



# Current Revision Date Sheet Name

### SHEET INDEX:

INTERIOR ELEVATIONS	
INTERIOR ELEVATIONS	
PARTITION TYPES & DETAILS	
MILWORK DETAILS	
MILWORK DETAILS	
ICAL	
ELECTRICAL SPECIFICATIONS	
ELECTRICAL LIGHTING PLAN	
ELECTRICAL POWER PLAN	
ELECTRICAL SCHEDULES	
NICAL	·
MECHANICAL PLAN	
MECHANICAL SPECIFICATIONS	
MECHANICAL DETAILS	
MECHANICAL DETAILS	
HOOD DRAWING	
NG	'
PLUMBING PLAN	
PLUMBING PLAN	
NCE	1
REFERENCE FURNITURE PLAN	
	PARTITION TYPES & DETAILS MILWORK DETAILS MILWORK DETAILS ICAL ELECTRICAL SPECIFICATIONS ELECTRICAL LIGHTING PLAN ELECTRICAL POWER PLAN ELECTRICAL SCHEDULES NICAL MECHANICAL PLAN MECHANICAL PLAN MECHANICAL DETAILS MECHANICAL DETAILS MECHANICAL DETAILS HOOD DRAWING NG

### LIGHTING AND CEILING LEGEND:

(ARCHITECTURAL INFORMATION SHOWN FOR REFERENCE ONLY)

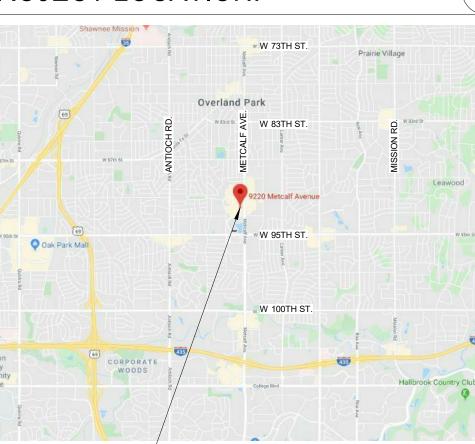
PROPOSED.

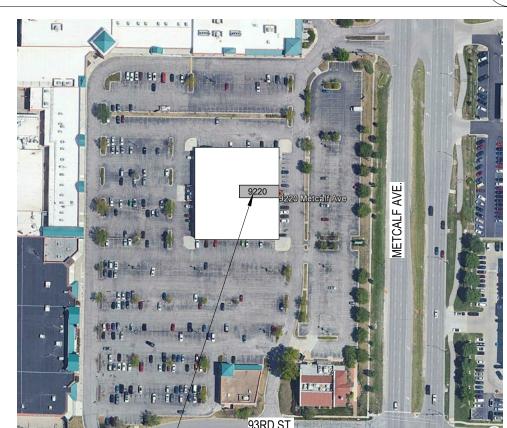
FLUORESCENT FIXTURE (2x2, 2X4, ETC) WITH PARABOLIC LENS FLUORESCENT FIXTURE (2x2, 2X4, ETC). WITH PRISMATIC

CEILING MOUNTED CAN LIGHT. SEE SCHEDULE.

SCHEDULE.

DIFFUSERS AND RETURNS. FOR REFERENCE ONLY. "N" DESIGNATION DENOTES NEW FIXTURE (TYP.)





### JERSEY MIKE'S

PROJECT SUMMARY

**BUILDING CODE:** 

TENANT FITOUT OF AN EXISTING MULTI-TENANT BUILDING

SEE SHEET A0.3 FOR EGRESS PLAN

**BUILDING DATA:** Overland Park Building Department - Johnson County, KS

BUILDING CODE AGENCY/JURISDICTION: Johnson County, Kansas 2012 International Building Code 2012 International Fire Code

ONE (1)

2012 International Mechanical Code 2012 International Plumbing Code 2011 National Electric Code

TYPE OF WORK: INTERIOR FITOUT FIRE SUPPRESSION: FULLY-SPRINKLERED

**EXISTING CONSTRUCTION TYPE:** TOTAL NUMBER OF FLOORS: ONE (1)

**USE/OCCUPANCY GROUP** B (Business) (Per Section 303.1.2.1)

**Tenant Contact:** Spiegel Capital, LLC 1524 SW Merryman Dr. Lee's Summit, MO 64082

**Architect Contact:** 

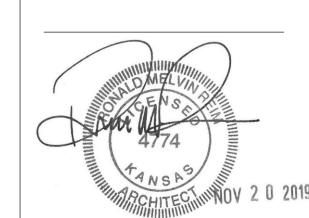
Oculus Incorporated One South Memorial Dr, Suite 1500 St. Louis, MO 63102

(314) 367-1489 fax Nick Basler nbasler@caseengineeringinc.com

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drawings and seal(s) shall in no way convey or imply any type of warranty or

certification relating to the performance of products and materials beyond those provided by their respective manufacturer.



**PERMIT SET** 

Client Approval

### **PROJECT INFORMATION**

Project# 43419-KS02 Issue Date 11/20/2019 Scale As indicated

Drawn by JDW Checked by

### PROJECT GENERAL NOTES:

- THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES BETWEEN THESE DOCUMENTS AND ANY APPLICABLE CODES BY THE AGENT INVOLVED WITH THE GOVERNING AGENCY HAVING JURISDICTION. IT IS UNDERSTOOD THAT THE "FIELD INSPECTOR" FOR SUCH AGENCY HAS FINAL AUTHORITY
- TO APPROVE/DISAPPROVE PROJECT CONSTRUCTION AND CORRECTNESS OF ALL CODE RELATED ITEMS. EACH SUBCONTRACTOR IS CONSIDERED A SPECIALIST IN THEIR RESPECTIVE FIELD OR TRADE AND SHALL NOTIFY, PRIOR TO PERFORMANCE OF THE WORK, THE GENERAL CONTRACTOR AND THE ARCHITECT OF ANY WORK CALLED OUT IN THE DRAWINGS WHICH CANNOT BE FULLY GUARANTEED OR CONSTRUCTED
- THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING THE WORK AND IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF ALL OPENINGS, BASES, AND SPECIAL PROVISIONS REQUIRED FOR EQUIPMENT, DUCTS, PIPING, CONDUITS, FINISH HARDWARE, ETC. AND IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES. GENERAL CONTRACTOR TO COORDINATE ARCHITECTURAL DRAWINGS WITH MECHANICAL AND ELECTRICAL, PLUMBING, CIVIL AND LANDSCAPE DRAWINGS. GENERAL CONTRACTOR TO MAINTAIN ALL EXISTING FIRE RATINGS DURING DEMOLITION AND CONSTRUCTION.
- GENERAL CONTRACTOR SHALL NOT SCALE OFF DRAWINGS CONTACT ARCHITECT FOR ALL COORDINATION ISSUES. GENERAL CONTRACTOR TO MAINTAIN UNOBSTRUCTED ACCESS TO ALL EXITS DURING DEMOLITION AND CONSTRUCTION WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILING SHALL BE THE SAME AS FOR OTHER SIMILAR FIRST CLASS WORK FOR THE TRADE INVOLVED. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY ALTERNATE NON-STANDARD OR UNTESTED METHOD(S)

ACRYLIC LENS RECESSED WALL WASHER LIGHT FIXTURE. SEE SCHEDULE.

SUSPENDED FLUORESCENT PENDANT FIXTURE. SEE

SCHEDULE. EXIT LIGHT. SEE

SPRINKLER SYSTEM. FOR REFERENCE ONLY.

JERSEY MIKE'S

PROJECT DIRECTORY:

NUMBER OF FLOORS ABOVE GRADE:

michaelspiegel@jerseymikes.com (816) 309-5772

**Engineer Contact:** Case Engineering 796 Merus Ct

(636) 349-1600 x263 Fenton, MO 63026

Matt Bradley

(314) 450-5395 phone

**DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES** 

l. Contractor shall provide all wood or metal blocking, grounds, nailers, and supports, as shown in the drawings, and as required for the attachment of other work. Contractor shall install all work plumb and level. Contractor shall also fill and sand smooth all exposed nail and fastener holes, and

2. All finish lumber, hardwood stock, and milled trim shall be kiln dried and ready for fabrication/installation. All pieces shall be of the type and grade specified and clear of warp, splits, knots or other deformities that would detract from its appearance.

All architectural woodwork shall comply w/ with standards and recommendations of the architectural woodwork institute's AWI current standards -"Architectural Woodwork Quality Standards".

4. Contractor shall fabricate and install base cabinets as shown on drawings. Casework shall be AWI premium grade and finished as noted on

5. Cabinets shall be of 'flush overlay construction as shown on the drawings and as follows:

a. Cabinets where shown as plastic laminate: Provide plastic laminate on all exposed surfaces with selected colors as indicated on the drawings and as listed below unless otherwise noted: 1. Gp-50 for non-post-formed surfaces.

2. Pf-42 for post-formed surfaces. 3. Gp-28 for vertical surfaces

6. The following hardware shall be used for all scheduled millwork / cabinets unless otherwise noted on drawings:

a. Drawer guides: Self closing accuride C3800/C3827, or approved equal. b. Grommets: All grommet trim unless noted otherwise to be manufactured by Doug Mockett and Co., Manhattan Beach, CA 90266, (213)318-2491. Equip with 3"diameter holes with XG series "black". Equip all slotted holes with CL series "black" to the size as c. Hinges: Grass 1203 or Stanley 1511-2 or 1511-9X, self-closing, three dimensional adjustable, 165 degree opening. d. Touch latching mechanisms: Stanley, Hafele or approved equal. (sized appropriately to match door size.) e. Casework pulls: 3 1/2" polished chrome wire cabinet door pulls f. Pocketing cabinet door hardware: NOT USED g. Ventilation grill: Hafele #571.62.302, black or approved equal. h. Cabinet door silencers: Provide three (3) rubber bumpers per door. i. Self supports: Provide recessed metal standards or metric drilling at contractors' option. Coat hooks: Refer to door hardware groups. k. Drawer and cupboard locks: Half-mortise type, 5-pin tumbler and deadbolt, round

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION** 

cylinder only exposed, brass with plated finish, similar to Yale NO. 5591.

<u>SEALANTS</u>

1. Install sealants as mentioned below and shown on drawings (unless otherwise noted on drawings), per manufacturer's recommendations.

2. Type 1: All exterior vertical surfaces use sealants as follows:

a. Aluminum and glass: One part non- acid curing silicone sealant. b. Aluminum, masonry, and EIFS: one or two part non-sag low modulus urethane sealant. Verify compatibility of sealant with EIFS manufacturer prior to use.

3. Type 2: Interior wet locations - such as bathrooms, toilet fixture bases, sinks, etc.: one-part mildew resistant silicone sealant.

4. Type 3: All interior joints exposed to view: Siliconized acrylic latex sealant (paintable) as noted or indicated in the documents. A continuous bead of caulk shall be provided at all edges of hollow metal and aluminum frames.

5. Type 4: All exterior door thresholds use: one-part butyl sealant.

FIRE AND SMOKE PROTECTION

1. Furnish and install fireproofing system (complete w/ all required primers, metal lath, sealers, topcoats, etc as applicable) at location of steel beam reinforcement. Use "U.L." approved materials which match required fire resistive ratings used on existing beam(s). Install in compliance w/ manufacturer's recommendations and industry standards.

2. Subject to approval of local code officials and standards, apply fireproofing materials by trowel application or other placement method acceptable to

**DIVISION 08 - OPENINGS** 

METAL DOORS AND FRAMES

1. Furnish and install hollow metal frames to comply with steel door institute "recommended specifications: a. (SDI-100) standard steel doors and frames. b. HMMA/NAAMM "guide specifications for commercial hollow metal doors and frames" (HMMA 861-87).

Provide labeled frames where indicated on drawings. Warranty to be in effect for two years after date of substantial completion.

3. Finish on frames to be as follows: Shop/field painting at contractor option, to match color selection as indicated in material legend on drawings, unless otherwise noted all frames to be sprayed.

4. Frames, unless noted otherwise, shall conform to the building standard as specified by the landlord and are to be Fully Welded.

5. Reuse existing hollow metal frames (unless noted otherwise on drawings), wherever possible. Contractor shall notify the owner of the type and number of existing frames which can be re-used and which have become damaged making them un-suitable for reuse.

6. Provide galvanized metal doors with shop-applied primer of type and styles indicated on drawings or schedules. Provide non-removable glazing stops installed on public side of door. Glazing beads on inside of glass and louver panels shall be removable. Glazing systems shall be minimum 20 gauge steel. All doors hollow metal doors to be 1 3/4" thick.

7. Submit shop drawings and schedules for approval, prior to fabrication. Conform to same door and opening designations used in the door schedule.

WOOD DOORS

. Where indicated on drawings and shown in schedules, furnish and install new solid core wood doors to match building standard. Door veneer to match existing grain, species and leaf matching. Provide labeled doors where indicated on drawings.

2. Reuse existing doors as indicated on drawings. Refinish doors to match color and sheen of new doors unless otherwise noted on drawings.

3. Rated interior solid core wood doors shall comply with requirements of AWI Section 1300, fd-5 doors. Custom/premium grade doors for transparent finish to match quality of non-rated doors. Core to be non-combustible mineral composition material per label requirements. Stiles and rails securely bonded to core per label requirements. Veneer to be as specified in material legend, "A" grade, edge glued joints for transparent finish

4. Non-rated interior solid core wood doors shall comply with requirements of AWI Section 1300, pc-5 ce doors. Custom grade veneer, bonded particle core doors for opaque finish. Core to be particleboard conforming to ANSI A208.1, 1-ld-2 grade. Stiles and rails securely bonded to core, and then entire unit abrasive planed before veneering. Veneer to be sound, close grain hardwood, minimum b grade (minimum 1/50" at 12 % mc), for

5. Submit shop drawings, product information and schedules for approval prior to fabrication. Conform to same door and opening designations as shown in the door schedule on the drawings.

