA.

WOU
DESIGN PARTNERS

3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010

- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

HOEJUN KIM
No. 10718006-0301
6-12-2018

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
A	CORRECTION SVWRF	4-19-18
B	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

SHEET NAME

GENERAL NOTES

SHEET NUMBER

A-0.2

HEALTH DEPARTMENT APPROVAL LETTER

SALT LAKE COUNTY HEALTH DEPARTMENT
788 E. Woodoak Ln., Murray, UT 84107
385-468-3845

Food Establishment Plan Review

Establishment Name: Korean BBQ in Utah
Address: 7157 S. State Street, Midvale, Utah 84047
Owner/Agent: Charles An
Owner Phone: 714-920-7951
Architect/Designer: Harry Kim
Architect Phone: 213-378-8780
Establishment Number: 35-05119 Risk Level: 3 Projected Completion Date: 09 / 01 / 2018 ☐ New ☑ Remodel

FACILITIES

Hand Washing Sinks:
Adequate Number: Yes (4)
Conveniently Located: Yes
Splash Guard or Space: Yes (Required)

Food Equipment:
NSF/ANSI or equivalent: Yes
Indirectly Drained: Yes
Cold Holding Capacity: Approved
Water Heater Capacity: 100 Gallons
Restroom Location: Approved

Required Sinks:
3-Comp Sink: Yes (2) Warewash Area and Bar
Mop/Service Sink*: Yes

Outdoor Surfaces:
Dumpster: /ete
Walking/Driving: Concrete/Asphalt
Ventilation Provided: Yes
Filter Type: Type 1
Sewer & Water Letters: Existing
(New Construction Only)

FINISH SCHEDULE

	Floors	Base	Walls	Ceilings
Food Preparation	Quarry Tile	Quarry Tile	FRP/Stainless Steel/Semi-gloss painted gypsum	Vinyl Tile
Service Area	Quarry Tile	Quarry Tile	FRP/Stainless Steel/Semi-gloss painted gypsum	Vinyl Tile
Warewashing	Quarry Tile	Quarry Tile	FRP/Stainless Steel/Semi-gloss painted gypsum	Vinyl Tile
Mop/Service Sink Area	Quarry Tile	Quarry Tile	FRP/Stainless Steel/Semi-gloss painted gypsum	Vinyl Tile
Food Storage	Quarry Tile	Quarry Tile	FRP/Stainless Steel/Semi-gloss painted gypsum	Vinyl Tile
Toilet Rooms	Sealed Concrete	Painted Wood	Painted Gypsum	Ceiling Tile
Dining/Customer Area	Sealed Concrete	Ceramic Tile	Ceramic Tile/Painted Gypsum	Painted Gypsum

Notes & Conditions of Approval

Plans approved 4-18-18.
Hand sink at the bar must have splash guards. Any other sink that may splash on a food or equipment must have splash guards.

*Per Utah State amendment to the 2012 IPC, chemical dispensers shall connect to a separate, dedicated water supply, separate from any sink faucet.

Any changes to approved plans and specifications must be submitted to this Bureau for review and approval. Plan review does not constitute final approval of the finished establishment, nor does it constitute approval by any other agency. A final inspection and payment of a separate food service permit fee is required prior to commencement of operations. 72 hour notice is required for all construction and pre-opening inspections. Plan review is valid for 180 days.

Reviewed By: Rachel Black (Email: rblack@slco.org Date: 04/18/2018 17:07:47 -0600) Date: 4-18-18
Contact Person Notified: Harry Kim Date: 4-18-18 Fax/email: hkim@wouparners.com/tvcenterprisellc@gmail.com

See attached pages for notes and general requirements.

SALT LAKE COUNTY HEALTH DEPARTMENT

SLCOHD 05/14

General Construction Requirements & Commonly Overlooked Items

1. The void spaces surrounding pipes, conduits, and other utility line penetrations through floors, walls, ceilings, and equipment shall be sealed and finished to be smooth, cleanable, and non-absorbent. This includes soft drink syrup hose chases and holes cut through the bottom of cabinets for floor sink access such as with soda dispensing stations.
2. Light intensity shall be:
   a. At least 50 foot candles at a surface where employees work with food, or where employee safety is a factor.
   b. At least 20 foot candles in areas used for hand washing, ware washing, equipment and utensil storage, and in toilet rooms.
   c. At least 10 foot candles in walk-in refrigeration units, dry storage and all other areas.
3. Smoking is not permitted in any food establishment in accordance with R392-510 Utah Indoor Clean Air Act.
4. All conduit, equipment drain lines, and supply lines must be spaced above the floor at a recommended minimum distance of 4 inches to facilitate floor cleaning.
5. A designated area that is separate from food and clean food equipment is required to be provided for the storage of employees' personal belongings such as purses and jackets.
6. Adequate number of toilets and toilet rooms is determined by the Local Building Inspector.
7. Any shelf or cabinet used for storing food, equipment, or utensils must be a minimum distance of 6 inches above the floor to facilitate cleaning.
8. All light fixtures above areas of exposed food or food equipment must be equipped with light shields or shatterproof bulbs.
9. Surfaces on which dumpsters and other waste containers are placed must be made of smooth concrete or asphalt.
10. It is recommended that any wall that is subject to splash from sinks or warewashing machines be finished with a durable waterproof material such as FRP, tile, or equivalent. For sinks, the wall finish material should extend from the floor to at least 18 inches above the faucet. For warewashing machines, the wall finish material should extend from the floor to at least 18 inches above the top of the machine.
11. Chemical dispensers must not be connected to mop sink faucets that are equipped with an atmospheric vacuum breaker (AVB). SLCOHD recommends a separate tap to supply water for chemical dispensers.

SALT LAKE COUNTY HEALTH DEPARTMENT

Preopening Inspection Checklist

Food Protection Bureau, Environmental Health Division
788 East Woodoak Lane; Murray, UT 84107
385-468-3845

- ☐ Facilities conform to approved plans, including presence of—at minimum:
  - Hand sink(s)
  - Mop sink
  - Three-compartment sink
- ☐ Light intensity is:
  - At least 50 foot candles at a surface where employees work with food, or where employee safety is a factor.
  - At least 20 foot candles in areas used for hand washing, ware washing, equipment and utensil storage, and in toilet rooms.
  - At least 10 foot candles in walk-in refrigeration units, dry storage and all other areas.
- ☐ All light fixtures above areas of exposed food or food equipment are equipped with light shields or shatterproof bulbs.
- ☐ All conduit, equipment drain lines, and supply lines are spaced above the floor at a minimum distance of 4 inches to facilitate floor cleaning.
- ☐ Any shelf or cabinet used for storing food, equipment, or utensils is a minimum distance of 6 inches above the floor to facilitate cleaning.
- ☐ All surfaces are smooth, durable, and easily cleanable.
- ☐ The void spaces surrounding pipes, conduits, and other utility line penetrations through floors, walls, ceilings, and equipment are sealed and finished to be smooth, cleanable, and nonabsorbent. This includes holes cut through the bottom of cabinets for floor-sink access such as with soda-dispensing stations.
- ☐ Any wall that is subject to splash from sinks or warewashing machines is finished with a durable waterproof material such as FRP, tile, or equivalent. For sinks, the wall finish material should extend from the floor to at least 18 inches above the faucet. For warewashing machines, the wall finish material should extend from the floor to at least 18 inches above the top of the machine.
- ☐ Surfaces on which dumpsters and other waste containers are placed are made of smooth concrete or asphalt.
- ☐ All water-supplied equipment is properly located and drained (air gap, air break, etc.)
- ☐ Chemical dispensers are not connected to mop sink faucets that are equipped with an atmospheric vacuum breaker (AVB). The health department recommends a separate tap to supply water for chemical dispensers.
- ☐ There is an adequate number of toilets and toilet rooms, as determined by building inspector.
- ☐ All refrigerators/freezers are maintaining proper temperatures.
- ☐ All appropriate equipment meets ANSI/NSF standards or is of equivalent construction and is installed according to code.
- ☐ Hot water is available at all fixtures where required:
  - 110° F at three-compartment sink
  - 100° F at hand sinks
- ☐ Thermometers (food and ambient air) are present and accurate
- ☐ Appropriate signage is posted (hand washing, Utah Indoor Clean Air Act/No Smoking, etc.)
- ☐ Chemical test papers are available.
- ☐ Certified Food Safety Manager is registered with the health department
- ☐ Establishment has documentation of ALL staff members' food handler training

Salt Lake County Health Department promotes and protects community and environmental health
saltlakehealth.org

SALT LAKE COUNTY HEALTH DEPARTMENT

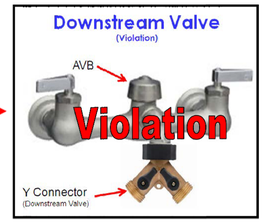
Food Protection Bureau
788 East Woodoak Lane
Murray, Utah 84107
385-646-3845

Chemical Dispenser Installation

The water supply hose to a chemical dispenser shall not be connected to a water faucet that is equipped with an atmospheric vacuum breaker (AVB). Doing so creates pressure on the AVB and negates its ability to prevent backflow. AVBs are not rated for pressure applications. Please refer to International Plumbing Code® Section 608. In simple terms, you are not allowed to install a shutoff valve below an AVB.

It is common for chemical supply companies to install a hose bib "Y connector" on a mop sink faucet and then attach their chemical dispenser water supply hose to one of the Y ends. This violates the Plumbing Code.

This is an example of What Not To Do →



It is recommended that a separate water tap WITHOUT an AVB be installed for supplying water to chemical dispensers.

Attention Architects and Contractors: Please consider installing a separate water tap in the mop sink area for connecting chemical dispensers. It is easier and more cost effective to do so during the construction phase.

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LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF 4-19-18	
2	CORRECTION BLDG. 4-26-18	

PROJECT DATA
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SCALE

SHEET NAME
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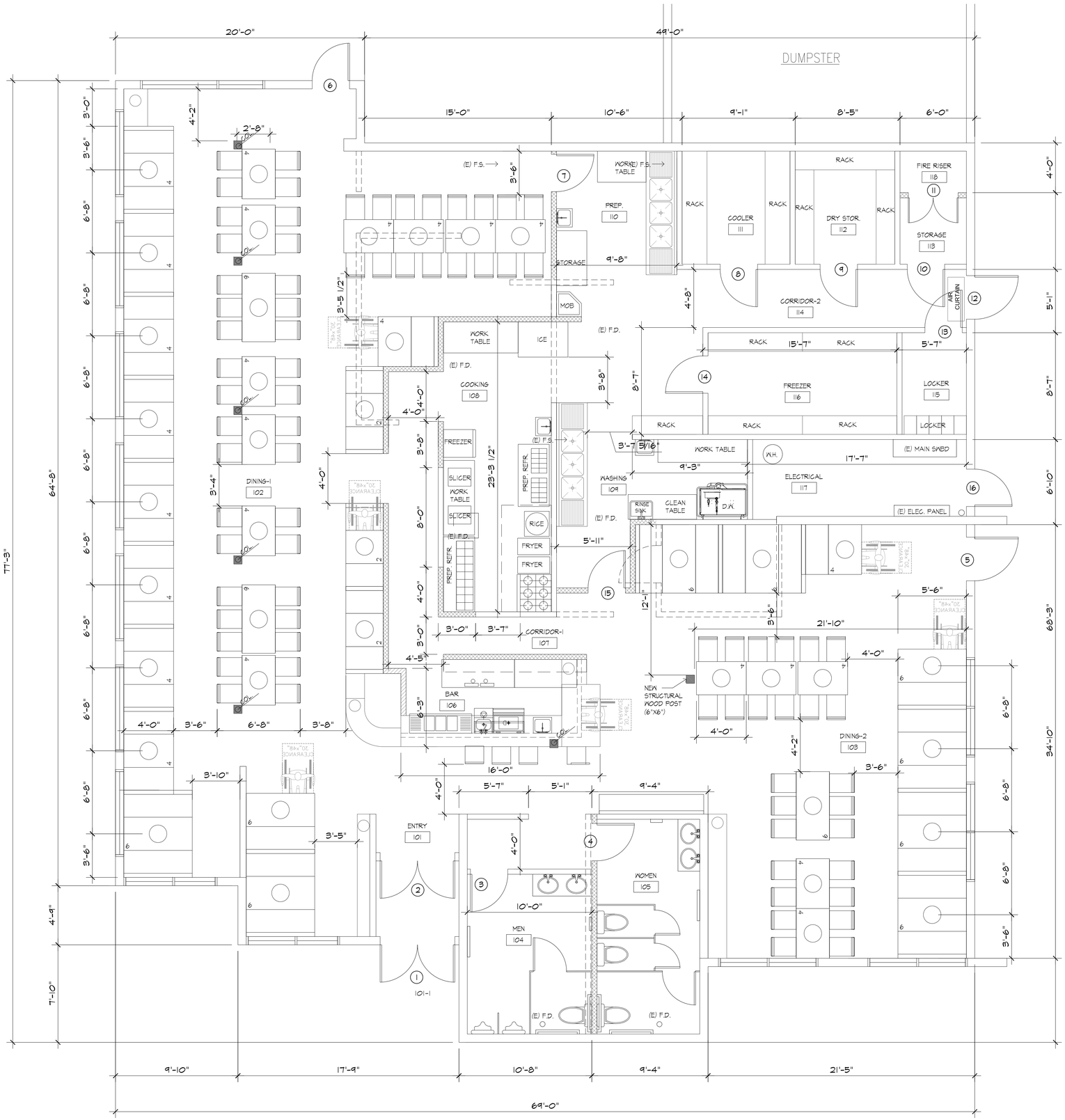
SHEET NUMBER
A-0.3



ACCESSIBLE SEATING NOTES:

1. WHERE FIXED OR BUILT-IN SEATING, TABLES OR COUNTERS ARE PROVIDED FOR THE PUBLIC AND IN GENERAL ENPLOYEE AREA, 5% BUT NEVER LESS THAN IT MUST BE ACCESSIBLE.
2. THE TOP OF TABLES AND COUNTERS SHALL BE 28" TO 34" FROM THE FLOOR AND GROUND.
3. IF SEATING FOR PEOPLE IN WHEELCHAIRS IS PROVIDED AT FINXED TABLES OR COUNTERS KNEE SPACES AT LEAST 27" HIGH 30" WIDE AND 19" DEEP SHALL BE PROVIDED.

EXISTING WALL

REMOVE EXISTING INTERIOR WALL

NEW PARTITION (FULL HEIGHT)

NEW PARTITION (LOW HT PARTITION))

EXISTING STRUCT. COLUNES TO REMAIN

1 FLOOR PLAN
Scale: 1/4" = 1'-0"

DESIGN PARTNERS

3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010

- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

STATE OF UTAH
HOEJUN KIM
No. 10718302-0301
6-12-2018
LICENSED ARCHITECT

TITLE

Korean BBQ of Utah

7157 S. State Street
Midvale, Utah, 84047

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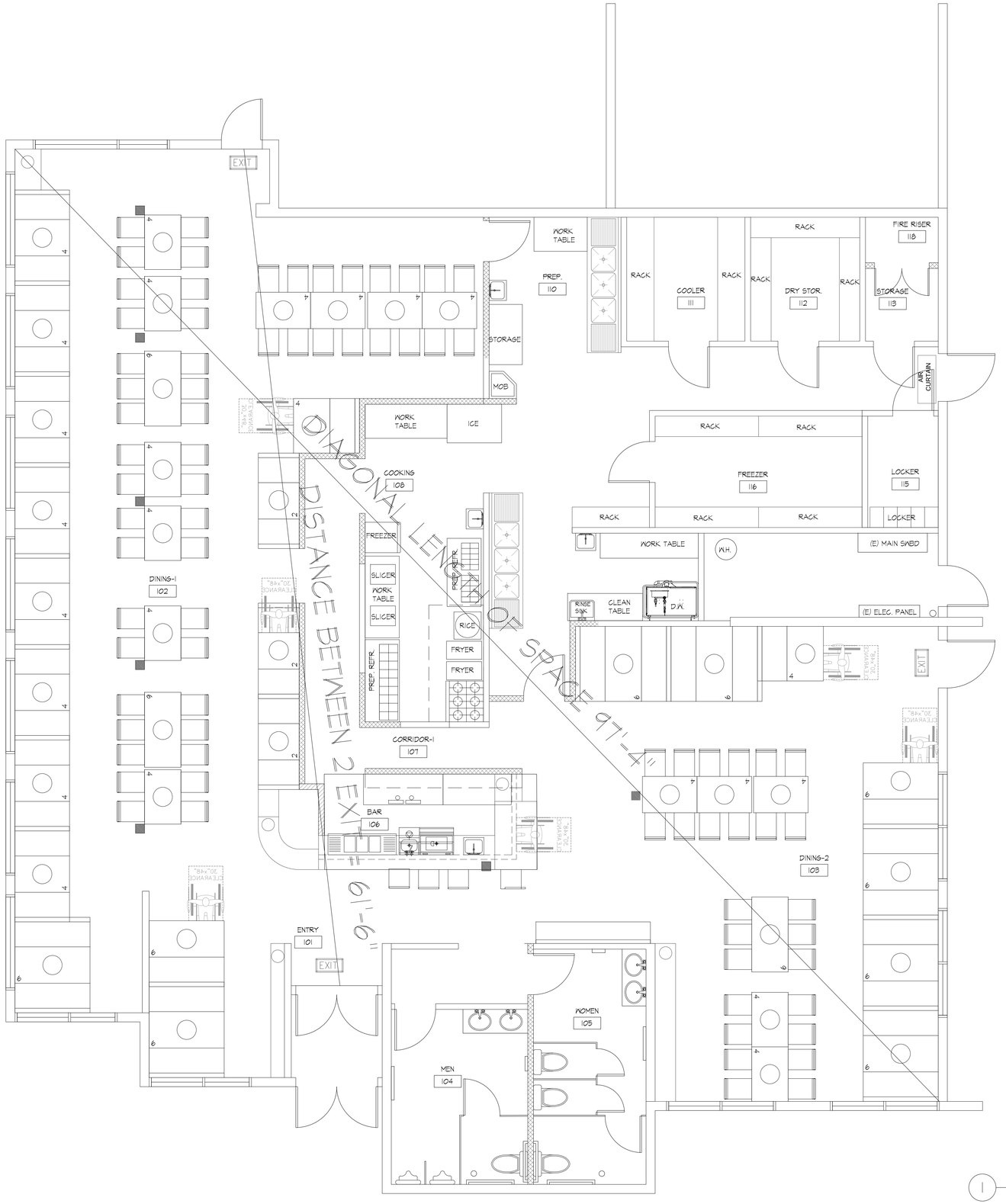
SHEET NAME

FLOOR PLAN

SHEET NUMBER

A-1.1



1 FLOOR PLAN
Scale: 1/4" = 1'-0"

TOTAL AREA IN SCOPE , 4,700 SQ.FT.
TOTAL OCCUPANCY , 204 OCC.
2 EXIT REQUIRE (3 EXIT PROVIDED)
DISTANCE BETWEEN 2 EXITS 61'-6"
HALF LENGTH OF DIAGONAL OF
THE AREA = 97'-4"/2 = 48'-10"
EXIT ACCESS TRAVEL DISTANCE
< 250 MAX. (A-2 W/ SPRINKLER SYSTEM)

PROPOSED OCCUPANT LOAD ANALYSIS			
ROOM	AREA	F.A./OCC	OCCU. LOAD
DINING AREA	2,334 SF	FIXED SEAT	179
STORAGE/MECH	459 SF	300	2
KITCHEN	620 SF	200	4
BAR	108 SF	200	1
LOCKER	48 SF	50	1
REST. RM. CORRIDOR	1,131 SF	0	0
TOTAL	4700 SF		187

NOTES
1. EXIT SIGN SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED AT ALL TIME.
2. EXIT SIGNS ILLUMINATED BY AN EXTERNAL SOURCE SHALL HAVE AN INTENSITY OR NOT LESS THAN 5 FOOT CANDLES (54 LUX)
3. INTERNALLY ILLUMINATED SIGNS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUF. INSTRUCTION AND SECTION 2702.
4. EXIT SIGNS SHALL BE CONNECTED TO AN EMERGENCY POWER SYSTEM THAT WILL PROVIDE AN ILLUMINATION OF NOT LESS THAN 90 MIN. IN CASE OF PRIMARY POWER LOSS.
5. EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY SPECIAL KNOWLEDGE OR EFFORT.
6. DOOR HANDLES, LOCK AND OTHER OPERATING DEVICES SHALL BE INSTALLED AT A MIN. 34" AND A MAX 48" ABOVE THE FINISH FLOOR.
7. THE MEANS OF EGRESS, INCLUDING THE EXIT DISCHARGE SHALL BE ILLUMINATE AT ALL TIMES THE BUILDING SPACE SERVED BY THE MEANS OF EGRESS IS OCCUPIED.
8. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE WALKING SURFACE.

WOU DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL
STATE OF UTAH
HOEJUN KIM
No. 10718302-0301
6/12-2018
LICENSED ARCHITECT

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS
1 CORRECTION SWRF 4-19-18
2 CORRECTION BLDG. 4-26-18

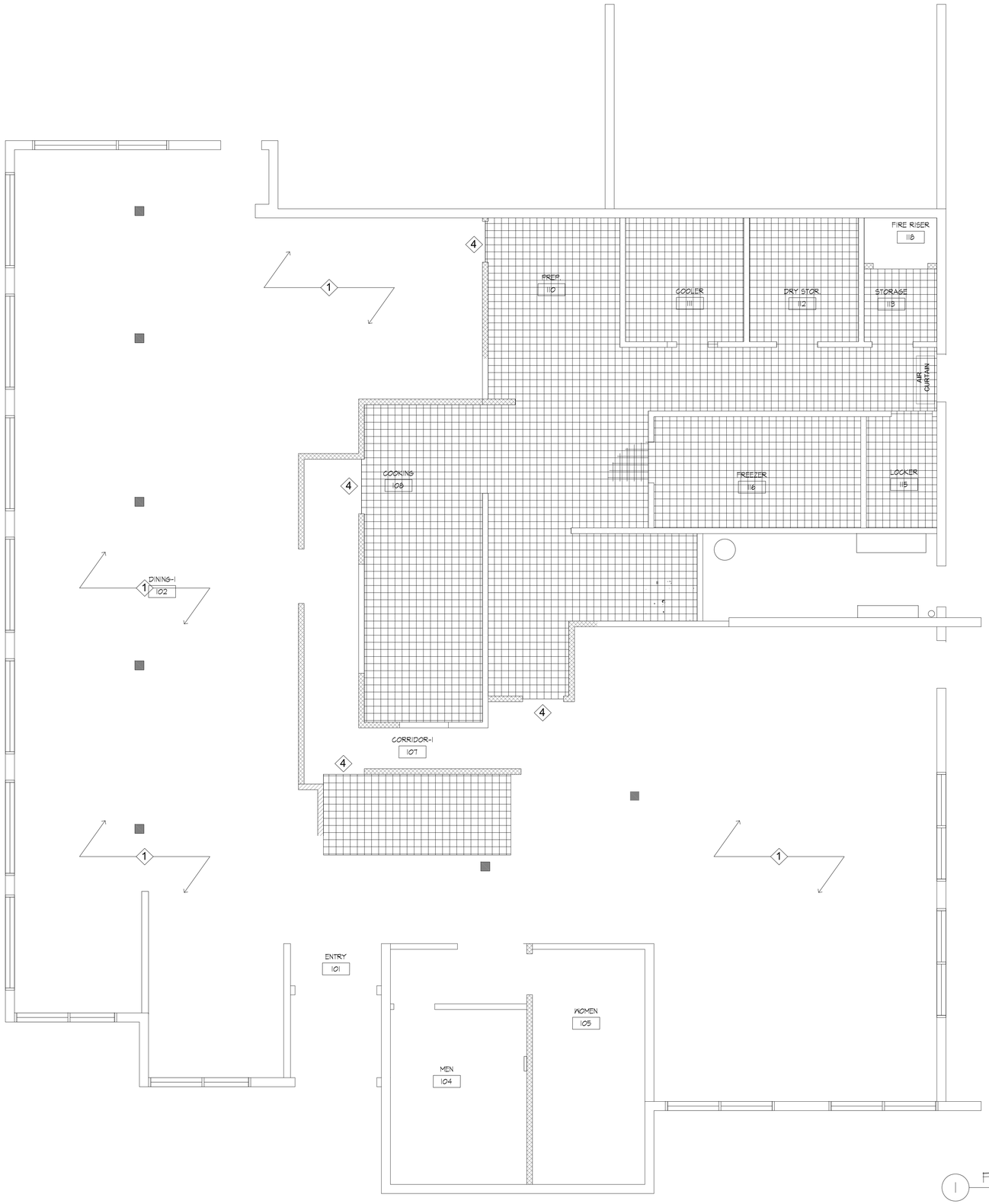
NO.	ISSUE	DATE

PROJECT DATA
PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

SHEET NAME
EXIT PLAN

SHEET NUMBER
A-1.2



1 FLOOR COVERING PLAN

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

KEYED NOTES

1. SEALED CONCRETE SEE SCHEDULE OF FINISHES AND FINISH NOTES
2. INSTALL QUARRY TILE THROUGHOUT INSTALL COOLER & FREEZER WALLS IN BED OF SEALANT FRIOR TO INSTALLATION OF QUARRY TILE.
3. PLUBMING EQUIPMENT
4. INSTALL ALUMINUM TRANSITION FLOOR STRIP AT TILE EDGE
5. PORCELAIN TILE ARE TO BE INSTALLED PER PLAN W/ FULL TILES SHEREVER POSSIBLE. SEE SCHEDULE OF FINISHES AND FINISH NOTES

LEGEND

QUARRY TILE (SMOOTH THROUGHOUT)

SEALED CONCRETE

WOU DESIGN PARTNERS

3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010

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- INTERIOR BRANDING
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Midvale, Utah, 84047

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2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :
DATE :
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APPROVED BY :

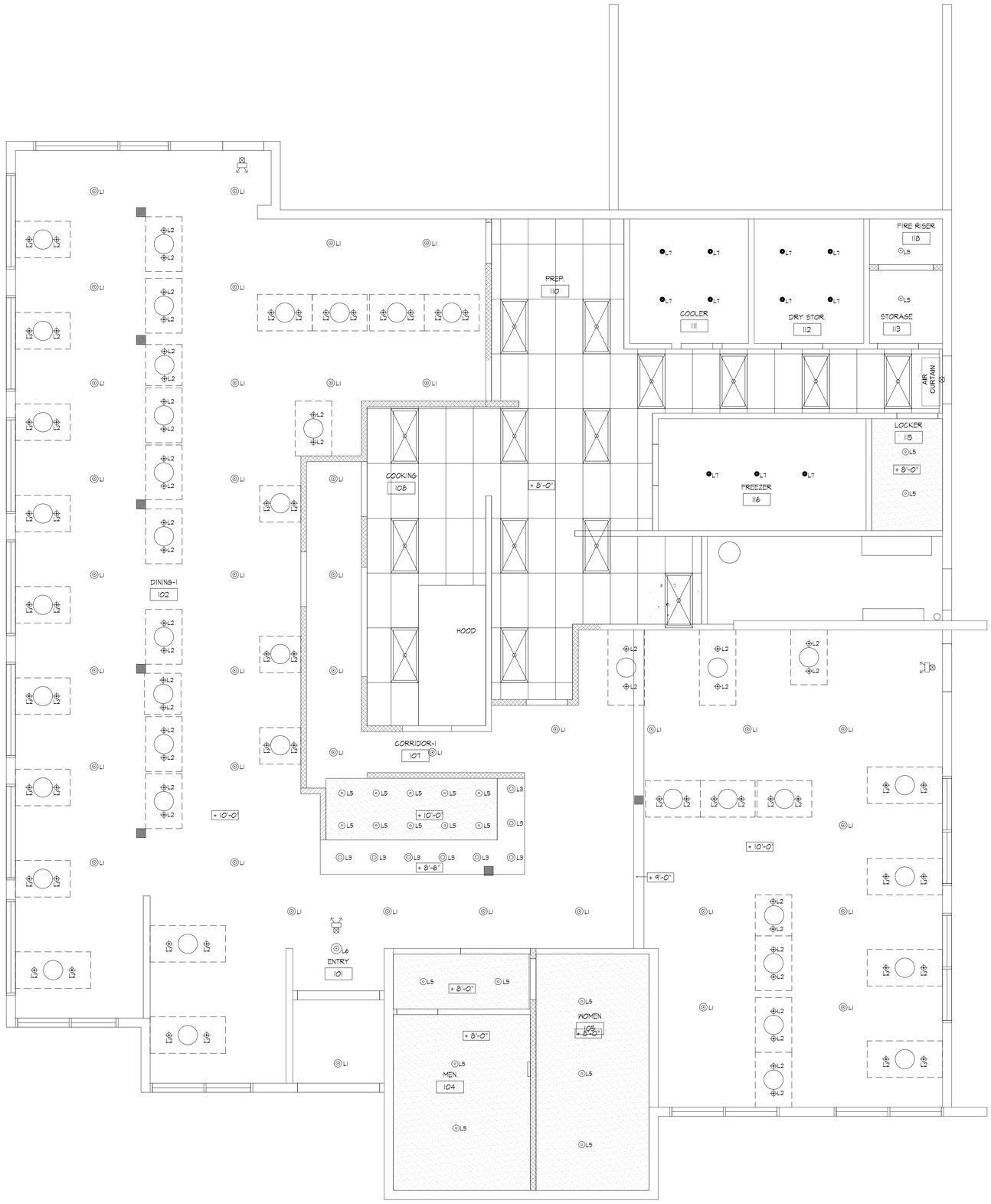
SCALE

SHEET NAME

FLOOR COVERING PLAN

SHEET NUMBER

A-1.3



1 REFLECTED CEILING PLAN
Scale: 1/4" = 1'-0"

CEILING MATERIAL LEGEND :

4'-0"X 2'-0" ACOUSTCAL CEILING TILE (SEE INTERIOR FINISH SCHEDULE)

9 / A7.1

: GYP. BD. CEILING-1 (SEE INTERIOR FINISH SCHEDULE)

3 / A7.1

: GYP. BD. CEILING-2 (SEE INTERIOR FINISH SCHEDULE)

LIGHTING LEGEND :

L1	PENDANT LIGHTING (AT AISLE)	15W LED
L2	PENDANT LIGHTING (BOOTH TABLE) (W/ ACRYLIC LENSE SHATTER PROOF)	
L3	PENDANT LIGHTING (BAR) (W/ ACRYLIC LENSE SHATTER PROOF)	
L4	PENDANT LIGHTING (SPOT LIGHT)	
L5	RECESSED DOWN LIGHTING (HARD CEILING)	
	PENDANT LIGHTING (AT RECEPTION)	
L7	VAPER BARRIER LIGHTING (@ WALK-IN BOX)	
--------	LED LINEAR LIGHT	
HOOD	EXHUAST HOOD	
	TABLE TOP BBQ GRILL HOOD	
	2'-0"x4'-0" RECESSED FLUORESCENT LIGHTING FIXTURE (W/ ACRYLIC LENSE SHATTER PROOF)	
	FLUORESCENT LIGHT FIXTURE	
	EXHAUST FAN - AIR CHANGE EVERY 15 MINUTES	
	EXIT SIGN W/ BATTERY BACK-UP (+ 7'-6" ON WALL MOUNT UNTS UON)	
	EMERGENCY BATTERY PACK	

L1	LED 21 WATT	
L2	LED - LITHONIA MINI PENDANT (9.5 WATT)	
L3	LED - LITHONIA MINI PENDANT (9.5 WATT)	
L4	LED 12 WATT	
L5	LED - LITHONIA RECESSED DOWNLIGHT (6", 16.5 WATT)	
L6	LED 15 WATT	
L7	LED 12 WATT	

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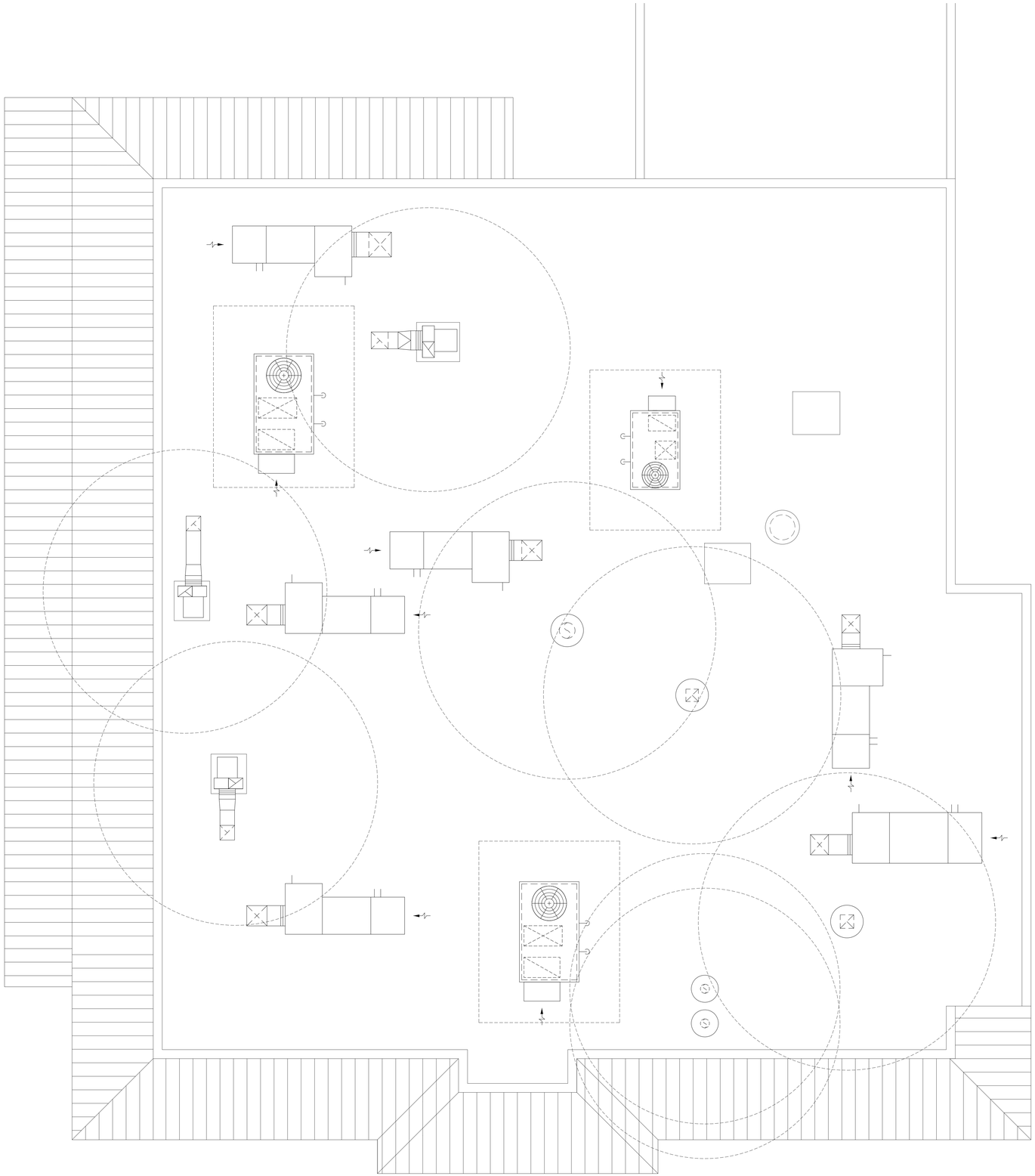
SCALE

SHEET NAME

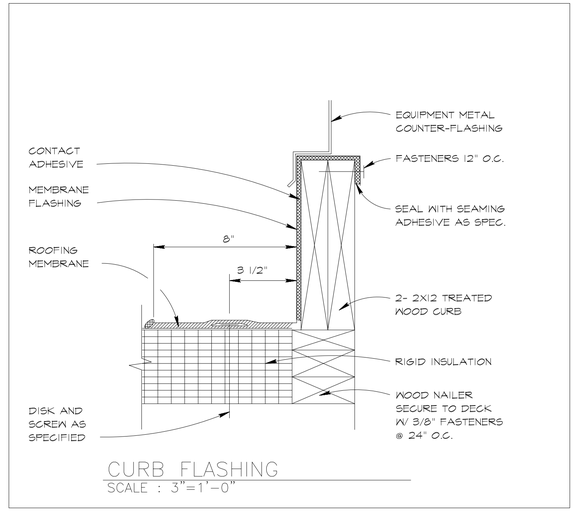
REFLECTED CEILING PLAN

SHEET NUMBER

A-1.4



ROOF PLAN
Scale: 1/4" = 1'-0"



CURB FLASHING
SCALE : 3"=1'-0"

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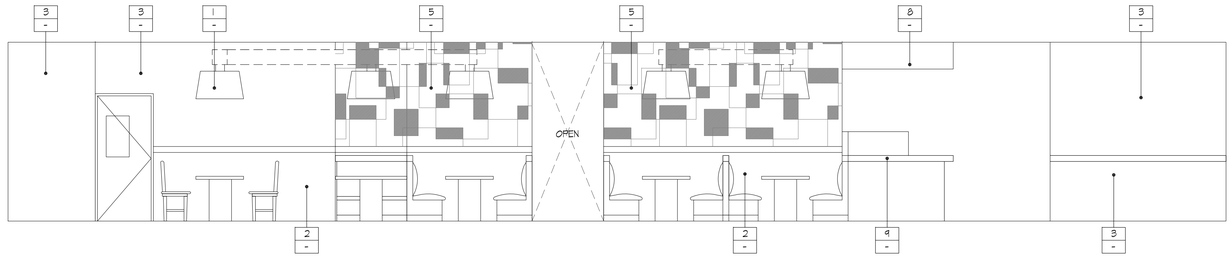
SCALE