6. Contractor to submit certificate showing that interior wood doors are to be warranted for life of installation.

7. Door manufacturer's to be considered are as follows (unless otherwise noted on drawings)

a. AMPCO, Eggers, VT Industries and Weyerhaeuser door division.

**ENTRANCES AND STOREFRONTS** 

NOT APPLICABLE

<u>HARDWARE</u>

1. Provide locksets appropriate to function where indicated in door schedule. Furnish and install new hardware to match building standard as required (unless otherwise noted), note, selections are based upon products as manufactured by "Schlage Lock Company," alternate manufacturers of equivalent "models" by Corbin, Falcon, Yale products will be considered. See drawings for additional information.

2. Project standard interior door locks and latches (unless otherwise noted):

a. Certif: ANSI A156.2, 1989, series 4000 grade 1 Design: Schlage extra heavy duty cylindrical locks, Series: "D" lever: "Schlage Rhodes" Latch: 09-66X square corner strike: 10-072; 37-015(@wd fr) Finish: 626(26D) satin chromium plated. Keying: Master-keyed - standard interchangeable cores

3. Project standard security deadbolts (unless otherwise noted):

Reinforcing kit: 37-001 - sized for door thickness

a. Certif: ANSI A156.2, 1984, grade 3. Design: Single cylinder deadbolt, thumb turn interior. Series: "100" model: "B160" Finish: 626(26D) satin chromium plated. Keying: Master-keyed - standard interchangeable cores Reinforcing kit: 37-001 - sized for door thickness.

4. Project standard cypher locks (unless otherwise noted):

a. Contractor shall retrofit, if possible, existing cypher locks hardware to meet current ADA, ANSI and building code requirements. Retrofit shall include manufacturer's approved lever handles. If retrofit of existing cypher lock cannot be achieved notify the Architect for a replacement specification.

b. Manufacturer: ILCO Unicam Corp. Certif: ANSI A156.2, grade 1.ADA & d.o.d.5220.22m Design: Exterior access by combination or key override. Egress by interior lever. Series: "I1000" model: "1021"

Keying: Masterkeyed - standard interchangeable cores

5. Furnish and install card key access system to match building standard where indicated on the drawings.

6. Door Closers (unless otherwise noted):

Finish: Matchg bldg standard

a. LCN 4040 w/back check, surface mounted with parallel arm for push side mounting. Similar in style and appearance to building standard.

7. Hinges, butts and pivots (unless otherwise noted). Non-ferrous hinges to be provided with stainless steel pins. Exterior doors, and out-swing corridor doors to receive non-removable pins. Provide number of hinges in accordance w/ door and hardware institute recommendations. Provide ball bearing butts for doors equipped with closures.

8. Submit for approval hardware schedule keyed to Architect's door and opening designations. List manufacturer's model number for all group components. Submit product information for each type of hardware provided.

9. Hardware supplier shall have in his/her employ an AHC member of the American Society of Hardware Consultants who must be capable of correctly interpreting the plans and specifications to furnish complete and appropriate hardware. Consultant must sign shop drawing/product information submittal thus signifying that the submittal complies with the intent of the documents and the door and hardware institute.

10. Supplier to coordinate lock cylinders and keying with Tenant, and master key system for the entire project. Supplier will meet with Tenant as required to finalize keying requirements and document/obtain final instructions in writing.

**GLASS AND GLAZING** 

1. Comply with recommendations of flat glass marketing association (FGMA) "glazing manual" and "sealant manual" except where more stringent

2. All interior glass shall be 1/4" minimum, unless otherwise noted, glass thickness shall meet or exceed minimum standards set forth in current ASTM

3. Contractor shall furnish and install tempered safety glass. as indicated on the drawings or otherwise required by code. All safety glass shall be identified as such with visible markings located in corner and suitable for building inspector review and approve.

Unless otherwise noted on the drawings, contractor shall furnish and install clear non-coated annealed flat glass of the size and thickness shown. Provide glass and glazing that has been produced, fabricated and installed to withstand normal thermal, wind or impact loading (where applicable). without failure. All glass for the project shall comply w/ thickness, dimensional tolerances and characteristics set forth in ASTM C1036 "Standard Specification for Flat Glass !

5. Unless otherwise noted on the drawings, contractor shall furnish and install clear heat-treated flat glass, ft (fully tempered) of the size as indicated in the documents. Provide glass and glazing material that has been produced, fabricated and installed to withstand normal thermal, wind or impact loading. Fully tempered glass shall comply w/ the requirements for safety glazing in ANSI Z97.1-"standard for glazing materials used in buildings" as well as ASTM C1048 "standard for heat treated flat glass -kind ft coated and uncoated glass. Fully tempered glass shall comply with all local building

code and life safety requirements. 6. Provide glazing sealants, tapes, and misc. materials with a proven record of compatibility with other materials/surfaces with which they will come into contact, including, but not limited to, glass products, seals of insulating glass units, glazing channel substrates, under conditions of service, as demonstrated by testing and field experience.

7. Submit shop drawings and product literature for Architect review.

**DIVISION 09 - FINISHES** 

PLASTER AND GYPSUM BOARD ASSEMBLIES

1. Interior finish material shall comply with the flame spread and smoke development limitation listed in the building code section.

2. Contractor shall furnish all materials and labor to construct and finish all interior rooms and spaces as shown on drawings, noted schedules or otherwise specified in these documents.

3. Gypsum wall board shall be 5/8" thick (unless otherwise noted on drawings), taped, filled and sanded smooth. Fire-code gypsum wallboard shall be 5/8" thick, taped, filled, sanded smooth, and installed per manufacturer's recommendations for ratings as shown on drawings.

4. Install (non-load bearing) screw-type metal stud support system of the gauge recommended by the manufacturer for the application shown on the drawings. Comply with manufacturer's recommendations for acoustical ceiling work but not less than recommended.

a. 25 ga / standard duty studs @ 24" o.c. max / for clear span heights, do not exceed manufacturer's recommendations for the following:

1 5/8" stud, 2 1/2" stud, 3 5/8" stud, and 4" stud. b. 22 ga / heavy duty studs @ 24" o.c. max / for clear span heights, do not to exceed manufacturer's recommendations for the following: 1 5/8" stud, 2 1/2" stud, 3 5/8" stud, 4" stud, and 6" stud. c. 20 ga / extra duty studs @ 24" o.c. max / for clear span heights, do

not exceed manufacturer's recommendations for the following: 1 5/8" stud, 2 1/2" stud, 3 5/8" stud, 4" stud, and 6" stud.

5. Contractor shall furnish and install complete suspended gypsum wall board ceiling system where indicated on the drawings. Provide components which comply with ASTM C 754 and manufacturer's recommendation for materials and sizes unless otherwise indicated. Provide seismic struts/braces as required by local codes and per building standards.

1. Comply with manufacturer's recommendations for all acoustical ceiling work. Products by USG, Armstrong, and Chicago Metallic will be considered if no specific materials are called for in the documents.

2. Where noted on the drawings, contractor shall replace pads with new pads as indicated. (See finish legend for additional information).

3. Contractor shall review ceiling plans and provide take off quantities to the Tenant for ordering of customers' own materials. Ordered quantities shall include sufficient amount for attic stock and waste during installation.

4. Comply with building standard details and local codes with reference to seismic struts/bracing.

RESILIENT FLOORING

1. Install all resilient tile flooring by direct glue method in accordance with the manufacturers' recommended installation specifications and instructions. Install only over properly prepared and cleaned substrates as recommended by manufacturer.

2. Material to be selected from manufacturer's standard colors. Color and material to be selected by Architect unless otherwise shown in finish schedule.

1. Install resilient base material as noted in material legend. Use direct glue method in accordance with manufacturer's recommended installation specifications and instructions. Install only over properly prepared substrates as recommended by manufacturer. Material shall be installed in the longest continuous sections feasible. final installation shall be smooth, free of bumps and other irregularities.

2. Wall base to be selected from manufacturers standard colors. Color to be integral and full thickness of material. Color and material to be selected by the Architect.

PAINTING AND COATING

1. Contractor shall finish walls with one coat primer and two coats latex enamel paint unless otherwise noted in material legend, keyed notes and room finish schedule.

2. Where indicated on drawings, contractor shall spray finish on building door frames in semi-gloss alkyd enamel. Finish color to be as indicated on drawings and to match architect's sample.

SPECIAL COATINGS

1. Contractor shall furnish and install special coatings or multi-color paint system as noted in the material legend. Installer shall be experienced in the installation of special coatings or multi-color installation process and familiar with all manufacturer's equipment and application procedures and instructions. Contractor shall coordinate the installation of special materials with Owners representative to minimize disruptions to normal building operations. Prior to installation, contractor shall notify Owner if special coating application produces fumes or orders which might disrupt other building use/operations. If necessary, special coatings installation shall be conducted after hours or on weekends.

2. Contractor shall provide an additional supply equivalent to 5% of each color of paint specified for touch up and repair. Surplus paint shall be in new and unopened containers provided by the manufacturer.

3. Contractor to verify that painting contractor is certified installer/applicator of manufacturer of special coating specified in project.

**DIVISION 10 - SPECIALTIES** 

FIRE EXTINGUISHER CABINETS

Unless otherwise noted on drawings, contractor to furnish and install building standard semi recessed fire extinguisher cabinet equal to Potter Roemer #7042 fire cabinet with 2a 10bc minimum rated extinguisher, where indicated on drawings. Paint cabinet to match walls unless not allowed by local codes.

**DIVISION 11 - EQUIPMENT** 

1. Contractor to install commercial kitchen equipment provided by the tenant and as indicated on the drawings.

2. Contractor shall coordinate the installation of tenant provided equipment with all related work including millwork, plumbing and electrical. Install device in accordance with manufacturer's specifications and instructions. Contractor shall notify the tenant of all specific information required to coordinate installation of tenant provided equipment.

**DIVISION 12 - FURNISHINGS** 1. Contractor shall furnish and install all tenant-provided furniture as indicated on the drawings.

2. Contractor shall install all Tenant/Owner provided AV equipment as indicated on the drawings. Coordinate installation of audio visual equipment with ceiling installation. Tenant shall provide contractor with specific product cut sheets/specification and mounting

**DIVISION 13 - SPECIAL CONSTRUCTION** 

NOT APPLICABLE

**DIVISION 14 - CONVEYING EQUIPMENT** 

<u>DIVISION 21 - FIRE SUPPRESSION</u>

NOT APPLICABLE

NOT APPLICABLE

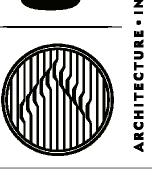
**DIVISION 22 - PLUMBING** 

RE: PLUMBING SPECIFICATIONS. **DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING** 

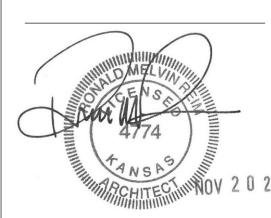
RE: MECHANICAL SPECIFICATIONS.

RE: ELECTRICAL SPECIFICATIONS

**DIVISION 26 - ELECTRICAL** 



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PERMIT SET

Client Approval

43419-KS02 Project# Issue Date 11/20/2019

1" = 1'-0"

Drawn by



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those provided by their respective manufacturer.

**PERMIT SET** 

Client Approval

(G) Latch apporach, push side \*48" MIN where closer is provided

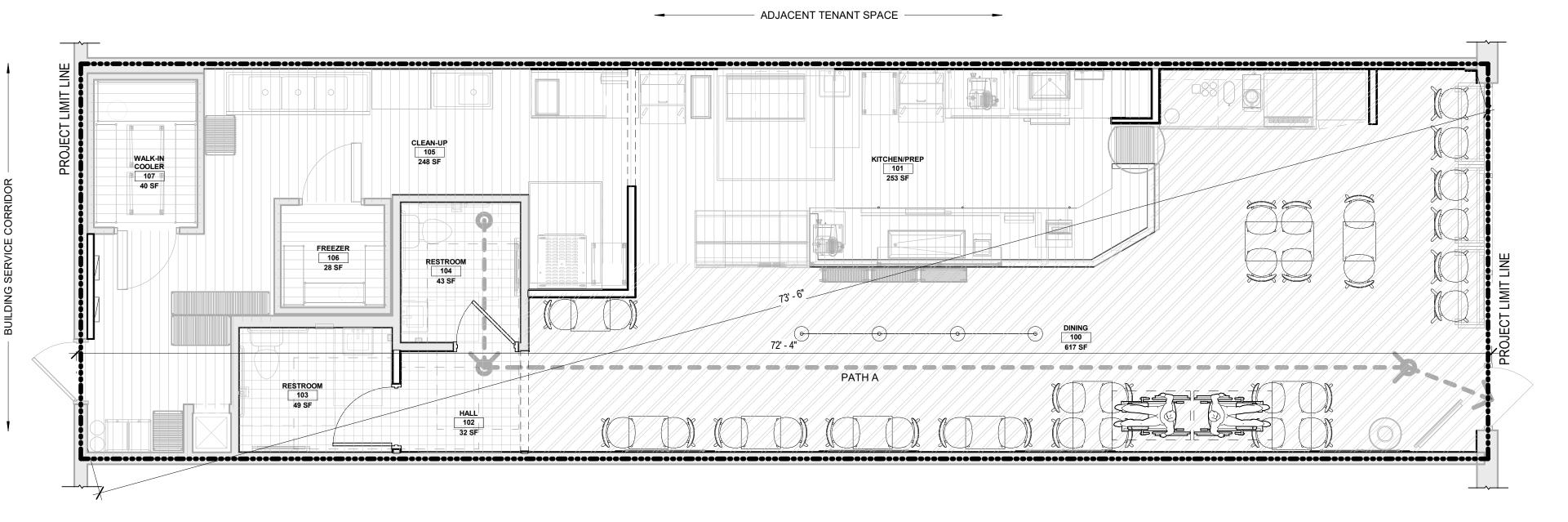
**OCCUPANCY AND EGRESS PLAN** 

43419-KS02 Project# 11/20/2019 Issue Date 1/4" = 1'-0" Scale

JDW

Drawn by

Checked by



ADJACENT TENANT SPACE

H4 OCCUPANCY/EGRESS PLAN

#### EXIT REQUIREMENTS: OCCUPANCY DATA:

	FULLY SPRINKLERED			(	Occupancy Schedule		
REQUIRED NUMBER OF EXITS PER CODE: IUMBER OF EXITS SHOWN ON PLANS:	2 2	RM#	ROOM NAME	AREA	OCCUPANCY	LOAD FACTOR	OCCUPAN LOAD
REQUIRED DISTANCE BETWEEN EXIT DOORS PER CODE:	73' - 6" / 3 = 24' - 5" 72' - 4"	100	DINING	617 SF	ASSEMBLY UNCONCENTRATED	15	42
TOTONE DIOTNINOE DETWEEN ENTI DOONG.	12 - 4	101	KITCHEN/PREP	253 SF	COMMERCIAL KITCHEN	200	2
MAXIMUM DEAD END CORRIDOR DEPTH:	20'	102	HALL	32 SF	UNOCCUPIED	0	0
		103	RESTROOM	49 SF	UNOCCUPIED	0	0
		104	RESTROOM	43 SF	UNOCCUPIED	0	0
		105	CLEAN-UP	248 SF	COMMERCIAL KITCHEN	200	2
		106	FREEZER	28 SF	STORAGE	300	1
		107	WALK-IN COOLER	40 SF	STORAGE	300	1
		Grand	total: 8	1310 SF		•	46