SHEET NAME

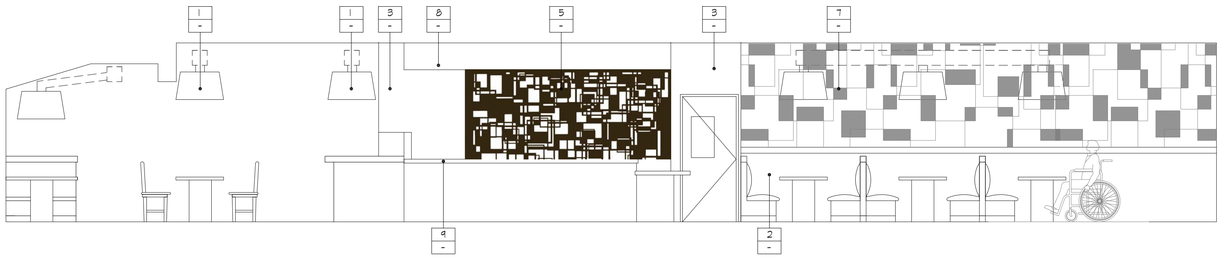
ROOF PLAN

SHEET NUMBER

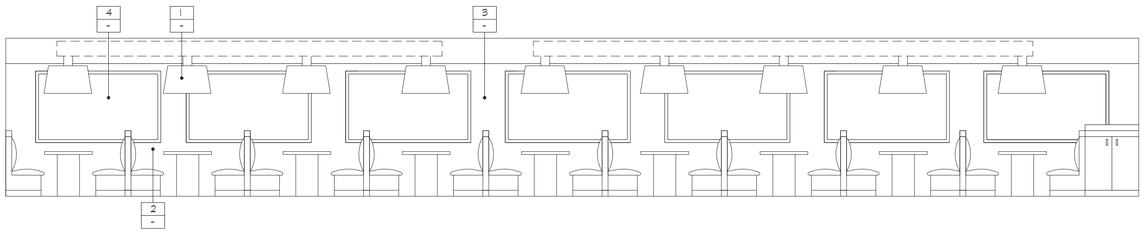
A-1.5



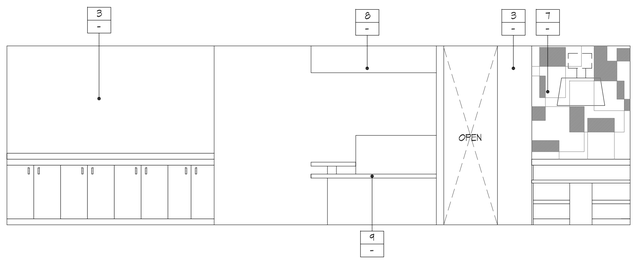
1 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"



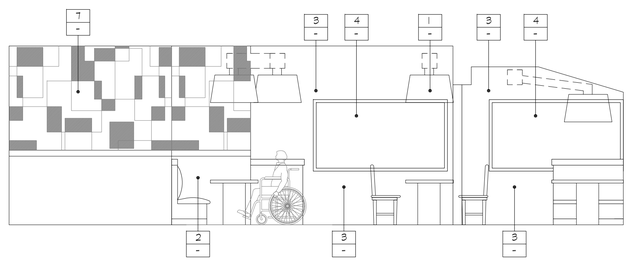
2 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"



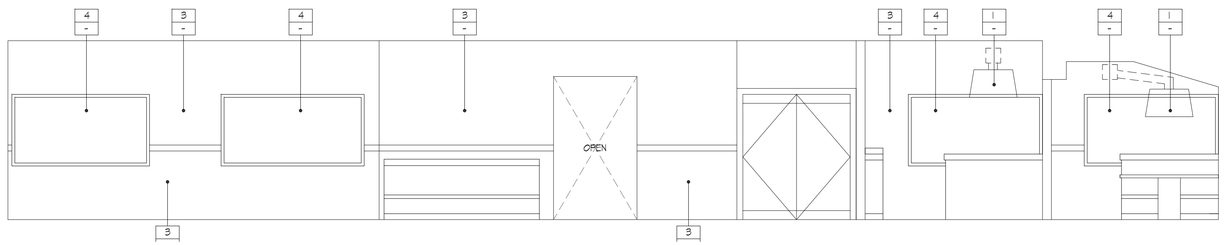
3 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"



4 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"



5 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"



6 INTERIOR ELEVATION
Scale: 1/4" = 1'-0"

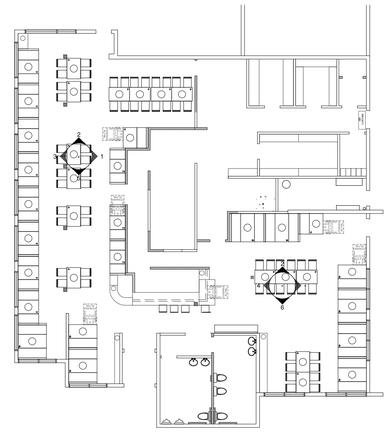
KEY NOTES AND MATERIAL

1	EXHAUST HOOD
2	LAMINATED PLASTIC
3	PAINTED GYP. BD.
4	EXISTING WINDOW
5	POLYCARBONATE FILM WITH BACKLIGHT
6	TEMP. CLEAR GLASS
7	FABRIC OVER MDF
8	ACRLIC PANEL WITH BACKLIGHT
9	QUARZE STONE

COLOR AND FINISH

A	DUNN EDWARDS
B	DUNN EDWARDS
C	DUNN EDWARDS
D	DUNN EDWARDS
E	DUNN EDWARDS
F	DUNN EDWARDS

KEY PLAN



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SCALE

SHEET NAME

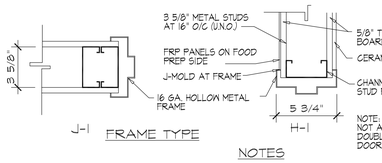
INTERIOR ELEVATIONS

SHEET NUMBER

A-1.6

DOOR SCHEDULE

MARK NO.	LOCATIONS	EXISTING	DOOR SIZE	DOOR TYPE	DOOR MAT'L	DOOR RATING	FRAME MAT'L	FRAME JAMB	FRAME HEAD	HARDWARE CLOSER	HARDWARE TYPE
1	ENTRY		(2) 3'-0" X 10'-0"	A	AL.		AL.	STL	STL	YES	1
2	ENTRY		(2) 3'-0" X 10'-0"	A	AL.		AL.	-	-	YES	
3	MEN	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		3
4	WOMEN	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		3
5	DINING-2	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		2
6	DINING-1		3'-0" X 7'-0" X 1 3/4"	A	AL.		H.M.	J - 1	H - 1	YES	1
7	PREP	○	3'-0" X 7'-0" X 1 3/4"	D	AL.		AL.	-	-		4
8	COOLER	○	3'-0" X 7'-0"	WALK-IN COOLER/FREEZER DOOR BY MANUFACTURER							
9	DRY STORAGE	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		2
10	STORAGE	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		2
11	FIRE RISER		(2) 2'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		
12	CORRIDOR-2	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		2
13	LOCKER	○	3'-0" X 7'-0" X 1 3/4"	B	S.C.		H.M.	J - 1	H - 1		2
14	FREEZER	○	3'-0" X 7'-0"	WALK-IN COOLER/FREEZER DOOR BY MANUFACTURER							
15	WASHING		(2) 18" X 7'-0"	D	AL.			STL	-		4



FRAME TYPE

NOTES

1. ALL EGRESS DOOR HARDWARE SHALL BY READILY OPENABLE FROM SIDE WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT
2. OPENABLE PARTS SHALL BE 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
3. OPENABLE PARTS SHALL OPENABLE WITH ONE HAND AND SHALL NOT REQUIRED TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL NE 5 LB. MAXIMUM.
4. THE BOTTOM 10 INCHES OF ALL DOORS TO HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZAROUS CONDITION.

DOOR HARDWARE TYPES

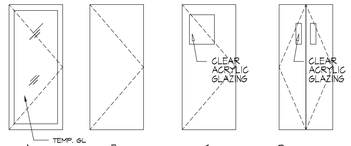
1 - LOCKING LATCH SET WITH LEVER SUCH THAT DOOR ALWAYS OPENS WHEN INTERIOR LEVER IS TURNED. KEY LOCK ON EXTERIOR, CLOSER, WEATHERSTRIPPING
PROVIDE PANIC HARDWARE ON ALL EXIT DOORS EXCEPT MAIN ENTRANCE/EXIT.

2 - LOCKING LATCH SET WITH LEVER SUCH THAT DOOR ALWAYS OPENS WHEN INTERIOR LEVER IS TURNED. KEY LOCK ON EXTERIOR, PEEP HOLE, BUZZER, CLOSER.

3 - RESTROOM FUNCTION, DOOR ALWAYS OPENS FROM INTERIOR (PUSH AND PULL)

4 - PUSH AND PULL, DBL ACTING DOOR

5 - PRIVATE HARDWARE



DOOR TYPES

ABREV'S:

HR. = HOUR
SC WOOD = SOLID CORE WOOD
OAK VENEERED PREP FOR STAIN
EX = EXISTING
H.M. = HOLLOW METAL
H.W. = HARDWOOD
AL. = ALUMINUM

NOTE:

DOUBLE ACTING DOOR SHALL BE "ELIASON" MODEL SCPT WITH .032"-6061-T6 TEMPERED ALUM. ALLOY TOP PANEL & 48" S.S. BASE PLATE BOTH SIDES
3/4" SOLID CORE BODY
PHONE:800-828-3655

* A READILY VISIBLE DURABLE SIGN IS POSTED ON EGREE SIDE ON OR ADJACENT TO THE DOOR STATING: " THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED". THE SIGN SHALL BE IN LETTER 1" HIGH ON A CONTRASTING BLACK GROUND.

** PROVIDE PANIC HARDWARE AT REAR EXIT DOOR LISTED IN ACCORDANCE WITH UL 305; FOR FIRE EXIT HARDWARE IN COMPLIANCE WITH UL 10C OR UL 305 AND CBC 1008.1.10.1

ROOM FINISH SCHEDULE

MARK	NAME	FLOOR: SEALED CONCRETE	FLOOR: PORCELAIN TILE	FLOOR: QUARRY TILE	FLOOR: GALV. METAL	FLOOR: EXPOSED CONC.	BASE: PAINTED WOOD	BASE: 6" CERAMIC (3/8 R.)	BASE: 6" QUARRY (3/8 R.)	BASE: 6" TILE(3/8 R.)	BASE: 6" H GALV. METAL (3/8 R.)	WALLS: PORCELAIN TILE	WALLS: CERAMIC WALL TILE	WALLS: FRP PANELS	WALLS: PAINTED GYP BD	WALLS: GALV. METAL	CEILING: EXPOSED/OPEN CLG	CEILING: CEILING TILE	CEILING: GYPSUM BOARD	CEILING: GALV. METAL	CEILING HEIGHT
101	ENTRY	○					○								○			○			10'-0"
102	DINING-1	○					○								○			○			10'-0"
103	DINING-2	○					○								○			○			10'-0"
104	MEN	○						○					FH		AP				(AP)		8'-0"
105	WOMEN	○						○					FH		AP				(AP)		8'-0"
106	BAR				○				○						AP				(AP)		10'-0"
107	CORRIDOR-1	○					○								○			○			10'-0"
108	COOKING				○				○					**	AP			WT			8'-0"
109	WASHING				○				○					*	AP			WT			8'-0"
110	PREP.				○				○					*	AP			WT			8'-0"
111	COOLER				○				○							○				○	8'-0"
112	DRY STORAGE				○				○					*	AP			WT			8'-0"
113	STORAGE				○				○						AP			WT			8'-0"
114	CORRIDOR-2	○					○								○			○			10'-0"
115	LOCKER				○				○						AP			WT			8'-0"
116	FREEZER			○					○							○				○	8'-0"
117	MECH.			○					○							○	○				8'-0"
118	FIRE RISER			○					○							○		○			8'-0"

(AP) PAINT TYPE WILL BE SEMIGLOSS IN ALL AREAS EXCEPT OFFICE AND DINING

(WT) CEILING TILE : WASHABLE, SMOOTH FINISH, WHITE COLOR (SMOOTH VINYL CEILING TILE)

(*) PROVIDE ALL WALLS (BEHIND AND ADJACENT TO SINKS, DISHWASHERS AND JANITORIALFACILITIES) ARE FRP OR STAILESS STEEL - 8FT. HT. FROM THE TOP OF COVE BASE.

(**) PROVIDE STAINLESS STEEL FINISH AT KICHEN HOOD WALL

(FH) FULL HEIGHT

FINISH NOTES :

1. CORNER GUARDS TO BE INSTALLED AT ALL OUTSIDE CORNERS IN KITCHEN, SERVICE, PREP. (STAINLESS) AND DINING ROOM (CLEAR). SUPPLIED AND INSTALLED BY G.C.
2. NOT ALL FINISHES IN SCHEDULE OF FINISHES ARE NECESSARILY INCLUDED IN THIS SCOPE OF WORK. SEE ROOM FINISH SCHEDULE
3. KITCHEN DOOR (DOUBLE) : ELIASON SCP-8 MODEL W/ PLAS. LAM. FIN. BOTH SIDES, WITH 9"X14" RECTANGLE ACRYLIC WINDOW, 18" S.S. BASE PLATES W/ STAINLESS STL. EDGE TRIM & HINGE COVERS. DOOR FURNISHED W/ BLACK ALUM. BUMPER STRIP (32" A.F.F.) BY MANUF.
4. ALL METAL DOOR FRAMES TO BE PAINTED PER INTERIOR ELEVATIONS.
5. FLOOR TILE TO BE OBTAINED THROUGH OWNER'S CONTACT.
6. G.C. TO LEAVE ON SITE, UPON COMPLETION OF JOB, (1) BOX EACH OF ALL WALL, FLOOR & CEILING TILE USED.
7. GRANITE COUNTER/TABEL TOPS : ALL PRODUCT TO BE SLAB W/ SURFACE ROUND EDGE DETAIL AND CONSISTANT / SMALL PARTICULATE AND POLISHED FINISH.
8. ALL SURFACES IN KITCHEN, SERVICE, AT BEVERAGE COUNTER AND RESTROOMS SHAL MEET 70% LIGHT REFLECTIVE VALE (LRV) OR GREATER.
9. QUARRY TILE : DAL TILE Q42 ARID GRAY, SMOOTH FINISH
10. BASE TILE : 6" HT. MIN. WITH 3/8" RADIUS
11. THE WALK-IN COOLER AND FREEZER'S METAL FLOORS ARE SMOOTH. DIAMOND PLATE FLOOR IS NOT APPROVED IN THE COOLER
12. ALL GYPSUMBOARD SHALL BE SMOOTH FINISH AT WALL AND CEILING

WALK-IN COOLER/FREEZER

ELECTRICAL REQUIRES A SEPARATE PERMIT

PANELS FOR THE COOLERS AND FREEZER CONSIST OF ALUMINUM OR STEEL SKINS AND A CORE OF 4" THICK DOW CHEMICAL COMPANY-DELTA-TERM AF 4500/VORAGOR GE 157 FOAMED-IN-PLACE POLYURETHANE HAVING AN AVERAGE IN-PLACE DENSITY OF 2.1 POUNDS PER CUBIC FOOT. THE PANELS ARE HELD TOGETHER BY USE OF POSI-LOC FASTENING DEVICES ALONG THE EDGES. FLAME SPREAD AND SMOKE DENSITY RATINGS PER ASTM E84 ARE 20 AND 130, RESPECTIVELY, FOR THE CORE MATERIAL. THE SELF-IGNITION TEMPERATURE OF THE FOAM PER ASTM D-1929 IS 950 F. SURFACE BURNING CHARACTERISTICS OF THE FINISHED BUILDING UNIT SHALL NOT EXCEED 75 FOR FLAME SPREAD AND 450 FOR SMOKE DEVELOPED, RESPECTIVELY.

A) PROVIDE AUTOMATIC DOOR CLOSERS THAT FIRMLY CLOSE ALL WALK-IN DOORS THAT HAVE BEEN CLOSED TO WITHIN ONE INCH OF FULL CLOSURE, EXCEPT THAT THIS SUBPARAGRAPH SHALL NOT APPLY TO DOORS WIDER THAN THREE FEET NINE INCHES OR TALLER THAN SEVEN FEET;

B) PROVIDE STRIP DOORS, SPRING HINGED DOORS, OR OTHER METHOD OF MINIMIZING INFILTRATION WHEN DOORS ARE OPEN;

C) CONTAIN WALL, CEILING, AND DOOR INSULATION OF AT LEAST R-25 FOR COOLERS AND R-32 FOR FREEZERS, EXCEPT THAT THIS SUBPARAGRAPH SHALL NOT APPLY TO GLAZED PORTIONS OF DOORS NOR TO STRUCTURAL MEMBERS;

D) CONTAIN FLOOR INSULATION OF AT LEAST R-28 FOR FREEZERS;

E) FOR EVAPORATOR FAN MOTORS OF UNDER ONE HORSEPOWER AND LESS THAN 460 VOLTS, USE:

(1) ELECTRONICALLY COMMUTATED MOTORS (BRUSHLESS DIRECT CURRENT MOTORS); OR

(2) 3-PHASE MOTORS;

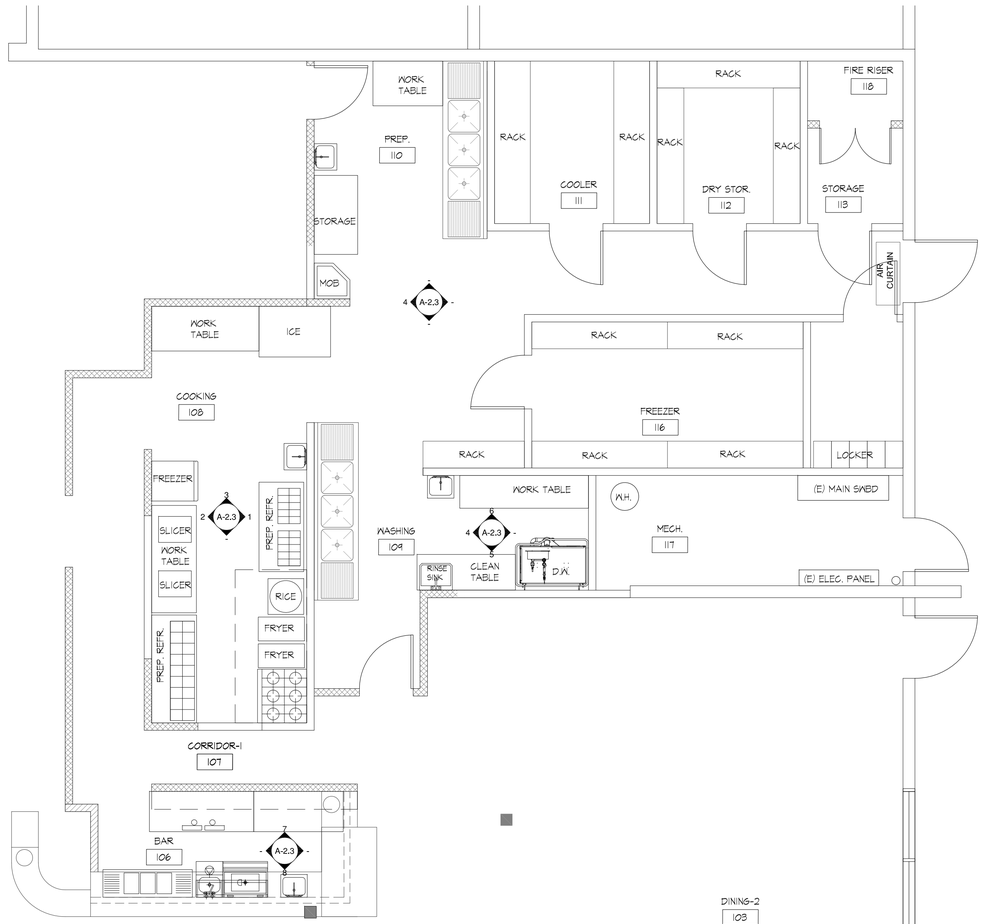
F) FOR CONDENSER FAN MOTORS OF UNDER ONE HORSEPOWER, USE:

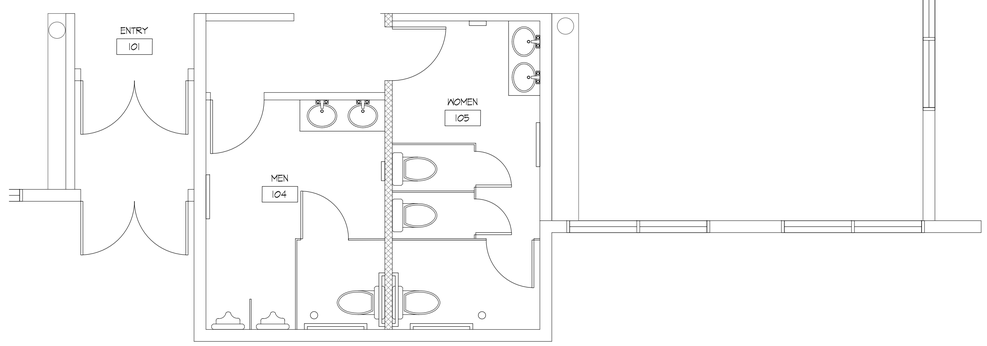
(1) ELECTRONICALLY COMMUTATED MOTORS;

(2) PERMANENT SPLIT CAPACITOR-TYPE MOTORS; OR

(3) 3-PHASE MOTORS; AND

G) FOR ALL INTERIOR LIGHTS, USE LIGHT SOURCES WITH AN EFFICACY OF 40 LUMENS PER WATT (LPW) OR MORE, INCLUDING BALLAST LOSSES (IF ANY), EXCEPT THAT LIGHT SOURCES WITH AN EFFICACY OF 40 LPW OR LESS, INCLUDING BALLAST LOSSES (IF ANY), MAY BE USED IN CONJUNCTION WITH A TIMER OR DEVICE THAT TURNS OFF THE LIGHTS WITHIN 15 MINUTES OF WHEN THE WALK-IN COOLER OR WALK-IN FREEZER IS NOT OCCUPIED BY PEOPLE.





ENLARGED KITCHEN AND BAR FLOOR PLAN

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

WOU DESIGN PARTNERS

3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010

- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

STATE OF UTAH — HOEJUN KIM — No. 10718302-0301 — 6/12-2018 — LICENSED ARCHITECT

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWPPP	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

SHEET NAME

DOOR/ ROOM FINISH SCHEDULE & KITCHEN FLOOR PLAN

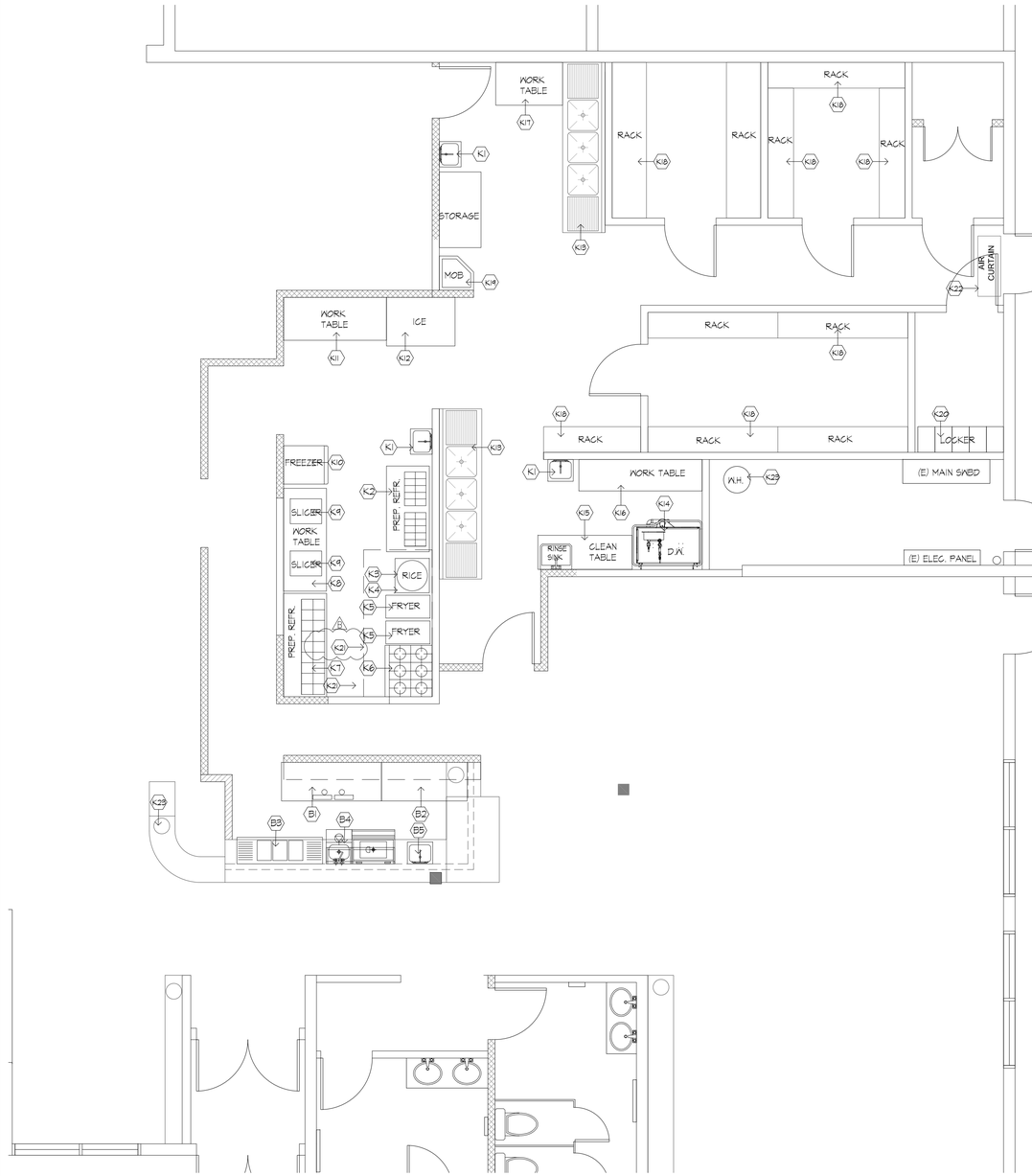
SHEET NUMBER

A-2.1

EQUIPMENT SCHEDULE

(B1), PLAN DESIGNATION

	EQUIP. NO.	NEW/ EXIST.	DESCRIPTION	MANUFR.	MODEL NO.	FIN.	ELECTRICAL VOLT.	PH.	LOAD	WATER HW	CW	WASTE DIR	INDR	GAS AMOUNT	SIZE (IN INCHES) (W.XD.XH.)	NOTES
BAR	B 1	NEW	BEER DISPENSER	BLUEAIR	BDD69-3		115V		6.3 AMPS				F.S.		69x27x37	SELF CONTAINED , INDIRECT TO FLOOR SINK
	B 2	NEW	BACK BAR COOLER	BLUEAIR	BBB59-2S6		115V		6.3 AMPS						60X28X37	SELF CONTAINED
	B 3	NEW	BAR 3 COMP. SINK	KROWNE	18-53C					1/2"	1/2"	1"	F.S.		60X18.5X34	W/ 12" DRAIN BD. BOTH SIDE W/ RIGHT END SIDE SPLASH, INDIRECT TO F.S.
	B 4	NEW	BAR WORKSTATIONS	KROWNE	18-W48L-10					1/2"	1/2"				48x24x36.5	WITH DUMP SINK, INDIRECT TO FLOOR SINK
	B 5	NEW	HAND SINK	BLUEAIR	BSH-14					1/2"	1/2"	2"			17X15X14	WITH SOAP AND TOWEL DISP., DROP IN SINK
KITCHEN	K 1	NEW	HAND SINK	BLUEAIR	BSH-14					1/2"	1/2"	2"			17X15X14	WITH SOAP AND TOWEL DISP., DROP IN SINK
	K 2	NEW	PREP REFRIGERATOR	BLUEAIR	BLMT 60		115V		5.5 AMPS						60X33X44	SELF CONTAINED
	K 3	NEW	RICE COOKER	RINNAI	RER-55AS									35K	28x18x17	WITH EQ. STAND, ¼" NPT FEMALE GAS CONNECTION
	K 4	NEW	RICE COOKER STAND	GSW	ES-RC3024										24X30X29	W/ SLIDING SHELF
	K 5	NEW	FRYER	AMERICAN RANGE	AF-35/50									35K	16X30X46	
	K 6	NEW	BURNER	AMERICAN RANGE	ARHP-36-6									56K	36X30X10	
	K 7	NEW	PREP REFRIGERATOR	BLUEAIR	BLMT 72		115V		6 AMPS						72X33X44	SELF CONTAINED
	K 8	NEW	WORK TABLE	THUNDER GROUP	SLWT48072F4										72X30X35	ST. STL
	K 9	NEW	MEAT SLICER	HOBART	HS6		120V		5.4 AMPS						22X27X25	
	K 10	NEW	FREEZER	BLUEAIR	B5F23T		115V		8 AMPS						27X31X82	SELF CONTAINED
	K 11	NEW	WORK TABLE	THUNDER GROUP	SLWT48072F4										72X30X35	ST. STL
	K 12	NEW	ICE MACHINE	MANITOWOC	I-1800		220V		30 AMPS	1/2"	1/2"		F.S.		48X34X80	REMOTE
	K 13	NEW	3 COMP. SINK	BLUEAIR	B53-24-14/2D					1/2"	1/2"	1"	F.S.		120X30X44.5	W/ 2 DRAIN BD. BOTH SIDE W/ RIGHT END SIDE SPLASH, INDIRECT TO F.S.
	K 14	NEW	DISH WASHER	AUTO-CHLOR	D2G L CORNER		115V		20 AMPS	1/2"	1/2"	2"	F.S.		44X20X76	LEFT CORNER MODEL
	K 15	NEW	SOILED TABLE							3/4	3/4		F.S.		60X30X44	W/ RINSE SINK AND SPRAY FAUCET
	K 16	NEW	WORK TABLE	THUNDER GROUP	SLWT42484F4										84X24X35	ST. STL
	K 17	NEW	WORK TABLE	THUNDER GROUP	SLWT48036F										36X30X35	ST. STL
	K 18	NEW	18" STORAGE SHELVING	WINCO	VEX-18XX										WX18X91	SEE PLAN FOR LENGTH
	K 19	NEW	MOP SINK							1/2"	1/2"		F.S.			
	K 20	NEW	LOCKER	KELMAX	EL/5/15										12X15X66	WITH 6" LEGS
	K 21	NEW	HOOD												8'-6(W)X41(D)	
	K 22	NEW	AIR CURTAIN	CURTRON	AIR-PRO 48"		120V									48"
	K 23	EXIST.	WATER HEATER													
	K 24	NEW	P.O.S.													



1 KITCHEN AND BAR EQUIPMENT PLAN

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

DESIGN PARTNERS

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LOS ANGELES, CA 90010

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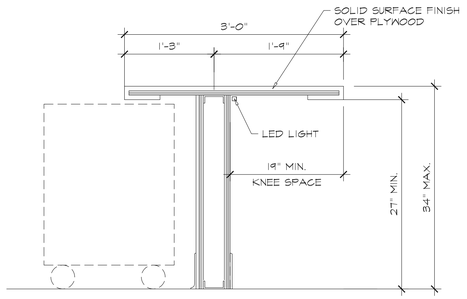
SCALE

SHEET NAME

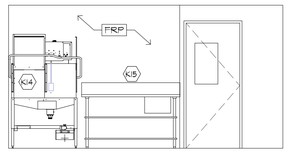
BAR/ KITCHEN EQUIPMENT PLAN

SHEET NUMBER

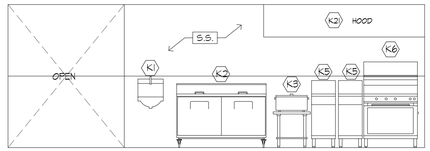
A-2.2



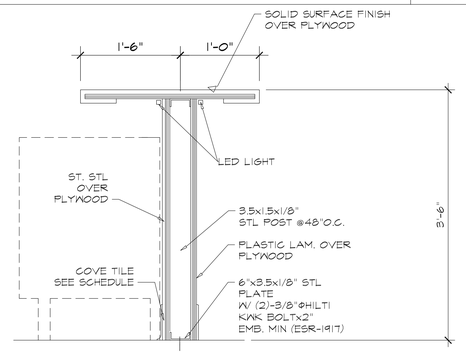
BAR COUNTER SECTION (ACCESSIBLE) | SCALE 1" = 1'-0" | 9



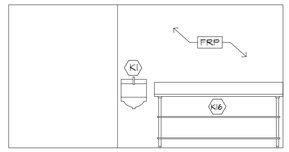
KITCHEN ELEVATION | SCALE 1/4" = 1'-0" | 5



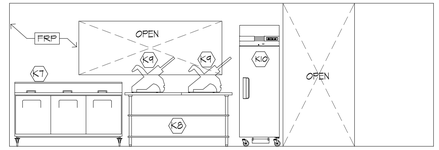
KITCHEN ELEVATION | SCALE 1/4" = 1'-0" | 1



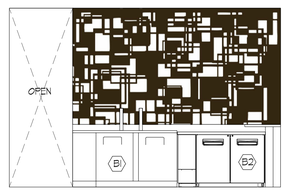
BAR COUNTER SECTION | SCALE 1" = 1'-0" | 10



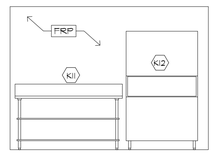
KITCHEN ELEVATION | SCALE 1/4" = 1'-0" | 6



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

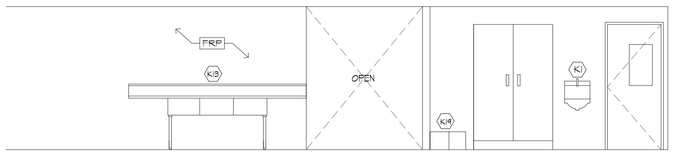


BAR ELEVATION | SCALE 1/4" = 1'-0" | 7



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

BAR ELEVATION | SCALE 1/4" = 1'-0" | 8



KITCHEN ELEVATION | SCALE 1/4" = 1'-0" | 4

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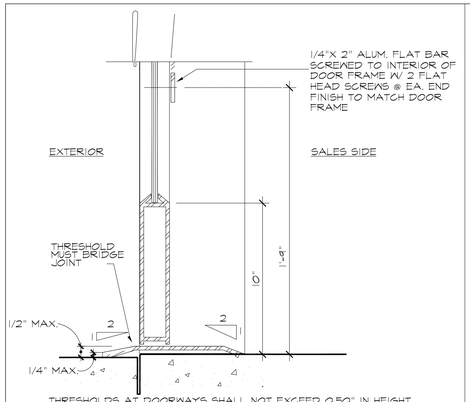
SCALE

SHEET NAME

KITCHEN ELEVATIONS CNTR. SECTIONS

SHEET NUMBER

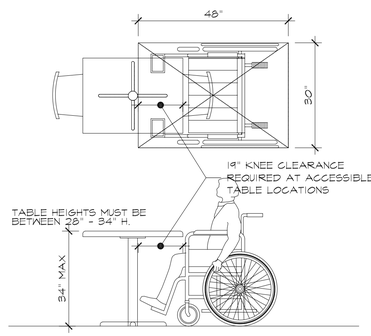
A-2.3



THRESHOLDS AT DOORWAYS SHALL NOT EXCEED 0.50" IN HEIGHT.

THRESHOLD

SCALE	
NONE	9

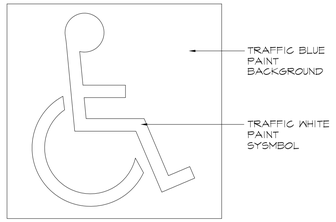


ACCESSIBLE SEATING DIAGRAMS

SCALE	
NTS	7

FOR PARKING SIGN : 3'-0" X 3'-0"

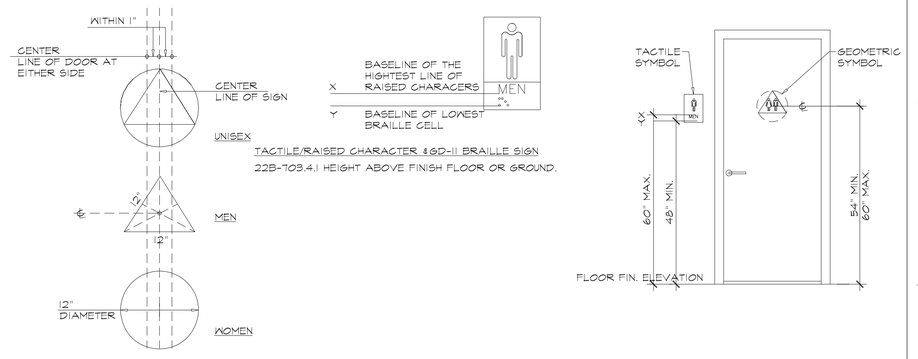
FOR BLDG. ENTRACE : 6" X 6"



AFFIX AN INTERNATIONAL ACCESSIBILITY SYMBOL ON ALL ACCESSIBLE ENTRANCES.