NOTE: AREA SQUARE FOOTAGE SHOWN ARE FOR THE BUILDING CODE OFFICIAL'S USE AND REVIEW ONLY. AREA CALCULATIONS SHOWN NOT RELATED TO TENANT LEASING INFORMATION.

### EXIT ACCESS TRAVEL DISTANCES

ath ID	Common Path Distance	Allowable Common Path	Actual Travel Distance	Allowable Travel Distance
	0' - 0"	0' - 0"	59' - 3"	75' - 0"

### Dlumbing Eixtura Schodula

RESTAURANTS, DRINKING FOUNTAINS SHALL NOT BE REQUIRED

A) REFERENCE COVER SHEET FOR BUILDING CODE SUMMARY

SHEET NOTES:

Plumbi	Plumbing Fixture Schedule										
	WATERO	CLOSETS		LAVAT	ORIES	DRINI FOUN					
NAME	MALE	FEMALE	URINALS	MALE	FEMALE	REG.	ACC.				
RESTROOM	1	1	0	1	1	*0	*0				
		•									

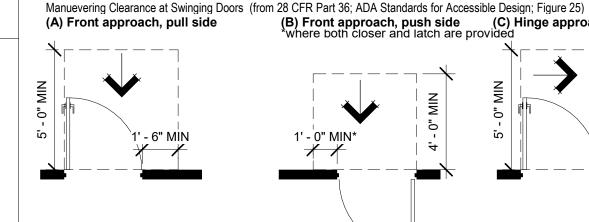
\*PER SECTION 410 OF THE INTERNATIONAL PLUMBING CODE: WHERE WATER IS SERVED IN

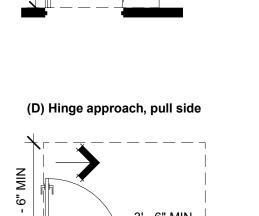
(B) Front approach, push side (C) Hinge approach, pull side where both closer and latch are provided

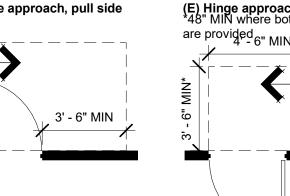
### GENERAL DOOR AND HARDWARE NOTES:

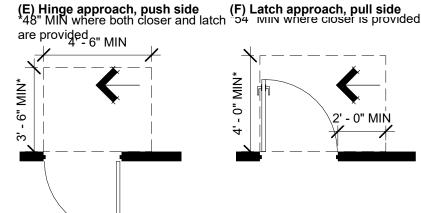
- A] HAND ACTIVATED DOOR OPENING HARDWARE IS TO BE MOUNTED 30" -34" ABOVE THE FLOOR AND BE OPERABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE.
- B] LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PUSH/PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED AND APPROVED FOR PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPERATIONG HARDWARE.
- C] MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 POUNDS OF FORCE FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS. SUCH FORCE BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHERE FIRE
- D] THE BOTTOM 10" OF ALL NON-AUTOMATED HINGED DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION
- E) EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3'-0" IN WIDTH NOT LESS THAN AND 6'-8" IN HEIGHT. ALL DOORS SHALL BE CAPEABLE OF OPENING A MINIMUM OF NINETY DEGREES AND SHALL BE MOUNTED SUCH THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32" WITH THE DOOR AT NINETY DEGREES FROM THE CLOSED POSITION. ONE DOOR OF A PAIR OF DOORS SHALL MEET THE MINIMUM WIDTH REQUIREMENTS.
- F] MAXIMUM HEIGHT OF THRESHOLD TO BE 1/2". MAXIMUM VERTICAL RISE AT EDGE IS 1/4" WITH A MAXIMUM BEVEL OF 22 DEGREES.
- G] ALL REUSED DOORS AND HARDWARE TO BE FULLY INSPECTED FOR SOUNDNESS AND FUNCTION. ANY REUSEABLE COMPONENT SHALL BE CLEANED, OILED, PATCHED, REFINISHED AS REQUIRED PRIOR TO

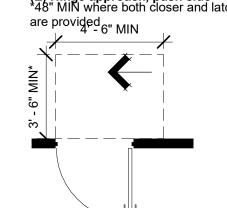
- H] GENERAL CONTRACTOR AND HARDWARE SUPPLIER SHALL BE RESPONSIBLE FOR COODINATING ALL LOCKING, LATCHING, CLOSURE AND KEYING REQUIREMENTS FOR TENANT USE.
- J] IT SHALL BE THE SPECIFIC DUTY AND RESPONSIBILITY OF THE FINISH HARDWARE SUPPLIER TO EXAMINE DRAWINGS AND SCHEDULES AND FURNISH PROPER HARDWARE FOR ALL NEW AND/OR MODIFIED OPENINGS AS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL SUBMIT A HARDWARE SCHEDULE TO ARCHITECT FOR REVIEW AND APPROVAL OF TYPES AND STANDARDS OF QUALITY PROIR TO ORDERING.
- K] MATCH EXISTING OPENING WIDTH, HEAD & JAMB GWB CONSTRUCTION.
- L] ALL NEW DOORS TO HAVE 1/4" MAXIMUM UNDERCUT U.O.N.



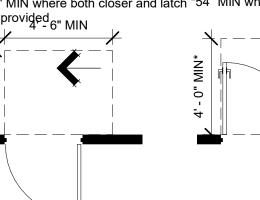


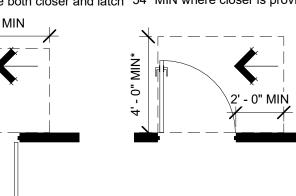






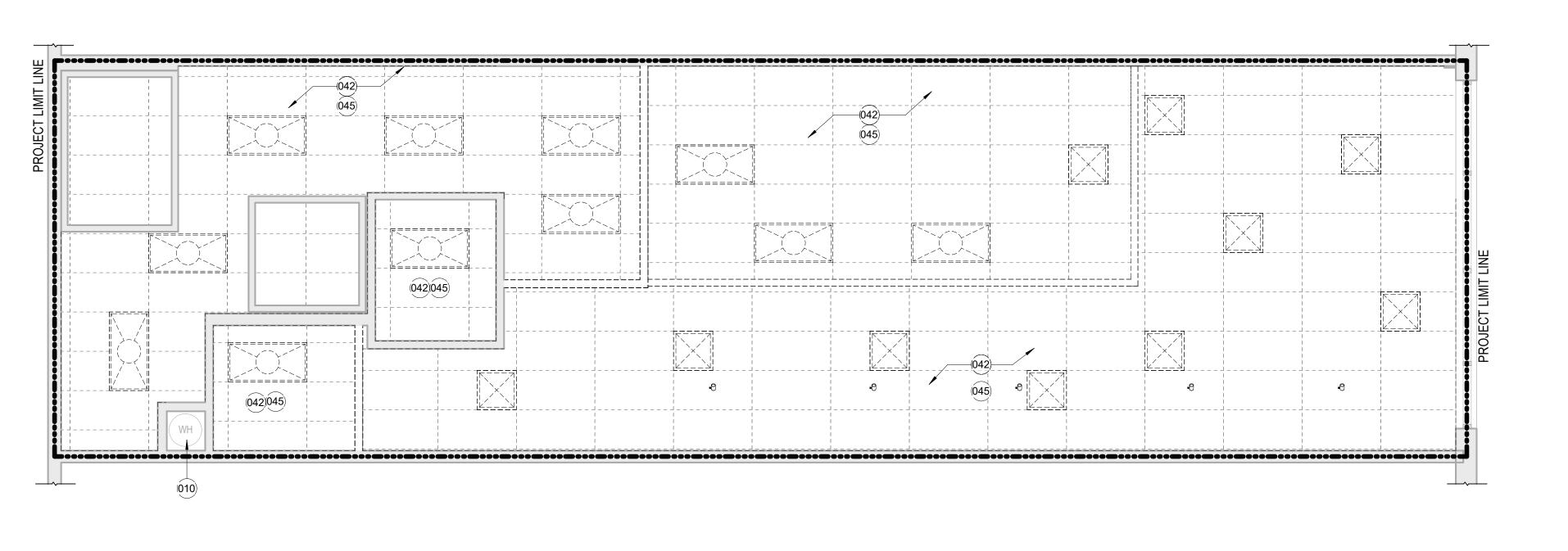
1' - 0" MIN\*



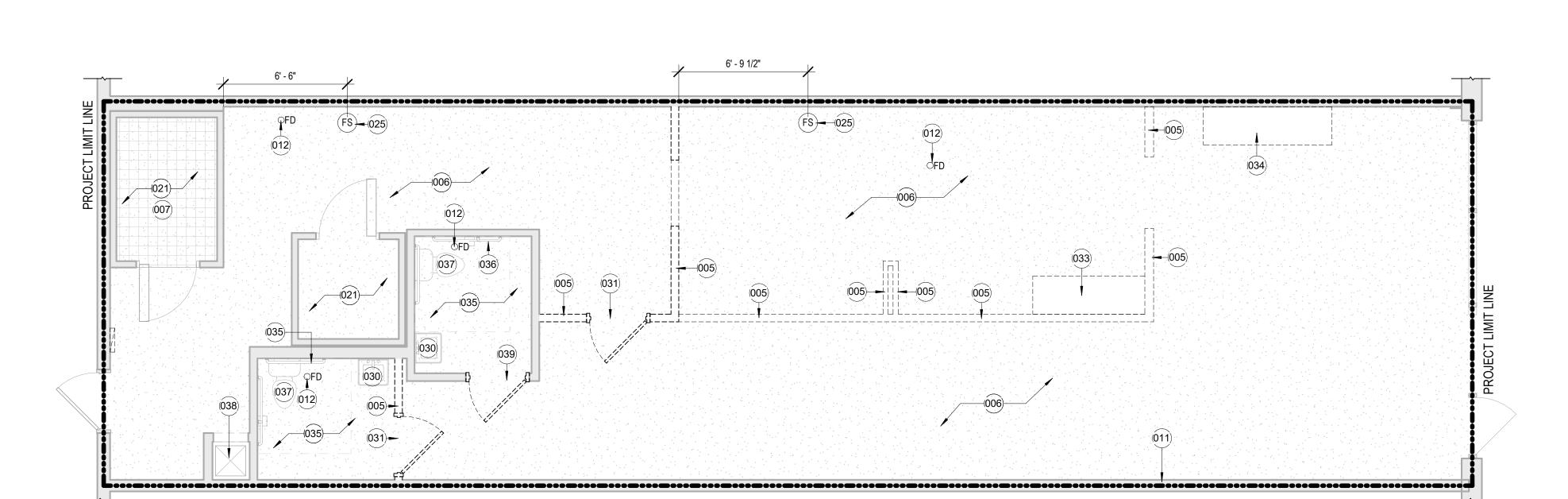


REINSTALLATION IN NEW WORK.

DOORS ARE REQUIRED, THE MAXIMUM FORCE REQUIRED TO OPERATE THE DOOR MAY BE INCREASED TO 15 POUNDS.