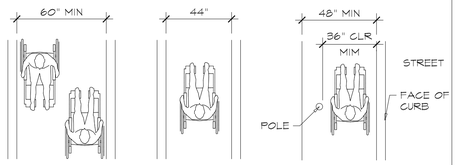
INTERNATIONAL SYMBOL OF ACCESSIBILITY

SCALE	
N.T.S.	3



TOILET FACILITIES GEOMETRIC SYMBOLS

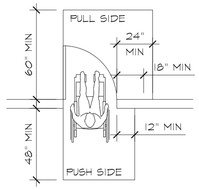
SCALE	
N.T.S.	1



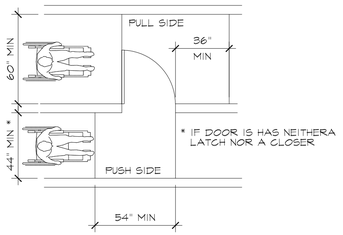
MIN. CORRIDOR WIDTH OVER 200'

MIN. CORRIDOR WIDTH

MIN. SIDEWALK WIDTH



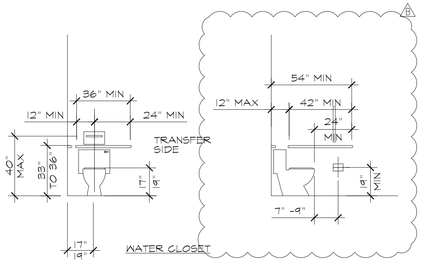
LEVER MANEUVRING CLR.AT DOOR
(FRONT APPROACH)
* DOOR IS EQUIPPED WITH BOTH A LATCH AND A CLOSER

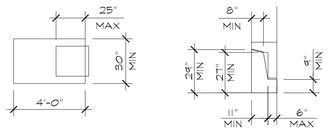


LEVER MANEUVRING CLR.AT DOOR
(HINGE APPROACH)

WHEEL CHAIR MANEUVRING

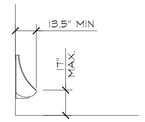
SCALE	
N.T.S.	10





PLAN ELEVATION @ LAVOTORY

TOE AND KNEE CLEARANCE

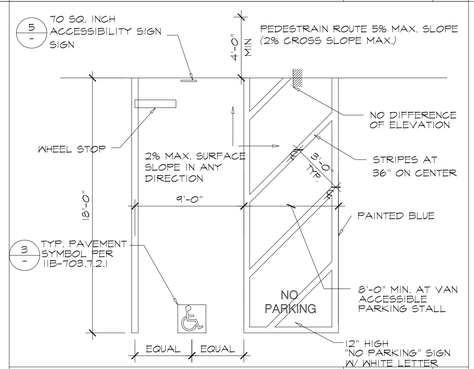


1. 44" MAX. HT. OF FLUSH VALVE
2. WALL WITHIN 24" OF FRONT & SIDES OF URINAL ARE SMOOTH, HARD AND NON-ABSORBENT TO 48" IN HT.

URINAL

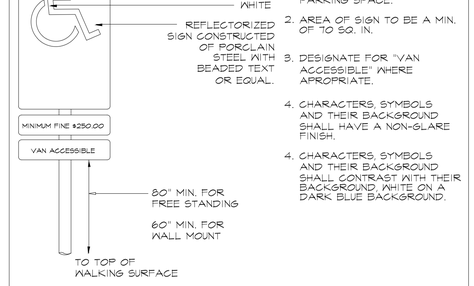
PLUMBING ELEMENTS

SCALE	
N.T.S.	8



ACCESSIBLE PARKING TYP.

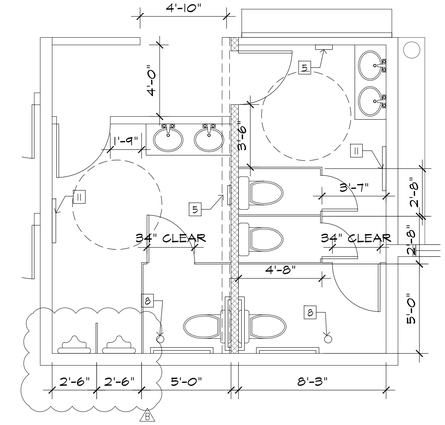
SCALE	
NONE	4

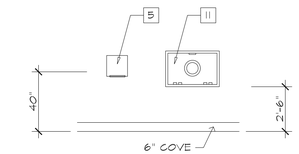


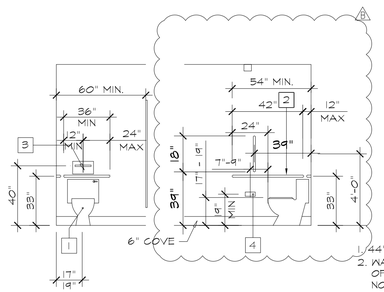
NOTE:
1. SIGN TO BE CENTERED AT THE INTERIOR END OF PARKING SPACE.
2. AREA OF SIGN TO BE A MIN. OF 70 SQ. IN.
3. DESIGNATE FOR "VAN ACCESSIBLE" WHERE APROPRIATE.
4. CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH.
4. CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL CONTRAST WITH THEIR BACKGROUND, WHITE ON A DARK BLUE BACKGROUND.

ACCESSIBLE PARKING SIGN

SCALE	
N.T.S.	5







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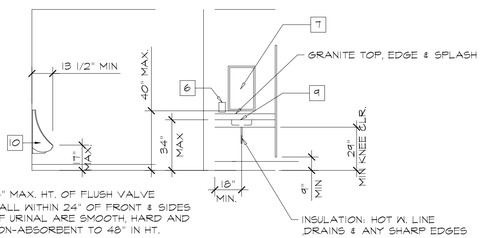
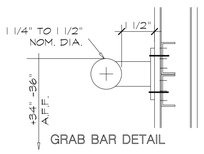


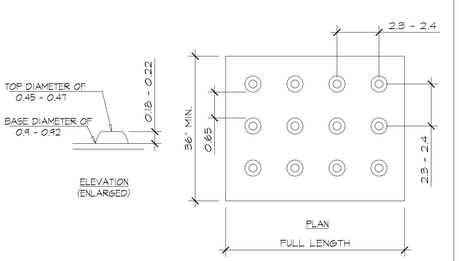


GRAB BAR DETAIL

1. LON CONSUMPTION WATER CLOSET
2. 1 1/2" DIA. STAINLESS STL. GRAB BAR W/ CONCEALED MNT - 48" / 36"
3. TOILET SEAT COVER DISPENSER
4. TOILET PAPER DISPENSER
5. HAND DRYER (BOBRICK B-7120)
6. SOAP DISPENSER
7. MIRROR
8. FLOOR DRAIN
9. SOLID SURFACE CNT. TOP WITH UNDER MNT. LAVATORY
10. URINAL
11. BABY CHANGING STATION

EXISTING ACCESSIBLE REST ROOM

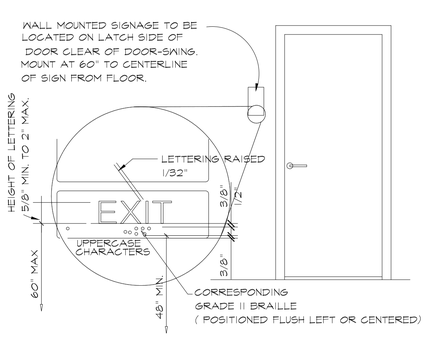
SCALE	
N.T.S.	2



NOTE:
1. DETECTABLE WARNING SURFACES SHALL BE YELLOW CONFORMING TO FS 33538 OF FEDERAL STANDARD 595C (CBC 705.1.1.3.1)
2. DETECTABLE WARNING SHALL BE 36" WIDE WITH FULL LENGTH (SEE SITE PLAN)
3. TRUNCATED DOMES TO BE: "INTERLOCK SAN DIEGO" TACTILE STONE, CARLSBAD, CALIFORNIA (760) 434-5566 OR APPROVED EQUAL.

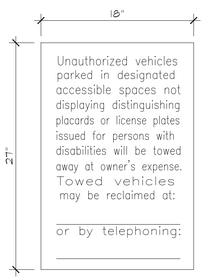
TRUNCATED DOMES

SCALE	
N.T.S.	11



TACTILE SIGN

SCALE	
N.T.S.	12



NOTES:
1. SIGN TO BE PORCELAIN ON STEEL WITH A REFLECTORIZED BEADED TEXTURE, BOTTOM OF SIGN TO BE +80" ABOVE FINISHED SURFACE.
2. SIGN TO CONFORM TO ALL CURRENT, STATE, LOCAL CODES and OR REGULATIONS.
3. LOCATE AT ALL MAIN DRIVEWAY ENTRIES, SEE SITE PLAN FOR LOCATIONS.
4. PRIOR TO FABRICATION and INSTALLATION OF SIGN, CONTRACTOR SHALL OBTAIN ALL APPROPRIATE INFORMATION FOR BLANK SPACES OF SIGN FROM LOCAL PUBLIC AGENCIES and FILL IN AS A PERMANENT PART OF THE SIGN.
5. SIGN LETTERING SHALL BE NOT LESS THAN 1" IN HEIGHT.
6. SIGN TO BE PROVIDED AT ALL ENTRY DRIVEWAYS.

ADDITIONAL SIGN

SCALE	
N.T.S.	6

DESIGN PARTNERS

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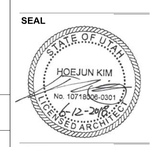
- LAND-USE CONSULTATION

SEAL



TITLE

Korean BBQ of Utah

7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

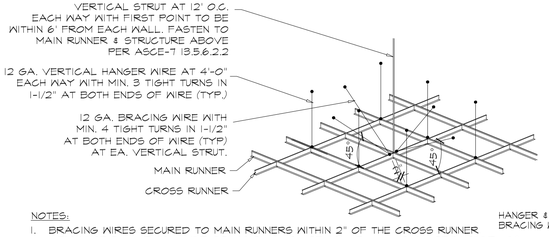
SCALE

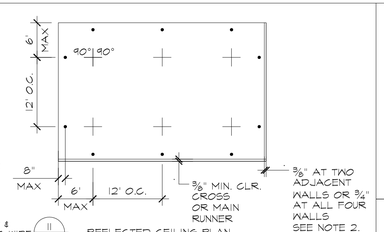
SHEET NAME

ACCESSIBLE REST ROOM & DETAILS

SHEET NUMBER

A-4.1





NOTES:

1. BRACING WIRES SECURED TO MAIN RUNNERS WITHIN 2" OF THE CROSS RUNNER INTERSECTION AND SPLAYED 90° FROM EACH OTHER AT AN ANGLE NOT EXCEED 45° FROM THE PLANE OF THE CEILING.
2. FOR ROOMS WITH SPAN IN EITHER DIRECTION LEAA THAN 25'; MAIN RUNNERS CROSS RUNNERS MAY BE ATTACHED TO THE PERIMETER OF TNO ADJACENT WALLS WITH 3/8" CLEARANCE BETWEEN THE RUNNERS AND THE OTHER TNO WALLS. WHERE SPAN OF THE CEILING SYSTEM BETWEEN PERIMETER WALLS EXCEED 25' IN BOTH DIRECTIONS, A MINIMUM WALL ANGLE SIZE OF AT LEAST 2" HORIZONTAL LEG SHALL BE USED AT PERIMETER WALLS AND INTERIOR FULL HEIGHT PARTITION. THE FIRST TILE SHALL BE 3/4" CLEAR FROM WALL SURFACE.
3. WHEN THE DISTANCE BETWEEN THE STRUCTURAL DECK AND THE CEILING EXCEED 4', THE SPACING OF THE VERTICAL HANGERS SHALL NO EXCEED 2' O.C. ALONG THE ENTIRE LENGTH OF THE MEANS OF EGRESS SERVICEING AN OCCUPANT LOAD OF 30 OR MORE, AND AT LOBBIES ACCESSORY TO GROUP A OCCUPANCES.

TYPICAL SUSPENDED CEILING VETRICAL AND LATERAL SUPPORT

A. SUSPENDED CEILING AND LIGHTING SYSTEMS

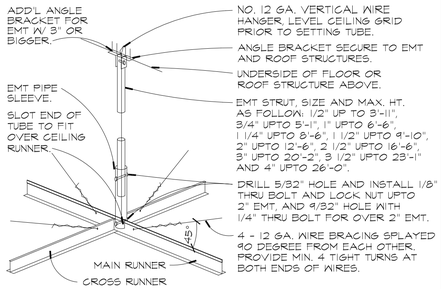
THE FOLLOWING PRESCRIPTIVE DESIGN MAY USED FOR SUSPENDED CEILINGS AND LIGHTING SYSTEMS THAT ARE A MAXIMUM 4 FT BELOW THE STRUCTURAL DECK AND WEIGHT NO MORE THAN 4 LBS PER SQ. FT.

B. MINIMUM INSTALLATION REQUIREMENTS

1. VERTICAL SUPPORTI.
   a. HANGER WIRES SUPPORTING A MAXMUM TRIBUTARY CEILING AREA OF 16 S.F. SHALL BE A MINIMUM OF 12 GA. IN DIAMETER. THE SIZE OF WIRES SUPPORTING A TRIBUTARY CEILING AREA OF GREATER THAN 16 S.F. SHALL BE SUBSTANTIATED BY DESIGN CALAULATION.
   b. HANGER ATTACHMENT DEVICES USED IN CEILING SYSTEMS NOT EXCEEDING FOUR POUNDS PER SQUARE FEET SHALL BE CAPABLE OF SUPPORTING A MINIMUM ALLOWABLE LOAD OF 100 PONDS.
   c. HANGERS SHALL BE PLUMB AND SHALL NOT ATTACH TO OR BEND AROUND INTERFERING DUCT PIPES OR SIMILAR OBSTRUCTIONS. IF HANGERS MUST BE SPLAYED MOR THAN ONE HORIZONTAL TO SIX VERTICAL THE RESULTING HORIZONTAL FORCE SHALL BE OFFSET BY BRACING, COUNTER-SPLAYING OR OTHER ACCEPTABLE MEANS AND SUBSTANTIATED BY DESIGN CALCULATION.
   d. PERIMETR HANGERS.
      THE TERMINAL END OF EACH CROSSRUNNER OR MAIN RUNNER SHALL BE INDEPENDENTL SUPPORTED AND WITHIN EIGHT INCHES OF A WALL.
2. LATERAL SUPPORTI.
   ALTERAL SUPPORT FOR THE CEILING SYSTEM MAY BE PROVIDED BY FOUR WIRES OF MIN. 12 GA SPLAYED IN FOUR DIRECTIONS 90 DEGREES APART AND CONNECTED TO THE MAIN RUNNER WITHIN TWO INCHES OF THE CROSS RUNNER AND TO THE STRUCTURE ABOVE AT AN ANGLE NOT EXCEEDING 45 DEGREES FROM THE PLANE OF THE CEILING. THSE LATERAL SUPPORT POINTS SHALL BE PLACED 12 FT O.C. IN EACH DIRECTION WITH THE FIRST POINT WITHIN 4 FT FROM EACH WALL.
3. ATTACHMENT OF MEMBERS TO THE PERIMETR
   ALLOWANCE SHALL BE MADE FOR LATERAL MOVEMENT OF THE SYSTEM. MAIN RUNNERS AND CROSS RUNNERS MAY BE ATTACHED AT TNO WALLS WITH CLEARANCE BETWEEN THE WALL AND RUNNERS MAINTAINED AT THE OTHER TNO WALLS.
4. LIGHTING FIXTURE AND AIR DIFFUSER SUPPORTS
   LIGHTING FIXTURES AND AIR DIFFUSERS SHALL BE SUPPORTED DIRECTLY BY WIRES TO THE STRUCTURE ABOVE.
   EXCEPTIONS:
   a. RECESSED LIGHTING FIXTURES NOT OVER 56 LBS IN WEIGHT AND SUSPENDED AND INDEPENDENTLY HUNG FIXTURES NOT OVER 20 LBS IN NEIGHT MAY BE SUPPORTED AND ATTACHED DIRECTLY TO THE CEILING SYSTEM RUNNERS BY A POSITIVE ATTACHMENT SUCH AS SCREWS OR BOLTS.
   b. AIR DIFFUSERS NOT OVER 20 LBS AND WHICH RECEVE NO TRIBUTARY LOADING FROM TH DUCT WORK MAY BE POSITIVELY ATTACHED TO AND SUPPORTED BY THE CEILING RUNNERS.
5. PERIMETER MEMBERS
   A MINMUM WALL ANGLE SIZE OF AT LEAST A 2' HORIZONTAL LEG SHALL BE USED AT PERIMETER WALLS AND INTERIOR FULLHEIGHT PARTITIONS. THE FIRST CEILING TILE SHALL MAINTAIN 3/4" CLREAR FROM THE FINISH WALL SURFACE. AN EQUIVALENT ALTERNATIVE DETAIL THAT WILL PROVIDE SUFFICENT MOVEMENT DUE TO ANTICIPATED LATERAL BUILDING DISPLACEMENT MAY BE USED IN LIEU OF THE LONG LEG ANGLE SUBJECT TO THE APPROVAL OF THE SUPERINTENDENT OF BUILDING.
   APPLICATION:
   THIS PROVISION SHALL BE REQUIRED ONLY WHEN THE SPAN OF THE PROPOSED SUSPENDED CEILING SYSTEM BETWEEN PERIMETER WALLS EXCEEDS 25 FT IN BOTH DIRECTIONS.
6. BRACING AT DISCONTINUITY
   POSITIVE BRACING TO THE STRUCTURE SHALL BE PROVIDED AT THE CHANGES IN THE CEING PLANE ELEVATION OR AT DISCONTIUITIES IN THE CEILING GRID SYSTEM.
7. SUPPORT FOR WIRING SYSTEMS
   ELECTRICAL WIRING SYSTEMS, INCLUDING CABLE TRAYS, CONDUITS, JUCTION BOXES, AND OTHER APPURTENANCES SHALL BE INDEPENDENTLY SUPPORTED AND INDEPENDENTLY BRACED FROM THE STRUCTURE.
8. SPRINKLER HEADS
   SPRINKLER HEADS EXCEPT FLOOR -CEILING OR ROOF-CEILING FIRE-RESISTIVE ASSEMBLIES, SHALL HAVE A 2" OVERSIZE RING, SLEEVE, OR ADAPTOR THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT AT LEAST 1" IN ALL HORIZONTAL DIRECTING. ALTERNATIVELY, A SWING JOINT THAT CAN ACCOMMODATE 1" OF CEILING MOVEMENT IN ALL HORIZONTAL DIRECTIONS IS PERMITTED TO BE PROVIDED AT THE TOP OF THE SPRINKLER HEAD EXTENTION.

C. SPECIAL REQUIREMENT FOR MEANS OF EGRESS

1. GENERAL
   CEILING SUSPENSION SYSTEMS SHALL BE CONNECTED AND BRACED DIRECTLY TO THE STRUCTURE AT THE MEAS OF EGRESS SERVING AN OCCUPANT LOAD OF 30 OR MORE AND AT LOBBIES ACCESSORY TO GROUP A OCCUPANCY. SPACING OF VERTICAL HANGERS SHALL NOT EXCEED 2 FT. O.C. ALONG THE ENTIRE LENGTH OF THE MEANS OF EGRESS OR LOBBY.
2. ASSEMBLY DEVICE
   ALL LAY-IN PANELS SHALL BE SECURED TO THE SUSPENSION SYSTEM WITH TNO HOLD-DOWN CLIPS MINIMUM FOR EACH TILE WITHIN A 4 FT RADIUS OF THE EXIT LIGHTS AND EXIT SIGNS.
3. EMERGENCY SYSTEMS.
   INDEPENDENT SUPPORTS AND BRACES SHALL BE PROVIDED FOR LIGHT FIXTURES REQUIRED FOR EXIT ILLUMINATION.
4. SUPPORTS FOR APPENDAGE
   SEPERATE SUPPORT FROM THE STRUCTURE SHALL BE PROVIDED FOR ALL APPENDAGES, SUCH AS LIGHT FIXTURES, AIR DIFFUSERS, EXITSIGNS ANS SIMILAR ELEMENTS.



COMPRESSION STRUT

LATERAL FORCE BRAGING:

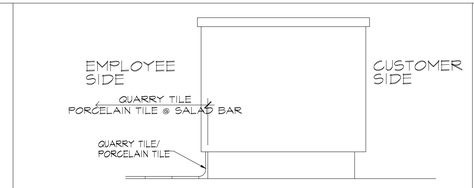
INSTALL BOLT TO SECURE ONE TUBE TO THE OTHER. TUBES SHALL LAP ONE ANOTHER AT LEAST 4" IN FULLY EXTENDED POSITION.

SUSPENDED CEILING SYSTEMS

SUSPENDE CEILING SYSTEM. CHICAGO METALLIC (ESR-2631)
CATALOG NUMBER : 270
WITH PERIMETER CLIP : 1496

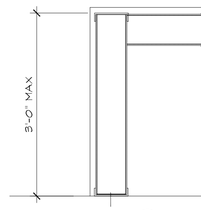
CEILINGTILE:NATINAL GYPSUM
GLOD BOND BRAND GRIDSTONE
GYPSUM CEILING TILE (2.2 LBS/S.F.)

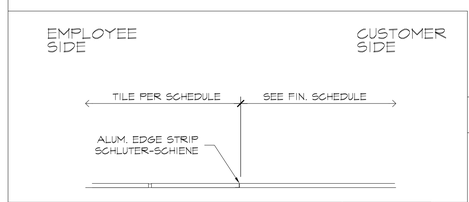
SCALE N.T.S. | 9



TILE @ COUNTER

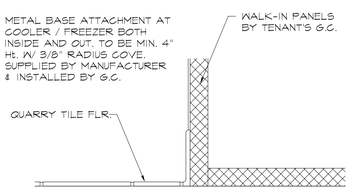
SCALE N.T.S. | 5





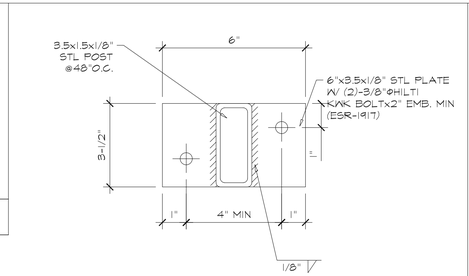
SECTION @ TILE TRANS.

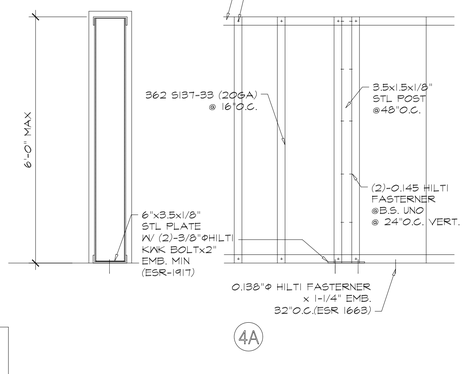
SCALE N.T.S. | 6



SECTION @ WALK-IN PANELS

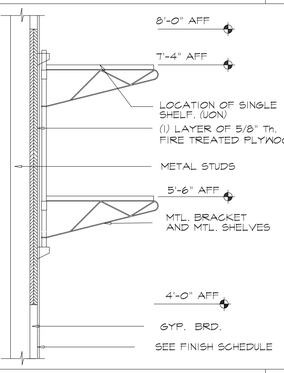
SCALE N.T.S. | 7





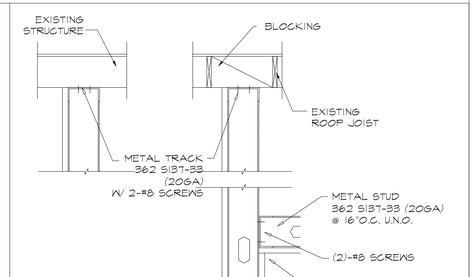
LOW HEIGHT PARTITION

SCALE N.T.S. | 4



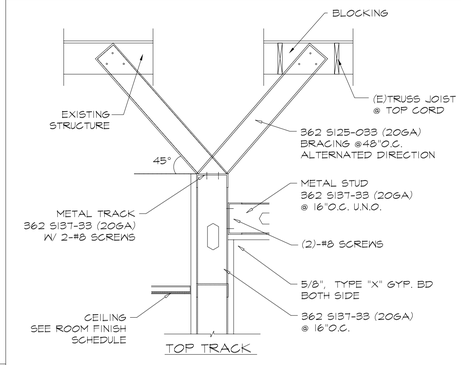
WALL SHELF DETAIL TYP.

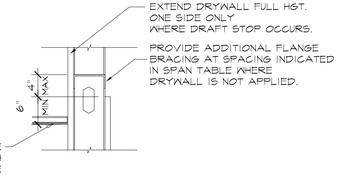
SCALE N.T.S. | 10



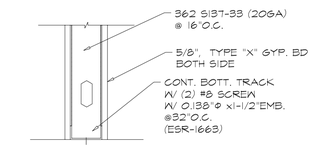
INTERIOR NON BEARING WALL

SCALE N.T.S. | 1





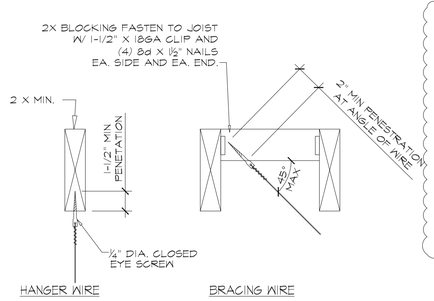
SUSP. CLG. AT PARTITION (OPPTION)



BASE TRACK AT SLAB

INTERIOR NON BEARING WALL

SCALE N.T.S. | 2



HANGER WIRE

SCALE N.T.S. | 11

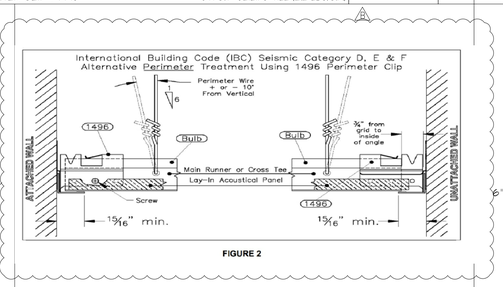
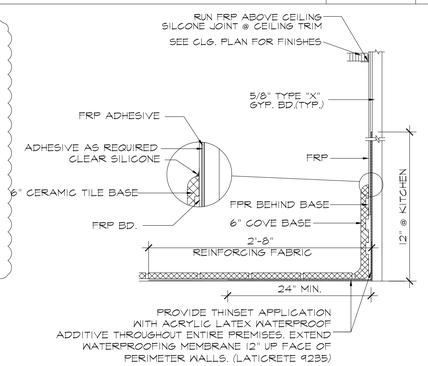


FIGURE 2

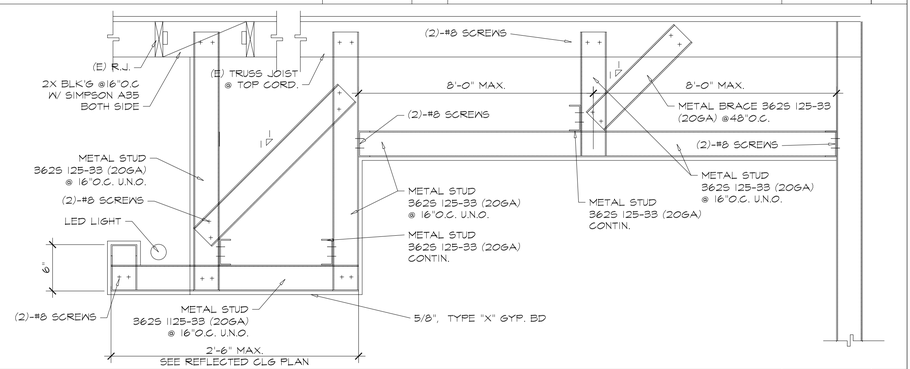
PERIMETER CLIP

SCALE N.T.S. | 10



TILE / WATER PROOF @ DEMISING WALL

SCALE N.T.S. | 8



HARD CEILING / SOFFIT DETAIL

SCALE N.T.S. | 3

DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

STATE OF UTAH
HOEJUN KIM
No. 10718302-0301
6/12-2018
LICENSED ARCHITECT

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF 4-19-18	
2	CORRECTION BLDG. 4-26-18	

PROJECT DATA

PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

SHEET NAME

ACCESSIBLE REST ROOM & DETAILS

SHEET NUMBER

A-4.2

South Valley
WATER RECLAMATION FACILITY
7495 South 1300 West
West Jordan, Utah 84084
801.566.7711 F 801.566.7734

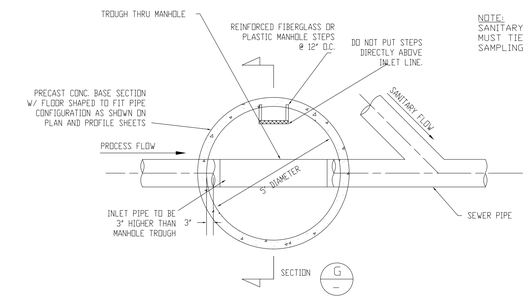
SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM

PRETREATMENT DRAWINGS AND SPECIFICATIONS

SAMPLING MANHOLE - 3' TO 7' DEEP
SAMPLING MANHOLE - 7' AND DEEPER
SAMPLING MANHOLE - BOX
GREASE INTERCEPTOR - 800 AND 1000 GALLON
SAND AND OIL SEPARATOR - 800 AND 1000 GALLON
DETAILS

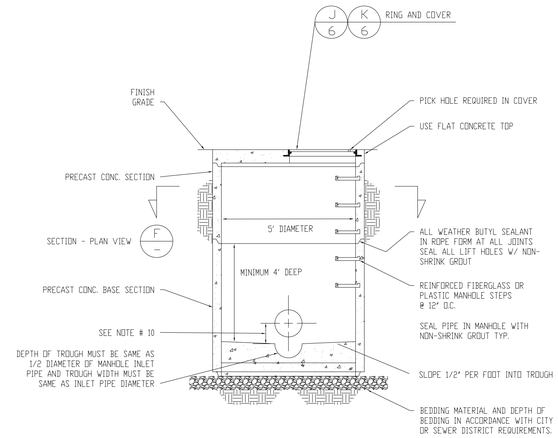
IMPORTANT NOTICE: South Valley Water Reclamation Facility must be notified prior to backfilling interceptor and sampling manhole installations. Inspection of these installations by South Valley Water Reclamation Facility is a requirement!

DRAWING NO: SHEET 1 OF 6 REV: 1



F PLAN - MANHOLE
NONE

NOTE:
SANITARY PIPING FROM TOILETS MUST TIE IN DOWNSTREAM FROM SAMPLING MANHOLE.



G SECTION - MANHOLE
NONE

NOTES:
1. PIPING, CLEANOUT CONFIGURATION, SIZE AND TYPE OF PIPING MATERIAL AS PER CITY OR SANITARY DISTRICT. INSPECTION BY SVWRF PRIOR TO BACKFILLING IS REQUIRED.
2. WIDTH OF TROUGH IN THE MANHOLE MUST BE THE SAME SIZE AS THE INLET PIPE INTO MANHOLE. DEPTH OF TROUGH MUST BE THE SAME AS ½ OF INLET PIPE DIAMETER.
3. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
4. REINFORCEMENT STEEL SHALL BE ASTM A615 GRADE 60.
5. THE CONCRETE COVER OVER REINFORCEMENT STEEL SHALL BE A MINIMUM OF 1½ INCHES.
6. THE STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF UTAH.
7. THE STRUCTURE SHALL BE DESIGNED FOR THE FOLLOWING LOADING CRITERIA:
   A) WALLS DESIGNED FOR A SATURATED EQUIVALENT FLUID AT-REST SOIL PRESSURE OF 90 PCF PLUS TRUCK SURCHARGES.
   B) TRUCK LOADING USING AN AASHTO H-20 TRUCK LOAD.
8. MANHOLES OVER 4 FEET IN DEPTH WILL HAVE FIBERGLASS OR PLASTIC STEPS.
9. ALL MANHOLES MUST HAVE ROUND NOTCHED COVERS WITH PICK HOLE FOR REMOVAL.
10. FOR NEW CONSTRUCTION, BOTTOM OF INLET PIPE INTO MANHOLE MUST BE AT LEAST 3 INCHES ABOVE THE BOTTOM OF THE TROUGH THRU THE MANHOLE.
11. 12" GRADE RINGS MAX. USE A FULL EXTENSION OF BOX FOR OVER 12".
12. GROUT ALL PIPES IN/OUT FLUSH WITH OUT/IN SIDE OF BOX.
13. DO NOT LOCATE SAMPLING MANHOLE IN PARKING SPOTS.
14. MINIMUM DEPTH OF SAMPLING MANHOLE IS 4'. IF YOU CAN'T GET 4', CONTACT SVWRF.

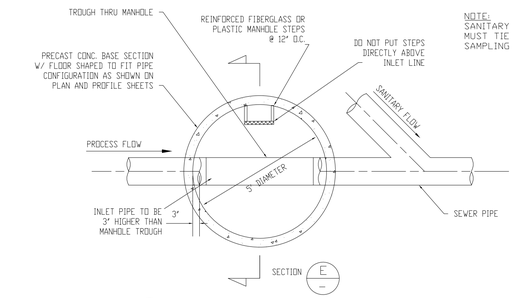
REV.	DATE	BY	DESCRIPTION
1	12/9/08	D.S.	NOTES 11 & 12. BEDDING NOTE.

DESIGNED BY: N. PALMER | CHECKED BY: N. PALMER | DRAWN BY: J. MCDOUGALL | APPROVED BY: N. PALMER | ?????????, 2001

South Valley WATER RECLAMATION FACILITY 7495 South 1300 West West Jordan, Utah 84084 801.566.7711 F 801.566.7734
JOB NO: ------

SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM
SAMPLING MANHOLE, 3' TO 7' DEEP

SCALE: NONE | DRAWING NO: SHEET 2 OF 6 | REV: 1



D PLAN - MANHOLE
NONE

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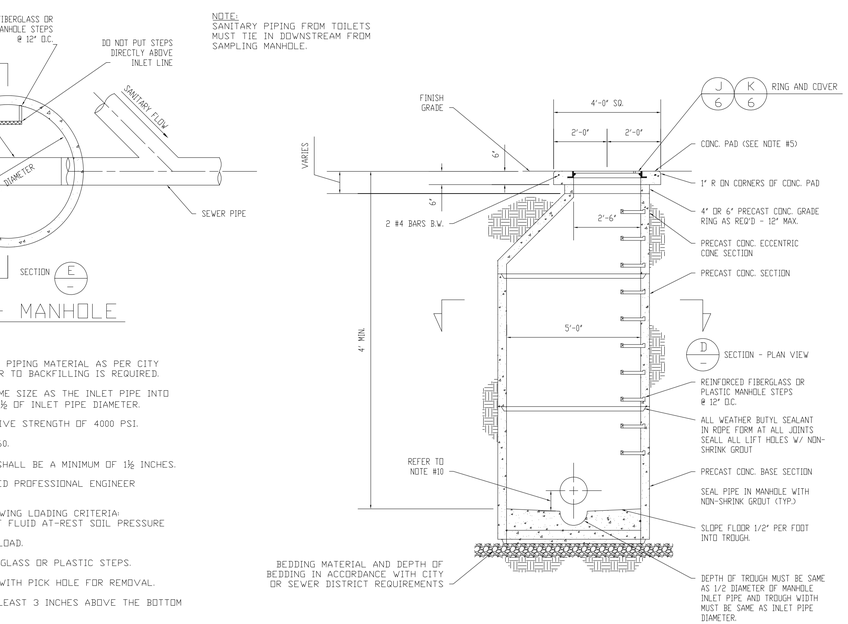
   B) TRUCK LOADING USING AN AASHTO H-20 TRUCK LOAD.
8. MANHOLES OVER 4 FEET IN DEPTH WILL HAVE FIBERGLASS OR PLASTIC STEPS.
9. ALL MANHOLES MUST HAVE ROUND NOTCHED COVERS WITH PICK HOLE FOR REMOVAL.
10. BOTTOM OF INLET PIPE INTO MANHOLE MUST BE AT LEAST 3 INCHES ABOVE THE BOTTOM OF THE TROUGH THRU THE MANHOLE.
11. NO CONE SECTION BY ITSELF.
12. GROUT ALL PIPES IN OR OUT WITH FLUSH INSIDE/OUTSIDE OF BOX.
13. INLET PIPE 2" INSIDE BOX.
14. DO NOT LOCATE SAMPLING MANHOLE IN PARKING SPOTS.

NOTE:
SANITARY PIPING FROM TOILETS MUST TIE IN DOWNSTREAM FROM SAMPLING MANHOLE.



E SECTION - MANHOLE
NONE

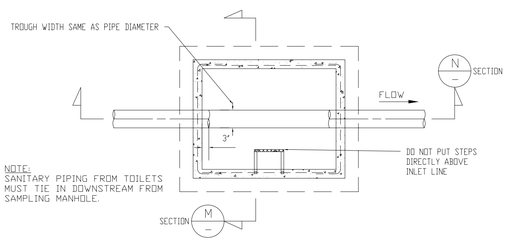
REV.	DATE	BY	DESCRIPTION
1	7/14/05	J.M.	ADDED MANHOLE DIAMETER DIMENTION
2	12/9/08	D.S.	NOTES 11, 12, & 13. BEDDING NOTE.

DESIGNED BY: N. PALMER | CHECKED BY: N. PALMER | DRAWN BY: J. MCDOUGALL | APPROVED BY: N. PALMER | JULY 14, 2005

South Valley WATER RECLAMATION FACILITY 7495 South 1300 West West Jordan, Utah 84084 801.566.7711 F 801.566.7734
JOB NO: ------

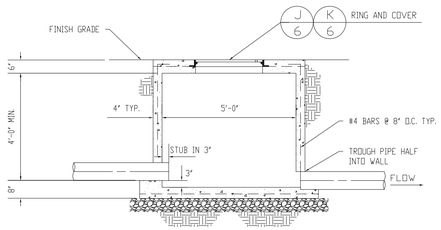
SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM
SAMPLING MANHOLE, 7' AND DEEPER

SCALE: NONE | DRAWING NO: SHEET 3 OF 6 | REV: 1



NOTE:
SANITARY PIPING FROM TOILETS MUST TIE IN DOWNSTREAM FROM SAMPLING MANHOLE.

L PLAN - SAMPLE BOX
NONE



N SECTION - SAMPLE BOX
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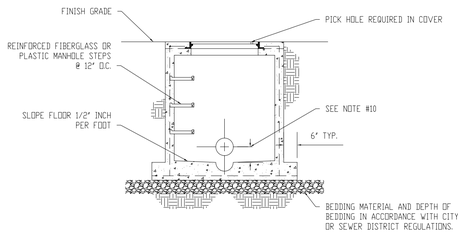
4. REINFORCEMENT STEEL SHALL BE ASTM A615 GRADE 60.
5. THE CONCRETE COVER OVER REINFORCEMENT STEEL SHALL BE A MINIMUM OF 1½ INCHES.
6. THE STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF UTAH.
7. THE STRUCTURE SHALL BE DESIGNED FOR THE FOLLOWING LOADING CRITERIA:
   A) WALLS DESIGNED FOR A SATURATED EQUIVALENT FLUID AT-REST SOIL PRESSURE OF 90 PCF PLUS TRUCK SURCHARGES.
   B) TRUCK LOADING USING AN AASHTO H-20 TRUCK LOAD.
8. MANHOLES OVER 4 FEET IN DEPTH WILL HAVE FIBERGLASS OR PLASTIC STEPS.
9. ALL MANHOLES MUST HAVE ROUND NOTCHED COVERS WITH PICK HOLE FOR REMOVAL.
10. BOTTOM OF INLET PIPE INTO MANHOLE MUST BE AT LEAST 3 INCHES ABOVE THE BOTTOM OF THE TROUGH THRU THE MANHOLE.
11. 12" OF GRADE RINGS MAX. USE A FULL EXTENSION OF BOX FOR OVER 12".
12. ANY WATER THAT ENTERS SMH MUST LEAVE, NO PUDDLING.
13. GROUT ALL PIPES IN/OUT FLUSH WITH SIDE OF BOX.
14. INLET PIPE 2" INSIDE BOX.



M SECTION - SAMPLE BOX
NONE

REV.	DATE	BY	DESCRIPTION
1	12/9/08	D.S.	NOTES 11, 12, 13 & 14. OUTLET PIPE IN (N) SECTION.
2			BEDDING NOTE IN (M) SECTION.

DESIGNED BY: N. PALMER | CHECKED BY: N. PALMER | DRAWN BY: J. MCDOUGALL | APPROVED BY: N. PALMER | ?????????, 2001

South Valley WATER RECLAMATION FACILITY 7495 South 1300 West West Jordan, Utah 84084 801.566.7711 F 801.566.7734
JOB NO: ------

SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM
SAMPLING MANHOLE, BOX

SCALE: NONE | DRAWING NO: SHEET 4 OF 6 | REV: 2

WOU
DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

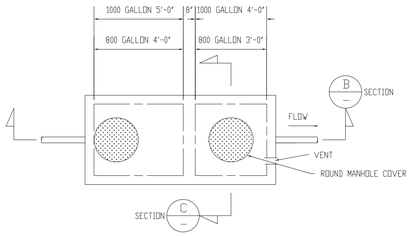
NO.	ISSUE	DATE
1	CORRECTION SVWRF 4-19-18	
2	CORRECTION BLDG. 4-26-18	

PROJECT DATA
PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

SCALE

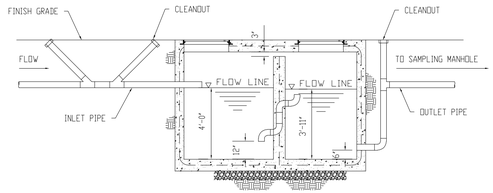
SHEET NAME
SOUTH VALLEY MANHOLE SPECIFICATIONS

SHEET NUMBER
A-4.3

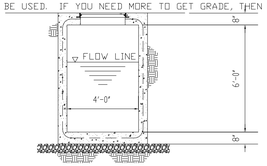


A — NONE
PLAN - GREASE INTERCEPTOR SAND AND OIL SEPERATOR

NOTES:
1. PIPING, CLEANOUT CONFIGURATION, SIZE AND TYPE OF PIPING MATERIAL AS PER CITY OR SANITARY DISTRICT. INSPECTION BY SVWRF PRIOR TO BACKFILLING IS REQUIRED.
2. INTERCEPTOR PIPING AND OTHER ASSOCIATED PIPING CHANGES THAT ARE NECESSARY TO INSTALL INTERCEPTOR MUST BE IN ACCORDANCE WITH LOCAL REGULATIONS.
3. INTERCEPTOR MUST BE PROPERLY VENTED, INDEPENDENT OF OTHER FACTORS, IN ACCORDANCE WITH UNIFORM PLUMBING CODE STANDARDS. VENTED INSIDE BUILDING WITH INDEPENDENT VENT AWAY FROM VTR AIR INTAKES.
4. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
5. REINFORCEMENT STEEL SHALL BE ASTM A615 GRADE 60.
6. THE CONCRETE COVER OVER REINFORCEMENT STEEL SHALL BE A MINIMUM OF 1-1/2 INCHES.
7. THE STRUCTURE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF UTAH.
8. THE STRUCTURE SHALL BE DESIGNED FOR THE FOLLOWING LOADING CRITERIA:
   A) WALLS DESIGNED FOR A SATURATED EQUIVALENT FLUID AT-REST SOIL PRESSURE OF 90 PCF PLUS TRUCK SURCHARGES.
   B) TRUCK LOADING USING AN AASHTO H-20 TRUCK LOAD.
9. MANWAY FRAME & COVER SHALL BE A TRAFFIC TYPE CASTING FOR H-20 TRUCK LOAD.
10. THE INLET PIPE SHALL BE AT AN ELEVATION 1" HIGHER THAN THE OUTLET PIPE.
11. WHERE THE SEWER LINE ALREADY EXISTS, THE SEWER INVERT INTO AND OUT OF THE INTERCEPTOR SHALL BE 4'-0" ABOVE THE INTERCEPTOR FLOOR.
12. THE BAFFLE IN THE INTERCEPTOR SHALL BE WITHIN 3" OF THE CEILING. BAFFLE WILL HAVE TO BE RAISED WITH EXTENSION OF BOX.
13. COVERS SHALL BE CIRCULAR AND BE SOLID.
14. SANITARY WASTE FROM TOILETS MUST NOT BE PLUMBED THROUGH THE INTERCEPTOR.
15. INTERCEPTOR MUST BE LOCATED IN SUCH A MANNER THAT IT IS READILY ACCESSIBLE FOR CLEANING.
16. GROUT ALL PIPE INTO AND OUT OF BOX FLUSH WITH OUTSIDE.
17. GROUT ALL WINDOW AND KNOCK OUT FLUSH WITH OUTSIDE OF BOX.
18. GROUT ANY SPALDS FROM KNOCKOUTS.
19. 12" OF GRADE RINGS IS ALL THAT CAN BE USED. IF YOU NEED MORE TO GET GRADE, THEN ENTIRE BOX MUST BE RAISED.



B — NONE
SECTION - GREASE INTERCEPTOR SAND AND OIL SEPERATOR



C — NONE
SECTION - GREASE INTERCEPTOR SAND AND OIL SEPERATOR

REV.	DATE	BY	DESCRIPTION
1	12/15/08	D.S.	NOTES 16, 17, & 18. VENT IN (B) SECTION.

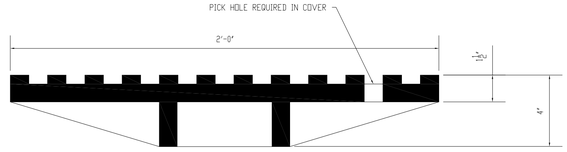
DESIGNED BY: N. PALMER
DRAWN BY: J. MCDOUGALL
CHECKED BY: N. PALMER
APPROVED BY: N. PALMER
?????????, 2001

ALL DRAWN AND WRITTEN INFORMATION, APPEARING HEREON CONSTITUTE THE ORIGINAL AND EXCLUSIVE USE PROPERTY OF SOUTH VALLEY WATER RECLAMATION FACILITY

South Valley WATER RECLAMATION FACILITY
7496 South 1300 West
West Jordan, Utah 84084
801.566.7711 F 801.566.7734

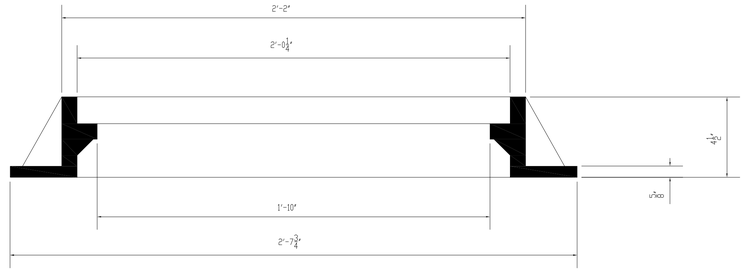
JOB NO: -----
SCALE: NONE
DRAWING NO: SHEET 5 OF 6
REV: 1

SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM
GREASE INTERCEPTOR



J — NONE
MANHOLE COVER

NOTE:
IF CONCRETE GRADE RINGS ARE USED ON A SAMPLING MANHOLE INSTALLATION, THE TOTAL HEIGHT OF THE STACKED RINGS MUST NOT EXCEED 12".



K — NONE
MANHOLE RING

REV.	DATE	BY	DESCRIPTION

DESIGNED BY: N. PALMER
DRAWN BY: J. MCDOUGALL
CHECKED BY: N. PALMER
APPROVED BY: N. PALMER
?????????, 2001

ALL DRAWN AND WRITTEN INFORMATION, APPEARING HEREON CONSTITUTE THE ORIGINAL AND EXCLUSIVE USE PROPERTY OF SOUTH VALLEY WATER RECLAMATION FACILITY

South Valley WATER RECLAMATION FACILITY
7496 South 1300 West
West Jordan, Utah 84084
801.566.7711 F 801.566.7734

JOB NO: -----
SCALE: NONE
DRAWING NO: SHEET 6 OF 6
REV: 1

SOUTH VALLEY WATER RECLAMATION FACILITY
PRETREATMENT PROGRAM
DETAILS

DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL
STATE OF UTAH
HOEJUN KIM
No. 10718302-0301
6/12-2018
LICENSED ARCHITECT

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS
1 CORRECTION SVWRF 4-19-18
2 CORRECTION BLDG. 4-26-18

NO.	ISSUE	DATE

PROJECT DATA
PROJECT NUMBER :
DATE :
DRAWN BY :
CHECKED BY :
APPROVED BY :

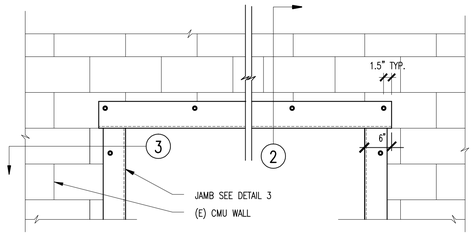
SCALE

SHEET NAME
SOUTH VALLEY MANHOLE SPECIFICATIONS

SHEET NUMBER
A-4.4

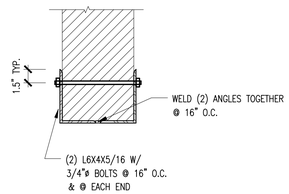
NOTES:

1. SAW CUT WALL THROUGH VERTICALLY.
2. SAW CUT WALL ONE SIDE 6" DEEP HORIZONTALLY.
3. INSTALL ONE ANGLE.
4. SAW CUT THE OTHER SIDE HORIZONTALLY THROUGH.
5. INSTALL THE OTHER ANGLE.
6. BOLT BOTH ANGLE TOGETHER AS NOTED AND ALLOW EPOXY IN CMU TO SET.
7. REMOVING CMU TO CREATE OPENING.



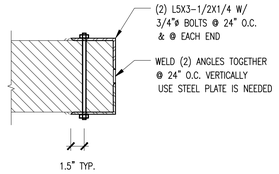
1 MAX. 7FT LINTEL ELEVATION

SCALE: 3/4" = 1'-0"



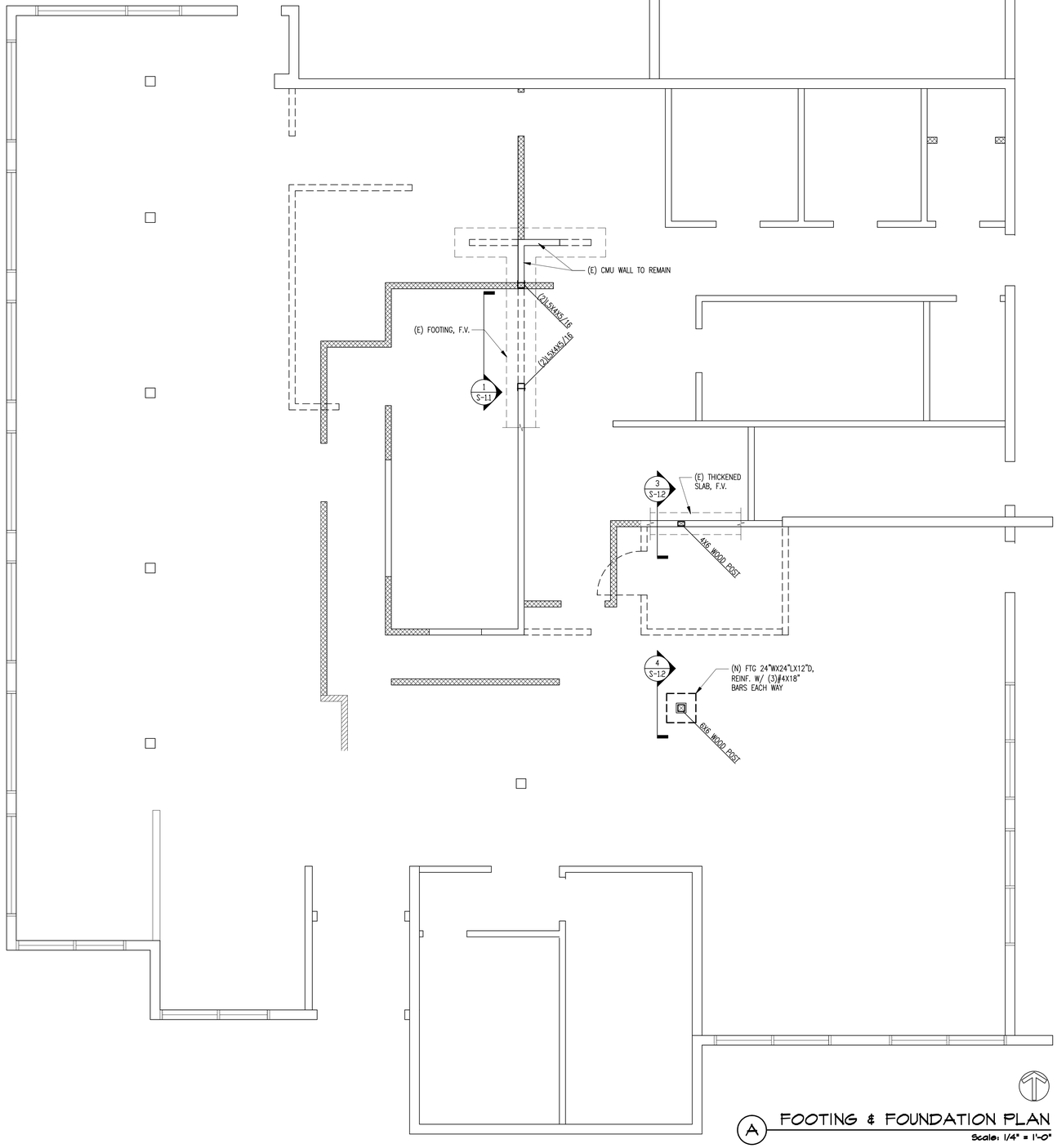
2 LINTEL DETAIL

SCALE: 1-1/2" = 1'-0"



3 JAMB DETAIL

SCALE: 1-1/2" = 1'-0"



A FOOTING & FOUNDATION PLAN

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

WAU DESIGN PARTNERS

3450 WILSHIRE BLVD. SUITE 900
LOS ANGELES, CA 90010

- ARCHITECTURE DRAWINGS
- INTERIOR DRAWINGS
- PLANNING
- LAND-USE CONSULTATION

SEAL

LICENSED PROFESSIONAL ENGINEER
No. 181333
JUNMIN WANG
STATE OF UTAH
April 11, 2018

TITLE

Korean BBQ of Utah

7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE

PROJECT DATA

PROJECT NUMBER :	JW1809
DATE :	April 11, 2018
DRAWN BY :	Jose Wang
CHECKED BY :	Jose Wang
APPROVED BY :	

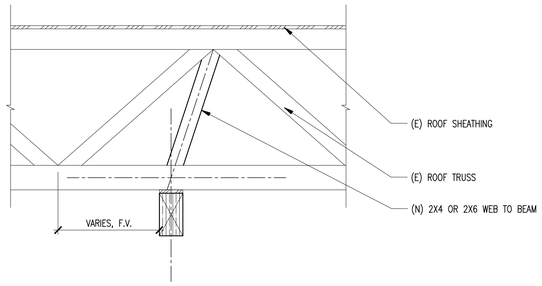
SCALE

SHEET NAME

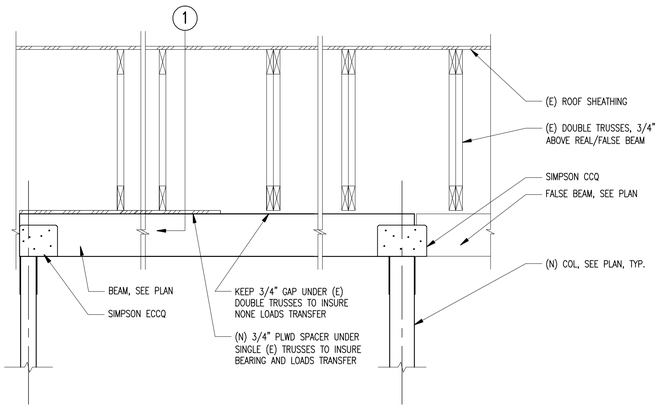
FOOTING & FOUNDATION PLAN

SHEET NUMBER

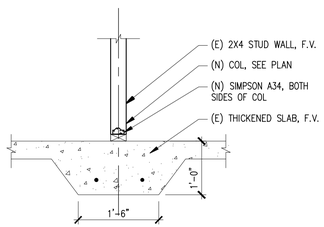
S-1.1



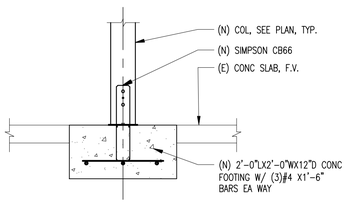
1 TRUSS BEARING DETAIL
SCALE: 3/4" = 1'-0"



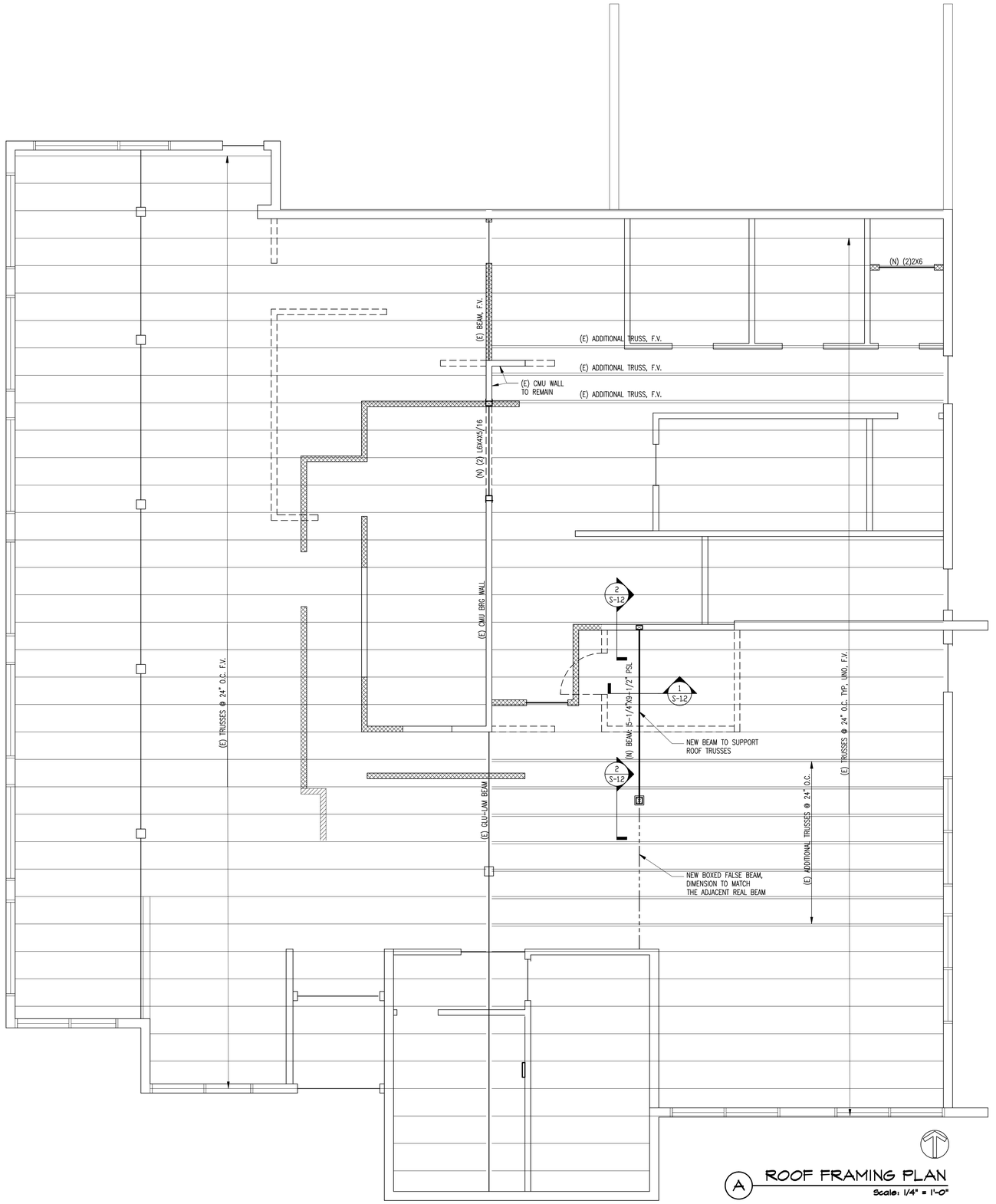
2 BEAM BEARING DETAIL
SCALE: 3/4" = 1'-0"



3 COLUMN BEARING DETAIL
SCALE: 3/4" = 1'-0"



4 COLUMN BEARING DETAIL
SCALE: 3/4" = 1'-0"



A ROOF FRAMING PLAN
Scale: 1/4" = 1'-0"

WAU DESIGN PARTNERS
3450 WILSHIRE BLVD. SUITE 600
LOS ANGELES, CA 90010
- ARCHITECTURE DRAWING
- INTERIOR DRAWINGS
- PLANNING
- LAND-USE CONSULTATION

SEAL

LICENSED PROFESSIONAL ENGINEER No. 181333 JUNHEE WANG STATE OF UTAH
April 11,2018

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE

PROJECT DATA

PROJECT NUMBER :	1803000
DATE :	April 11, 2018
DRAWN BY :	Jose Wang
CHECKED BY :	Jose Wang
APPROVED BY :	

SCALE

SHEET NAME

ROOF FRAMING PLAN

SHEET NUMBER

S-1.2

PACKAGED ROOF TOP AIR CONDITIONING UNIT SCHEDULE

SYMBOL	* MANUFACTURER & MODEL NO.	NOMINAL CAPACITY (TONS)	LOCATION	AREA SERVED	CFM	COOLING CAPACITY BTUH			GAS HEATING CAPACITY, MBH					SUPPLY FAN					ELECTRICAL ELECTRICAL							RA FILTER (NO) & DIM. (IN.)	MIN. OSA (LxWxH) (CFM)	UNIT SIZE (LxWxH) (IN)	OPERATING WEIGHT (LBS)	REMARKS
						TOTAL	SENSIBLE	EER	STAGE 1		STAGE 2		EFF(%)	DRIVE	E.S.P.	RPM	BHP	VOLT/ø/Hz	COMPRESSOR			SUPPLY FAN FLA	COND. FAN FLA	MCA	MOCP					
									IN	OUT	IN	OUT							QTY	RLA	LRA								
AC 1	TRANE YSC090F3EH	7.5	ROOF	DINING	3000	92,500	74,000	11.2	140	112	200	160	80	BELT	0.8	1077	1.67	208/3/60	1	25	164	9.4	3.3	44	60	(2)16x25x2	400	88x53x41	710	①②③④⑤
AC 2	TRANE YSC090F3EH	7.5	ROOF	DINING & RESTROOMS	3000	92,500	74,000	11.2	140	112	200	160	80	BELT	0.8	1077	1.67	208/3/60	1	25	164	9.4	3.3	44	60	(2)16x25x2	400	88x53x41	710	①②③④⑤
AC 3	TRANE YSC060G3EH	5	ROOF	KITCHEN	1900	60,000	48,000	12.0	150	121.5	–	–	81	DIRECT	0.62	1052	0.8	208/3/60	1	15.9	110	5.0	1.4	31	45	(4)16x16x2	200	70x44x41	520	①②③④

REMARKS: ① PROVIDE 14" HIGH PRE-FABRICATED ROOF CURB WITH BOTTOM SHAPED PER ROOF SLOPE. ② PROVIDE PROGRAMMABLE THERMOSTAT. ③ PROVIDE MANUAL DAMPER FOR UP TO 20% OSA INTAKE. ④ PROVIDE DUCT SMOKE DETECTOR TO SHUT OFF UNIT ON DETECTION OF SMOKE IN RETURN AIR DUCT. ⑤ PROVIDE OVERSIZED MOTOR AND DRIVE FOR SUPPLY FAN.
* OR APPROVED EQUAL

MAKE-UP AIR UNIT SCHEDULE

SYMBOL	* MANUFACTURER & MODEL NO.	LOCATION	AREA SERVED	AIR FLOW (CFM)	INDIRECT GAS HEATING						EVAPORATIVE COOLING					SUPPLY FAN					ELECTRICAL			UNIT SIZE (WxLxH) (IN)	OPERATING WEIGHT (LBS)	INTERLOCKED WITH	REMARKS
					INPUT (MBH)	OUTPUT (MBH)	EFF(%)	STAGE	EAT(°F)	LAT(°F)	EDB(°F)	LDB(°F)	COOLING MEDA	WATER	DRAIN	QTY.	ESP	TSP	RPM	HP	VOLT/ø/Hz	MCA	MOCP				
MAU 1	GREENHECK IGX-109-H12	ROOF	DINING AREA	1600	150	120	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.76	1097	1	208/3/60	7.7	15	45x106x39	1070	EF-1	①②③④
MAU 2	GREENHECK IGX-109-H12	ROOF	DINING AREA	1600	150	120	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.76	1097	1	208/3/60	7.7	15	45x106x39	1070	EF-2	①②③④
MAU 3	GREENHECK IGX-109-H12	ROOF	DINING AREA	2200	200	160	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.88	1271	1.5	208/3/60	10.2	15	45x106x39	1100	EF-3	①②③④
MAU 4	GREENHECK IGX-109-H12	ROOF	DINING AREA	1200	120	96	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.69	1390	1	208/3/60	7.7	15	45x106x39	1070	EF-4	①②③④
MAU 5	GREENHECK IGX-109-H12	ROOF	DINING AREA	1400	140	112	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.72	1507	1	208/3/60	7.7	15	45x106x39	1070	EF-5	①②③④
MAU 6	GREENHECK IGX-109-H12	ROOF	KITCHEN	1600	150	120	80	4	20.0	90	95	72	GLASDEK	1/2"	3/4"	1	0.6	0.76	1097	1	208/3/60	7.7	15	45x106x39	1070	EF-6	①②③④

REMARKS: ① PROVIDE ROOF CURB WITH BOTTOM SHAPED PER ROOF SLOPE. ② AUTO DRAIN AND FLUSH. ③ TEMPERATURE CONTROLS. ④ 100% OUTSIDE AIR, CONSTANT VOLUME

EXHAUST FAN SCHEDULE

SYMBOL	* MANUF'R & MODEL NO.	SERVING AREA	TYPE	DRIVE	CFM	FAN RPM	E.S.P. IN. WC	MOTOR HP	VOLT/PH/HZ	OPERATING WEIGHT LBS	**CONTROLLED BY	REMARKS
EF 1	GREENHECK USF-312-BI	DINING TABLE GROUP A	UPBLAST CENTRIFUGAL	BELT	1600	2548	2.5	1½	208/3ø/60	140	TEMPERATURE SENSOR	WITH EXTERNAL DISCONNECT SWITCH, GREASE COLLECTION BOX, VENTED FACTORY CURB, HINGED BASE, UL705 & UL 762 LISTED.
EF 2	GREENHECK USF-312-BI	DINING TABLE GROUP B	UPBLAST CENTRIFUGAL	BELT	1600	2548	2.5	1½	208/3ø/60	140	TEMPERATURE SENSOR	
EF 3	GREENHECK USF-313-BI	DINING TABLE GROUP C	UPBLAST CENTRIFUGAL	BELT	2200	2416	2.5	2	208/3ø/60	160	TEMPERATURE SENSOR	**PROVIDE ON/OFF CONTROL SWITCH TO OVERRIDE AUTOMATIC CONTROL SENSOR TO BE USED IN CASE OF TEMPERATURE SENSOR MALFUNCTION. C
EF 4	GREENHECK CUBE-161XP	DINING TABLE GROUP D	UPBLAST CENTRIFUGAL	BELT	1200	2380	2.25	1	208/3ø/60	85	TEMPERATURE SENSOR	
EF 5	GREENHECK CUBE-161XP	DINING TABLE GROUP E	UPBLAST CENTRIFUGAL	BELT	1400	2450	2.25	1½	208/3ø/60	90	TEMPERATURE SENSOR	
EF 6	GREENHECK CUBE-161HP	KITCHEN	UPBLAST CENTRIFUGAL	BELT	1800	1590	1.5	1	208/3ø/60	85	TEMPERATURE SENSOR	
EF 7	GREENHECK GB-071	WOMEN'S RESTROOM	DOWNBLAST CENTRIFUGAL	BELT	160	1285	0.5	1/6	120/1ø/60	55	LIGHTING SWITCH	WITH BACKDRAFT DAMPER, ROOF CURB CAP, BIRD SCREEN.
EF 8	GREENHECK GB-071	MEN'S RESTROOM	DOWNBLAST CENTRIFUGAL	BELT	130	1212	0.5	1/6	120/1ø/60	55	LIGHTING SWITCH	

REMARKS: * OR APPROVED EQUAL.

AIR DIFFUSER/GRILLE SCHEDULE

SYMBOL & DESCRIPTION	* MANUF'R & MODEL NUMBER	NECK SIZE (INCHES)	CFM	MAX. NECK VELOCITY	MAX. NC	PRESS. DROP IN. W.C.	REMARKS
S-1 SIDEWALL SUPPLY AIR DIFFUSER	TITUS 300RL	20 x 6	0 – 440	600	20	0.06	¾" BLADE SPACING, INDIVIDUALLY ADJUSTABLE DOUBLE BLADES, FRONT BLADES PARALLEL TO LONG DIMENSION, OPPOSED BLADE DAMPER
S-2 CEILING SUPPLY AIR DIFFUSER	TITUS MCD	8 x 8 12 x 12 14 x 14 16 x 16 20 x 20	0 – 220 350 – 500 500 – 680 680 – 850 1000 – 1150	600	20	0.06	MODULAR CORE DIFFUSER, TYPE 3 FOR LAY-IN T-BAR CEILINGS, TYPE 1 FOR GYPBOARD CEILINGS.
R-1 SIDEWALL RETURN AIR GRILLE	TITUS 350RL	30 x 12	0 – 1300	600	20	0.06	¾" BLADE SPACING, 35° DEFLECTION, BLADE PARALLEL TO LONG DIMENSION
R-2 E-1 CEILING RETURN/ EXHAUST AIR GRILLE	TITUS 50F	6 x 6 8 x 8 18 x 18	0 – 120 120 – 200 1000 – 1600	700	20	0.06	T-BAR CEILINGS OR HARD CEILINGS.

REMARKS: * OR APPROVED EQUAL. 1. MOUNTING FRAME TO BE COMPATIBLE WITH CEILING/WALL TYPE.

HOOD EXHAUST & MAKE-UP AIR CALCULATION

HOOD #	HOOD #1	HOOD #2	HOOD #2	HOOD #2	HOOD #2	HOOD #2	HOOD #2
HOOD TYPE & NO. OF OPEN SIDE	TYPE-I, 2	TYPE-I, 4 (ISLAND)	TYPE-I, 4 (ISLAND)	TYPE-I, 4 (ISLAND)	TYPE-I, 4 (ISLAND)	TYPE-I, 4 (ISLAND)	TYPE-I, 4 (ISLAND)
QUANTITY	1	8	8	11	6	7	
SERVING EXHAUST FAN/ AIR VOLUME	EF-6 (1800 CFM)	EF-1 (1600 CFM)	EF-2 (1600 CFM)	EF-3 (2200 CFM)	EF-4 (1200 CFM)	EF-5 (1400 CFM)	
HOOD SIZE	8'-6" WIDE x 4'-0" DEEP	12"ø	12"ø	12"ø	12"ø	12"ø	
FORMULA	Q=200 x LIN. FT.	Q=200 x AREA	Q=200 x AREA	Q=200 x AREA	Q=200 x AREA	Q=200 x AREA	
EXHAUST AIR VOLUME PER HOOD	1800 CFM	200 CFM	200 CFM	200 CFM	200 CFM	200 CFM	
EXHAUST DUCT SIZE	14"ø	6"x6"	6"x6"	6"x6"	6"x6"	6"x6"	
AIR VELOCITY IN DUCT	1684 FPM	800 FPM	800 FPM	800 FPM	800 FPM	800 FPM	
FILTER, NUMBER & SIZE	(6) 16"x16"	CUSTOM MADE	CUSTOM MADE	CUSTOM MADE	CUSTOM MADE	CUSTOM MADE	
FILTER TYPE	BAFFLE	BAFFLE	BAFFLE	BAFFLE	BAFFLE	BAFFLE	
HOOD STATIC PRESSURE	0.47" W.C	0.5" W.C	0.5" W.C	0.5" W.C	0.5" W.C	0.5" W.C	
SERVING MAKE-UP AIR UNIT	MAU-6	MAU-1	MAU-2	MAU-3	MAU-4	MAU-5	
MAKE-UP AIR VOLUME	1600 CFM (89%)	1600 CFM (100%)	1600 CFM (100%)	2200 CFM (100%)	1200 CFM (100%)	1400 CFM (100%)	
SERVING EQUIPMENT	GAS BURNER, FRYER	TABLE BURNER	TABLE BURNER	TABLE BURNER	TABLE BURNER	TABLE BURNER	

AIR BALANCE SCHEDULE

INTERLOCKED EQUIPMENT	EXHAUST AIR (CFM)	MAKE-UP AIR (CFM)	OSA (CFM)	BALANCE
EF-1, EF-2, EF-3, EF-4, EF-5	-8,000			
MAU-1, MAU-2, MAU-3, MAU-4, MAU-5		+8,000		
DINING TOTAL	-8,000	+8,000		0
EF-6	-1800			
MAU-6		+1600		
AC-3			+200	
KITCHEN TOTAL	-1800	+1600	+200	0

FIRE EXTINGUISHING SYSTEM NOTES

1. FIRE EXTINGUISHING SYSTEM SHALL BE DESIGNED TO PROVIDE FIRE PROTECTION FOR TYPE-I HOODS, COOKING APPLIANCES AND GREASE DUCTS.
2. FIRE EXTINGUISHING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH 2015 INTERNATIONAL MECHANICAL CODE, UL 300, NFPA 17A AND NFPA 96.
3. UPON FIRE EXTINGUISHING SYSTEM ACTIVATION: ALL ELECTRICAL UNDER THE HOOD SHALL SHUT OFF, GAS SUPPLY SHALL SHUT OFF, MAKE-UP AIR INTERNAL TO HOOD SHALL SHUT OFF, EXHAUST AIR SHALL REMAIN ON AND FIRE SYSTEM SHALL BE INTERCONNECTED TO FIRE ALARM.
4. FIRE EXTINGUISHING SYSTEM PLANS SUBMITTAL IS SEPARATE, NOT PART OF MECHANICAL SUBMITTAL AND SHALL BE SUBMITTED UNDER SEPARATE PERMIT APPLICATION.