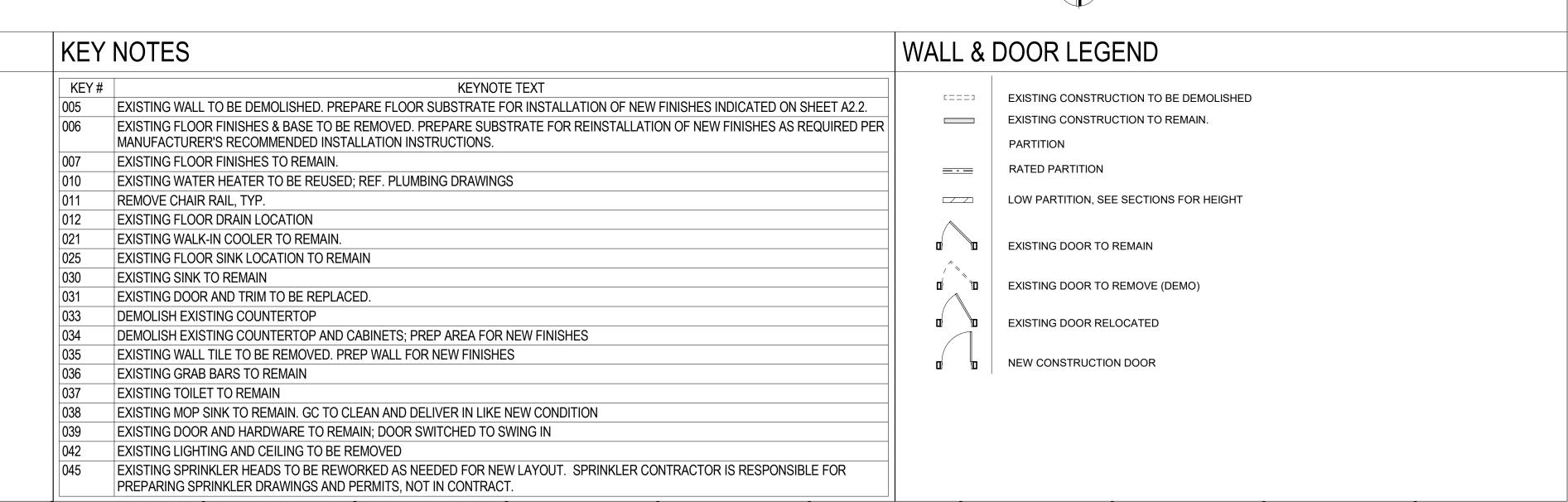
F4 DEMOLITION REFLECTED CEILING PLAN



M4 DEMOLITION FLOOR PLAN

1/4" = 1'-0"

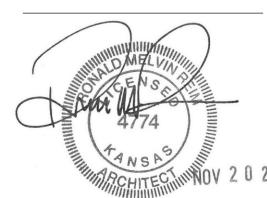






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**DEMOLITION PLAN** 

43419-KS02 Project# 11/20/2019 Issue Date As indicated

Drawn by Checked by

SHEET NOTES

SHALL CONTINUE UNINTERRUPTED.

EXISTING WHERE AVAILABLE.

WALL OR COLUMN AND ENCLOSE IN WALL OR COLUMN.

DASHED LINES ON DEMOLITION PLAN REPRESENT ITEMS TO BE DEMOLISHED/REMOVED PATCH AND REPAIR REMAINING EXISTING PARTITIONS THAT ARE DAMAGED BY DEMOLITION

PREPARE ALL SURFACES TO RECEIVE NEW FINISHES AS SCHEDULED. LEVEL FLOOR AS REQUIRED.

GC SHALL NOTIFY ARCHITECT WHEN DEMOLITION IS COMPLETE AND NEW CONSTRUCTION BEGINS.

WALLS, ETC). MAINTAIN RATINGS THROUGHOUT NEW/DEMOLITION CONSTRUCTION ACTIVITIES.

GC TO PROTECT EXISTING CONSTRUCTION DURING DEMOLITION AND CONSTRUCTION PHASES.

REMOVE AND CAP OFF ANY ELECTRICAL OUTLETS, TELEPHONE AND COMMUNICATION LINES, AND PLUMBING LINES WHICH

OCCUR IN WALLS WHICH ARE BEING REMOVED AS SHOWN DASHED ON PLANS. OPERATION OF REMAINING SYSTEMS

IF PLUMBING, WATER, WASTE OR VENT PIPES ARE ENCOUNTERED IN WALL SCHEDULED TO BE REMOVED, AND PIPE IS

SCHEDULED TO BE ABANDONED AS A PART OF THIS WORK, REMOVE SECTION OF PIPES EXPOSED AND CAP OFF PIPE

GC TO PROTECT EXISTING SUB-GRADE BUILDING UTILITIES FROM DEMOLITION AND RECONNECT NEW SYSTEMS TO

WITH-IN FLOOR, WALLS OR ABOVE CEILING. PATCH FLOOR, WALLS AND CEILING DAMAGED DURING PIPE REMOVAL AND CAPPING. IF PIPE IS NOT SCHEDULED TO BE ABANDONED AS A PART OF THIS WORK, RELOCATE PIPE TO THE NEAREST

CONTRACTOR TO VERIFY AND MAINTAIN EXISTING FIRE RATINGS OF EXISTING BUILDING COMPONENTS (DOORS, FRAMES,

GC TO REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING ENGINEERED DRAWINGS. NOTIFY ARCHITECT OF ANY

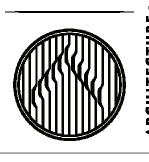
IF DURING DEMOLITION CONDITIONS ARE REVEALED THAT MAY JEOPARDIZE THE INTEGRITY OF THE STRUCTURE OR

PRECLUDE FOLLOWING DRAWINGS, GC TO SHORE STRUCTURES AND NOTIFY ARCHITECT AND OWNER IMMEDIATELY FOR FURTHER INSTRUCTION AND CONSULT OF A STRUCTURAL ENGINEER

### SHEET NOTES:

- ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6" FROM THE WALL UON
  - GC TO NOTIFY ARCHITECT OF ANY DISCREPENCIES PRIOR TO
  - CONSTRUCTION.
  - REFER TO SHEET A0.3 FOR ACCESSIBLE DOOR CLEARANCES
  - ALL DIMENSIONS ARE TO FINISH FACE OF GWB UON REFERENCE SHEET A6.0 FOR PARTITION TYPES
- SWINGING DOOR AND GATE SURFACES WITHIN 10" OF THE FINISH FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN THESE SURFACES SHALL BE WITHIN 1/16" OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATES SHALL BE CAPPED. ADA 404.2.10.
- ACCESSIBLE TABLES SHALL BE POSITIONED FOR A FORWARD APPROACH WITH CLEAR FLOOR SPACE COMPLIANT WITH ADA 305, SHALL BE 28" TO 34" IN HEIGHT TO THE TOP, HAVE 27" MINIMUM HIGH KNEE SPACE AND HAVE KNEE AND TOE CLEARANCE TO MEET ADA 306. ALL FOOD CONDIMENTS, UTENSILS, DRINKS DISPENSERS, ETC. SHALL BE LOCATED WITHIN THE REACH RANGES REQUIRED BY ADA AND NO HIGHER THAN 48" ABOVE THE FLOOR.







051 MILLWORK/CASEWORK BY GC 052 WALK-IN COOLER BY NORLAKE KLB-74\_x\_-C\_-36", SUPPLIED BY ECO,

KEYNOTES: (XX)

HARDWARE

HW1 RESTROOM DOORS:

FLOORLESS, SELF-CONTAINED CAPSULE PAK SYSTEM STEP-IN FREEZER BY NORLAKE KLF-77\_x\_-C\_-36", SUPPLIED BY ECO, 4" STEP-UP FLOOR PANEL, SELF CONTAINED CAPSULE PAK SYSTEM. FLOORING NOT REQUIRED UNDERNEATH FREEZER

**KEYNOTE TEXT** 

013 NEW ELECTRICAL PANEL. PROVIDED BY LANDLORD. REF. ELECTRICAL

059 HALF-HEIGHT PARTITION BELOW, SEE SECTIONS

ADA LEVER HARDWARE EQUIV TO SCHLAGE RHODES

WALL-BUMPER: GLYNN-JOHNSON 50C AT HANDLE

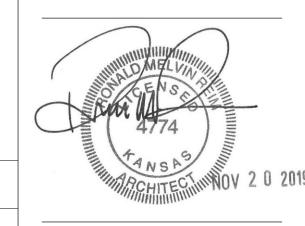
AUTO-CLOSER: ANSI A156.4, GRADE 1, EQUIV TO LCN 4041

HARDWARE FINISH: #626 BRUSHED S/S

TURN/PUSH LOCKSET: ANSI F82, GRADE 1, EQUIV TO SCHLAGE ND53PD

PLATES: 8" H x 16 GA FLUSH S/S KICK PLATE AT BOTH SIDES OF DOOR

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**ARCHITECTURAL FLOOR PLAN** 

43419-KS02 Project#

11/20/2019 Issue Date Scale As indicated

JDW Drawn by Checked by

DOOR SCHEDULE

**DOOR TYPES:** 

AS SCHED.

BUILDING

STANDARD

FLUSH DOOR

S.C. WD.

H3 FLOOR PLAN
1/4" = 1'-0"

									24145	
					DOOR			FF	RAME	
	000R#	WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	HARDWARE	TYPE	MATERIAL	Comments
`   [	100	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXISTING DOOR AND HARDWARE TO REMAIN
	101	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXISTING DOOR AND HARDWARE TO REMAIN; DOOR TO SWING INTO RESTROOM; FINISH
4										DOOR PT-5
	102	3' - 0"	7' - 0"	0' - 1 3/4"	Α	WD-SC	HW1	1	STL-W	FINISH DOOR PT-5
	103	3' - 0"	7' - 0"	0' - 6"	-	-	-	-	-	EXISTING DOOR AND HARDWARE TO REMAIN; VISION LIGHT TO BE TEMPERED OR
										LAMINATED GLASS
	104	3' - 0"	7' - 0"	0' - 6"	-	-	-	-	-	EXISTING DOOR AND HARDWARE TO REMAIN; VISION LIGHT TO BE TEMPERED OR
										LAMINATED GLASS
	105	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXISTING DOOR AND HARDWARE TO REMAIN

AL-SF CO CG

F (D)

FACT FG FR 45

G GL-1 HO HW MFR

NCO OPP PNL PR PS PT PVC

STL

STL-CC

STL-KD

STL-W

TC TS

WD

WD-HC

WD-SC

FRAME TYPES:

S8 A2.1

2" WELDED

H.M. FRAME

PAINT AS

SCHEDULED

**S11** 

\ A2.1 ∕

WALL AND DOOR LEGEND

\_--

EXISTING CONSTRUCTION TO BE DEMOLISHED EXISTING CONSTRUCTION TO REMAIN PARTITION

RATED PARTITION

LOW PARTITION, SEE SECTIONS FOR HEIGHT

EXISTING DOOR TO REMAIN

EXISTING DOOR RELOCATED

NEW CONSTRUCTION DOOR

EXISTING DOOR TO REMOVE (DEMO)

DOOR ABBREVIATIONS:

**ALUMINUM STOREFRONT** 

FIRE RATING LABEL IN MINUTES

MANUFACTURER'S STANDARD

NON-CASED OPENING

POLYVINYL CHLORIDE

SMOKE CONTROL "S" LABEL

TEMPERATURE RISE LABEL - DOOR

TRANSPARENT FINISH - CLEAR

TRANSPARENT FINISH - STAINED

STEEL COMPOSITE CORE

STEEL KNOCK-DOWN

WOOD HOLLOW CORE

WOOD SOLID CORE

STEEL WELDED

CASED OPENING

**COILING GRILLE** 

FLUSH (DUTCH)

**FACTORY** 

GLASS

FULL GLASS

**GLAZING TYPE** 

HOLD-OPEN

HARDWARE

OPPOSITE PANEL

POCKET SLIDE

PAIR

STEEL

WOOD

REFER TO PARTITION TYPE BUILT-UP MTL. STUD HEADER **HOLLOW METAL** FRAME AS SCHEDULED DOOR AS SCHEDULED 2 1/4" | 1 5/8", 1 7/8" | <del>- / / /</del>

5 3/4"

S8 DETAIL @ TYP DOOR HEAD

HOLLOW METAL FRAME AS SCHEDULED JAMB ANCHOR CLIP (MIN. 4 PER JAMB) MTL. STUD - PROVIDE DBL STUDS AT OPENINGS W/ DOORS GREATER THAN OR EQUAL TO 42" REFER TO PARTITION TYPE DOOR AS SCHEDULED

S11 DETAIL @ TYP DOOR JAMB

### FINISH FLOOR NOTES

NO PAINTING OR INTERIOR FINISHING SHALL BE DONE UNDER CONDITIONS WHICH WILL JEOPARDIZE THE QUALITY OR APPEARANCE OF SUCH WORK. ALL WORKMANSHIP WHICH IS JUDGED LESS THAN FIRST QUALITY BY THE ARCHITECT WILL BE REJECTED. FLAME SPREAD TO BE CLASS I: 0-25. SMOKE DENSITY TO BE LESS THAN 450.

- ALL SURFACES SHALL BE PREPARED TO RECEIVE THE SPECIFIED FINISH. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED, SPACKLED AND SANDED SMOOTH AND PREPARED TO RECEIVE THE SPECIFIED FINISH.
- PROVIDE ONE PRIMER COAT AND 2 FINISH COATS AT ALL PAINTED WALLS.
- SEE FINISH PLAN, ELEVATIONS AND DETAILS FOR CLARIFICATION OF EXTENT OF FINISH MATERIALS.
- ALL VERTICAL SURFACES U.O.N. SHALL RECEIVE WALL BASE.