LEGEND & ABBREVIATIONS

SYMBOL	ABB.	DESCRIPTION	ABB.	DESCRIPTION
	SAD	SUPPLY AIR DUCT SECTION	AC	AIR CONDITIONING
	RAD	RETURN AIR DUCT SECTION	AP	ACCESS PANEL
	EAD	EXHAUST AIR DUCT SECTION	BAS	BUILDING AUTOMATION SYSTEM
	CAD	COMBUSTION AIR DUCT SECTION	B.D.D.	BACK DRAFT DAMPER
	(L)	LINED DUCTWORK	BHP	BRAKE HORSEPOWER
	CD	CEILING SUPPLY AIR DIFFUSER	CFM	CUBIC FEET PER MINUTE
	RAR	CEILING RETURN AIR REGISTER	COND.	CONDENSATE
	EAR	CEILING EXHAUST AIR REGISTER	D.B.	DRY BULB
	SWS	SIDEWALL SUPPLY REGISTER	DTR	DOWN THRU ROOF
	SWR	SIDEWALL RETURN REGISTER	EF	EXHAUST FAN
	SWE	SIDEWALL EXHAUST REGISTER	E.S.P.	EXTERNAL STATIC PRESSURE
		FLEXIBLE DUCT CONNECTION	F.P.I.	FINS PER INCH
	MVD	MANUAL VOLUME DAMPER	FIN. FLR.	FINISH FLOOR
D/L	DL	DOOR LOUVER	FLA	FULL LOAD AMPS
U/C	UC	UNDERCUT DOOR	HP	HORSEPOWER, HEAT PUMP
T	T-STAT	THERMOSTAT	HWS	HEATING HOT WATER SUPPLY
			KW	KILOWATTS
	SA	SUPPLY AIR	LRA	LOCKED ROTOR AMPS
	RA	RETURN AIR	MCA	MINIMUM CIRCUIT AMPS
	EA	EXHAUST AIR	MFS	MAXIMUM FUSE SIZE
	TA	TRANSFER AIR	MIN.	MINIMUM
	OSA	OUTSIDE AIR	MOCP	MAXIMUM OVERCURRENT PROTECTION
	TYP.	TYPICAL	NC	NOISE CRITERIA
	SF	SQUARE FOOT	OBD	OPPOSED BLADE DAMPER
SFD	SFD	COMBINATION SMOKE AND FIRE DAMPER	PH	PHASE
F	FD	FUSIBLE LINK FIRE DAMPER	PSI	POUNDS PER INCH
SD		DUCT MOUNTED SMOKE DETECTOR	PSIG	POUNDS PER SQUARE INCH GAGE
	(E)	EXISTING	PSIG	POUNDS PER SQUARE INCH GAGE
	(N)	NEW	RLA	RATED LOAD AMPS
	POC	POINT OF CONNECTION	UTR	UP THRU ROOF
			W.C.	WATER COLUMN

GENERAL NOTES

1. COORDINATE ALL WORK WITH OTHER TRADES.
2. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY: 2015 INTERNATIONAL BUILDING CODE, 2015 INTERNATIONAL MECHANICAL CODE, 2015 INTERNATIONAL PLUMBING CODE, 2015 INTERNATIONAL FUEL GAS CODE, 2015 INTERNATIONAL ENERGY CONSERVATION CODE.
3. CONTRACTOR SHALL FURNISH ALL LABOR, NEW MATERIALS, AND EQUIPMENT, TOOLS, TRANSPORTATION AND ANY OTHER SERVICES REQUIRED TO COMPLETE THE PROJECT PER DRAWINGS.
4. BEFORE BEGINNING ANY WORK, CONTRACTOR SHALL THOROUGHLY EXAMINE AND VERIFY ALL EXISTING CONDITIONS, POINTS OF CONNECTION, SIZES, LOCATIONS, ELEVATIONS, ETC. CONTRACTOR SHALL NOTIFY TO PROJECT MANAGER OF ANY DISCREPANCIES BEFORE BEGINNING WORK.
5. ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED IN CEILING SPACE UNLESS OTHERWISE NOTED ON PLAN.
6. ALL DUCTWORK INSULATION SHALL BE PROVIDED WITH MINIMUM REQUIREMENTS AS FOLLOWS: EXPOSED ON ROOF R=8, IN ATTIC R=8, ABOVE T-BAR CEILING R=4.2
7. AIR CONDITIONING UNIT SHALL BE INSTALLED IN ACCESSIBLE LOCATION FOR AIR BALANCE AND MAINTENANCE.
8. ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED AND TESTED IN ACCORDANCE WITH THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA).
9. ALL PIPES PENETRATING WALLS & FLOOR SHALL BE SEALED AIRTIGHT WITH RESILIENT CAULKING AND PACKING.
10. PROVIDE ACCESS PANELS FOR ALL SMOKE DETECTORS, MANUAL VOLUME DAMPERS ABOVE CONCEALED CEILING PANELS. COORDINATE ALL CEILING AND WALL ACCESS REQUIREMENTS WITH ARCHITECT. LOCATE VALVES IN EASILY ACCESSIBLE LOCATIONS.
11. AIR BALANCING DAMPERS SHALL BE PROVIDED FOR BRANCH DUCT TAKE OFF AND EVERY AIR INLET, OUTLETS AND SHALL BE LOCATED AS FAR AWAY AS POSSIBLE FROM AIR OUTLET.
12. LENGTH OF FLEXIBLE DUCT SHALL BE MAXIMUM 5 FEET IN LENGTH AT DIFFUSERS.
13. ALL DUCT AND PIPE INSULATION AND AIR CONDITIONING EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION.
14. PROVIDE SMOKE/FIRE DAMPERS AT ALL DUCT PENETRATIONS THRU FIRE RATED WALLS AND THRU OCCUPANCY SEPARATION WALLS.
15. DUCTWORK SHALL BE INSULATED OR LINED (L) AS NOTED ON DRAWINGS. ALL DUCTWORK EXPOSED ON ROOF SHALL BE INTERNALLY LINED UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES ARE FREE AIR FLOW SIZES. ALL DUCT JOINTS SHALL BE SEALED. INSULATION SHALL HAVE A FLAME-SPREAD INDEX NOT EXCEEDING 25 AND A SMOKE DEVELOPED INDEX NOT EXCEEDING 50.
16. ALL EQUIPMENTS DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE PER BUILDING CODE REQUIREMENT.
17. ROOF MOUNTED EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES.
18. ALL APPLIANCES AND PLUMBING VENTS AND DISCHARGE OUTLET OF EXHAUST FANS SHALL BE AT LEAST TEN (10) FEET IN A HORIZONTAL DIRECTION, OR THREE (3) FEET ABOVE THE OUTSIDE AIR INTAKES FOR HVAC UNITS.
19. AIR DISTRIBUTION SYSTEMS SHALL BE EQUIPPED WITH SMOKE DETECTORS LISTED AND LABELED FOR INSTALLATION IN AIR DISTRIBUTION SYSTEMS. DUCT SMOKE DETECTORS SHALL COMPLY WITH UL 268A. SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2000 CFM PER 2015 IMC SECTION 606.
20. THE EXHAUST FAN SERVING A TYPE-I HOOD SHALL HAVE AUTOMATIC CONTROLS THAT WILL ACTIVATE THE FAN WHEN ANY APPLIANCE THAT REQUIRES SUCH TYPE-I HOOD IS TURNED ON, OR A MEANS OF INTERLOCK SHALL BE PROVIDED THAT WILL PREVENT OPERATION OF SUCH APPLIANCES WHEN THE EXHAUST FAN IS NOT TURNED ON PER IMC SECTION 507.1.1. C

TYPE 1 EXHAUST HOOD & DUCT NOTES

1. ALL PHASES OF INSTALLATION SHALL COMPLY WITH NFPA 96.
2. PROVIDE OPENINGS WITH ACCESS PANEL IN EXHAUST AIR DUCTS TO ALLOW CLEANING AT ALL BENDS AND HORIZONTAL RUNS PER CMC 510.3
3. EXHAUST DUCT SHALL BE CONSTRUCTED OF MIN. 16 GAUGE GALVANIZED STEEL OR 18 GAUGE STAINLESS STEEL.
4. ALL SEAMS AND JOINTS OF EXHAUST DUCT SHALL HAVE LIQUID TIGHT CONTINUOUS EXTERNAL WELD OR EQUAL.
5. EXHAUST FAN DISCHARGE OUTLET SHALL HAVE A MINIMUM OF 10 FT. OF CLEARANCE FROM THE OUTLET TO ADJACENT BUILDINGS, PROPERTY LINES, AIR INTAKES OR 3 FT. VERTICAL CLEARANCE PER NFPA 96.
6. HORIZONTAL EXHAUST DUCT SHALL HAVE SLOPE NOT LESS THAN 1/4" PER FOOT TOWARD HOOD FOR DUCT LESS THAN 75 FEET LONG AND 1" PER FOOT SLOPE FOR DUCT LONGER THAN 75 FOOT LONG.
7. EXHAUST DUCT TO BE PROTECTED FROM COMBUSTIBLES PER NFPA 96 AND LOCAL CODE.
8. BUILDING PRESSURE SHALL NOT EXCEED 0.02" WATER COLUMN AT EXTERIOR DOORS.
9. KITCHEN SHALL BE AIR BALANCED TO BE NEGATIVE WITH RESPECT TO THE REST OF AREAS.
10. EXHAUST FAN AND MAKE-UP AIR UNIT SHALL BE INTERCONNECTED BY ELECTRICAL INTERLOCK.
11. EXHAUST HOOD SHALL BE CONSTRUCTED OF MIN. 18 GAUGE GALVANIZED STEEL OR MIN. 20 GAUGE STAINLESS STEEL.
12. EXHAUST HOOD SHALL OVERHANG COOKING EQUIPMENT 6" ON ALL OPEN SIDES.

MECHANICAL DRAWING LIST

DWG NO.	TITLE
M-1	MECHANICAL LEGEND, NOTES AND SCHEDULES
M-2	MECHANICAL FLOOR PLAN – CONDITIONED AIR
M-3	MECHANICAL FLOOR PLAN – EXHAUST & MAKEUP AIR
M-4	MECHANICAL ROOF PLAN
M-5	MECHANICAL DETAILS
M-6	KITCHEN HOOD DETAILS
M-7	TABLE TOP HOOD DETAILS

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REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18
3	CORRECTION BLDG.	5-17-18

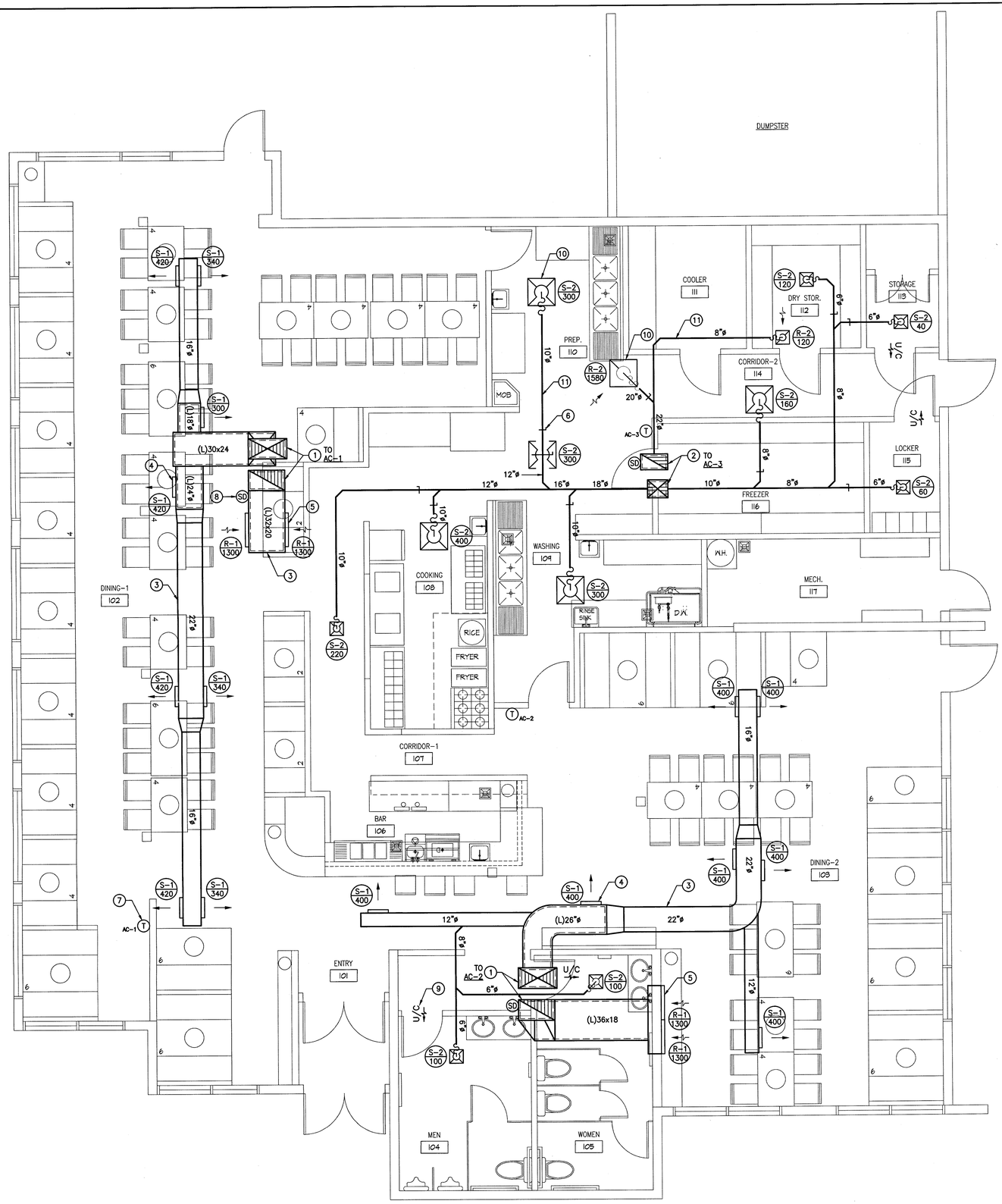
PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

SCALE

SHEET NAME
MECHANICAL LEGEND, NOTES & SCHEDULES

SHEET NUMBER
M-1



KEYNOTES:

1. LINED 33x18 SUPPLY & 32x18 RETURN MAIN DUCTS UP THRU ROOF TO AC UNIT.
2. LINED 18x16 SUPPLY & 24x14 RETURN MAIN DUCTS UP THRU ROOF TO AC UNIT.
3. EXPOSED RIGID SUPPLY/RETURN DUCT (TYP.)
4. DUCT MOUNTED SUPPLY AIR DIFFUSER (TYP.)
5. DUCT/WALL MOUNTED RETURN AIR GRILLE (TYP.)
6. MANUAL VOLUME DAMPER (TYP.)
7. THERMOSTAT ON WALL (TYP. 3)
8. SMOKE DETECTOR ON RETURN AIR DUCT TO SHUT OFF AC UNIT ON DETECTION OF SMOKE (TYP. 3)
9. MINIMUM $\frac{3}{4}$" DOOR UNDERCUT FOR AIR TRANSFER (TYP. 4)
10. CEILING SUPPLY/ RETURN AIR GRILLE (TYP.)
11. SUPPLY/ RETURN AIR DUCT ABOVE CEILING (TYP.)

MECHANICAL FLOOR PLAN - CONDITIONED AIR

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

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APPROVED BY :	

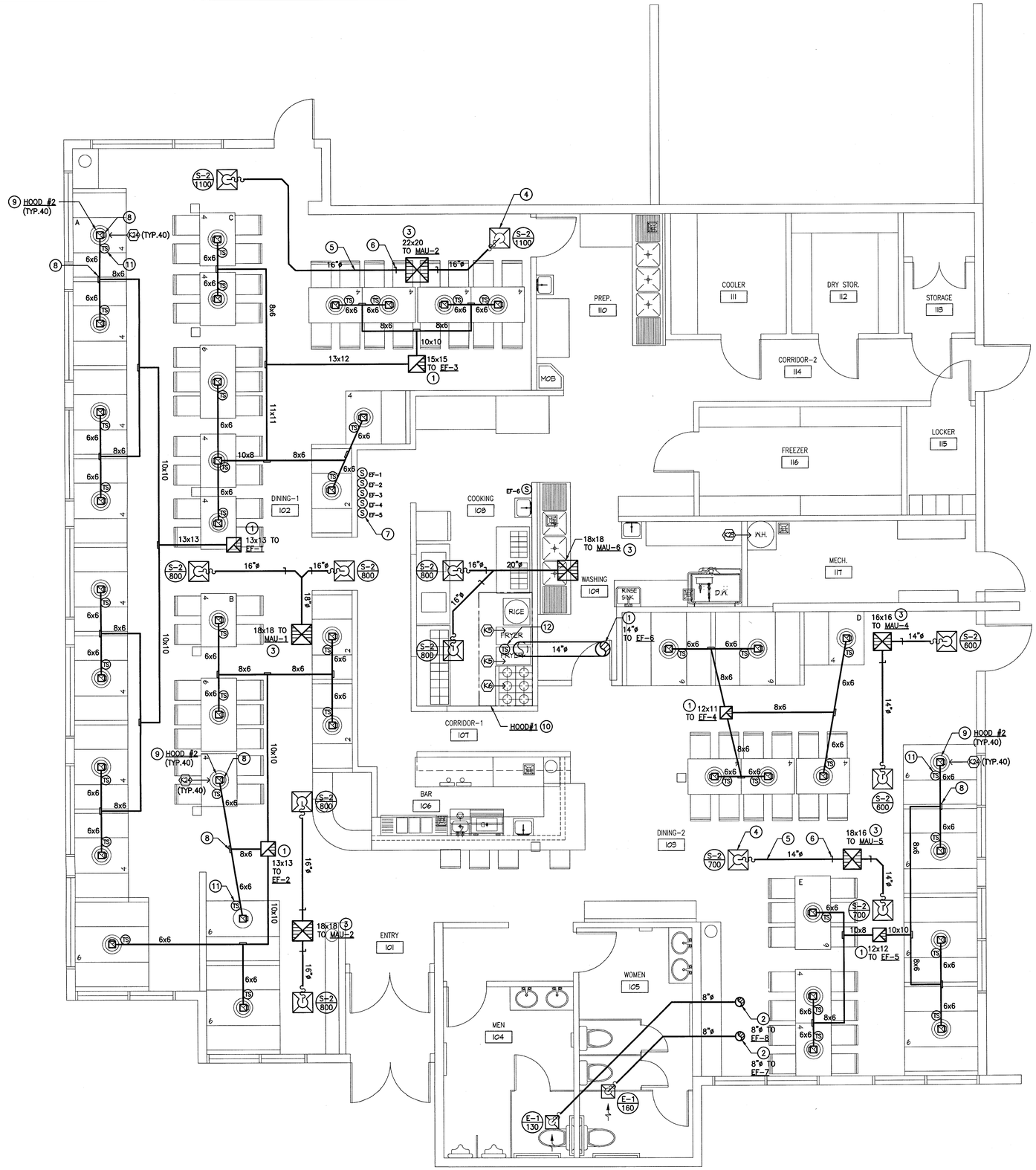
SCALE

SHEET NAME

MECHANICAL FLOOR PLAN - CONDITIONED AIR

SHEET NUMBER

M-2



KEYNOTES:

1. GREASE AIR EXHAUST MAIN DUCT UP THRU ROOF TO EXHAUST FAN ON ROOF.
2. EXHAUST AIR MAIN DUCT UP THRU ROOF TO EXHAUST FAN ON ROOF.
3. MAKE-UP AIR MAIN DUCT UP THRU ROOF TO MAKE-UP AIR UNIT ON ROOF.
4. CEILING MAKE-UP AIR DIFFUSER (TYP.)
5. MAKE-UP AIR DUCT ABOVE CEILING (TYP.)
6. MANUAL VOLUME DAMPER (TYP.)
7. ON/OFF SWITCH ON WALL WITH CONTROL WIRING TO CORRESPONDING EXHAUST FAN AND MAKE-UP AIR UNIT TO MANUALLY OVERRIDE AUTOMATIC CONTROL (TYP.6)
8. ACCESS PANEL ON GREASE DUCT FOR DUCT CLEANING PER IMC SECTION 506.3.8 (TYP.)
9. EXHAUST HOOD ABOVE TABLE GRILL (TYP.40)
10. EXHAUST HOOD ABOVE KITCHEN COOKING EQUIPMENT.
11. TEMPERATURE SENSOR W/ADJUSTABLE SETTING ON EXHAUST AIR DUCT FOR AUTOMATIC CONTROL OF EXHAUST FAN FOR TABLE-TOP BURNERS. PROVIDE AT ACCESSIBLE LOCATION (TYP.40)
12. TEMPERATURE SENSOR W/ADJUSTABLE SETTING UNDER KITCHEN HOOD FOR AUTOMATIC CONTROL OF EXHAUST FAN. PROVIDE AT ACCESSIBLE LOCATION.

KITCHEN EQUIPMENT SCHEDULE

EQUIP. NO.	DESCRIPTION	MANUFR.	MODEL NO.	QTY.	GAS BTUH
K 3	RICE COOKER	RINNAI	RER-55AS	1	35K
K 5	FRYER	AMERICAN RANGE	AF-35/50	2	35K
K 6	BURNER	AMERICAN RANGE	ARHP-36-6	1	56K
K 23	WATER HEATER	AMERICAN WATER HEATERS	BC65-100T199-6N	1	199K
K 24	TABLE BURNER	BUHELNG SAFE INC	BH-5000	40	8K
-	HOOD #1, TYPE-I	ECON-AIR	4824 EX-2	1	-
-	HOOD #2, TYPE-I	JC ENTERPRISES	DKBHS	40	-

MECHANICAL FLOOR PLAN - EXHAUST & MAKE-UP AIR

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

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DRAWN BY :	JK
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APPROVED BY :	

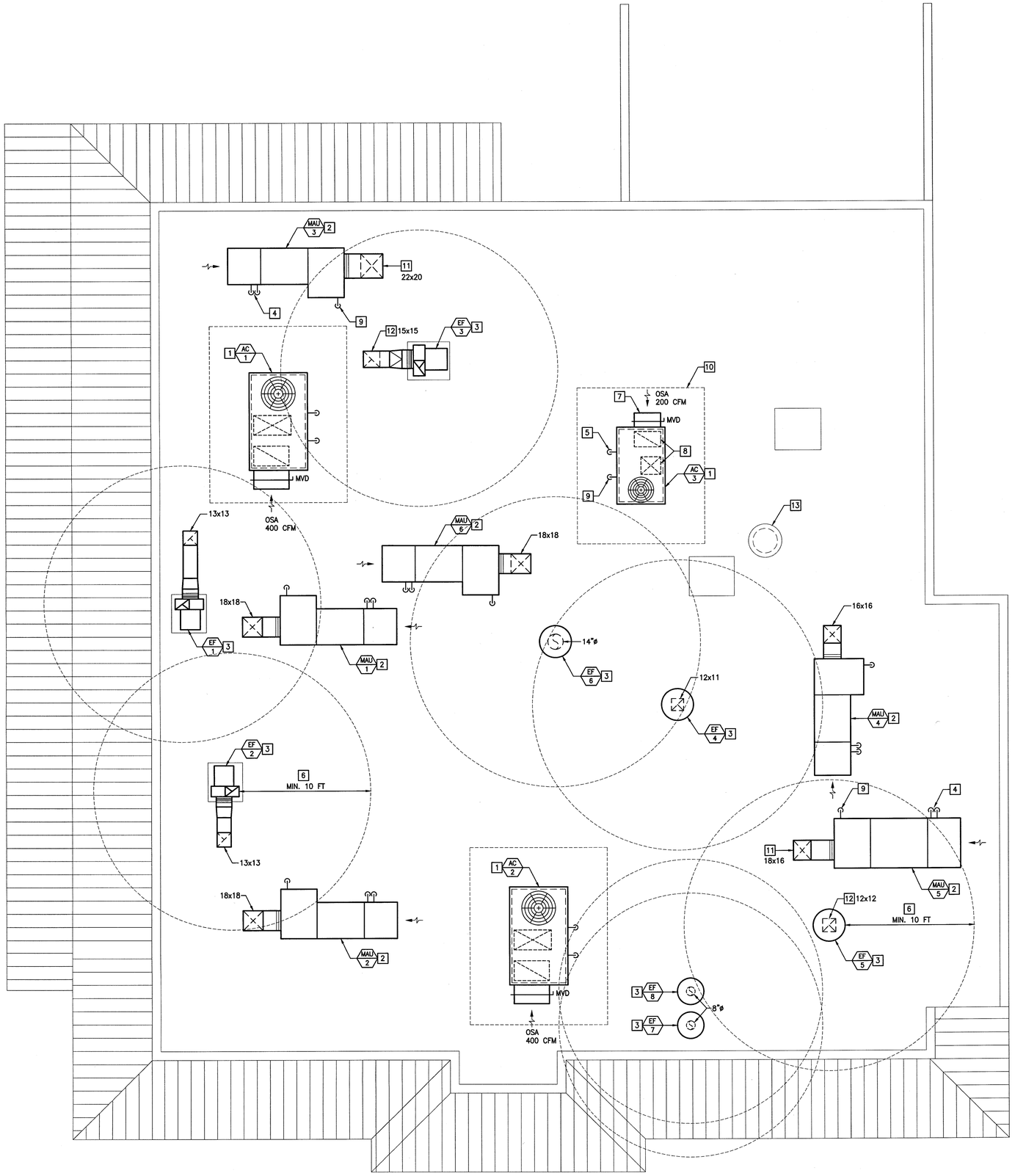
SCALE

SHEET NAME

MECHANICAL FLOOR PLAN - EXHAUST & MAKE-UP AIR

SHEET NUMBER

M-3



KEYNOTES:

1. PACKAGED AIR CONDITIONING UNIT. PROVIDE ROOF CURB FOR AC-3. AC-1 & AC-2 TO USE (E) ROOF CURBS.
2. MAKE-UP AIR UNIT ON ROOF CURB.
3. EXHAUST FAN ON ROOF CURB.
4. ¾" WATER AND ¾" AUTO DRAIN PIPES. FOR CONTINUATION, REFER TO PLUMBING PLAN P-3 (TYP. 6)
5. ¾" CONDENSATE DRAIN PIPE. FOR CONTINUATION, REFER TO PLUMBING PLAN P-2 (TYP. 3)
6. MIN. 10 FT DISTANCE FROM EXHAUST FAN DISCHARGE TO ANY OUTSIDE AIR INTAKE OPENING (TYP. 8)
7. OUTSIDE AIR INTAKE HOOD WITH BIRD SCREEN AND VOLUME DAMPER (TYP.3)
8. LINED SUPPLY AND RETURN AIR DUCTS OF AC UNIT DOWN THRU ROOF (TYP.3)
9. GAS PIPE FOR AC UNIT & MAKE-UP AIR UNIT. FOR SIZE AND ROUTING, REFER TO PLUMBING PLAN P-4 (TYP.9)
10. AC UNIT SERVICE CLEARANCE (TYP.3)
11. LINED MAKE-UP AIR DUCT DOWN THRU ROOF (TYP.6)
12. EXHAUST AIR DUCT DOWN THRU ROOF (TYP.8)
13. (E) FLUE FROM WATER HEATER, TO REAMIN.

MECHANICAL ROOF PLAN

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

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CHECKED BY :	ML
APPROVED BY :	

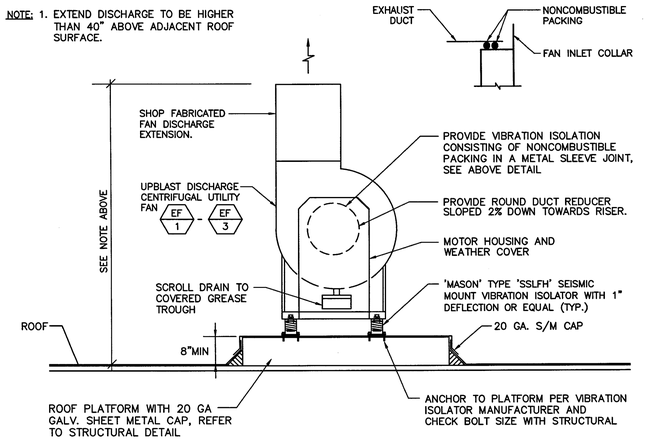
SCALE

SHEET NAME

MECHANICAL ROOF PLAN

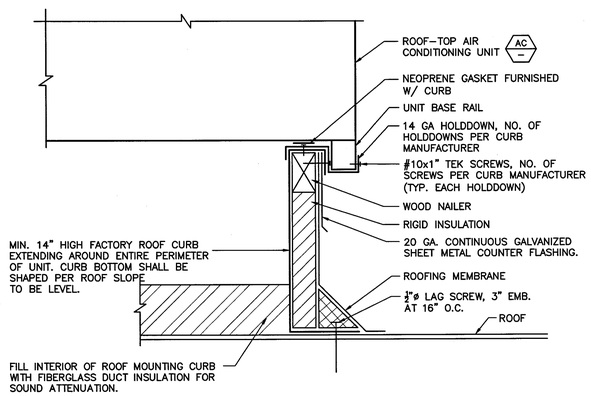
SHEET NUMBER

M-4



UTILITY EXHAUST FAN INSTALLATION

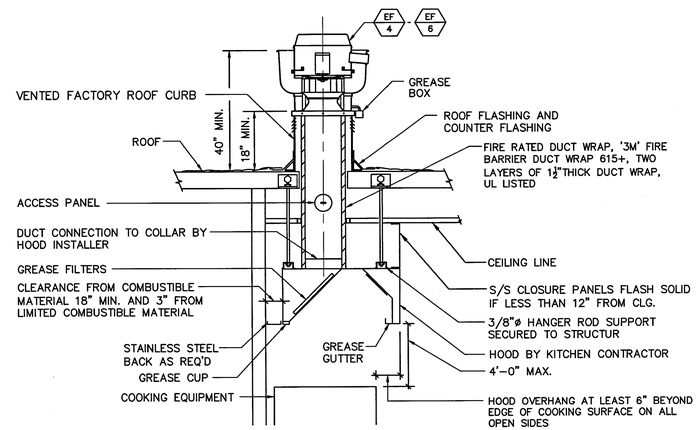
SCALE: NONE | 3



NOTE: 1. FOR STRUCTURAL FRAMING AND DETAIL, REFER TO STRUCTURAL PLAN.

PACKAGED HP UNIT ON NEW ROOF CURB

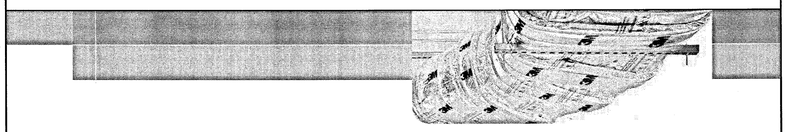
SCALE: NONE | 2



NOTES:
1. EXHAUST OUTLET TO BE 10'-0" MIN. FROM ADJACENT PROPERTY LINE OR AIR INTAKE.
2. REFER TO KITCHEN FOOD, GREASE DUCT AND EXHAUST FAN MANUFACTURER'S INSTRUCTIONS.

TYPICAL TYPE I HOOD, DUCT , EXHAUST FAN

SCALE: NONE | 1



3M™ Fire Barrier Duct Wrap 615+

Product Data Sheet and Installation Guide

1. Product Description

3M™ Fire Barrier Duct Wrap 615+ is a flexible fire-resistant wrap consisting of an inorganic fiber blanket encapsulated with a scrim-reinforced foil. The product is 1-1/2" thick, 6 pcf density.[1] It is used to fire rate commercial kitchen grease ducts as well as ventilation ducts. 3M™ Fire Barrier Duct Wrap 615+ is a proven alternative to 1- or 2-hour fire-resistant rated shaft enclosures for grease ducts (ICC-ES ESR-1255). With its excellent insulating capabilities, low weight and thin profile, it is an ideal choice for a duct enclosure system. This non-asbestos[2] wrap installs easily due to its high flexibility and strength.

[1] In accordance with the tolerances in ASTM C 892 Standard Specification for High-Temperature Fiber Blanket Thermal Insulation.
[2] These fibers are not biopersistent and are therefore non-carcinogenic per Note Q of EU Directive 67/548/EEC (guideline 97/69/EG).

Flexible and lightweight with a thin profile for easier application and reduced space requirements

Product Features

- Two-layer wrap for grease ducts rated as a shaft alternative per ASTM E 2336
- Zero clearance to combustible throughout the entire enclosure system
- Butted inner layer in 2-layer grease duct applications
- One-layer wrap for fire-resistive ventilation ducts per ISO 6944
- High flexibility for installation ease
- Foil encapsulated for blanket protection, less dust, and high wrap strength
- Wide range of penetration seal systems
- Available in: 24" x 25 ft. (609.6mm x 7.62m) and 48" x 25 ft. (1219.2mm x 7.62m) rolls
- Blanket adhered to foil scrim helps prevent wrap from slumping

FIRE BARRIER: UL Classified 2 HOUR Fire Protection
FLEXIBLE WRAP: GREASE & AIR DUCT Fire Protection
ICC ES ICC-ES ESR-1255
NFPA 96
LISTED Omega Point Laboratories Intertek FIRE RESISTANT DUCT SEE INTERTEK DIRECTORY
LISTED c UL us Intertek FIRE RESISTANT DUCT SEE INTERTEK DIRECTORY
CLASSIFIED UL BATTS AND BLANKETS FOR USE IN FIRE RESISTIVE DUCT ASSEMBLIES SEE UL FIRE RESISTANCE DIRECTORY 9K09
CSFM LISTING No. 2440-0941:112

2. Applications

3M™ Fire Barrier Duct Wrap 615+ is an ideal fire resistive enclosure for commercial kitchen grease ducts and ventilation air ducts. It is a proven alternative to a 1- or 2-hour fire-resistant rated shaft enclosures for grease ducts and provides zero clearance to combustible construction throughout the entire enclosure system (per ICC-ES ESR-1255). 3M™ Fire Barrier Water Tight Sealant 1000 NS, 3M™ Fire Barrier Water Tight Sealant 1003 SL or 3M™ Fire Barrier Silicone Sealant 2000+ is used in combination with 3M™ Fire Barrier Duct Wrap 615+ to firestop the duct when the duct penetrates fire-rated floor or wall assemblies. 3M™ Fire Barrier Duct Wrap 615+ also provides a firestop solution where a T-rating is required for penetrations located outside wall cavities or outside fire-resistance rated shaft enclosures.

Two-layer grease duct applications: 3M™ Fire Barrier Duct Wrap 615+ meets the criteria of ASTM E 2336 Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems.

Single-layer ventilation duct applications: 3M™ Fire Barrier Duct Wrap 615+ has passed ISO 6944-1985 Fire Resistance Tests – Ventilation Ducts.

T-rating for metallic through-penetrating items: 3M™ Fire Barrier Duct Wrap 615+ is used in conjunction with 3M Fire Barrier sealants to achieve up to 2-hour equal F & T-ratings in ASTM E 814 (UL 1479) tested through-penetrations.

3. Specifications

Installation shall be in strict accordance with manufacture's written instructions, as shown on the approved shop drawings. 3M™ Fire Barrier Duct Wrap 615+ shall be a high-temperature fibrous thermal insulation blanket encapsulated in a fiberglass-reinforced aluminized polyester foil. Duct Wrap density shall be nominal 6 pcf (96 kg/m³) and have a nominal 1-1/2" (38.1mm) thickness. The fiber blanket shall have a continuous use limit of 1000°C (1832°F). The blanket thermal resistance (R-value) at ambient temperature shall be minimum $6.3 \frac{°F \cdot ft^2 \cdot hr}{Btu}$.

Smoke Developed Index and Flame Spread Index of the bare blanket, and of the foil encapsulated blanket shall be 0/0. The foil encapsulation shall be bonded to the core blanket material.

Typically Specified Division or Section
Division 7 – Thermal and Moisture Protection
Section 23 07 13 – Duct Insulation

Related Sections
Section 07 21 00 – Thermal Protection
Section 07 21 16 – Blanket Insulation
Section 07 84 00 – Firestopping
Section 23 00 00 – Heating, Ventilation and Air-Conditioning (HVAC)
Section 23 31 13 – Metal Ducts

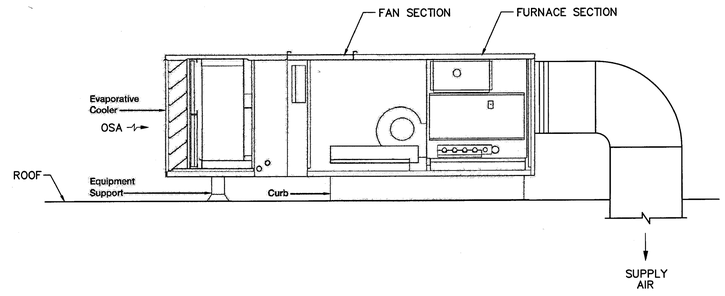
FIRE RETED DUCT WRAP SPECIFICATION

SCALE: NONE | 7

NOTES:
1. SPACING OF VERTICAL HANGER STRAP SHALL BE MAXIMUM 8'-0" O.C.
2. SPACING OF TRANSVERSE BRACING SHALL BE MAXIMUM 30'-0" O.C.
3. FOR MINIMUM SIZE OF OTHER HANGER TYPES, SEE SMACNA HVAC CONSTRUCTION STANDARDS TABLE 5-2.
4. FOR UPPER ATTACHMENTS TO BUILDING AND LOWER ATTACHMENTS TO DUCTS, SEE SMACNA HVAC DUCT CONSTRUCTION STANDARDS FIG. 5-1 THRU 5-5.