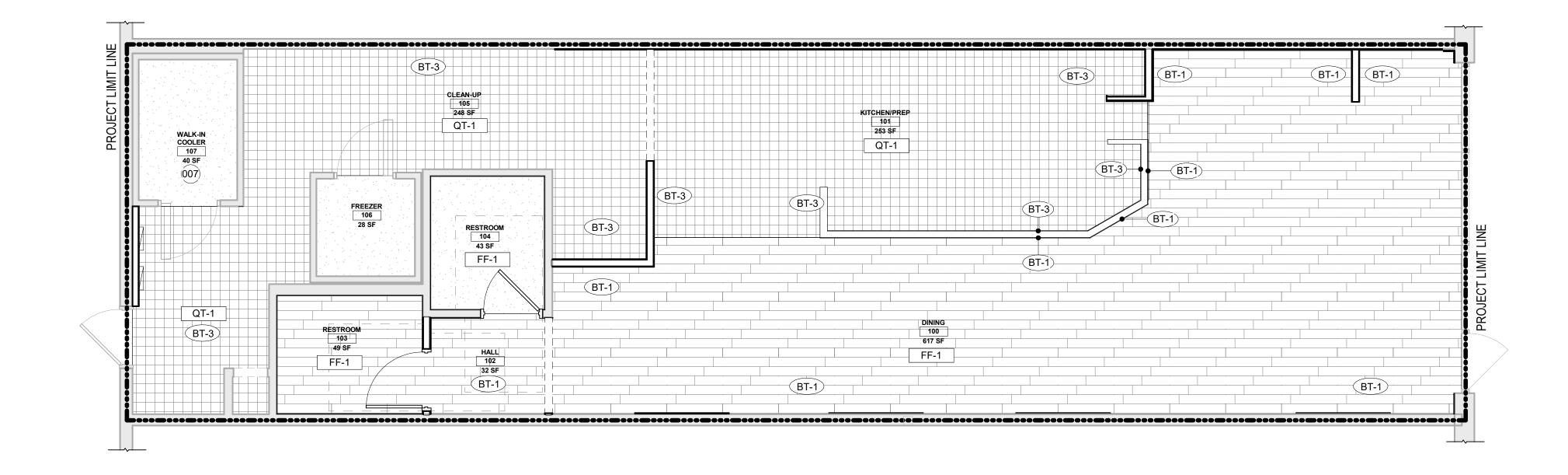
CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL FABRICS AND OTHER CUSTOM FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED, AND ANY EXCESSIVE LEAD TIME MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY TO ALLOW FOR RE-SPECIFICATION IF NECESSARY.

- EXAMINE ALL FINISH SURFACES AFTER COMPLETION OF WORK AND "TOUCH-UP" AS REQUIRED. UPON COMPLETION, REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED OR
- SPLATTERED ON EXPOSED SURFACES. INTERIOR GYPSUM BOARD SURFACES SHALL BE WIPED WITH A DAMP CLOTH JUST PRIOR TO APPLICATION OF THE FIRST COAT, IN ORDER TO LAY FLAT ANY NAP WHICH MAY HAVE FORMED
- ALL INTERSECTIONS OF FLOOR FINISH MATERIALS SHALL BE LOCATED DIRECTLY UNDER
- CENTER OF DOOR, WHERE OCCURS. U.O.N. REFERENCE INTERIOR ELEVATIONS FOR WALL FINISHES.

### ROOM FINISH SCHEDULE

IN SANDING PROCESS.

. [							
,			FLOOR	BASE	WALL		
	RM#	RM NAME	FINISH	FINISH	FINISH	CEILING FINISH	COMMENTS
	100	DINING	FF-1	BT-1	SEE ELEV.	CT-2	
	101	KITCHEN/PREP	QT-1	BT-3	SEE ELEV.	CT-1	
	102	HALL	FF-1	BT-1	SEE ELEV.	CT-2	
†	103	RESTROOM	FF-1	BT-1	SEE ELEV.	CT-2	
	104	RESTROOM	FF-1	BT-1	SEE ELEV.	CT-2	
_	105	CLEAN-UP	QT-1	BT-3	SEE ELEV.	CT-1	
	106	FREEZER	N/A	N/A	N/A	CT-2	
	107	WALK-IN COOLER	QT-1	N/A	N/A	CT-2	



F5 FINISH FLOOR PLAN

1/4" = 1'-0"

### 

			FLOORING A	AND WALL BASE	
TAG	SOURCE	TYPE	DESCRIPTION	COLOR	COMMENTS
FF-1	DAL TILE	PROCELAIN TIILE	6X36 JM BROWN WOOD	PART #N813 JM6361PR	CUSTOMER AREAS - DINING, RESTROOM, AND HALLWAY(S). 6"X36", 5/16 D. GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09. GROUT JOINT RECOMMENDED AT 3/16"
FF-2					ALTERNATIVE TO FF-1
QT-1	DAL TILE	QUARRY TIILE	6X6 PAVER 0Q74	BLACK	KITCHEN FLOORING. GROUT: MAPEI FLEXCOLOR CQ10 BLACK
BT-1	DAL TILE	PROCELAIN TIILE	IRON CRAFT	SABLE BLACK IC15 - UNPOLISHED	CUT FULL 12"X24" TILE (WT-2) DOWN TO 6"X12" FOR DINING ROOM WALL BASE, AND 4"X12" ON MILLWORK TOE KICK IN CUSTOMER AREAS. REFERENCE NOTES FOR COVE BASE. GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09
ВТ-3	DAL TILE	6X6 QUARRY COVE TILE	6X6 QUARRY COVE TILE 0Q74	BLACK	WILL BE INSTALLED AROUND THE PERIMETER OF KITCHEN AND KITCHEN MILLWORK TOE KICK. GROUT: MAPEI FLEXCOLOR CQ10 BLACK

IF INTERIOR TRANSITIONS STRIPS ARE TO BE REQUIRED, USE SCHULTER-RENO IN SATIN ANODIZED ALUMINUM.

FOR COVE BASE APPLICATION IN THE RESTROOM(S), USE SCHLUTER DILEX-AHK (POLISHED NICKEL) BELOW FULL WT-2 TILES. NO CUT TILE IS REQUIRED. REFER TO ELEVATIONS. FOR COVE BASE APPLICATION IN THE DINING ROOM, USE SCHLUTER DILEX-AHK (POLISHED NICKEL)

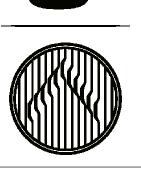
	COUNTER FINISHES							
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS			
SS-1	COUNTERTOP	CONSENTINO	SILESTONE - ETERNAL SERIES 2 CM	CHARCOAL SOAPSTONE - SUEDE	COUNTERTOP FINISH FOR ALL MILLWORK			

### **FINISH REMOVED**

			W	/OOD	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
WD-1	WAINSCOT	GC	1"X SHIPLAP, D. FIR NO2 (STANDARD) GRADE, SMOOTH FINISH	PAINTED PT-1	BEHIND BEACH CHAIR GRAPHICS IN DINING ROOM - REFER TO ELEVATIONS ON THE FRONT LINE SOFFIT. FACE OF COUNTER ON THE FRONT LINE.
WD-2	WAINSCOT	TERRAMAI	MISSION OAK FSC RECLAIMED OAK	CLEAR OIL	ACCENT WALL (PER PLAN). BOTTOM OF CHAIR RAIL IN DINING ROOM AND VESTIBULE. BEVERAGE COUNTER MILLWORK DOORS. BANQUETTE BACK AND SEAT. USE SCHULTER JOLLY (POLISHED NICKEL) FOR WALL EDGING, WHEN REQUIRED.
WD-3	BAR COUNTER	TERRAMAI	TEAK		GC TO ORDER FROM TERRAAI. TABLETOP TO MATCH DINING ROOM TABLE TOPS
WD-4	FURNITURE BASE	GC		PAINTED PT-1	CONSTRUCTION OF DINING ROOM FURNITURE - COMMUNITY TABLE, BANQUETTE, AND BAR COUNTER.
WD-5	HARDWOOD CAP	GC	3/4" HARDWOOD	PAINTED PT-6	FOR LOW WALL CAP AND WINDOW SILLS, WHEN CONDITION(S) OCCUR. ALLOW 1/2" OVERHANG.
			UPHO	DLSTERY	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
UP-1	BANQUETTE	DESIGNTEX	LUDINGTON 3285	EARTH 702	BANQUETTE SEATING

			WALL	_ FINISHES	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
W-1	STAINLESS STEEL WAINSCOT	CAPTIVE AIRE	BRUSHED S/S 20 GAUGE FROM TOP OF Q.T. BASE		FULL HEIGHT TO HOOD, BEHIND GRILL AND BREAD OVEN AREA
W-2	FRP WALL PANELING	MARLITE		WHITE	BACK KITCHEN FOOD PREP AREA
			LAN	∐ MINATES	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
PL-1	MILLWORK	WILSONART	STEEL MESH	FINE VELVET FINISH 4879-38	MILLWORK BEHIND THE SERVICE LINE AND BACK KITCHEN. USE PVC EDGE BANDING.
PL-2	CUTTING BOARDS	WILSONART	NATURAL RECON	FINE VELVET FINISH 7996-38	21 1/4" X 21 1/4" X 1" CUTTING BOARDS FOR PICK UP TOWER. QUANTITY 6
				PAINT	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
PT-1	SHIP LAP, SOFFIT, AND RESTROOM CEILINGS	BENJAMIN MOORE	OC-130	CLOUD WHITE, SATIN	CUSTOMER AREA SHIPLAP (AND SHIPLAP TRIM), FRONT LINE SOFFIT, AND RESTROOM WALLS (ABOVE TILE)
PT-2	5/8" GWP PAINTED	BENJAMIN MOORE	1613	SILENT NIGHT, SATIN	DINING ROOM AND HALLWAY WALLS ABOVE CHAIR RAIL.
PT-3	DOOR FRAME	BENJAMIN MOORE	1615	ROCK GRAY, SATIN	DOOR FRAME, IN OPEN CEILING CONDITION, EVERYTHING ABOVE 12' AFF IN DINING ROOM
PT-4					
PT-5	INTERIOR DOORS	MINWAX	WOOD FINISH PENETRATING STAIN	WEATHER OAK 270	FINISH WITH CLEAR TOP COAT
PT-6	UPPER DINING ROOM WALLS, DINING ROOM CEILING, LOW WALL/ SILL CAP	BENJAMIN MOORE	#2132-10	BLACK, EGGSHELL OR SEMI GLOSS	LOW WALL CAP AND WINDOW SILL FINISH.
			WA	ALL TILE	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
WT-1	CERAMIC TILE	DAL TILE	2X8 MOD JM BLUE	PART#: N519 JM28MOD1P2. GROUT: MAPEI UP TRACOLOR PLUS FA-IRON 107	BACK SPLASH TILE IN KITCHEN AND BEVERAGE COUNTER. RUNNING BOND. USE SCHULTER JOLLY (POLISHED NICKEL) FOR EDGING
WT-2	CERAMIC TILE	DAL TILE	IRONCRAFT	SABLE BLACK IC15-UNPOLISHED - 12"X24". GROUT: MAPEI ULTRACOLOR PLUS FA - GRAY 09.	BATHROOM BOTTOM WALL TILE. USE SCHULTER JOLLY (POLISHED NICKEL) FOR EDGING
				/ETAL	
TAG	SURFACE	SOURCE	PRODUCT	COLOR	COMMENTS
M-1	CHAIR RAIL	GC	1/8" X 3 1/2" HOT ROLLED STEEL	PAINTED IN BLACK SEMI-GLOSS	DINING ROOM CHAIR RAIL, WITH BUTTON HEAD HEX SOCKET SCREW

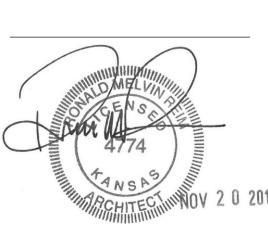






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**FINISH PLAN AND SCHEDULE** 

43419-KS02 Project# 11/20/2019 As indicated

Drawn by

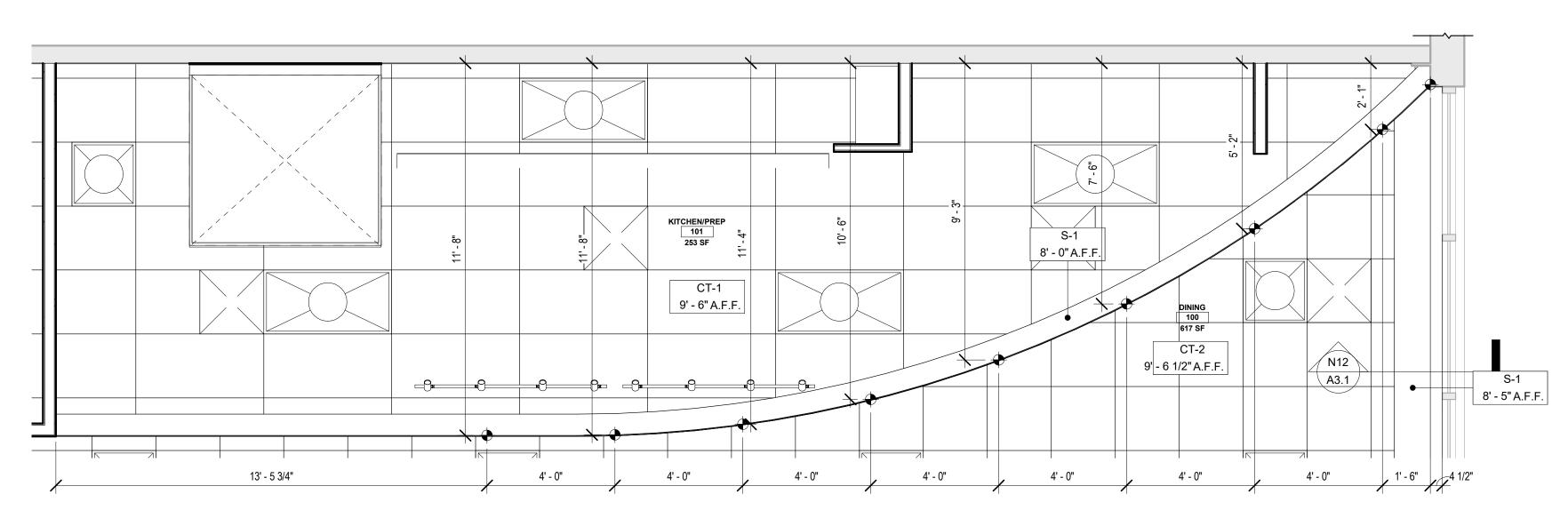
- LIGHT SWITCHES ARE TO BE MOUNTED AT 42" AFF TO CENTER OF SWITCH UON.
- FIXTURES SHOWN ARE FOR LOCATION INFORMATION ONLY. REFERENCE MEP DRAWINGS FOR FIXTURE DESIGNATIONS AND CONNECTIONS.
- LIGHT FIXTURES ARE TO BE CENTERED ON CEILING TILES UON.
- POWER AND DATA LOCATIONS SHOWN ON THIS PLAN ARE FOR INFORMATION ONLY. REFERENCE DESIGN/BUILD ELECTRICAL PLANS FOR QUANTITY/LOCATION OF ALL ELECTRICAL OUTLETS AND FIXTURES.
- SEE FINISH LEGEND FOR ACOUSTICAL CEILING GRID AND TILE INFORMATION (SHEET A2.2)
- SEE SHEET A3.1 FOR TYPICAL SEISMIC BRACING INFORMATION AS REQUIRED BY LOCAL BUILDING CODES AND ORDINANCES
- GC TO REPAIR/REPLACE ANY DAMAGED CEILING PANELS OR GRID
- COMPONENTS AS NECESSARY MATCH ADJACENT EXISTING QUANTITIES ARE FOR REFERENCE ONLY, GC TO VERIFY IN FIELD.

### KEYNOTES: W

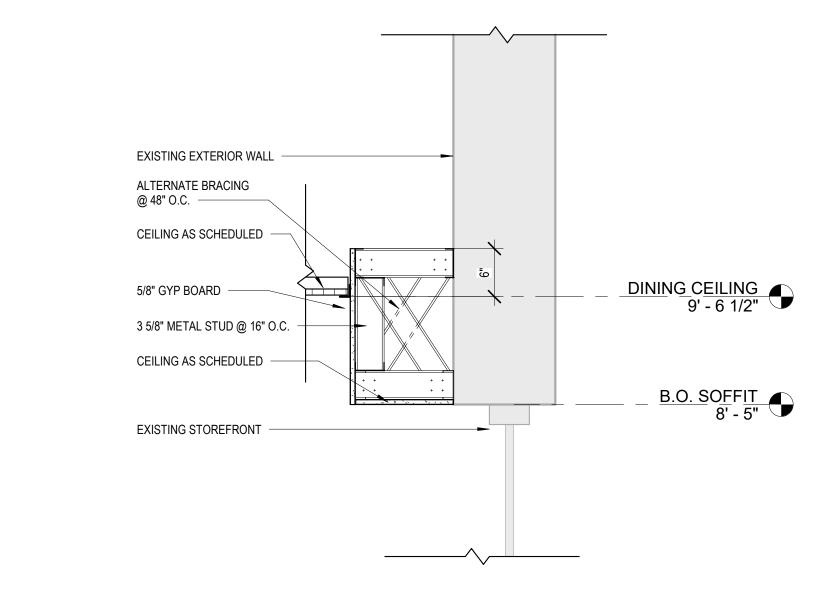
KEYNOTE TEXT 048 TRACK LIGHTS TO BE POINTED DOWN TOWARD THE MEAT CASE AND SLICER. 057 GC TO DIRECT LIGHTS ON MENU

- 203 REF ELEVATIONS FOR MOUNTING HEIGHT AND LOCATION OF LIGHT FIXTURE.
- 204 SUSPENDED MENU, PROVIDED BY OTHERS 205 | SPRINKLER HEADS WILL NEED TO BE PROVIDED ON BOTH SIDES OF
- MENUBOARD(S) 208 FINISHED HEIGHT OF HEADER TO BE 7'-0" AFF. PAINT UNDERSIDE OF HEADER PT-1.

G1 REFLECTED CEILING PLAN
1/4" = 1'-0"



M1 DIMENSIONS @ SOFFIT

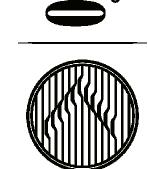


N12 <u>SECTION</u> @ SOFFIT

### CEILING LEGEND

	FLOORING AND WALL BASE									
TAG	SOURCE	ТҮРЕ	COLOR	SIZE	COMMENTS					
CT-1	SOURCE: ARMSTRONG	ACOUSTIC CEILING TILE VINYL FACED	WHITE VINYL	SIZE: 2' X 4'	FOOD PREP AREAS HD APPROVED VINYL FACED					
CT-2	SOURCE: ARMSTRONG	ACOUSTIC CEILING TILE FISSURED 2X2 WITH TEGULAR EDGE	WHITE	SIZE: 2' X 2'	CUSTOMER AREA, RESTROOM VESTIBUL, AND RESTROOMS					
S-1	SOURCE: BENJAMIN MOORE		PT-2		SEE DETAIL					

SHEET NOTES:

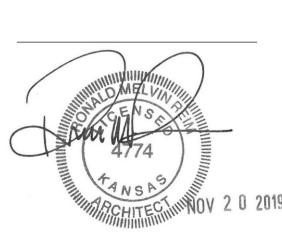




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certification relating to the performance of products and materials beyond those provided by their respective manufacturer.

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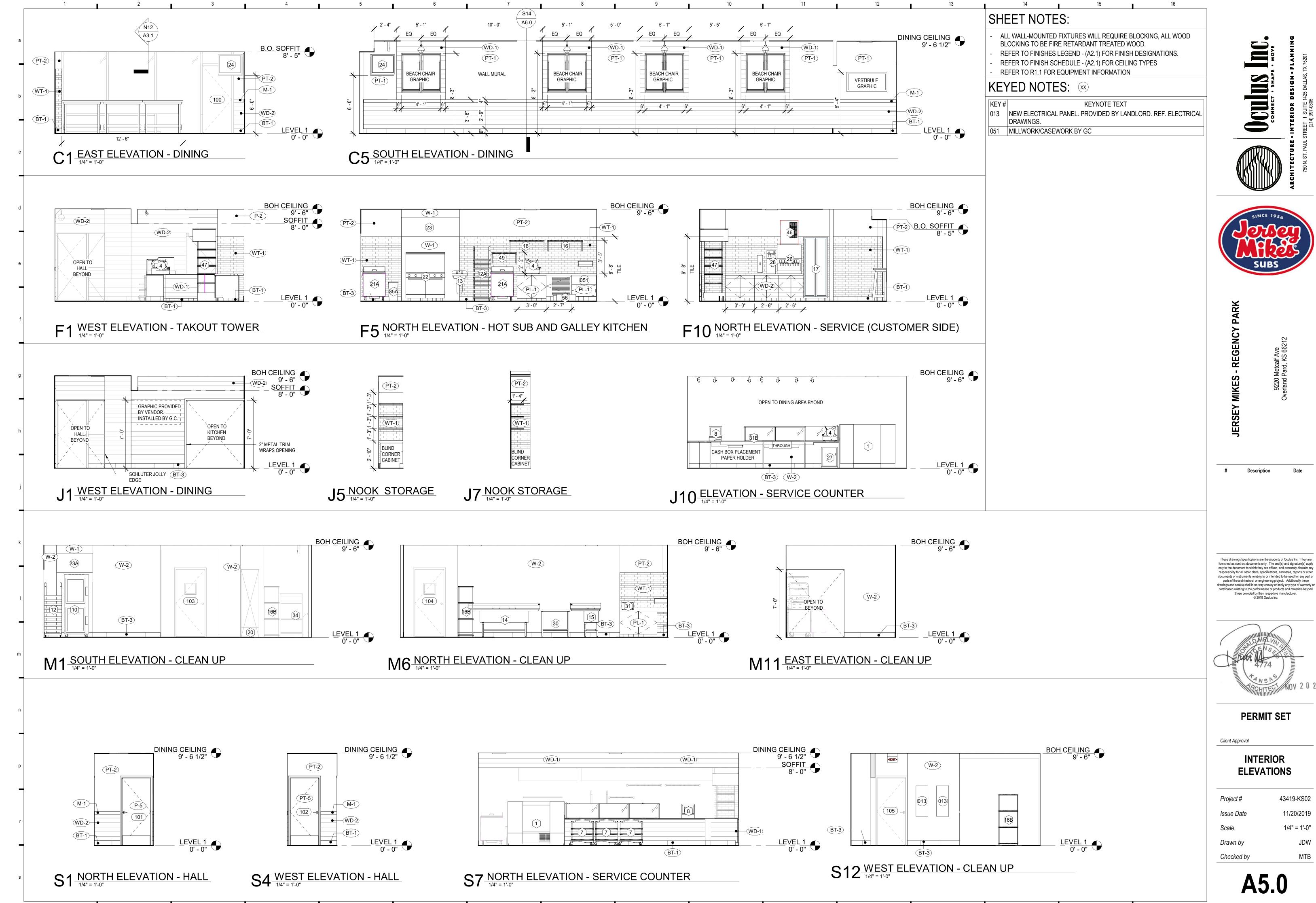
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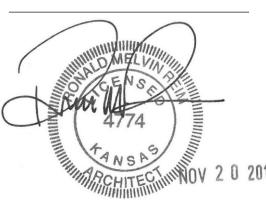
Client Approval

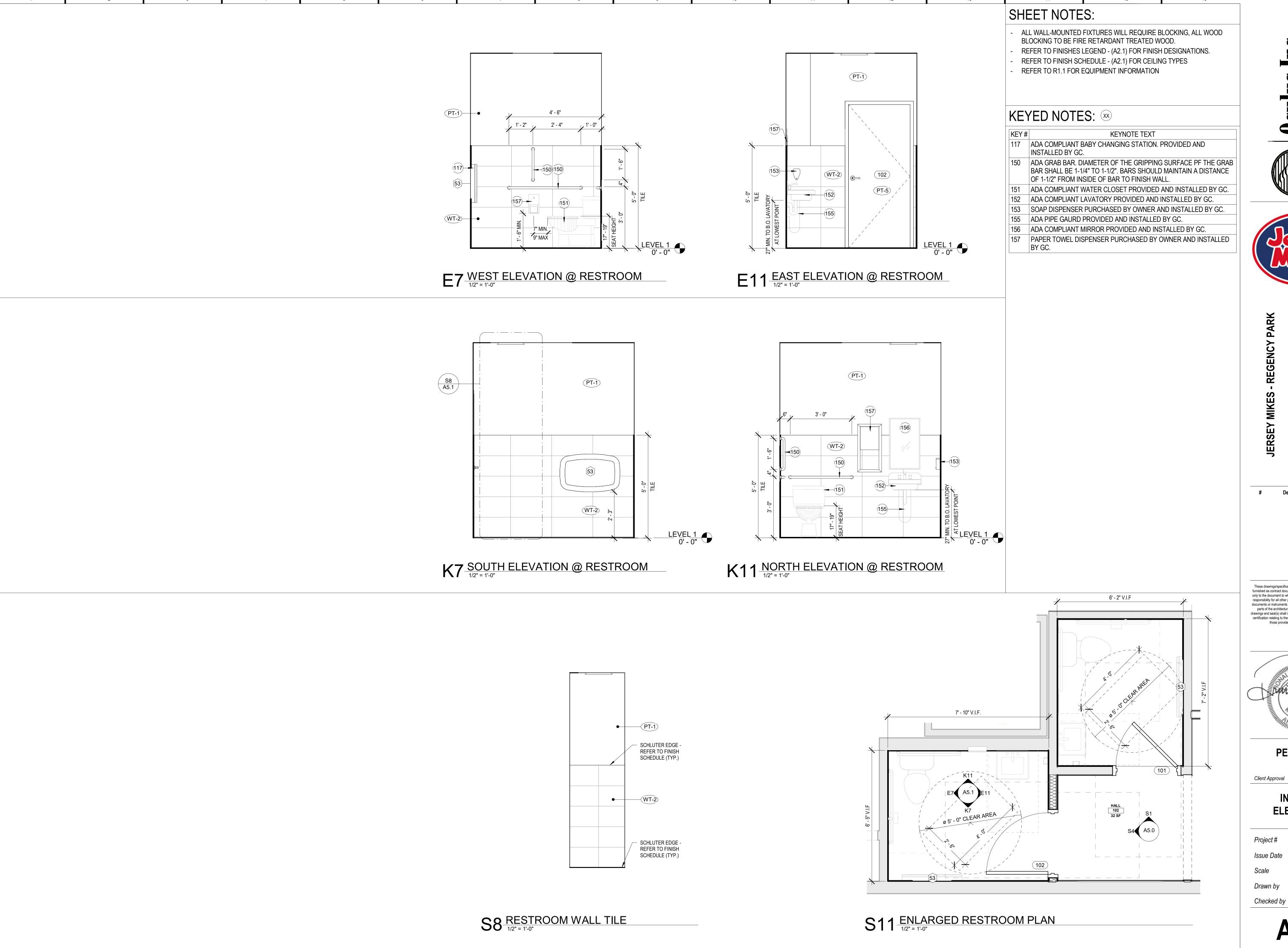
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### REFLECTED CEILING **PLAN**