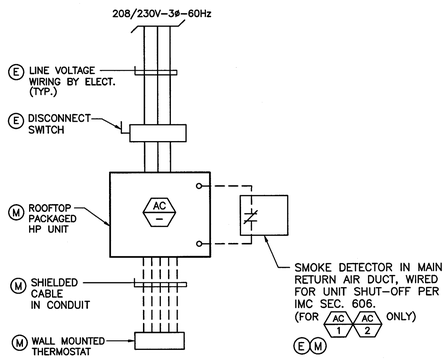
ROUND DUCT MOUNTING DETAIL

SCALE: NONE | 5

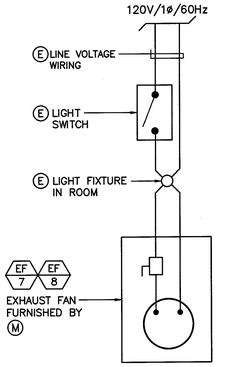


MAKE-UP AIR UNIT ON ROOF

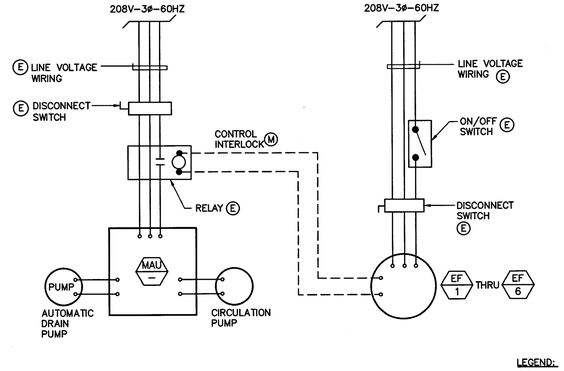
SCALE: NONE | 4



NOTE:
1. REFER TO EQUIPMENT MANUFACTURER'S INSTRUCTIONS FOR EXACT WIRING DIAGRAM.



NOTE:
1. FAN ON/OFF SHALL BE CONTROLLED WITH LIGHTING SWITCH OR MOTION SENSOR. PROVIDE ADJUSTABLE TIME DELAY FUNCTION.



NOTE:
1. REFER TO EQUIPMENT MANUFACTURER'S INSTRUCTIONS FOR EXACT WIRING DIAGRAM.

LEGEND:
M BY MECHANICAL CONTRACTOR
E BY ELECTRICAL CONTRACTOR

EQUIPMENT CONTROL WIRING DIAGRAM

SCALE: NONE | 6

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18008

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWPPP	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

SCALE

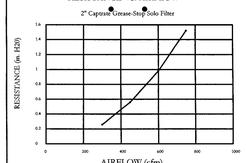
SHEET NAME

MECHANICAL DETAILS

SHEET NUMBER

M-5

Captrate
Grease-Stop Solo Filter



Filter Detail

CAPTRATE •

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)

SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED

TOTAL DUCT AREA=144 X $\frac{\text{CFM}}{\text{FPM(*)}}$

DUCT LENGTH= $\frac{\text{TOTAL DUCT AREA}}{\text{DUCT DEPTH}}$

GREASE-STOP SOLO FILTER IS ETL LISTED UNDER FILE NUMBER 3064494-001 AND COMPLIES WITH UL1046 STANDARD, NSF STANDARD #2, NFPA 96 AND IMC

* CAPTIVE-AIRE VENTILATOR DUCT SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1600-1800 FPM AND A SUPPLY VELOCITY OF 1000 FPM. PLEASE CONSULT FACTORY FOR MAXIMUM ALLOWABLE DUCT SIZES

CALCULATIONS UTILIZED

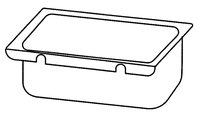
CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:

- NFPA #96
- B.O.C.A. #93-16
- I.C.B.O. 3441R
- SBCCI PST & ESI NO. 93137
- E.T.L. LISTED 3054804-001
- LOS ANGELES RR#26080
- ETL IS LISTED TO ULC STANDARDS

NFPA®

ETL SANITATION LISTED
Intertek

BUILDING CODES

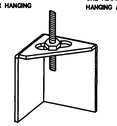


GREASE CUP WILL BE SUPPORTED BY TWO STUDS ON THE INSIDE WALL OF THE HOOD. THE GREASE WILL DRAIN THROUGH A CONCEALED GREASE TROUGH AND INTO THIS REMOVEABLE/CLEANABLE CUP.

1/2 Pint Grease Cup Detail

1/2" DIA. ALL THREAD ROD CONNECTED TO ROOF JOIST THROUGH ANOTHER HANGING ANGLE

1/2" DIA. HEAVY DUTY NUT ONE ABOVE AND ONE BELOW HANGING ANGLE



* ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-PUNCHED AT FACTORY

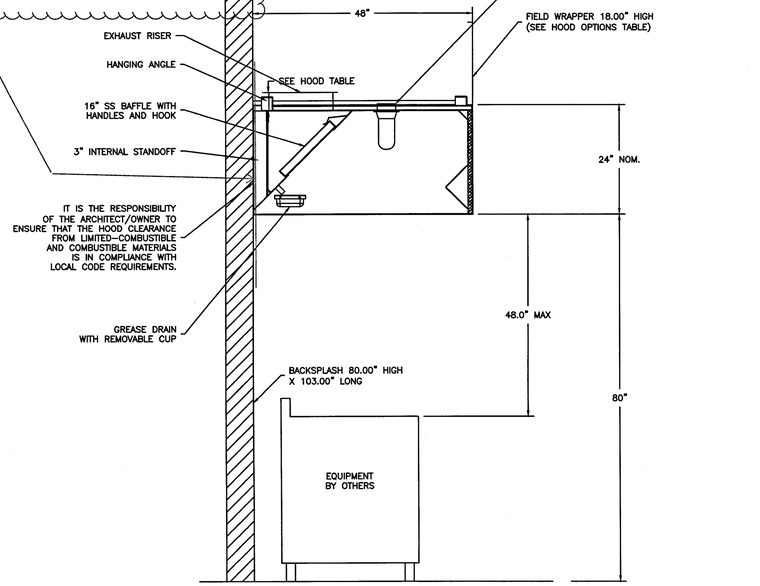
ND-2 HANGING ANGLE DETAIL

HANGING ANGLES WILL BE LOCATED IN THE FOLLOWING LOCATIONS FOR WALL CANOPIES

HOOD STYLE		DIM FROM REAR	DIM FROM FRONT (24" High Hood)	DIM FROM FRONT (30" High Hood)
Wall	Exhaust Only	4.166"	2.25"	2.25"
	With MUA		2.25"	2.25"
Back Shelf	Exhaust Only	4.166"	2.25"	2.25"
	With MUA		2.25"	2.25"
Condensate		2.25"	2.25"	

HANGING ANGLE LOCATIONS

507.2.6 Clearances for Type I hood. A Type I hood shall be installed with a clearance to combustibles of not less than 18 inches (457 mm).
Exception: Clearance shall not be required from gypsum wallboard or 1/2-inch (12.7 mm) or thicker cementitious wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the hood and the gypsum or cementitious wallboard over an area extending not less than 18 inches (457 mm) in all directions from the hood.



SECTION VIEW – MODEL 4824EX-2
HOOD – #1

HOOD INFORMATION

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S) TOTAL EXH. CFM	WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	HOOD CONFIG. ROW
1		4824 EX-2	8' 6"	450 Deg.	1800			4"	14"	1800	1684	-0.465"	430 SS Where Exposed	ALONE	ALONE

HOOD INFORMATION

HOOD NO.	TAG	FILTER(S) TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	LIGHT(S) QTY.	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1		SS Baffle with Handles	6	16"	16"	30%	3	L55 Series E26	NO							YES	365 LBS

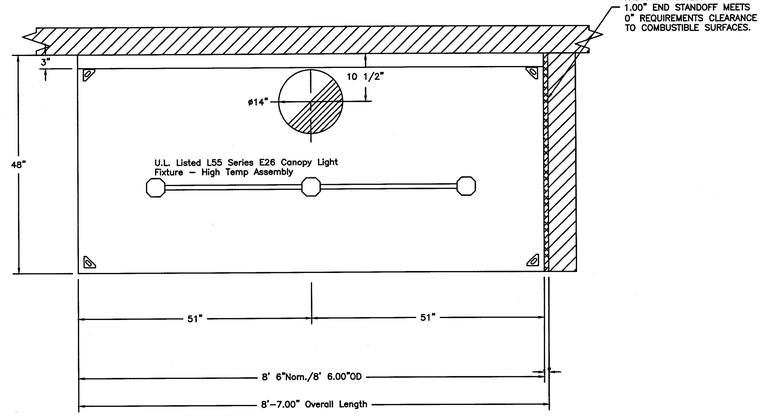
HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 18.00" High Front, Left
		BACKSPLASH 80.00" High X 103.00" Long 430 SS Vertical
		RIGHT END STANDOFF 1" Wide 48" Long Insulated
		RIGHT SIDESPLASH 80.00" High X 48.00" Long 430 SS Vertical
		BACKSPLASH – INSIDE CORNER 80.00" High X 2.00" Leg Length 430 SS Vertical

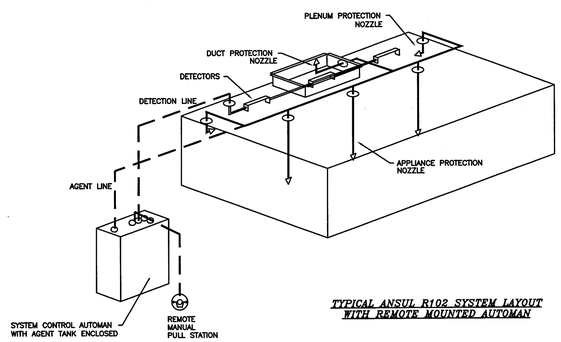
MECHANICAL AIR BALANCE	
TOTAL HOOD EXHAUST	1800 CFM
MUA	1600 CFM
REMAINDER FROM HVAC	200 CFM

NOTE– Exhaust Collar Must be Factory Installed. If A Different Size Or Location is Required, Please Note Change On Submittal.

Rear Discharge Is Available. Contact CaptiveAire For Possible Locations.



PLAN VIEW – Hood #1
8' 6.00" LONG 4824EX-2



TYPICAL ANSUL R102 SYSTEM LAYOUT WITH REMOTE MOUNTED AUTOMAN

HVAC DISTRIBUTION NOTE
IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

All Exhaust Fans, Tempered/Untempered Make-Up Air Units and Electrical Package to be Start-ed Up and Commissioned by Facotry Field Service Technician. Start-Up Report to be Sent to Engineer by Manufacturer When Complete.

FOR QUESTIONS CALL:
CHARLES FOREY
LOS ANGELES SALES OFFICE
REFERENCE JOB NUMBER
PHONE: 310.876.8505 REG81@CAPTIVEAIRE.COM

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18

ECON-AIR
Los Angeles Office
19150 14th St Suite 214, Santa Monica, CA. 90404 PHONE (310) 876-8505 FAX (818) 747-5839 EMAIL regs1@econair.com
www.econairla.com

KOREAN BBQ – Midvale, UT rev1
7157 S. State St.,
MIDVALE, UT, 84047

DATE: 3/23/2018
DWG.#:
DRAWN BY: CSF – 81
SCALE: NOT TO SCALE
SPECIFICATIONS

SHEET NO. 1

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SEAL

18008

TITLE

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7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

SCALE

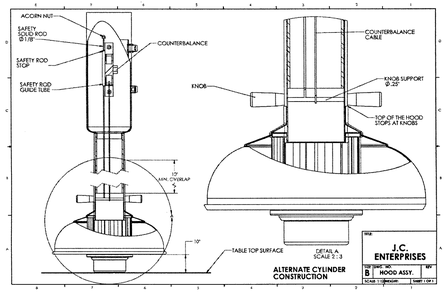
SHEET NAME

KITCHEN HOOD DETAILS

SHEET NUMBER

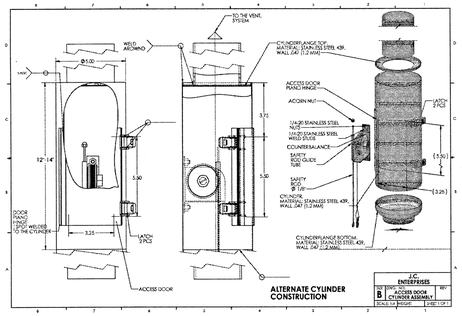
M-6

File MH47432 Vol. 1 Sec. 1 And Report ILL-1 Issued: 2010-05-11 Revised: 2010-12-31



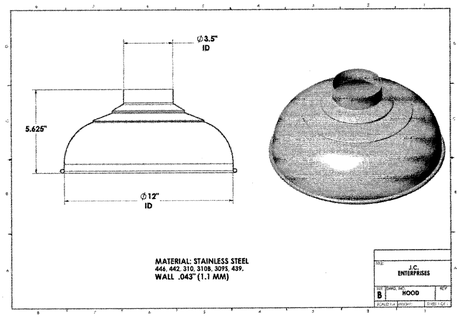
C100985495

File MH47432 Vol. 1 Sec. 1 And Report ILL-2 Issued: 2010-05-11 Revised: 2010-12-31



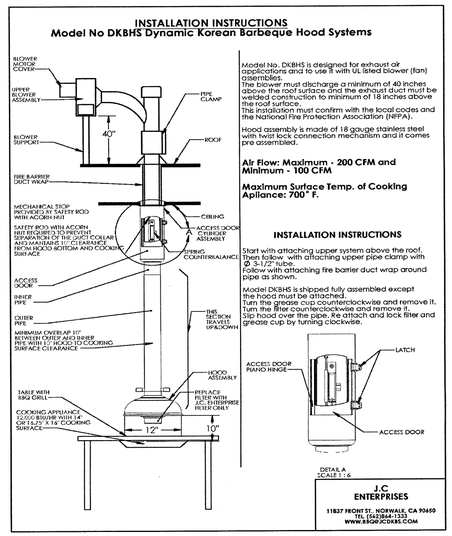
C100985496

File MH47432 Vol. 1 Sec. 1 And Report ILL-5 Issued: 2010-05-11 Revised: 2010-12-31



C100985499

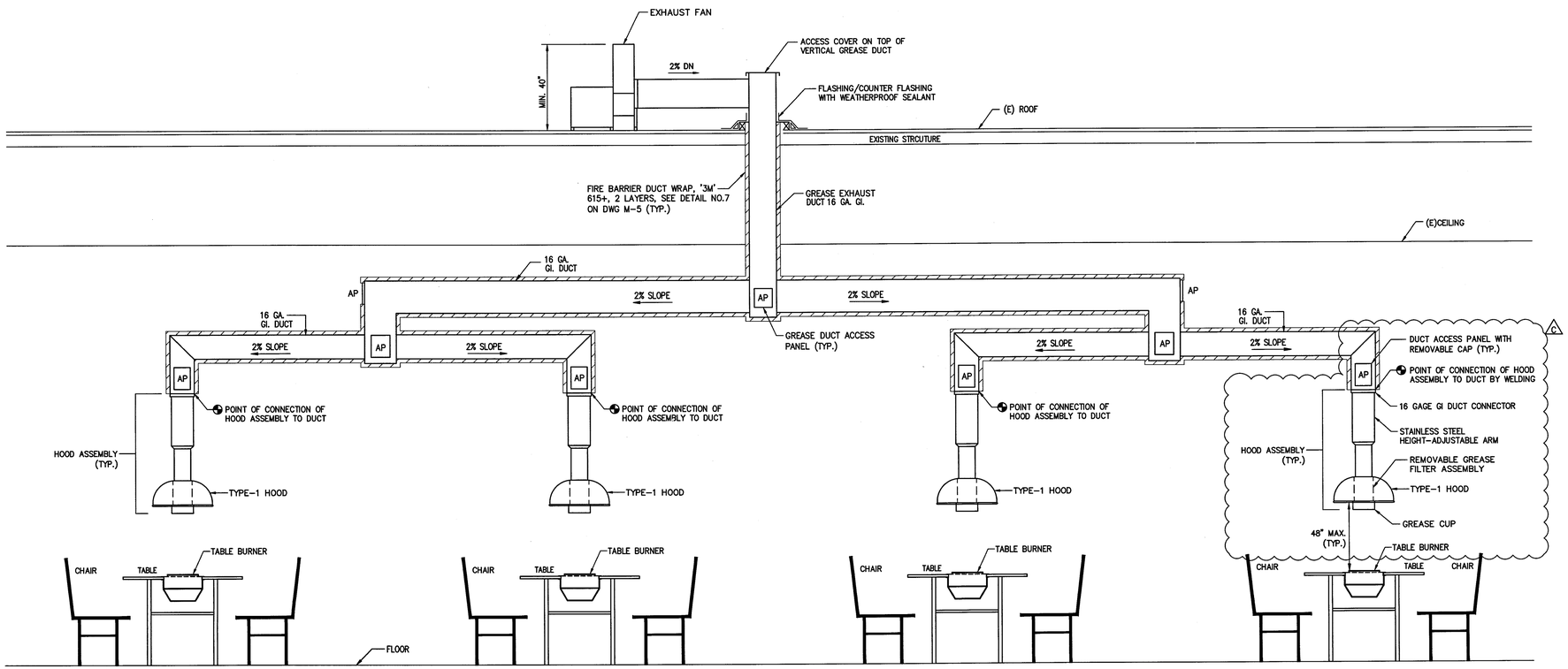
File MH47432 Vol. 1 Sec. 1 And Report ILL-15 Issued: 2010-05-11 Revised: 2010-12-31



C100985509

TABLE TOP HOOD DETAILS

SCALE	2
NONE	



TYPICAL TABLE TOP HOOD & DUCT ELEVATION

SCALE	1
NONE	

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SEAL

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Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18
3	CORRECTION BLDG.	5-29-18

PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

SCALE

SHEET NAME

TABLE TOP HOOD DETAILS

SHEET NUMBER

M-7

KITCHEN EQUIPMENT SCHEDULE

EQUIP. NO.	DESCRIPTION	MANUFR.	MODEL NO.	QTY.	WATER HW	WATER CW	WASTE DIR	WASTE INDR	GAS BTUH	NOTES
B 1	BEER DISPENSER	BLUEAIR	BDD64-3	1				F.S.		INDIRECT TO FLOOR SINK
B 3	BAR 3 COMP. SINK	KRONNE	18-53C	1	1/2"	1/2"	2"	F.S.		INDIRECT TO FLOOR SINK
B 4	BAR WORKSTATIONS	KRONNE	18-W48R-10	1	1/2"	1/2"		F.S.		WITH DUMP SINK, INDIRECT TO FLOOR SINK
B 5	HAND SINK	BLUEAIR	BSH-14	1	1/2"	1/2"	2"			DROP IN SINK
K 1	HAND SINK	BLUEAIR	BSH-14	3	1/2"	1/2"	2"			DROP IN SINK
K 3	RICE COOKER	RINNAI	RER-55AS	1					55K	1/2" NPT FEMALE GAS CONNECTION
K 5	FRYER	AMERICAN RANGE	AF-35/50	2					35K	
K 6	BURNER	AMERICAN RANGE	ARHP-36-6	1					56K	
K 12	ICE MACHINE	MANITOWOC	I-1800	1	1/2"	1/2"		F.S		REMOTE
K 13	3 COMP. SINK	BLUEAIR	B35-24-14/2D	2	1/2"	1/2"	2"	F.S		INDIRECT TO FLOOR SINK
K 14	DISH WASHER	AUTO-CHLOR	D2C L. CORNER	1	1/2"	1/2"	2"	F.S		
K 15	RINSE SINK			1	3/4"	3/4"		F.S		WITH RINK SINK AND SPRAY FAUCET
K 19	MOP SINK	CUSTOM		1	1/2"	1/2"				
K 23	WATER HEATER			1					199K	REFER TO PLUMBING FIXTURE SCHEDULE BELOW
K 24	TABLE BURNER	BUHEUNG SAFE INC	BH-5000	40					8K	

PLUMBING FIXTURE SCHEDULE

ITEM	FIXTURE	HOT WATER	COLD WATER	WASTE	VENT	INDIRECT WASTE	*DESCRIPTION
WC-1	ADA WATER CLOSET	–	3/4"	4"	2"	–	AMERICAN STANDARD 2835.128 "CADET 3 FLOWISE" 1.28 GPF FLOOR MOUNTED VITREOUS CHINA SIPHON JET ACTION, 16-1/2" HIGH ELONGATED BOWL, FOR HANDICAP USE, CLOSE-COUPLED TANK, OLSONITE 95CC SOLID PLASTIC OPEN-FRONT WHITE SEAT LESS COVER, BRASSCRAFT ANGLE STOP AND SUPPLY.
WC-2	WATER CLOSET	–	3/4"	4"	2"	–	AMERICAN STANDARD "CADET PRO" 215CB.104, ELONGATED TOILET, 1.28 GPF, FLOOR MOUNTED VITREOUS CHINA, SIPHON JET ACTION, 15" HIGH, CLOSE-COUPLED TANK, OLSONITE 95CC SOLID PLASTIC OPEN-FRONT WHITE SEAT LESS COVER, BRASSCRAFT ANGLE STOP AND SUPPLY.
U-1	URINAL	–	1¼"	2"	1½"	–	AMERICAN STANDARD 6590.503 "WASHBROOK FLOWISE" 0.125 GPF ULTRA HIGH EFFIENCY, WALL HUNG VITREOUS CHINA WASHOUT FLUSH ACTION WITH FLUSHING RIM, EXPOSED MANUAL FLUSH VALVE WITH VACUUM BREAKER.
L-1	LAVATORY	1/2"	1/2"	2"	1½"	–	AMERICAN STANDARD 0476.028 "AQUALYN", 20"x17" VITREOUS CHINA OVAL OVER-COUNTER MOUNT, SELF-RIMMING. ZURN #Z86100-XL-CP4 METERING MIXING FAUCET WITH 0.5 GPM, (PROVIDE THERMOSTATIC MIXING VALVE: ZURN ZW1070XL SET 105F) CHROME PLATED GRID DRAIN AND TAILPIECE, 17 GAUGE CHROME PLATED TUBULAR BRASS P-TRAP, BRASSCRAFT R3712A ANGLE STOPS AND SUPPLIES, COVER HOT WATER PIPE, TRAP, AND DRAIN PIPING WITH INSULATION TO PROTECT THE HANDICAPPED. (A) (B)
FS-1	FLOOR SINK	–	–	2"	1½"	–	ZURN #Z1902, 12"x12"x10" DEEP, ENAMELED CAST IRON BODY, SQUARE, SLOTTED, SEEPAGE FLANGE, MEDIUM DUTY HALF GRATE, NO. 1001 SEDIMENT BUCKET AND DOME BOTTOM STRAINER.
FD-1	FLOOR DRAIN	–	1/2"	2"	1½"	–	ZURN #FD-2280-ST, WITH 6" ROUND NICKEL BRONZE STRAINER, CAST-IRON BODY WITH 2" BOTTOM OUTLET, INVERTIBLE MEMBRANE CLAMP, ADJUSTABLE COLLAR WIHT SEEPAGE SLOTS AND TRAP PRIMER CONNECTION.
TP-1	TRAP PRIMER	–	1/2"	–	–	–	MIFAB #MR-500 BRASS BODY, ADJUSTABLE TRAP PRIMER VALVE, COMPLETE WITH MI-DU DISTRIBUTION UNIT, WITH ½" TYPE "L" COPPER TO EACH RECEPTOR. INSTALL PER MANUFACTURER'S RECOMMENDATIONS BEHIND ACCESS PANEL WITH SHUT-OFF VALVE.
WHA-1	WATER HAMMER ARRESTOR	–	1/2"	–	–	–	ZURN "SHOCKTROL" #Z-1700 SERIES. INSTALL BEHIND ACCESS PANEL PER MANUFACTURER'S RECOMMENDATIONS.
CP-1	CIRCULATING PUMP	–	3/4"	–	–	–	BELL & GOSSETT, XYLEM NBF-25, IN-LINE HOT WATER RECIRCULATION PUMP, 3-SPEED, CAPABLE OF 5 GPM AT 12 FT OF HEAD, 120V-1PH, 125 WATTS, 11 LBS, WITH "TC-1" TIMER AND AQS-3/4 AQUASTAT
WH-1	WATER HEATER	1½"	1½"	–	–	3/4"	AMERICAN WATER HEATERS, BCG3-100T199-6N, 199,000 BTUH, 100 GALLON TANK, 191 GPH RECOVERY RATE AT 100°F TEMP RISE, 28"ø x 70"HT, 1390 LBS OPERATING WEIGHT
ET-1	EXPANSION TANK	–	3/4"	–	–	–	AMTROL THERM-X-TROL, ST-12, 4.4 GAL. 11"ø x 15"HT, SHIPPING WEIGHT 9 LBS. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS. 1"x22 GA. STRAP TO WALL.
GI-1	GREASE INTERCEPTOR	–	–	4"	2"	–	JENSEN JP1000G, 1,000 GAL CAPACITY, PRECAST CONCRETE DOUBLE COMPARTMENT WITH INTERNAL CAST IRON PIPING, FRAMES, MANHOLES, AND JENSEN SAMPLE BOX COVERS (9)

NOTES:

1. THE ABOVE ITEMS SHALL BE PROVIDED AND INSTALLED IN FULL ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. COORDINATE LOCATION AND ARRANGEMENT OF ACCESSIBLE FIXTURES WITH THE ARCHITECTURAL PLANS.

* MAKE & MODEL CAN BE CHANGEABLE TO APPROVED EQUAL ONE.

COLD WATER PIPE SIZING CALCULATION

	P.S.I. LOSSES	P.S.I. LEFT
P.S.I. AVAILABLE AT THE STREET (79 MIN/85 MAX)	79	–
P.S.I. LOSS THRU (E) 2" METER (50 GPM)	1.0	78.0
P.S.I. LOSS THRU (E) 2" PRESSURE REDUCING VALVE	8	70.0
LOSS DUE TO BUILDING HEIGHT = 14 FT. X .433	6	65.0
RESIDUAL P.S.I. REQUIRED FOR FIXTURE (FLUSH VALVE)	30	34.0
P.S.I AVAILABLE FOR FRICTION LOSS	–	34.0

AVAILABLE P.S.I. / LENGTH OF RUN = 34.0 x 100 / 160 FT. + 20% (= 192 FT) = SYSTEM SIZED ON 17.7 LOSS PER 100 FT

COLD WATER PIPING SIZED FOR: 8 F.P.S. MAX. VELOCITY

HOT WATER PIPING SIZED FOR: 5 F.P.S. MAX. VELOCITY

PIPE SIZE	G.P.M.	CW F.U. (FT)	CW F.U. (FV)	G.P.M.	HW F.U.
1/2"	4	4	–	3	3
3/4"	12	16	–	7	8
1"	20	30	–	12	16
1-1/4"	31	56	14	19	28
1-1/2"	44	103	35	27	46
2"	76	254	132	48	119

WATER HEATER SIZING CALCULATION

EQUIP#	FIXTURE	TEMP °F	QT'Y & DEMAND	TOTAL
K14	DISHWASHER	120°	1 @ 23 GPH	23 GPH
K15	RINSE SINK	120°	1 @ 5 GPH	5 GPH
K1/B5	HAND SINK	105°	4 @ 5 GPH	20 GPH
B4	BAR WORKSTATIONS	120°	1 @ 5 GPH	5 GPH
K13/B3	3-COMPARTMENT UTENSIL SINK	120°	3 @ 42 GPH	126 GPH
K19	MOP SINK	120°	1 @ 15 GPH	15 GPH
L-1	LAVATORY	105°	4 @ 5 GPH	20 GPH
			TOTAL = 214 GPH	

214 GPH x 90°F (TEMP RISE) x 8.33 LBS / 0.85 = 188,748 BTUH REQUIRED
199,000 WATER HEATER SPECIFIED

PLUMBING DRAWING LIST

DWG NO.	TITLE
P-1	PLUMBING LEGEND, NOTES & SCHEDULES
P-2	PLUMBING FLOOR PLAN – WASTE & VENT
P-3	PLUMBING FLOOR PLAN – WATER
P-4	PLUMBING FLOOR PLAN – GAS
P-5	PLUMBING DETAILS

GAS LOAD CALCULATION

1. GAS PIPING IS SIZED PER 2015 IPC TABLE 402.4(2) (LOW PRESSURE) SCHEDULE 40 METALLIC PIPE
2. GAS DEMAND AND TOTAL DEVELOPED LENGTH:

GAS TYPE: NATURAL
INLET PRESSURE: LESS THAN 2 PSI
PRESSURE DROP: 0.5 IN. W.C.
SPECIFIC GRAVITY: 0.60

GAS LOAD: WATER HEATER = 199 CFH
KITCHEN COOK EQUIPMENT = 161 CFH
TABLE BURNER (8.0x40) = 320 CFH
AIR CONDITIONING UNIT = 550 CFH
MAKE-UP AIR UNIT = 910 CFH
TOTAL LOAD = 2140 CFH

TOTAL DEV. LENGTH TO METER (PIPE RUN) = 150 FEET

PLUMBING GENERAL NOTES

1. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, PRIOR TO THE START OF ANY TRENCHING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
2. EXACT LOCATIONS AND MOUNTING HEIGHTS OF PLUMBING FIXTURES SHALL BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS AND THE KITCHEN DRAWINGS.
3. SEE ARCHITECTURAL DRAWINGS FOR ACCESSIBLE FIXTURE LOCATIONS AND MOUNTING HEIGHTS. (INSULATE ALL EXPOSED HOT WATER AND DRAIN PIPING BELOW HANDICAP LAVATORIES AND SINKS WITH INSULATING TAPE AND OFFSET P-TRAP AGAINST WALL. ALSO, ALL FLUSH VALVES SHALL BE TO WIDE SIDE OF STALL.)
4. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING. NO WATER OR DRAIN PIPING PERMITTED OVER OR UNDER ELECTRICAL PANELS.
5. ALL CONDENSATE DRAIN PIPING ON ROOF SHALL BE TYPE "M" COPPER STRAPPED ONTO ERICO PIPE PIERS. PIPE PIERS SHALL BE SET AT 6'-0" O.C. AND CONDENSATE DRAIN PIPING SHALL BE SLOPED TO AND TERMINATED AT AN APPROVED RECEPTOR.
6. ALL CONDENSATE PIPING IN ATTIC SPACES SHALL BE INSULATED WITH 3/4" INSULATION.
7. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
8. ALL PLUMBING FIXTURE VENTS TO TERMINATE A MIN. OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM, OR 3 FEET ABOVE, ANY OUTSIDE AIR INTAKES.
9. ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
10. UNIONS SHALL BE PROVIDED AND INSTALLED AFTER EACH SCREW-TYPE VALVE AND PRIOR TO EQUIPMENT CONNECTIONS.
11. BEFORE FABRICATION OR INSTALLATION CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND EQUIPMENT PROVIDED UNDER ANOTHER SECTION OF SPECIFICATIONS. EXACT ROUGH-IN LOCATIONS AND REQUIREMENTS SHALL BE COORDINATED IN FIELD.
12. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR ALL POINTS OF CONNECTION WITH THE GENERAL CONTRACTOR AND OTHER TRADES PRIOR TO BID.
13. ALL WASTE AND VENT PIPING SHALL SLOPE AT 2% MIN. UNLESS OTHERWISE INDICATED.
14. ALL VALVES, TRAP PRIMER, WATER HAMMER ARRESTORS OR OTHER EQUIPMENT SHOWN IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
15. ALL LAVATORIES TO BE EQUIPPED WITH PRESSURE COMPENSATING FLOW CONTROL DEVICES RESTRICTING THE FLOW TO 0.5 GPM., FAUCET TEMPERATURE IS ALSO LIMITED TO NO MORE THAN 105°F.
16. WATER OR SOIL PIPE BELOW GRADE OUTSIDE SHALL HAVE MINIMUM COVER AS RECOMMENDED BY LOCAL AUTHORITIES.
17. ALL HOSE BIBBS SHALL BE INSTALLED 18" ABOVE FINISH FLOOR OR GRADE, UNLESS OTHERWISE NOTED.
18. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
19. ALL PLUGGED TEES AND PLUGGED WYES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
20. ASBESTOS OR HAZARDOUS WASTE: IT IS UNDERSTOOD AND AGREED THAT THIS CONTRACT DOES NOT CONTEMPLATE THE HANDLING OF ASBESTOS OR AND HAZARDOUS WASTE MATERIAL. IF ASBESTOS OR ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED, NOTIFY THE OWNER IMMEDIATELY. DO NOT DISTURB, HANDLE, OR ATTEMPT TO REMOVE.
21. CONNECTION BETWEEN INCOMPATIBLE MATERIALS ABOVE GRADE AND INSIDE BUILDING SHALL BE MADE WITH TWO (2) DIELECTRIC UNIONS SEPARATED BY A 12" SECTION OF RED BRASS PIPE.
22. ALL CUTTING OF EXISTING PAVINGS, WALKS AND/OR FLOORS SHALL BE BY MACHINE SAW CUTTING. HOLES FOR PIPING IN CONCRETE WALLS OR FLOORS SHALL BE DONE BY CORE DRILLING EQUIPMENT.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING AND REPAIRING ALL PAVED AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY HIS OPERATIONS.
24. ALL CONNECTIONS TO EXISTING SERVICES SHALL BE MADE SUCH THAT INTERRUPTION TIME WILL BE AS SHORT AS POSSIBLE. THE CONTRACTOR SHALL GIVE THE OWNER'S REPRESENTATIVE SUFFICIENT NOTICE OF SUCH INTERRUPTION AND THE ACTUAL SHUTDOWN TIME SHALL BE AT A TIME DESIGNATED BY THE OWNER'S REPRESENTATIVE.
25. COORDINATE LOCATION OF GAS & CONDENSATE CONNECTION ON AIR CONDITIONING UNITS WITH MECHANICAL CONTRACTOR FOR ROOF PENETRATION PRIOR TO INSTALLATION.
26. DURING THE PROGRESS OF WORK THE PLUMBING CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL CHANGES MADE IN THE PLUMBING SYSTEMS. THE RECORD DRAWING SHALL SHOW CHANGES IN MANUFACTURER (WITH NUMBERS AND TRADE NAMES). MATERIALS, SIZES, LOCATIONS AND HOOKUP POINTS. AS-BUILTS SHALL BE GIVEN TO THE OWNER'S CONSTRUCTION MANAGER AT COMPLETION OF JOB.
27. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL CODES, RULES, AND REGULATIONS GOVERNING THIS PROJECT AS SET FORTH BY THE LOCAL ADMINISTRATIVE AUTHORITY.
28. BEFORE ANY USE OF WATER SYSTEM IS MADE FOR DOMESTIC PURPOSES, IT SHALL BE STERILIZED BY SLOWLY FILLING THE SYSTEM WITH A WATER-CHLORINE SOLUTION CONTAINING AT LEAST FIFTY (50) PPM OF CHLORINE, AND THE SYSTEM OR PART THEREOF SHALL BE VALVED OFF AND ALLOWED TO STAND FOR TWENTY FOUR (24) HOURS; OR, THE SYSTEM OR PART THEREOF SHALL BE FILLED WITH A WATER-CHLORINE SOLUTION CONTAINING AT LEAST TWO HUNDRED (200) PPM OF CHLORINE AND ALLOWED TO STAND FOR THREE (3) HOURS. FOLLOWING THE ALLOWED STANDING TIME, THE SYSTEM SHALL BE FLUSH WITH CLEAN POTABLE WATER UNTIL THE CHLORINE RESIDUAL IN THE WATER COMING FROM THE SYSTEM DOES NOT EXCEED THE CHLORINE RESIDUAL IN THE FLUSHING WATER. THIS PROCEDURE OF FLUSHING THE SYSTEM SHALL BE REPEATED IF IT IS SHOWN BY BACTERIOLOGICAL EXAMINATION MADE BY AN APPROVED AGENCY THAT CONTAMINATION PERSIST IN THE SYSTEM.
29. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PROPER ACCESS PANEL SELECTION AND APPLICATION.
30. ALL ELECTRICAL DEVICES, WIRING AND CONDUITS, ETC., SERVING PLUMBING FIXTURES, INCLUDING BUT NOT LIMITED TO SENSOR OPERATED FAUCETS AND FLUSH VALVES SHALL BE INSTALLED RECESSED, PROVIDED WITH REQUIRED ACCESS PANEL AND COVER. COORDINATE WITH ARCHITECT FOR INSTALLATION LOCATION, DIMENSION AND THE FINISH COLOR OR MATERIAL OF THESE PANELS.
31. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMENDED BY THE INSPECTING AUTHORITY: 2015 INTERNATIONAL PLUMBING CODE, 2015 INTERNATIONAL BUILDING CODE, 2015 INTERNATIONAL MECHANICAL CODE, 2015 INTERNATIONAL FUEL GAS CODE, 2015 INTERNATIONAL ENERGY CONSERVATION CODE.