43419-KS02 11/20/2019 As indicated



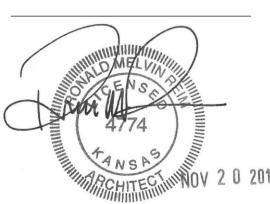








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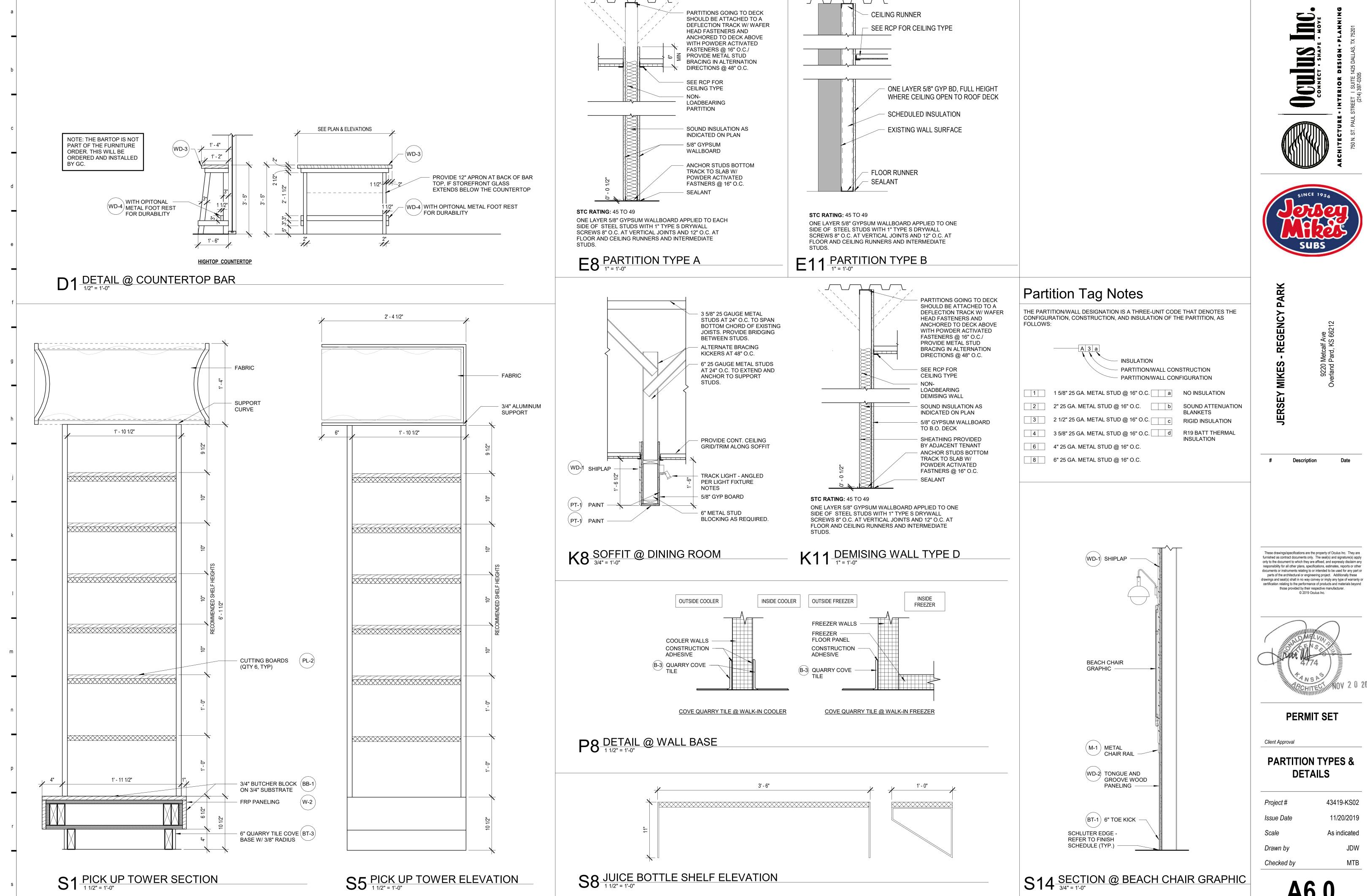
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Client Approval

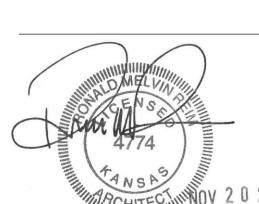
INTERIOR **ELEVATIONS** 

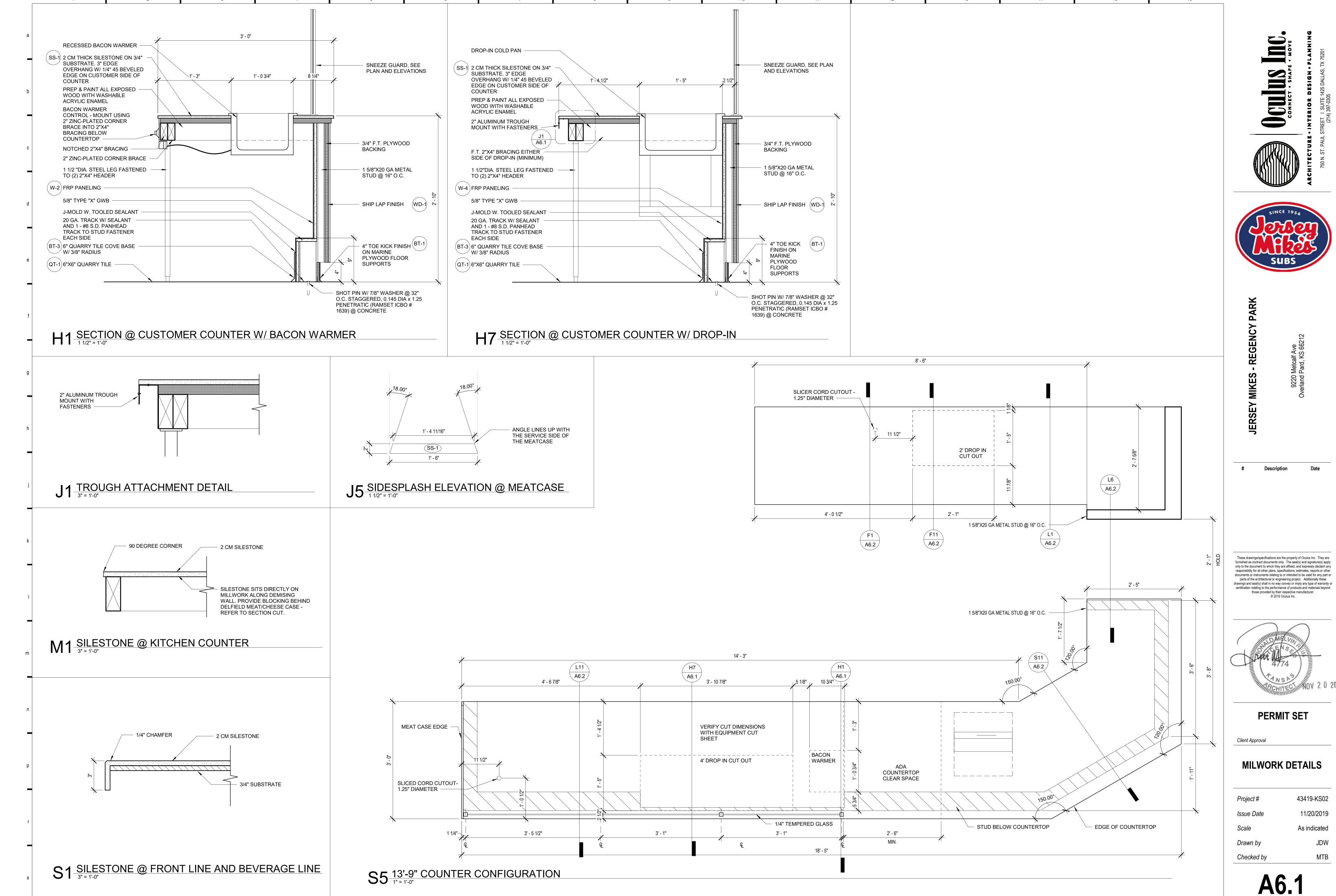
43419-KS02 Project# 11/20/2019 1/2" = 1'-0" Drawn by

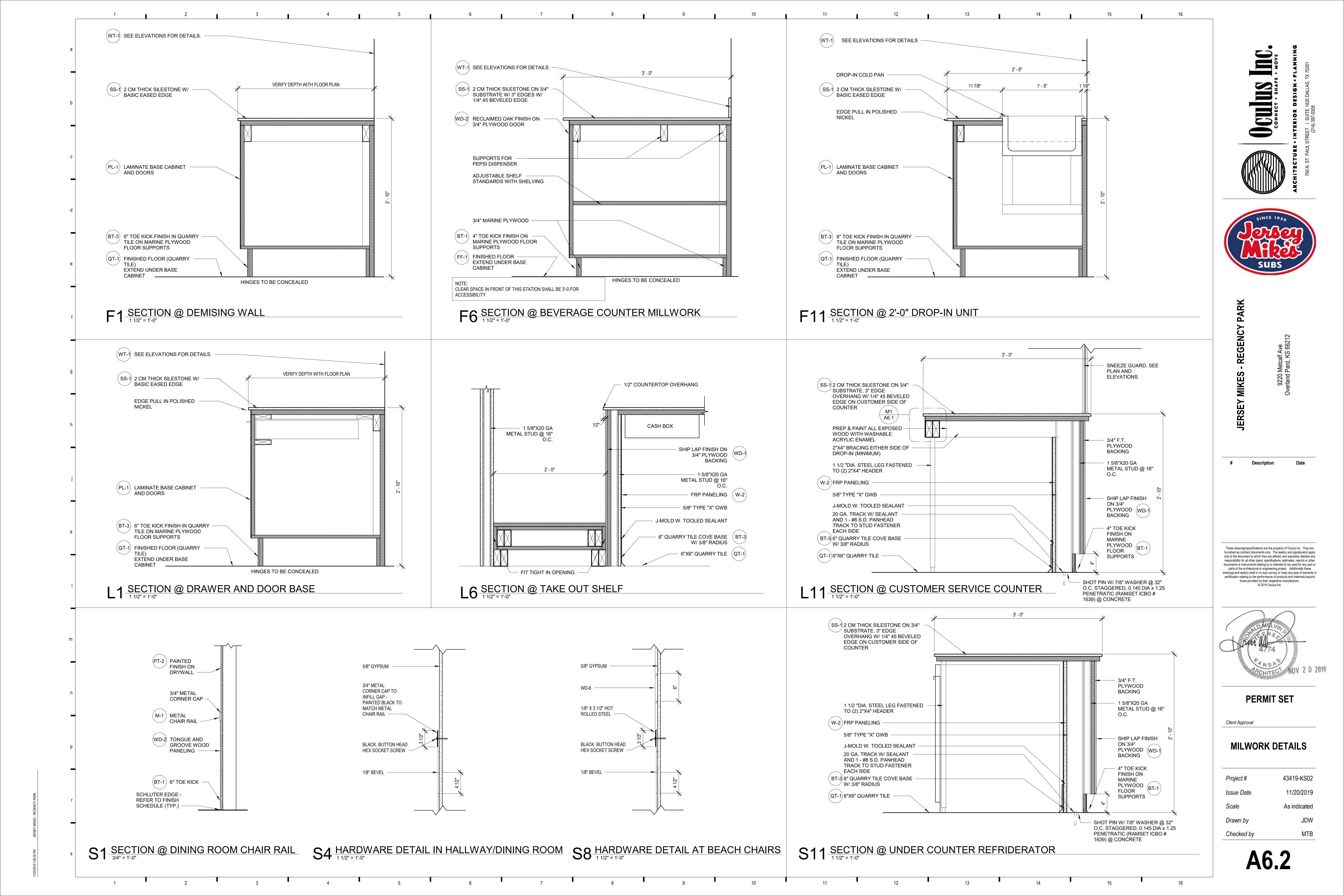
**A5.1** 











SHEET NOTES:

- ALL FURNITURE AND EQUIPMENT IS PROVIDED BY THE TENANT. LAYOUT SHOWN TO REFLECT DESIGN INTENT ONLY.

BLOCKING REQUIRED AT ALL WALL-MOUNTED SHELVING

KEYNOTES: 🕸

KEY# KEYNOTE TEXT



ARK SUBS

9220 Metcalf Ave Overland Pard, KS 66212

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FOR DESIGN INTENT REFERENCE ONLY

**PERMIT SET** 

Client Approval

REFERENCE FURNITURE PLAN

Project # 43419-KS02

Scale 11/20/2019
1/4" = 1'-0"