GRAVITY GREASE INTERCEPTOR SIZING

(BASED ON DFU'S PER 2015 UPC TABLE 703.2 & 1014.3.6)

DFU'S	INTERCEPTOR VOLUME (GALLONS)	FIXTURE TYPE	QUANTITY	TRAP SIZE	DFU PER FIXTURE	TOTAL DFU
8	500	3-COMP. SINK	3	2"	4	12
21	750	BAR WORKSTATIONS	1	2"	2	2
35	1,000	MOP SINK	1	3"	3	3
90	1,250	HAND SINK	4	1¼"	1	4
172	1,500	RINSE SINK	1	2"	2	2
216	2,000	DISH WASHER	1	2"	3	3
307	2,500	FLOOR DRAIN	4	2"	2	8
342	3,000					
428	4,000	TOTAL DRAINAGE FIXTURE UNITS				34

PLUMBING LEGEND

SYMBOL	DESCRIPTION	ABBREV.	DESCRIPTION
——W——	SANITARY SEWER ABOVE GRADE OR FLOOR	ABV	ABOVE
——W——	SANITARY SEWER BELOW GRADE OR FLOOR	ABV CLG	ABOVE CEILING
——(E)W——	EXISTING SANITARY SEWER	AFF	ABOVE FINISHED FLOOR
——GW——	GREASE WASTE ABOVE GRADE OR FLOOR	AP	ACCESS PANEL
——GW——	GREASE WASTE BELOW GRADE OR FLOOR	BEL	BELOW
——(E)GW——	EXISTING GREASE WASTE	CD	CONDENSATE
——CWV——	COMBINATION WASTE AND VENT ABOVE GRADE OR FLOOR	CFH	CUBIC FEET PER HOUR
——CWV——	COMBINATION WASTE AND VENT BELOW GRADE OR FLOOR	CFM	CUBIC FEET PER MINUTE
——PD——	PUMP DISCHARGE LINE	CI	CAST IRON
——D——	INDIRECT DRAIN	CLG	CEILING
——CD——	CONDENSATE DRAIN	CO	CLEANOUT
——ED——	EMERGENCY DRAIN	COTG	CLEAN OUT TO GRADE
----------	SANITARY VENT ABOVE GRADE OR FLOOR	CW	COLD WATER
--------V--------	SANITARY VENT BELOW GRADE OR FLOOR	D	DRAIN
-------(E)V-------	EXISTING SANITARY VENT	DN	DOWN
—— – ——	DOMESTIC COLD WATER ABOVE GRADE OR FLOOR	DW	DIRECT WASTE
——CW——	DOMESTIC COLD WATER BELOW GRADE OR FLOOR	(E)	EXISTING
——(E)CW——	EXISTING DOMESTIC COLD WATER	EF	EXHAUST FAN
—— – – ——	DOMESTIC HOT WATER ABOVE GRADE OR FLOOR	FCO	FLOOR CLEAN OUT
——HW——	DOMESTIC HOT WATER BELOW GRADE OR FLOOR	FLR	FLOOR
——(E)HW——	EXISTING DOMESTIC HOT WATER	FPM	FEET PER MINUTE
—— – – – ——	HOT WATER RETURN ABOVE GRADE OR FLOOR	FU	FIXTURE UNITS
——HWR——	HOT WATER RETURN BELOW GRADE OR FLOOR	FW	FILTERED WATER
——FW——	FILTERED WATER	G	GAS
——TW——	TEMPERED WATER	GC	GAS COCK
——TWR——	TEMPERED WATER RETURN	GPH	GALLONS PER HOUR
——G——	GAS – LOW PRESSURE	GPM	GALLONS PER MINUTE
——(E)G——	EXISTING GAS – LOW PRESSURE	GPR	GAS PRESSURE REGULATOR
——MPG——	GAS – MEDIUM PRESSURE	HDR	HEADER
——(E)MPG——	EXISTING GAS – MEDIUM PRESSURE	HW	HOT WATER
	PIPE DROP	HWR	HOT WATER RETURN
	PIPE RISE	IE	INVERT ELEVATION
	RISER OR DROP	IW	INDIRECT WASTE
	BRANCH – TOP CONNECTION	MPG	GAS-MEDIUM PRESSURE
	BRANCH – BOTTOM CONNECTION	NIC	NOT IN CONTRACT
	UNION	POC	POINT OF CONNECTION
	CAP	PRESS	PRESSURE
	VALVE IN RISER	PRV	PRESSURE REDUCING VALVE
	GATE VALVE OR SHUT-OFF VALVE	V	VENT
	GAS COCK OR BALL VALVE	VBF	VENT BELOW FLOOR
	PRESSURE GAUGE WITH GAUGE COCK	VTR	VENT THRU ROOF
	WATER HAMMER ARRESTOR	W	WASTE
	TRAP PRIMER	WHA	WATER HAMMER ARRESTOR
	CHECK VALVE	WCO	WALL CLEANOUT
	SOLENOID VALVE		
	FLOOR CLEANOUT OR CLEANOUT TO GRADE		
	CLEANOUT IN YARD BOX – TRAFFIC WEIGHT		
	WALL CLEANOUT		

PIPE MATERIAL SCHEDULE

AG: ABOVE GRADE
BG: BELOW GRADE

SERVICES		PIPE MATERIALS: CI. NO-HUB	ABS PLASTIC SCH. 40	COPPER DWV	SCH 40 BLACK STEEL	SCH 40 GALV. STEEL	COPPER TYPE M	COPPER TYPE L	SCH 40 PVC	COPPER TYPE K	REMARKS
WATER	AG						●				IAPMO IS 3-93 E1
	BG									●	IAPMO IS 3-93 E1
WASTE	AG	●	●								IAPMO IS 6-95
	BG	●	●								IAPMO IS 6-95
VENT	AG	●	●								SEE WASTE PIPE
	BG	●	●								
INDIRECT WASTE	AG						●				CONDENSATE DRAIN
	BG										CONDENSATE DRAIN
GAS	AG				●						SIZES 2½" AND UP TO BE WELDED; EXPOSED TO BE GALVANIZED
	BG										CSST PIPE

FIXTURE UNIT COUNT

QTY	DESCRIPTION	CW FU	CW FU TOTAL	WASTE DFU	TOTAL WASTE DFU
4	HAND SINK	1	4	1	4
1	MOP SINK	3	3	3	3
3	3 COMP. SINK	4	12	4	12
1	BAR WORKSTATIONS	2	2	2	2
1	RINSE SINK	2	2	2	2
1	DISHWASHER	–	–	3	3
4	WATER CLOSET F.T.	2.5	10	4	16
4	LAVATORY	1	4	1	4
2	URINAL	4	8	2	4
6	MAKE-UP AIR UNIT	0.5	3	2	4
	TOTAL		48 (50 GPM)		50

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REVISIONS
1 CORRECTION SWMP 4-19-18
2 CORRECTION BLDG. 4-26-18

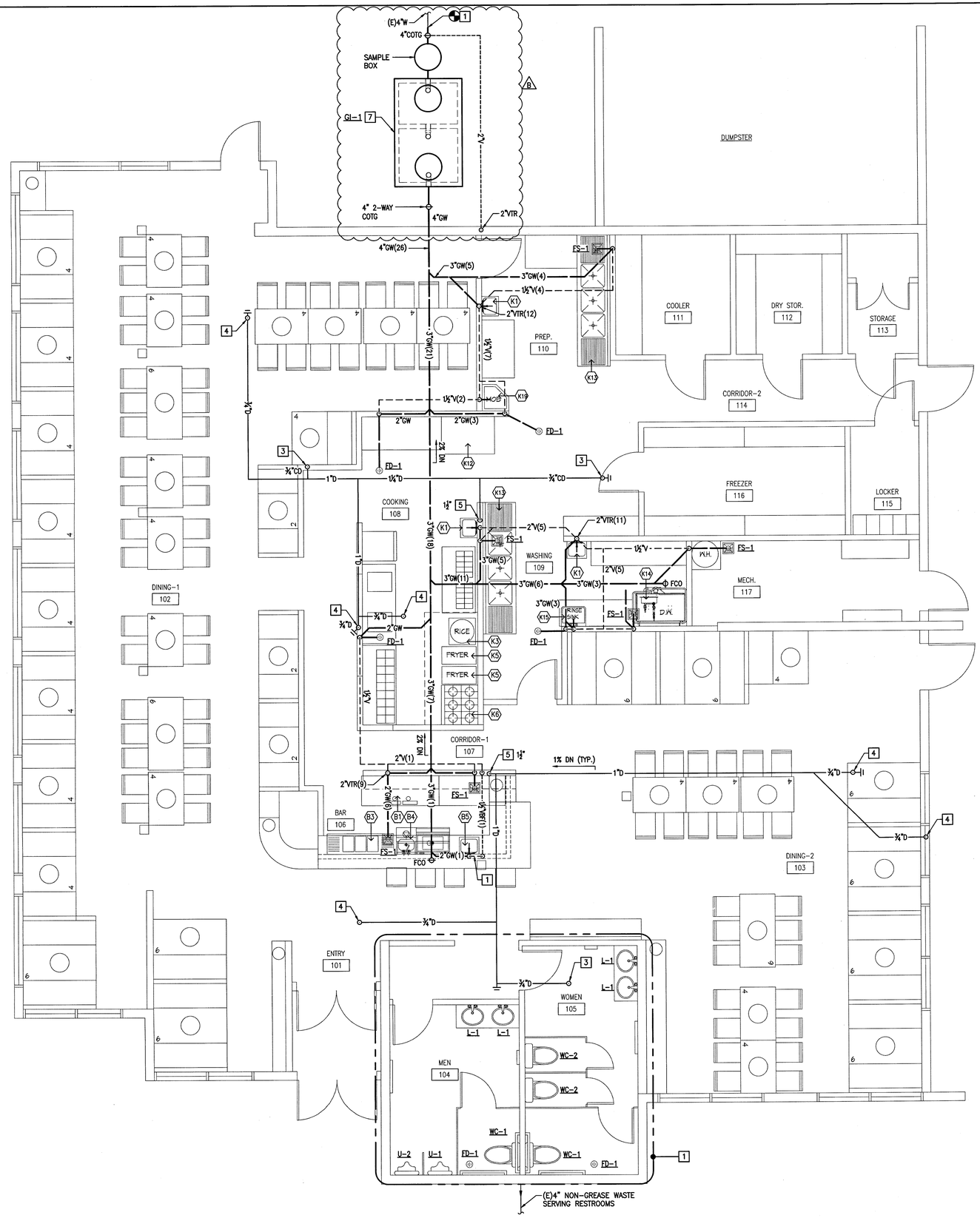
NO.	ISSUE	DATE

PROJECT DATA
PROJECT NUMBER :
DATE : 4-9-18
DRAWN BY : JK
CHECKED BY : ML
APPROVED BY :

SCALE

SHEET NAME
PLUMBING LEGEND, NOTES & SCHEDULES

SHEET NUMBER
P-1



KEYNOTES:

1. POINT OF CONNECTION TO (E) 4" WASTE.
2. FOR RESTROOMS: REPLACE ALL EXISTING PLUMBING FIXTURES WITH NEW ONES AND RECONNECT TO (E) SANITARY SEWER & VENT.
3. ¾" CONDENSATE DRAIN UP THRU ROOF TO AC UNIT WITH TRAP AND VENT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
4. ¾" DRAIN UP THRU ROOF TO MAKE-UP AIR UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
5. DRAIN DOWN IN WALL AND SPILL TO ABOVE FLOOR SINK WITH MINIMUM 1" AIR GAP.
6. PROVIDE VENT LOOP AS HIGH AS 6" ABOVE FLOOD LEVEL BEFORE ROUTING TO BELOW FLOOR.
7. 1000 GALLON PRECAST GREASE INTERCEPTOR UNDER GROUND WITH SAMPLE BOX. REFER DETAILS ON SHEETS P-5 AND A-4.4. (B)

GENERAL NOTES:

1. VERIFY EXACT LOCATION & SIZE OF EXISTING WASTE PIPES PRIOR TO INSTALLATION. CONTACT ARCHITECT OR MECHANICAL ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN THESE PLANS AND WHAT'S EXISTING ON THE JOB SITE.
2. ALL EXISTING PIPING SHOWN ON THIS DRAWINGS ARE CLOSE APPROXIMATIONS AND SHALL BE VERIFIED PRIOR TO INSTALLATION OR BID.
3. ALL PIPING SHOWN ON THIS DRAWING SHALL BE CONSIDERED NEW UNLESS NOTED OTHERWISE.

PLUBMING FLOOR PLAN - WASTE & VENT

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

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NO.	ISSUE	DATE
1	CORRECTION SWPPP	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

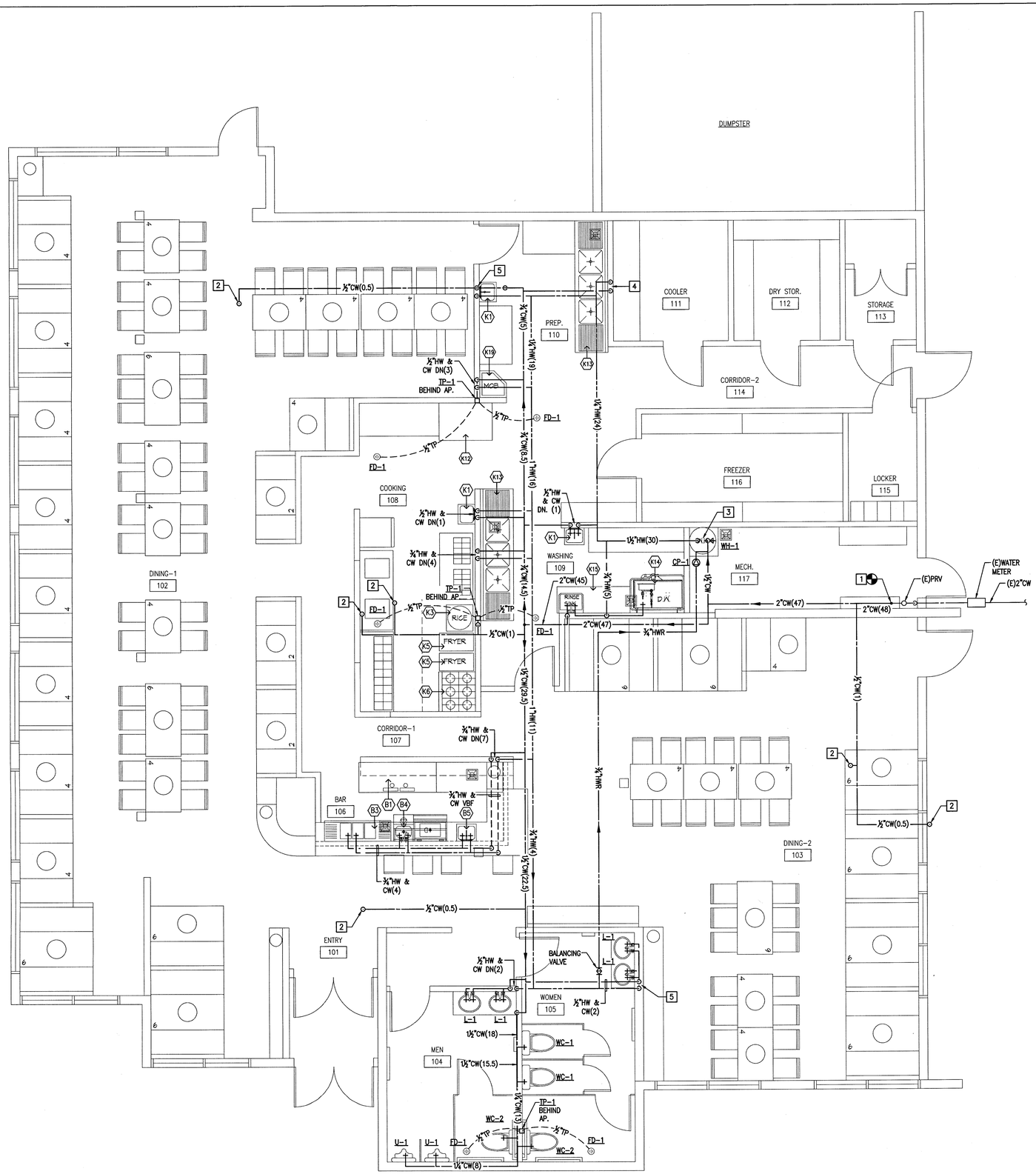
SCALE

SHEET NAME

PLUBMING FLOOR PLAN - WASTE & VENT

SHEET NUMBER

P-2



KEYNOTES:

1. POINT OF CONNECTION TO EXISTING 2" COLD WATER AT THIS LOCATION.
2. ¾" COLD WATER UP THRU ROOF TO MAKE-UP AIR UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
3. 1½" HW & CW DOWN TO WATER HEATER.
4. ¾" HW & CW DOWN IN WALL.
5. ½" HW & CW DOWN IN WALL.

GENERAL NOTES:

1. VERIFY EXACT LOCATION & SIZE OF EXISTING COLD WATER PIPING PRIOR TO INSTALLATION. CONTACT ARCHITECT OR MECHANICAL ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN THESE PLANS AND WHAT'S EXISTING ON THE JOB SITE.
2. ALL EXISTING PIPING SHOWN ON THIS DRAWINGS, ARE CLOSE APPROXIMATIONS & SHALL BE VERIFIED PRIOR TO INSTALLATION & OR BID.
3. ALL PIPING SHOWN ON THIS DRAWING SHALL BE CONSIDERED NEW UNLESS NOTED OTHERWISE.

PLUBMING FLOOR PLAN - WATER

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

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PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

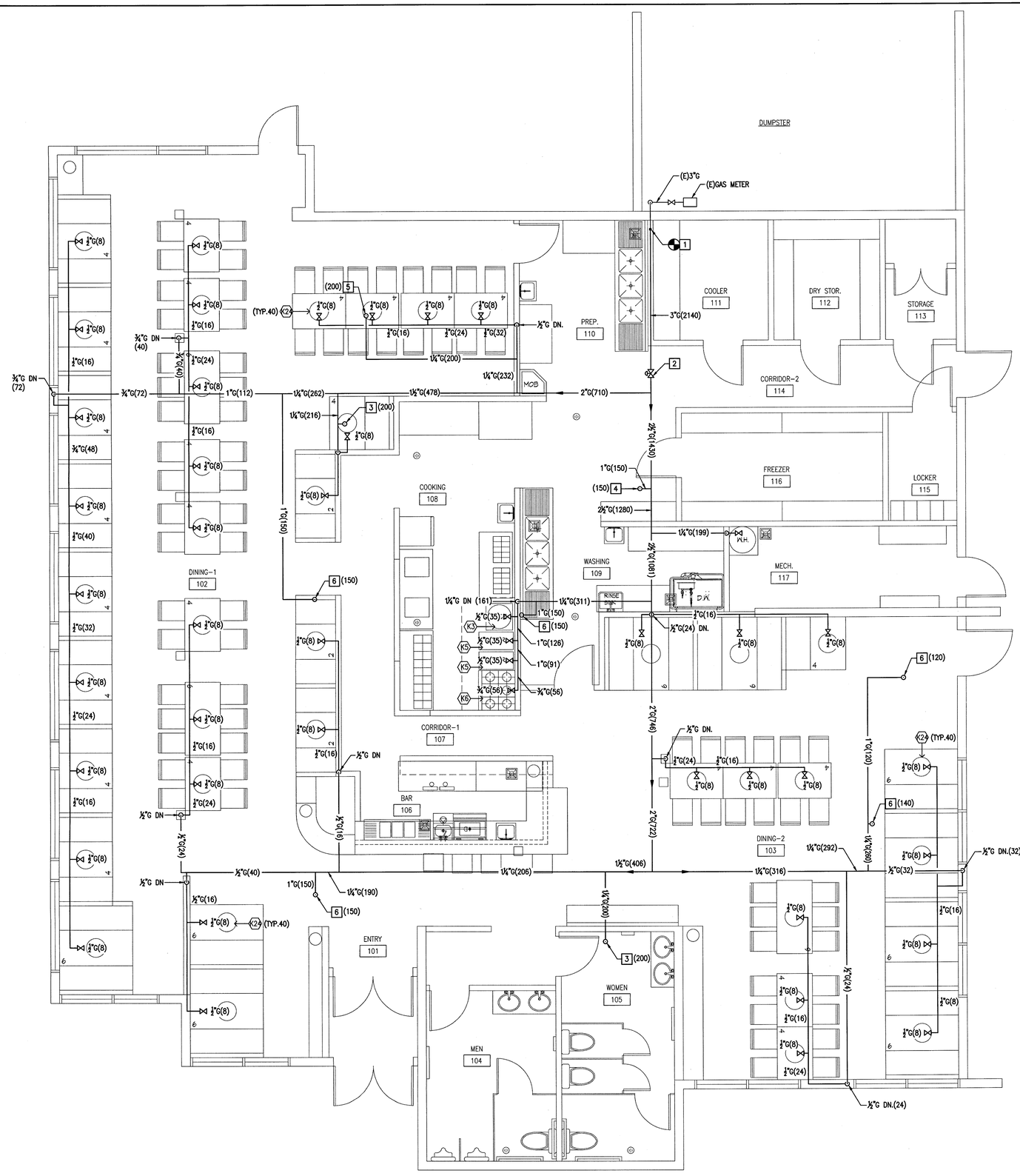
SCALE

SHEET NAME

PLUBMING FLOOR PLAN - WATER

SHEET NUMBER

P-3



KEYNOTES:

1. POINT OF CONNECTION TO EXISTING 3" GAS.
2. AUTOMATIC SOLENOID GAS SHUT-OFF VALVE IN ACCESSIBLE LOCATION. INTERLOCK WITH HOOD FIRE SUPPRESSION SYSTEM.
3. 1¼" GAS UP THRU ROOF TO AC UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
4. 1" GAS UP THRU ROOF TO AC UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
5. 1½" GAS UP THRU ROOF TO MAKE-UP AIR UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.
6. 1" GAS UP THRU ROOF TO MAKE-UP AIR UNIT. REFER TO MECHANICAL ROOF PLAN M-4 FOR CONTINUATION.

GAS NOTES:

1. GAS PIPING IS SIZED PER 2015 IPC TABLE 402.4(2) (LOW PRESSURE) SCHEDULE 40 METALLIC PIPE
2. GAS DEMAND AND TOTAL DEVELOPED LENGTH:

   GAS TYPE: NATURAL
   INLET PRESSURE: LESS THAN 2 PSI
   PRESSURE DROP: 0.5 IN. W.C.
   SPECIFIC GRAVITY: 0.60

   GAS LOAD:

WATER HEATER	=	199 CFH
KITCHEN COOK EQUIPMENT	=	161 CFH
TABLE BURNER (8.0x40)	=	320 CFH
AIR CONDITIONING UNIT	=	550 CFH
MAKE-UP AIR UNIT	=	910 CFH
TOTAL LOAD	=	2140 CFH

TOTAL DEV. LENGTH TO METER (PIPE RUN) = 150 FEET

GAS PIPE SIZING TABLE	
PIPE SIZE	CFH
1/2"	40
3/4"	83
1"	157
1-1/4"	322
1-1/2"	482
2"	928
2-1/2"	1480
3"	2610
4"	5330

GENERAL NOTES:

1. VERIFY EXACT LOCATION & SIZE OF EXISTING GAS METER & PIPING PRIOR TO INSTALLATION. CONTACT ARCHITECT OR MECHANICAL ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN THESE PLANS AND WHAT'S EXISTING ON THE JOB SITE.
2. ALL EXISTING PIPING SHOWN ON THIS DRAWING ARE CLOSE APPROXIMATIONS AND SHALL BE VERIFIED PRIOR TO INSTALLATION OR BID.
3. ALL PIPING SHOWN ON THIS DRAWING SHALL BE CONSIDERED NEW UNLESS NOTED OTHERWISE.

PLUBMING FLOOR PLAN - GAS

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

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Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE
1	CORRECTION SWRF	4-19-18
2	CORRECTION BLDG.	4-26-18

PROJECT DATA

PROJECT NUMBER :	
DATE :	4-9-18
DRAWN BY :	JK
CHECKED BY :	ML
APPROVED BY :	

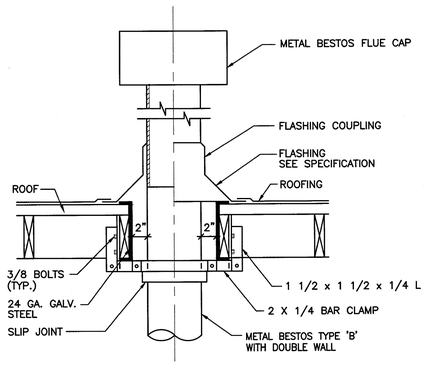
SCALE

SHEET NAME

PLUBMING FLOOR PLAN - GAS

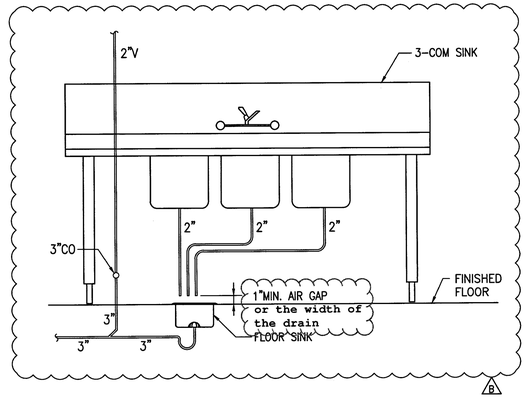
SHEET NUMBER

P-4



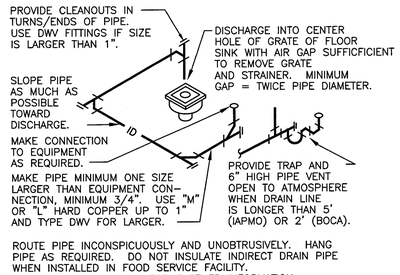
WATER HEATER FLUE THRU ROOF DETAIL

SCALE	
NONE	2



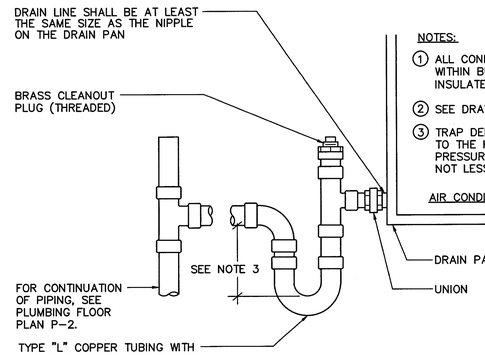
3-COMPARTMENT SINK DRAIN DETAIL

SCALE	
NONE	1



INDIRECT DRAIN INSTALLATION DETAIL

SCALE	
NONE	4

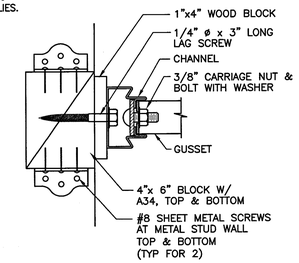


CONDENSATE DRAIN DETAIL

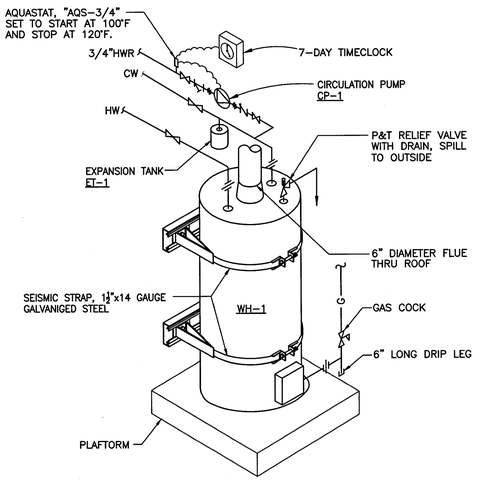
SCALE	
NONE	3

INSTALLATION NOTES:

1. MOUNT CHANNELS ON BLOCKING AS SHOWN.
2. INSTALL UPPER RESTRAINT 1/3 DOWN FROM TOP OF WATER HEATER AND LOWER RESTRAINT 4" ABOVE THE TOP OF CONTROLS.
3. INSTALL WATER HEATER TIGHT TO CHANNEL AND GUSSET ASSEMBLIES.



INSTALLATION TO METAL STUD WALL



GAS WATER HEATER DETAIL

SCALE	
NONE	5

DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
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SEAL

LICENSED PROFESSIONAL ENGINEER
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JOSEPH S. GABRIEL
STATE OF UTAH

18008

TITLE

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7157 S. State Street
Midvale, Utah, 84047

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SCALE

SHEET NAME

PLUMBING DETAILS

SHEET NUMBER

P-5

ELECTRICAL SPECIFICATIONS

GENERAL

1. CONFORM TO ALL APPLICABLE STATE, COUNTRY AND MUNICIPAL CODES AND ORDINANCES AND NEMA, UL., ANSI. STANDARDS, AND NATIONAL ELECTRICAL CODE (NEC 2011). WHERE PROVISIONS DO PERTINENT CODE ND STANDARDS CONFLICT WITH THIS SPECIFICATIONS, THE MORE STRINGENT PROVISIONS SHALL GOVERN.
2. PROVIDE ALL LABOR AND MATERIAL, NOT FURNISHED BY THE UTILITY COMPANY, REQUIRED TO RENDER SERVICE TO THE PROJECT FROM UTILITY COMPANY SERVICE POINT. VERIFY SERVICE CHANGES (E.G. EXCESS FACILITIES, CABLES) AND REQUIREMENTS, AND PAY ALL COSTS THEREOF, UNLESS SPECIFIED OTHERWISE. VERIFY CONSTRUCTION DETAILS OF CONDUIT AND CABLE DETAILS, AND SERVICE RELATED WORK WITH UTILITY COMPANY AND OBSERVE UTILITY COMPANY STANDARDS. UPON AWARD OF THE CONTRACT, NOTIFY THE UTILITY COMPANY AND SUPPLY THEM ESTIMATED COMPLETION DATE OF THE WORK AND DESIRED SERVICE DATE.
3. APPLY AND PAY FOR ALL PERMITS AND/OR ANY INSPECTIONS REQUIRED BY LEGAL AUTHORITIES.
4. COORDINATE ELECTRICAL WORK, AND EXISTING SYSTEM SHUTDOWNS A MINIMUM OF TWO (2) DAYS PRIOR TO COMMENCEMENT OF THE WORK, INCLUDING THE INFORMATION ON TYPE OF SERVICE, PLANNED TIME, AND ANTICIPATED LENGTH OF OUTAGE.
5. PRIOR TO SUBMITTING BID, SURVEY THE AREA WHERE THE NEW WORK WILL BE DONE FOR ANY EXISTING CONDITIONS WHICH MAY AFFECT OR BE AFFECTED BY THE WORK UNDER THIS SECTION. EXAMINE THE DRAWINGS AND SPECIFICATIONS OF ALL TRADES TO ESTABLISH THE SCOPE OF WORK TO BE PROVIDED UNDER THIS SECTION.
6. EXCERCISE EXTREME CARE TO INSURE PROTECTION OF EXISTING ELECTRICAL EQUIPMENT AND THE PREMISES DAMAGE. ASSUME COMPLETE RESPONSIBILITY FOR ANY AND ALL DAMAGE RESULTING FROM THE WORK
7. MANUFACTURE'S NAMES, PRODUCTS AND NUMBERS LISTED ON THE DRAWNGS OR IN THESE SPECIFICATIONS, ALONG WITH SPECIFIC DESCRIPTIONS IN THESE SPECIFICATIONS, SET THE STANDARD OF QUALITY AND PERFORMANCE. SELECT PRODUCTS OF ONE OF THE LISTED CATALOG ITEMS WHERE REQUIRED TO MEET SPECIFICATIONS. THE PHRASE "OR EQUAL BY" FOLLOWED BY MANUFACTURE'S PRODUCT SHALL MATCH THE PERFORMANCE, CONSTRUCTION, FIT AND FEATURE SPECIFIED.
8. PROVIDE BID BASED ON SPECIFIED MATERIAL AND EQUIPMENT. SUBMIT ANY PROPOSED SUBSTITUTIONS WITH BID ALONG WITH ALTERNATE PRICE. SUBSTITUTIONS OF SPECIFIED MATERIALS AND EQUIPMENT ARE SUBJECT TO THE APPROVAL OF THE ENGINEER.
9. PROVIDE ALL ELECTRICAL EQUIPMENT AND MATERIALS NEW AND FREE FROM DEFECTS AND OF RECENT MANUFACTURER.
10. AT THE CONCLUSION OF THE WORK, PROVIDE A SET OF RECORD REPRODUCIBLE ELECTRICAL CONTRACT DRAWINGS, SIGNED, AND DATED, INDICATING THE ACTUAL INSTALLATION OF THE ELECTRICAL WORK INCLUDING ALL REVISIONS BULLETINS, AND CHANGE ORDERS.
11. GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY THE OWNER.
12. VISIT THE AREA TO BE DETERMINE SCOPE AND EXISTING CONDITIONS.
13. VISIT THE AREA TO BE REMODELED TO DETERMINE SCOPE AND EXISTING CONDITIONS. ALL EQUIPMENT SHALL BE UL LISTED.

PRODUCTION AND EXECUTION

1. MAIN SWITCHBOARD
   - A. COMPLETE FACTORY ASSEMBLED, METAL ENCLOSED ASSEMBLY WITH LIFTING MEANS, CONSISTING OF THE REQUIRED NUMBER OF 90 INCH HIGH, SELF-SUPPORTED, VERTICAL SECTIONS, BOLTED TOGETHER TO FORM A FLOOR STANDING ASSEMBLY, FRONT AND REAR ALIGNED. FEEDER TERMINATION SUITABLE FOR BUS OR WIRE CONNECTIONS, AS INDICATED.
   - B. CODE DEVICE HANDLE HEIGHTS CONSIDERING INSTALLATION OF A 3 INCH HIGH CONCRETE BASE PAD.
   - C. RODENT PROOF VENTILATION AS REQUIRED TO MAINTAIN ALLOWABLE TEMPERATURE RISE AT RATED CAPACITY.
   - D. ANTI-TURN(TWO BOLT), SOLDERNESS , COPPER SADDLE TYPE INCOMING AND OUTGOING FEEDER TERMINALS.
   - E. NEMA 3R NON-WALK TYPE FOR OUTDOOR USE.
   - F. FULL HEIGHT VERTICAL WIRING COMPARTMENTS WITH HINGED PAN TYPE ACCESS DOORS, OR SCREWED ON PANS WITH CAPTIVE SCREWS, TOP AND BOTTOM WIRING COMPARTMENTS, CADMIUM PLATED HARDWARE AND CAPTIVE SCREWS.
   - G. FLAT ALUMINUM BUSSING, SILVER PLATED AT JOINTS, SIZED FOR 1,000 AMPERES PER SQUARE INCH, MOUNTED ON HIGH IMPACT, NONTRACKING INSULATORS BRACED FOR AVAILABLE FAULT CURRENT. LABEL BOARDS FOR SPECIFIED SHORT CIRCUIT RATING.
   - H. COMPRESSION TYPE BOLTS AT ALL BUS JOINTS USING A COMBINATION OF FLAT AND SPRING TYPE WASHERS.
   - I. FULL LENGTH ALUMINUM EQUIPMENT GROUND BUS 1/4 INCH BY 2 INCH SECURED AND BOUNDED TO BOARD, WITH TERMINALS FOR FEEDER GROUND CONNECTIONS.
   - J. FULLY RATED NEUTRAL BUS INSULATED FROM GROUND FOR ALL GROUNDED NEUTRAL BOARDS.
2. PANELBOARD:

   GALVANIZED SHEET CABINET, DEAD FRONT, FRONT ACCESSIBLE, SURFACE MOUNTED, FRONT TRIM PRIME COATED FOR FIELD PAINTING, FULL HEIGHT ALUMINUM BUS, A-B-C BUS ARRANGEMENT, LEFT TO RIGHT AND TOP BOTTOM, SOLDERLESS SADDLE TYPE LUGS SIZED FOR FEEDER, SOLID NEUTRAL BAR AND EQUIPMENT GROUND BUS, MINIMUM SHORT CIRCUIT RATING OF 10,000 AMPERES RMS SYMMETRICAL, HINGED LOCKABLE DOOR KEYED TO EXISTING PANELBOARD, VOLTAGE AND CURRENT RATING AS INDICATED ON THE DRAWINGS. PROVIDE TYPED PANEL SCHEDULE ON CLEAR PLASTIC COVER WITH INSTALLED INFORMATION. SIEMENS, GENERAL ELECTRIC, CUTLER HAMMER.
3. CIRCUIT BREAKERS:

   MODELED CASE, TRIP FREE, QUICK-MAKE, QUICK-BREAK, THERMAL MAGNETIC TYPE, BOLT-ON OR PLUGGED TO THE BUS, HANDLES CLEARLY INDICATING SIZE, AND TRIPPED POSITION, PERMANENT SCREWED ON OR RIVETED CIRCUIT NUMBERS ON ADJACENT TRIM, INTERRUPTING RATING NOT LESS THAN VALUE SPECIFIED FOR PANELBOARD, MANUFACTURERS SAME AS PANELBOARD.
4. CONDUIT:

   RIGID GALVANIZED STEEL, INTERMEDIATE STEEL, ELECTRIC METALLIC TUBING (EMT) OR MC CABLE FOR DRY CONCEALED LOCATIONS, EXPOSED LOCATIONS ABOVE 7 FEET FROM WALKING SURFACES. RIGID STEEL OR INTERMEDIATE STEEL ON EXTERIOR OR IN WET LOCATION, EXPOSED LOCATIONS WITHIN 7 FEET OF WALKING SURFACE. FOR ELECTRIC METALLIC TUBING (EMT) USE GRAND RING COMPRESSION TYPE FITTINGS INSULATED THROAT CONNECTORS FOR WET LOCATION, SETSCREW TYPE FITTINGS FOR DRY LOCATION, INDENTURE FITTINGS ARE NOT ACCEPTABLE. LIQUID-TIGHT FLEXIBLE STEEL CONDUIT FOR CONNECTIONS TO MOTORS. FITTING APPROVED FOR THE PURPOSE. ALLIED TUBE AND CONDUIT, TORRANCE TUBING OR O.Z. GEDNEY.
5. OUTLET AND JUNCTION BOXES:

   PRESSED STEEL, KNOCKOUT TYPE, WITH SCREW-ON COVERS OR PLASTER RINGS, HOT DIPPED GALVANIZED, WITH CADMIUM PLATED OR GALVANIZED MACHINE SCREWS. BOWERS, RACO OR STEEL CITY.
6. CONDUCTORS:

   COPPER, 600 VOLT INSULATION. THHN, THWN: DRY LOCATION, THWN: WET LOCATION, GENERAL CABLE, GENERAL ELECTRIC, ANNIZTER, OR OKONITE.
7. DISCONNECT SWITCHES:
   - A. HEAVY DUTY (HD) HORSEPOWER RATED, QUICK-MAKE, QUICK-BREAK, SAFETY TYPE, EXTERNALLY RATING. FUSED FOR FEEDER CIRCUIT PROTECTION, WITH UL REJECTION TYPE CLIPS. NONFUSED FOR MOTOR DISCONNECT WHERE INDICATED.
   - B. INCLUDE BYPASSABLE INTERLOCK, PADLOCK PROVISIONS, POSITIVE ON AND OFF INDICATION, MOLDED CASE BREAKER MECHANISM OR VISIBLE BLADES, SINGLE SWITCH MECHANISM TO PRECLUDE MECHANICAL SINGLE PHASING, SOLID NEUTRAL BAR FOR FOUR WIRE FEEDERS, COPPER CORE CU-AL TERMINALS, SPRING LOADED CLIPS WITH NON-CURRENT CARRYING SPRINGS. OPERATED, RATING, AND NUMBER OF POLES REQUIRED, CAPABLE OF SWITCHING 10 TIMES SWITCH.
   - C. IN SERVICE SWITCHBOARD, SWITCH TO BE APPROVED AS SERVICE MAIN.
8. FUSED, LOW VOLTAGE: PROVIDE NEC DIMENSIONS REJECTION TYPE FUSES AS FOLLOWS. 600 AMPS OR SMALLER: CLASS RK1, LOW PEAK DUAL ELEMENT WITH SEPARATE OVERLOAD AND SHORT CIRCUIT ELEMENTS UNLESS OTHERWISE NOTED.
9. LARGE JUNCTION AND PULL BOXES:

   GALVANIZED CODE GAUGE SHEET STEEL CONSTRUCTION, WITH FULL ACCESS SCREWED ON COVERS AND CADMIUM PLATED OR GALVANIZED MACHINE SCREWS, MINIMUM SIZE PER THE GOVERNING ELECTRICAL CODE OR AS NOTED ON DRAWINGS, WHICHEVER IS GREATER. FOR JUNCTION BOXES LARGER THAN 35 INCHES IN ANY DIMENSION, PROVIDE 3/4" DIAMETER STEEL PIPE CABLE SUPPORTS WITH FLANGED ENDS BOLTED TO BOX FRAME, AND WITH CONTINUOUS FIBER INSULATION SLEEVE SPACED ON 36 INCHES CENTER MAXIMUM.
10. DRY TYPE TRANSFORMER:

    UL LISTED DRY TYPE, RATING AS INDICATED, BUILT PER IEEE, ANSI, AND NEMA STANDARDS, UTILIZING GROUP III INSULATION, RATED AT 220 DEGREE C. NORMAL LIFE EXPECTANCY AND WINDING TEMPERATURE RISE NOT EXCEEDING 150 DEGREE C IN A MAXIMUM AMBIENT OF 40 DEGREE C WITH CONTINUOUS RATED NAME PLATE LOAD CONNECTED TO THE SECONDARY SIDE, AT RATED VOLTAGE. TWO 2-1/2 PERCENT TAPS EACH, ABOVE AND BELOW NORMAL. BIL RATING: 10KV.
11. INSTALLATION:
    - A. CONDUIT: CAP OPEN ENDS OF CONDUIT UNTIL READY TO PULL IN CONDUCTORS. PROVIDE A PULL WIRE IN ALL EMPTY CONDUITS. SUPPORT CONDUITS ONE INCH AND LARGER ON 10 FOOT INTERVALS, SMALLER THAN ONE INCH ON 7 FOOT INTERVALS, ALL SIZES WITHIN 3 FEET OF CONNECTION TO BOS OR FITTINGS, FLEX CONDUIT ON 4 FOOT INTERVALS AND WITHIN 1 FOOT OF OUTLET BOX OR FITTING.
    - B. BOXES AND DEVICES: INSTALL ALL OUTLETS AND BOXES IN READILY ACCESSIBLE LOCATIONS. MINIMUM BOX SIZE TO BE 4 INCHES SQUARE BY 1-1/2 INCHES DEEP. INSTALL ALL DEVISES VERTICALLY GROUND SLOT FOR RECEPTACLES AT TOP.
    - C. CONDUCTORS: ALL CONDUCTORS IN CONDUIT, NO.12 AWG MINIMUM FOR POWER. DO NOT LOOP THROUGH RECEPTACLE TERMINALS; CONNECT BY MEANS OF CONDUCTOR TAPS JOINED TO BRANCH CIRCUIT CONDUCTORS. FOR JOINTS, SPLICES AND TAPS IN CONDUCTORS NO.8 AWG AND SMALLER, USE SOLDERLESS CONNECTORS OF THE STEEL SPRING WITH SEMI-RIGID INSULATING SHELL OR SETSCREW TYPE, TAPED. FOR CONDUCTORS NO.6 AWG AND LARGER, USE COPPER OR COPPER CORE BOLTED SADDLE CONNECTORS AND LUGS. NO.4 AWG AND LARGER, USE LUGS WITH TWO BOLTS THROUGH TONGUE MINIMUM.
    - D. EQUIPMENT: MAINTAIN 3 FEET MINIMUM OR CODE REQUIRED IN FRONT OF PANELBOARDS, MOTOR CONTROLLERS, ETC. INSTALL PANELBOARDS WITH TOP AT 78 INCHES FROM FINISHED FLOOR. PROVIDE SUPPORT CHANNELS SPANNING STRUCTURAL MEMBERS WHERE EQUIPMENT DOES NOT SPAN MEMBERS.
    - E. GROUNDING SYSTEM: PROVIDE SERVICE GROUNDS WITH RESISTANCE TO GROUND OF THREE OHMS OR LESS AND IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. MAINTAIN EQUIPMENT GROUND CONTINUITY THROUGH ENTIRE SYSTEM INCLUDING RACEWAYS, WIREWAYS, EQUIPMENT ENCLOSURES, AND DEVICES. BOND FROM BUILDING COLD WATER MAIN PIPE TO SERVICE GROUND WITH INSULATED GROUND CONDUCTOR IN STEEL CONDUIT. EXTEND NEUTRAL AND EQUIPMENT GROUND FROM SERVICE SWITCHBOARD (AHEAD OF SERVICE MAIN) WITH INSULATED CONDUCTOR IN STEEL CONDUIT AND BOND TO SERVICE GROUND. INSTALL CONTINUOUS GROUNDING CONDUCTORS WITHOUT SPLICE, WHERE JOINTS ARE REQUIRED, PROVIDING COMPLETED JOINT EQUIVALENT TO OR LARGER THAN CONDUCTOR.
    - F. GROUND ELECTRODES: PROVIDE, WHERE INDICATED, DRIVEN GROUND RODS OF CONE POINTS ELECTROLYTIC COPPER BONDED TO CARBON STEEL CORE, SECTIONAL TYPE WHERE OVER 10 FEET IN LENGTH, DIE STAMPED NEAR TYPE WITH NAME OR TRADEMARK OF THE MANUFACTURER AND LENGTH OF ROD IN FEET: DIAMETER SUFFICIENT TO PERMIT DRIVING WITHOUT DAMAGE, BUT NOT LESS THAN 5/8 INCH. BOND GROUND WIRES TO ROD WITH EXOTHERMIC WELD OR UL APPROVED COMPRESSION CONNECTION.
    - G. NOISE AND VIBRATION: CONNECT TO MOTORS AND ALL ISOLATED OR VIBRATING EQUIPMENT WITH 24 INCHES MINIMUM LENGTH OF LIQUID TIGHT FLEXIBLE CONDUIT, SLACK CONNECTED. RUN CONDUITS TO MOTORS AND LENGTH OR FLOOR RISERS OVER 2 FEET HIGH, PROVIDE UNISTRUT OR PIPE BRACE TO FLOOR OR STRUCTURE.
    - H. PROTECTION AND CLEANING: COVER ALL EQUIPMENT. COVER OUTLET BOXES WITH CARDBOARD. PLUG OR CAP CONDUIT ENDS UNTIL CONDUCTORS ARE PULLED.
    - I. IDENTIFICATION AND NAMEPLATES: PROVIDE LAMINATED ENGRAVED PLASTIC NAMEPLATES FOR PANELBOARDS.
    - J. TEST: TIGHTEN ALL BOLTED CONNECTIONS AND MEGGER ALL FEEDERS AND MOTOR CIRCUITS. TEST ALL CONDUCTORS FOR CONTINUITY, SHORT CIRCUIT AND IMPROPER GROUND.

ELECTRICAL SYMBOLS

A,1-3,5 — HOMERUN TO PANEL "A" THREE WIRE CIRCUIT 1-3, TWO WIRE CIRCUIT 5

CONDUIT CONCEALED IN WALL OR ABOVE CEILING

EXPOSED CONDUIT — CONDUIT TURNED DOWN — EXISTING CONDUIT

CONDUIT TURNED UP — CONDUIT STUBBED & CAPPED — FLEXIBLE

1/2" C- 2# 12	#10 1/2" C- 2# 10	#8 3/4" C- 2# 8
1/2" C- 3# 12	#10 1/2" C- 3# 10	#8 3/4" C- 3# 8
1/2" C- 4# 12	#10 3/4" C- 4# 10	#8 3/4" C- 4# 8
3/4" C- 5# 12	#10 3/4" C- 5# 10	#5 1" C- 5# 8
3/4" C- 6# 12	#10 1" C- 6# 10	#8 1" C- 6# 8
3/4" C- 9# 12		

SERVICE SWITCHBOARD OR DISTRIBUTION SWITCHBOARD. +72" TO HIGHEST DEVICE

BRANCH CIRCUIT PANELBOARD, +72" TO HIGHEST DEVICE

MOTOR OUTLET PROVIDE WP FLEXIBLE CONNECTION

NON-FUSED DISCONNECT SWITCH, 30A, 3P, UON

60/40 — FUSED DISCONNECT SWITCH, 60A SWITCH WITH 40A FUSES SHOWN

MAGNETIC MOTORS STARTER, SIZE 1 UON

COMBINATION MAGNETIC MOTOR STARTER AND FUSED DISCONNECT SWITCH

(A) — LIGHTING FIXTURE IDENTIFICATION — (1) REFERENCE TO NOTE #1

+15" — MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE OF EQUIPMENT

MH=15" — MOUNTING HEIGHT FROM FINISHED FLOOR TO BOTTOM OF OUTLET OR EQUIPMENT

(J) — JUNCTION BOX SIZE AS NOTED OR REQUIRED

DUPLEX RECEPTACLE. NEMA 5-20R, +18" — DOUBLE DUPLEX RECEPTACLE

SPLIT-WIRED RECEPTACLE — DUPLEX FLUSH FLOOR RECEPTACLE

GFI — DUPLEX RECEPTABLE. NEMA 5-20R, GROUND FAULT CURRENT INTERRUPTER TYPE +42"

DOWNLIGHT

FLUOROSCENT FIXTURE — STRIP FLUORESCENT FIXTURE

EMERGENCY OR NIGHT LIGHT — EMERGENCY BATTERY PACK

EXIT LIGHTING FIXTURE; SHADED PORTION INDICATEDS ILLUMINATION FACE. DIRECTIONAL ARROW AS INDICATED ON PLANS (+7'-6" ON WALL MOUNTED UNITS UON)

S — SINGLE POLE TOGGLE SWITCH, +42", UON. SUBSCRIPT LETTERS INDICATE THE FOLLOWING:
2-2: POLE m: MANUAL MOTOR STARTER 3-3: WAY P: WITH PILOT LIGHT
4-4: WAY K: KEY OPERATED D: DIMMER OV: OVERRIDE
OC: OCCUPANY SENSOR WITH ON/OFF SWITCH R: RELAY

MOLDED CASE CIRCUIT BREAKER — SWITCH AND FUSES

TELEPHONE OUTLET, +18" UON — TEL/DATA OUTLET, +18" UON

AIC: AMPERE INTERRUPTING CAPACITY
UON: UNLESS OTHERWISE NOTED
GFP: GROUND FAULT PROTECTION
XFMR: TRANSFORMER
SWBD: SWITCHBOARD
CO: CONDUIT ONLY
C: CONDUIT
TYP: TYPICAL
NL: NIGHT LIGHT
(E): EXIST
(N): NEW
(R): REMOVED
(RE): RELOCATED EXIST

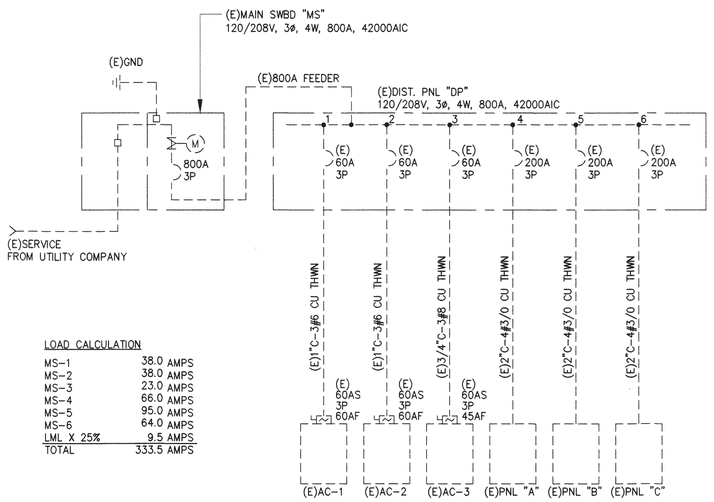
(S) — SMOKE DETECTOR 120V WITH BATTERY BACKUP

(D) — DUCT DETECTOR

(C) — CARBON MONOXIDE DETECTOR 120V WITH BATTERY BACKUP

(SC) — SMOKE/CARBON MONOXIDE DETECTOR 120V WITH BATTERY BACKUP

FSD — FIRE SMOKE DAMPER



LOAD CALCULATION

MS-1	38.0 AMPS
MS-2	38.0 AMPS
MS-3	23.0 AMPS
MS-4	66.0 AMPS
MS-5	95.0 AMPS
MS-6	64.0 AMPS
LML X 25%	9.5 AMPS
TOTAL	333.5 AMPS

SINGLE LINE DIAGRAM

WOU DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

SEAL

LICENSED PROFESSIONAL ENGINEER
No. 07628059-2405
JOSEPH S. GABRIEL
STATE OF UTAH

TITLE

Korean BBQ of Utah
7157 S. State Street
Midvale, Utah, 84047

REVISIONS

NO.	ISSUE	DATE

PROJECT DATA

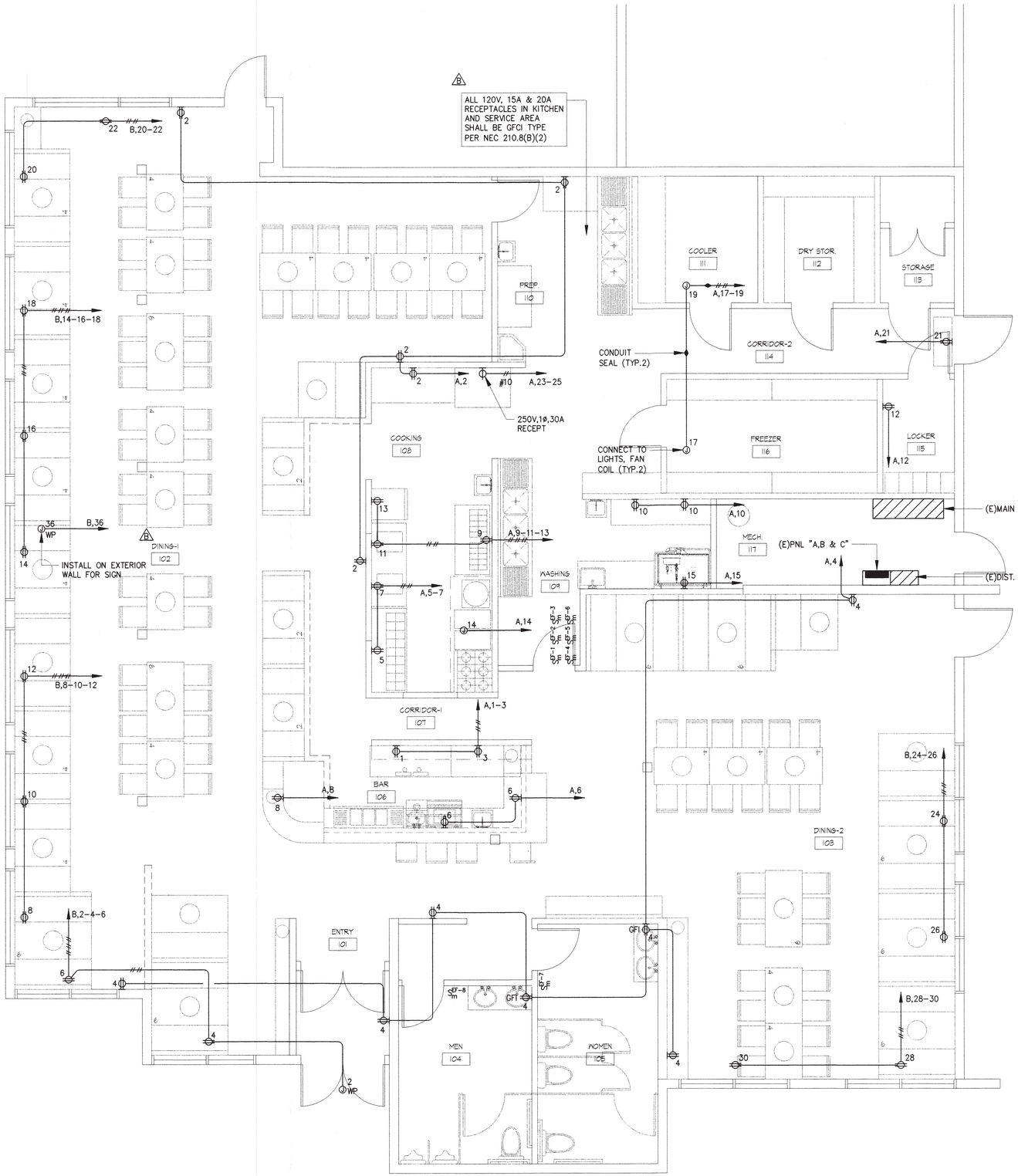
PROJECT NUMBER :	180307
DATE :	03/16/18
DRAWN BY :	CB
CHECKED BY :	PC
APPROVED BY :	

SCALE

SHEET NAME

SHEET NUMBER

E-1



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

PANEL "A" 120/208 V-3ø-4W 10,000 AIC
200 BUS AMPS MLO MAIN BRK AMPS ☒SURF ☐REC

NOTE	DESCRIPTION	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	LTG	RCP	CIR NO.	BKR P	BKR A	A	B	C	BKR A	BKR P	CIR NO.	RCP	LTG	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	DESCRIPTION	NOTE
	BEER DISPENSER	760					1	1	20				20	1	2	5		900			RECEPTS	
	COOLER		760				3	1	20				20	1	4	7			1260		RECEPTS	
	PREP REFRIG			720			5	1	20				20	1	6	2				360	RECEPTS	
	MEAT SLICER	650					7	1	20				20	1	8			180			RECEPT	
	PREP REFRIG		660				9	1	20				20	1	10	2			360		RECEPTS	
	MEAT SLICER			650			11	1	20				20	1	12					180	RECEPT	
	FREEZER	960					13	1	20				20	1	14			300			ANSUL SYSTEM	
	DISHWASHER		1800				15	1	20				20	1	16				300		ANSUL SYSTEM	
	LIGHTS, FAN COIL			720			17	1	20				20	1	18					720	ROOF RECEPTS	
	LIGHTS, FAN COIL	720					19	1	20						20							
	AIR CURTAIN		600				21	1	20						22							
	ICE MACHINE			2480			23	2	30						24							
	–	2480					25	–	–						26							
	COMPRESSOR		1200				27	2	20						28							
	–			1200			29	–	–						30							
	COMPRESSOR	1200					31	2	20						32							
	–		1200				33	–	–						34							
							35								36							
							37								38							
							39								40							
							41								42							
	SUBTOTAL	6770	6220	5770														1380	1920	1260		
	TOTAL LOAD			23.3 KVA																		
	(LCL+LML) X 25%			0.6 KVA																		
	DESIGN LOAD			23.9 KVA					66 AMPS													

NOTES
1. PROVIDE INTERLOCKING PER MECHANICAL DWG

PANEL "B" 120/208 V-3ø-4W 10,000 AIC
200 BUS AMPS MLO MAIN BRK AMPS ☒SURF ☐REC

NOTE	DESCRIPTION	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	LTG	RCP	CIR NO.	BKR P	BKR A	A	B	C	BKR A	BKR P	CIR NO.	RCP	LTG	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	DESCRIPTION	NOTE
	LIGHTS	790		19			1	1	20				20	1	2			1200			SIGN	
	LIGHTS		1310	49			3	1	20				20	1	4				1400		SHOW WINDOW	
	LIGHTS		1290	86			5	1	20				20	1	6					1400	SHOW WINDOW	
	LIGHTS	660		33			7	1	20				20	1	8			1400			SHOW WINDOW	
							9						20	1	10				1400		SHOW WINDOW	
							11						20	1	12					1400	SHOW WINDOW	
							13						20	1	14			1400			SHOW WINDOW	
							15						20	1	16				1400		SHOW WINDOW	
							17						20	1	18					1400	SHOW WINDOW	
							19						20	1	20			1400			SHOW WINDOW	
							21						20	1	22				2000		SHOW WINDOW	
							23						20	1	24					1600	SHOW WINDOW	
							25						20	1	26			1600			SHOW WINDOW	
							27						20	1	28				1600		SHOW WINDOW	
							29						20	1	30					1600	SHOW WINDOW	
							31								32							
							33								34							
							35						20	1	36					1200	SIGN	
							37								38							A
							39								40							
							41								42							
	SUBTOTAL	1450	1310	1290														7000	7800	8600		
	TOTAL LOAD			27.5 KVA																		
	(LCL+LML) X 25%			6.9 KVA																		
	DESIGN LOAD			34.3 KVA					95 AMPS													

PANEL "C" 120/208 V-3ø-4W 10,000 AIC
200 BUS AMPS MLO MAIN BRK AMPS ☒SURF ☐REC

NOTE	DESCRIPTION	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	LTG	RCP	CIR NO.	BKR P	BKR A	A	B	C	BKR A	BKR P	CIR NO.	RCP	LTG	VOLT-AMPS øA	VOLT-AMPS øB	VOLT-AMPS øC	DESCRIPTION	NOTE
1	MAU-1	500					1	3	15						2							
	–		500				3	–	–				20	1	4				200		EF-9	1
	–			500			5	–	–				20	1	6					200	EF-10	1
1	MAU-2	500					7	3	25				15	3	8			720			EF-1	1
	–		500				9	–	–				–	–	10				720		–	
	–			500			11	–	–				–	–	12					720	–	
1	MAU-3	720					13	3	25				15	3	14			720			EF-2	1
	–		720				15	–	–				–	–	16				720		–	
	–			720			17	–	–				–	–	18					720	–	
1	MAU-4	500					19	3	25				15	3	20			940			EF-3	1
	–		500				21	–	–				–	–	22				940		–	
	–			500			23	–	–				–	–	24					940	–	
1	MAU-5	500					25	3	25				15	3	26			500			EF-4	1
	–		500				27	–	–				–	–	28				500		–	
	–			500			29	–	–				–	–	30					500	–	
1	MAU-6	500					31	3	25				15	3	32			720			EF-5	1
	–		500				33	–	–				–	–	34				720		–	
	–			500			35	–	–				–	–	36					720	–	
							37						15	3	38			500			EF-6	1
							39						–	–	40				500		–	
							41						–	–	42					500	–	
	SUBTOTAL	3220	3220	3220														4100	4300	4300		
	TOTAL LOAD			22.4 KVA																		
	(LCL+LML) X 25%			0.7 KVA																		
	DESIGN LOAD			23.1 KVA					64 AMPS													

NOTES
1. PROVIDE INTERLOCKING PER MECHANICAL DWG IMC 507.1 & 507.1.1.1 B

WOU
DESIGN PARTNERS
3470 WILSHIRE BLVD. SUITE 930
LOS ANGELES, CA 90010
- ARCHITECTURE BRANDING
- INTERIOR BRANDING
- PLANNING
- LAND-USE CONSULTATION

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LICENSED PROFESSIONAL ENGINEER
No. 07882049-005
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TITLE

Korean BBQ of Utah
7157 S. State Street
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REVISIONS
A CORRECTION BLDG. 5-17-18

NO.	ISSUE	DATE

PROJECT DATA

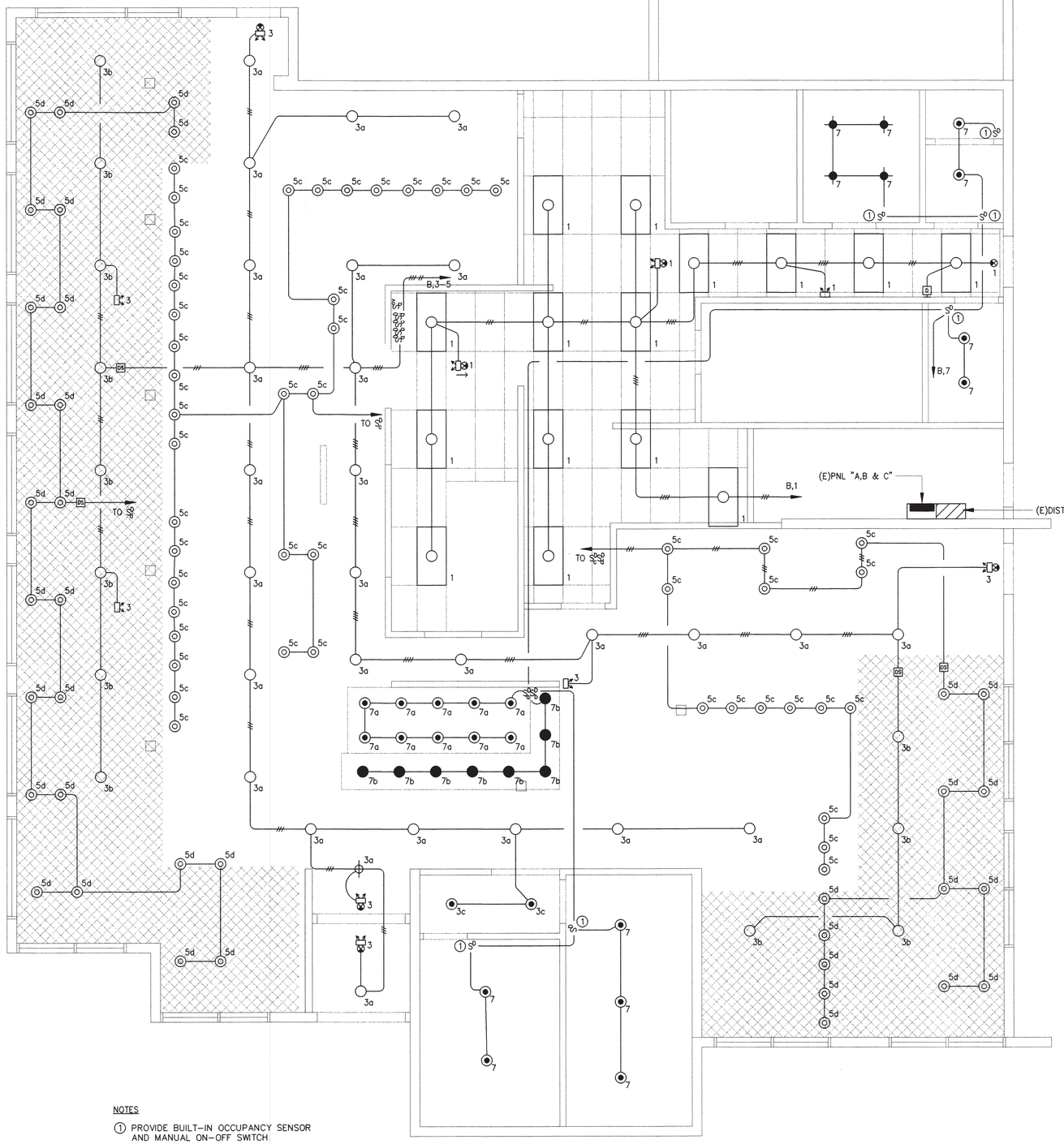
PROJECT NUMBER:	180307
DATE:	03/16/18
DRAWN BY:	CB
CHECKED BY:	PC
APPROVED BY:	

SCALE

SHEET NAME

SHEET NUMBER

E-2



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

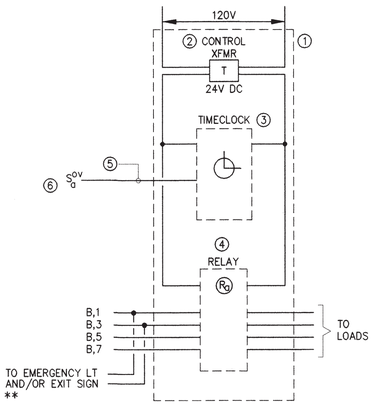
LEGEND

PRIMARY SIDELIT DAYLIGHT AREA (HATCHED)

LIGHTING FIXTURE SCHEDULE — RECESSED, S: SURFACE, P:PENDANT

SYMBOL	TYPE	VOLT	LAMP	MTD	DESCRIPTION/MANUFACTURER
	A	120	49W LED 4884 LUMENS	R	2' X 4' LED LIGHT WITH 0-10VDC DIMMER DRIVER
	L1	120	21W LED	R	LED DOWN LIGHT
	L2	120	9.5W LED	P	LED PENDANT LIGHT
	L3	120	9.5W LED	P	LED PENDANT LIGHT
	L5	120	15.5W LED	R	LED DOWN LIGHT
	L6	120	15W LED	R	LED DOWN LIGHT
	L7	120	12W LED	S	LED LIGHT
	E	120	25W	S	EMERGENCY LIGHT WITH 90 MIN. BATTERY BACKUP
	X	120	5W LED	S	EXIT SIGN WITH 90 MIN. BATTERY BACKUP
	EX	120	5W LED, 25W	S	EXIT SIGN AND EMERGENCY LIGHT WITH 90 MIN. BATTERY BACKUP

ALL LIGHTS SHALL BE SELECTED BY OWNER/ARCHITECT



BLDG LIGHT SHUT-OFF & OVERRIDE CONTROL DIAGRAM

NOTES

1. LIGHTING CONTROL PANEL WITH CONTROL XFMR, TIMECLOCK AND RELAYS. CERTIFIED BY 2015 IECC. INSTALL ADJACENT TO BRANCH CIRCUIT PANELBOARD. COOPER SERIES LK SERIES OR EQUAL
2. CONTROL TRANSFORMER, 120V AC TO 24V DC, SIZE, AND PRIMARY AND SECONDARY PROTECTION AS REQUIRED.
3. 365 DAY PROGRAMMABLE ELECTRONIC TIME CLOCK WITH 10 HR BATTERY BACKUP
4. OUTPUT RELAY WITH 24V DC COIL, POLE AS REQUIRED
5. 3#18 PLENUM RATED LOW VOLTAGE WIRING
6. OVERRIDE SWITCH FOR EACH RELAY OUTPUT, MECHANICAL OR TOGGLE SWITCH (MOMENTARY CONTACT OR MAINTAINED CONTACT) LABEL "OVERRIDE SW" SEE LIGHTING PLAN FOR LOCATION. 0-2HR MAXIMUM.

* FOR EMERGENCY LIGHTS WITH BATTERY BACKUP OR NIGHTLIGHTS. PROVIDE BYPASS WIRING AS REQUIRED

WOU DESIGN PARTNERS
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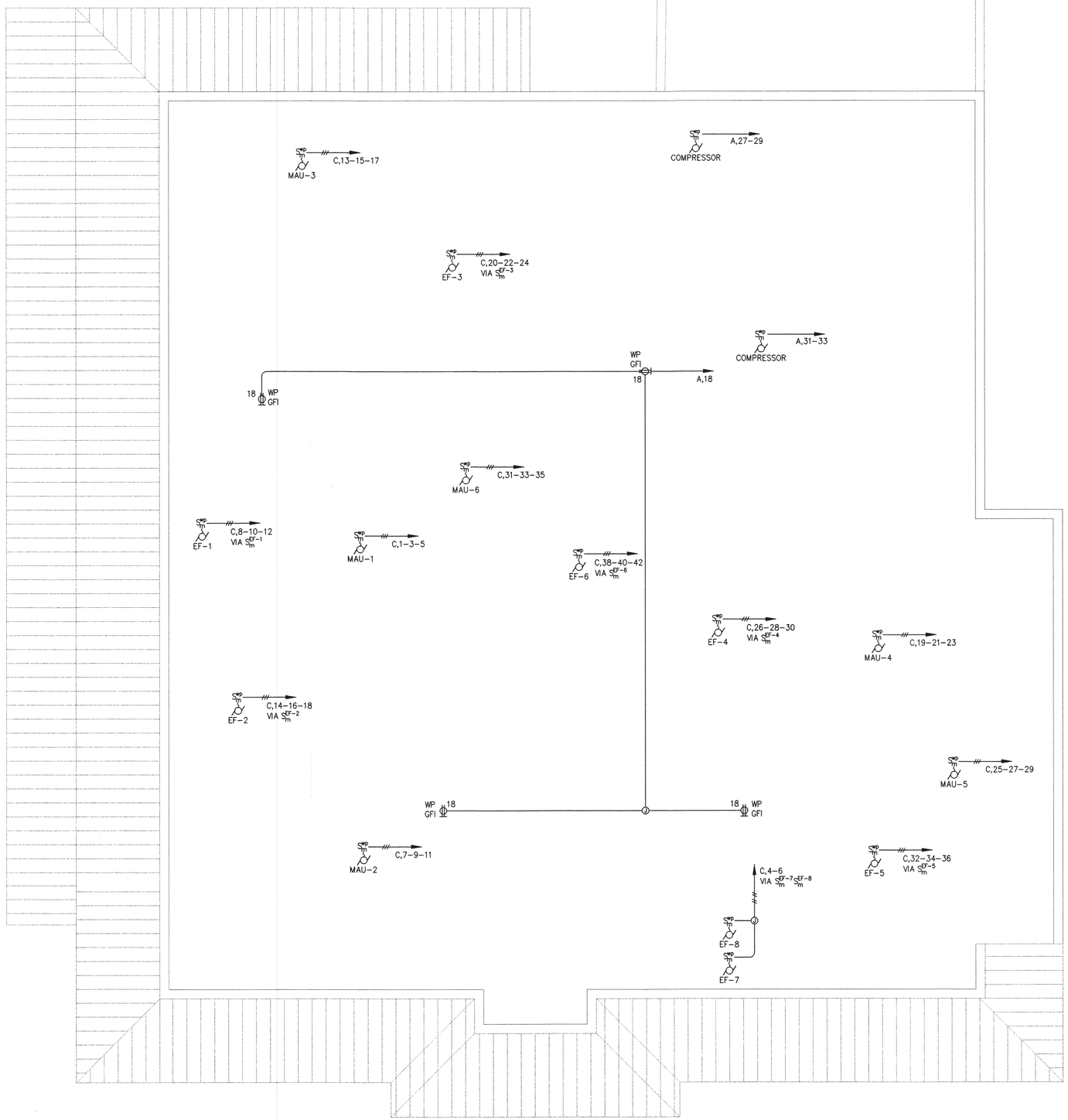
E-3



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

DESIGN PARTNERS

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LOS ANGELES, CA 90010

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E-4

COMcheck Software Version 4.0.8.1

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: KOREAN BBQ OF UTAH
Project Type: Alteration

Construction Site:
7157 S. STATE STREET
MIDVALE, UT 84047

Owner/Agent:
MICHAEL J LEE
TWC ENTERPRISE

Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-RESTAURANT (Dining: Family)	4700	0.95	4465
		Total Allowed Watts =	4465

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 (Dining: Family 4700 sq.ft.)				
LED 1: A: Other:	1	15	49	735
LED 2: L1: Other:	1	39	21	819
LED 3: L2: Other:	1	86	10	817
LED 4: L3: Other:	1	8	10	76
LED 5: L5: Other:	1	21	16	326
LED 6: L6: Other:	1	1	15	15
LED 7: L7: Other:	1	4	12	48
		Total Proposed Watts =		2836

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 4.0.8.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Joseph Gabriel PE — Name - Title
Signature
6/13/18 — Date

COMcheck Software Version 4.0.8.1

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 0.0% 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]¹	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.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

Section # & Req.ID	Rough-in Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15]¹	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1 [EL18]¹	Occupancy sensors installed in required spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.1, C405.2.2.3 [EL23]¹	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.2.1 [EL22]¹	Automatic controls to shut off all building lighting installed in all buildings.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3 [EL16]¹	Daylight zones provided with individual controls that control the lights independent of general area lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.2 [EL20]¹	Primary sidelighted areas are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.3, C405.2.3.1, C405.2.3.3 [EL21]¹	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL4]¹	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.2.4 [EL8]¹	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.3 [EL6]¹	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17]¹	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C405.4.1 [FI18]¹	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.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C408.2.5.1 [FI16]¹	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.3 [FI33]¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3)

DESIGN PARTNERS
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LOS ANGELES, CA 90010

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SCALE

SHEET NAME

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E-5