Drawn by
Checked by

R1.1

F3 REFERENCE FURNITURE & EQUIPMENT PLAN

### EQUIPMENT SCHEDULE (XX)

T (DE			T		T	T	
TYPE MARK QTY	DESCRIPTION	MANUFACTURER	MODEL	SUPPLIER	POWER REQUIRED	PLUMBING REQUIRED	MISC. NOTES
1	5'-10" MEATCASE	HOWARD MCCRAY	SC-CDS34N-6-JM	ECO	8.7AMP 115V/60/1		NSF-7. OUTLET INSTALLED AT 18" AFF.
1	SNEEZEGUARD	C.R. LAURENCE		GC		C.R. LAURENCE 323-588-1281 X 7710 RICARDO BASULTO	C.R. LAURENCE 323-588-1281 X 7710 RICARDO BASULTO
1	4' DROP IN COLD UNIT	DELFIELD	N8148-EFN	ECO	7.5 AMP 115V/60/1		NO DRAIN REQUIRED. OUTLET INSTALLED AT 18" AFF
1	2' DROP IN COLD UNIT	DELFIELD	N8118-EF	ECO	7.5 AMP 115V/60/1		NO DRAIN REQUIRED. OUTLET INSTALLED AT 18" AFF
2	SLICER	BIZERBA	GSP-H33 W/LIFT	ECO	120V/60/1		OUTLET INSTALLED AT 24" AFF, IN MILLWORK
1	MENU BOARD	JMFS	JMFS	GRAPHICS CO.			ORDERED WITH GRAPHICS PACKAGE
1	TELEPHONE	VARIES	VARIES	FRANCHISEE			
3	CHIP DISPLAY UNIT	PEPSI					
1	CASH REGISTER	INFOSOFT	UP700	FRANCHISEE			REG. W/ COMM. MODEM, CASH DRAWER, RECEIPT & JOURNAL (2 SETS KEYS). OUTLET INSTALLED AT 18"
1	BREAD OVEN	NUVU	QB 5/ 10 AUTOMIST	ECO	29AMP 208V/1 or 3ph OR 29AMP/1 or 3ph	1/4" SUPPLY LINE	AUTO MISTER NOT OPTIONAL. OUTLET INSTALLED AT 78" AFF
1	BREAD PANS	LINCOLN FOOD SERVICE		SMALLWARES CO.	·		18 GAUGE SHEET PANS
3	BREAD RACK	CHANNEL	401AC	SMALLWARES CO.			W/ (2) CURTAIN COVERS, WINDOW DISPLAY, ZIPPER
1	BREAD RACK (STATIONARY)	CHANNEL	DE100517	SMALLWARES CO.			W/ (2) CURTAIN COVERS, WINDOW DISPLAY, ZIPPER
1	HAND SINK - WALL HUNG	CHG	FS17D141005JM	ECO		CHG FKL45-4000-RE4 FAUCET	. ( )
1	3 COMPARTMENT SINK	ADVANCE TABCO/CHG	FC-3JM-DB	ECO		CHG KL53-1000-AF4 PRE-RINCE SPRAYER/ ADD-A-FAUCET, KL54-8012 AUCET AND D50-7100 LEVER WASTES - QTY 3	
1	PREP SINK	ADVANCE TABCO/CHG	FC-1JM-D_	ECO		CHG KL54-8002 FAUCET	ONE COMPARTMENT SINK W/ DRAINBOARD ON EITHER THE LEFT OR RIGHT SIDE
2	WIRE SHELVING	METRO		ECO			
2	18" X 24" WIRE SHELVING	METRO		200			
1	10 X21 WINE GITEEVING	WETTO					
1	1 DOOR PEPSI COOLER	PEPSI	GDM-26	PEPSI			OUTLET INSTALLED AT 18" AFF
1	WALK-IN COOLER	NORLAKE	KLB-776'X8'-C36"	ECO	115V FOR LIGHTS AND DOOR HEATER, 15 AMP BREAKER		OUTEET INOTALLED AT TO ALT
1	CAPSUL PACK	NORLAKE	CPBDCA	ECO	208-230/ 60/ 1 .8 TOTAL SYSTEM AMPS, 9.3 MINIMUM CIRCUIT AMPS, 20A MAX FUSE SIZE		
1	STEP IN FREEZER	NORLAKE	KLF-774'X6'-C36"	ECO	115V FOR LIGHTS AND DOOR HEATER, 15 AMP BREAKER		WITH 4" STEP-UP FLOOR PANEL, SELF CONTAINED CASULE PAK SYSTEM, FIELD COORDINATE POWER REQUIREMENT
1	CAPSUL PACK	NORLAKE	CPF DCA	ECO	208-230/60/1, 14.9 DEFROST AMPS, 8.4 TOTAL SYSTEM AMPS, 14.9 MINIMUM CIRCUIT AMPS, 15 MAX FUSE SIZE		
1	MOP SINK		2' X 2'	GC	, ,	1/2" SUPPLY, 1 1/2" DRAIN, VENT	MOP HANGER AND WALL GUARD
2	SANDWICH UNIT	DELFIELD	4427N-8-JM2	ECO	115V/60/1		
1	GRILLE	IMPERIAL	IR-G48T-XB-JMI	ECO		CONFIRM NATURAL OR LP GAS	
1	EXHAUST HOOD SYSTEM & FIRE SYSTE		ANSUL	ECO		FIRE SYSTEM ANSUL	
1	CONDENSATE HOOD	CAPTIVE AIRE	6024VHB	ECO	(1) 115V	THE STOTEM THOSE	
1	TV'S W/ MOUNTING BRACKETS	VARIES	42" MONITOR	FRANCHISEE/GC	110V		
1	PORTABLE FIRE EXTINGUISHERS	V/ II NILO	12 WONTON	GC	1 1 0 V		
1	DRINK DISPENSER & ADAPTER KIT	PEPSI	DISPENSER: IDC255, ADAPTOR: 80002957	PEPSI	9.3AMP 115V/60/1	1/2" SUPPLY, CONDENSATION DRAIN	COORDINATE W/ PEPSI. OUTLET INSTALLD AT 42" AFF
1	FLOOR SAFE	VARIES	VARIES	FRANCHISEE	σ.σ/μίνι	1/2 GOLLET, GONDENGATION DIVAIN	OCCIDITATE WITE OIL COTEET INCTALLUAT 42 ATT
1	ICED TEA BREWER/DISPENSER	BUNN	TB3Q	LUZIANNE	120V, 14.4 AMP		1-800-627-2094. OUTLET INSTALLED AT 42" AFF
1 1	SS. PREP TABLE 24" x 24"	ADVANCE TABCO	KMG-24x24-JM	ECO	12UV, 17.4 AIVIF		1-000-021-2034. OUTLET INSTALLED AT 42 AFF
1	COUNTER TOP FOOD WARMER		71001 MODEL 1001	SMALLWARES CO.	120V 5.8 AMP		OUTLET INSTALLED AT 54" AFF
1		VOLLRATH	HSW6	ECO			NO DRAIN. HARDWAIRED INSTALLED AT 18" AFF
	RECESSED BACON WARMER	WELLS			120V, 6.9 AMP	1/0" CLIDDLV	
1	BAG IN BOX SYSTEM	PEPSI	PEPSI	PEPSI	110/120V - 20AMP DUAL OUTLET	1/2" SUPPLY	WATER CONNECTION IS NEEDED FOR THE FILTRATION SYSTEM. OUTLET CAN BE INSTALLED AT 80" AFF
1	SLIM JIM REFUSE CONTAINER	RUBBERMAID	11"x20"	SMALLWARES CO.	145 VICO OCAMO DOFAVED	DDOV/IDE DDAIN	OUTLET INICTALLED AT 4011 AFE
1	ICE MAKER	HOSHIZAKI	KM-520MAJ	ECO	115V/60 20AMP BREAKER	PROVIDE DRAIN	OUTLET INSTALLED AT 42" AFF
1	TAKE OUT SHELF	METRO		ECO			CUSTOM BUILT SHELF
1	JUICE SHELVING	METRO		ECO			CUSTOM METRO SHELVING 7"H, 12"D, 42"L
2	BABY CHANGING TABLE			SMALL WARES CO.			
2	TROUGH	FRANKLIN SHEET METAL					

FURNITURE FURNISHED AND INSTALLED BY THE GC.

### FURNITURE SCHEDULE XX

Count	Type Mark	Description	Manufacturer	Model	SUPPLIER	Comments
	36	TABLE TOP AND BASE	ATS	24"x20"	FURNITURE CO.	ADA COMPLIANT TABLETOP
	37	TABLE TOP AND BASE	ATS	24"x42"	FURNITURE CO.	ADA COMPLIANT TABLETOP
4	39	CHAIRS - LOW	ATS		FURNITURE CO.	
	47	BAR STOOL	ATS		FURNITURE CO.	

#### SECTION 16100 ELECTRICAL SPECIAL CONDITIONS

#### <u>GENERAL</u>

- APPLICABLE PROVISIONS OF AIA DOCUMENT A201, "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", AND DIVISION 1 GENERAL CONDITIONS GOVERN WORK UNDER THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.
- APPLICABLE PROVISIONS OF THIS SECTION GOVERN WORK UNDER ALL OTHER SECTIONS OF DIVISION 16. WORK COVERED BY THIS SECTION SHALL CONSIST OF PROVIDING ALL MATERIAL, LABOR, EQUIPMENT AND SERVICES NECESSARY FOR A COMPLETE, TESTED AND ADJUSTABLE ELECTRICAL INSTALLATION READY FOR OPERATION AS SPECIFIED HEREIN AND AS SHOWN ON THE
- C. THE TERM CONTRACTOR AS USED IN THIS SECTION SHALL MEAN ANY CONTRACTOR OR SUBCONTRACTOR WHO HAS CONTRACTED TO PERFORM WORK INCLUDED IN AND DEFINED BY THIS SECTION AND ALL OTHER SECTIONS OF DIVISION 16.

#### CONTRACTOR'S RESPONSIBILITY

- PRIOR TO SUBMITTING HIS BID, CONTRACTOR SHALL CAREFULLY EXAMINE THESE CONSTRUCTION DOCUMENTS, THE DEVELOPER'S EXHIBITS, AND THE SITE, TO INQUIRE FULLY INTO DIFFICULTIES AND COSTS OF WORK, AND TO DETERMINE THE SCOPE AND CHARACTER OF WORK TO BE DONE. CONTRACTOR SHALL INCLUDE ALL NECESSARY COSTS TO LOCATE AND/OR EXTEND ALL UTILITIES INCLUDING LIGHTING PANELS, POWER PANELS, ELECTRICAL SERVICE, PHONE SERVICE AND/OR MODIFY EQUIPMENT TO MEET THE INTENT OF THE CONTRACT DOCUMENTS. THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER SHALL NOT BE RESPONSIBLE FOR FAILURE OF THE CONTRACTOR TO DETERMINE DIFFICULTIES AND COSTS IN THE PROJECT OR FOR HIS OVERLOOKING
- IF THIS CONTRACTOR DOES NOT CLEARLY UNDERSTAND THE PLANS AND SPECIFICATIONS, OR IF THERE ARE ANY REQUIREMENTS WHICH ARE AMBIGUOUS IN THE CONTRACTOR'S OPINION, HE SHOULD CALL THIS TO THE ATTENTION OF THE ARCHITECT PRIOR TO BIDDING, SINCE THIS CONTRACTOR WILL BE HELD RIGIDLY TO THE INTERPRETATIONS OF THE ARCHITECT AND ENGINEER.
- CONTRACTOR SHALL SCHEDULE HIS WORK IN COOPERATION WITH OTHER TRADES INSTALLING INTERRELATED WORK. ALL WORK SHALL BE SCHEDULED TO MAINTAIN SERVICE TO ALL REQUIRED AREAS DURING THE COURSE OF THE CONSTRUCTION EXCEPT FOR SHORT TERM PLANNED SHUTDOWNS, ANY OF WHICH SHALL BE PRE-SCHEDULED WITH THE OWNERS AGENT AND THE LANDLORD.

#### WORKMANSHIP AND GUARANTEE

IN ENTERING INTO A CONTRACT COVERING THIS WORK, THE CONTRACTOR ACCEPTS THE SPECIFICATIONS, AND GUARANTEES THAT THE WORK WILL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR FURTHER GUARANTEES THAT THE WORKMANSHIP AND MATERIAL WILL BE OF THE BEST PROCURABLE AND THAT NONE BUT EXPERIENCED WORKMEN EXPERIENCED IN EACH PARTICULAR CLASS OF WORK WILL BE EMPLOYED. CONTRACTOR FURTHER GUARANTEES TO REPLACE AND MAKE GOOD AT HIS OWN EXPENSE ANY DEFECTS DUE TO FAULTY WORKMANSHIP OR MATERIAL WHICH MAY DEVELOP WITHIN ONE (1) YEAR AFTER FINAL PAYMENT AND ACCEPTANCE BY THE ARCHITECT.

#### CODES AND STANDARDS

CONTRACTOR WILL COMPLY IN ALL RESPECTS WITH THE ADOPTED BUILDING CODES, APPLICABLE LAWS, ORDINANCES, AND REGULATIONS AS MAY APPLY ACCORDING TO THE RULING OF THE CONTROLLING PUBLIC OFFICIAL SHOULD THE CONTRACTOR PERFORM ANY WORK THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE LAWS, ORDINANCES AND REGULATIONS, OR WHICH DOES NOT RECEIVE THE APPROVAL OF THE CONTROLLING PUBLIC OFFICIAL, HE SHALL BEAR ALL COSTS ARISING IN CORRECTING THE DEFICIENCIES. ALL ELECTRICAL EQUIPMENT SHALL SHALL BEAR THE UNDERWRITER'S LABORATORY LABEL.

#### 🗕 5. FEES ON PERMITS

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAKING PAYMENT FOR ALL FEES, PERMITS AND INSPECTIONS RELATING TO HIS WORK.

#### CONTRACT DRAWINGS

- THE DRAWINGS SHOW THE GENERAL ARRANGEMENT AND INTENT OF THE DESIGN AND SHALL BE FOLLOWED AS CLOSELY AS ACTUAL BUILDING CONDITIONS AND THE WORK OF OTHER TRADES WILL PERMIT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS. IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED, NOR IS IT IMPLIED THAT ALL CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE SYSTEMS OR BUILDING COMPONENTS HAVE BEEN INDICATED. THE CONTRACTOR SHALL INVESTIGATE ALL EXISTING CONDITIONS AFFECTING THE WORK AND ARRANGE HIS WORK ACCORDINGLY, PROVIDING SUCH FITTINGS, OFFSETS, ACCESSORIES COMPLEMENTARY, AND ANY WORK REQUIRED BY ONE BUT NOT BY THE OTHER SHALL BE PERFORMED BY BOTH. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND SERVICES REQUIRED FOR A COMPLETE AND WORKING PROJECT AT NO ADDITIONAL COST EVEN THOUGH EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN EACH AND EVERY NECESSARY ELEMENT THEREOF IS NOT SPECIFICALLY IDENTIFIED HEREIN.
- CONTRACTOR SHALL NOT SCALE FROM THE DRAWINGS BUT SHALL FOLLOW THE ARCHITECTURAL DRAWINGS OR EXISTING BUILDING CONDITIONS WHERE APPLICABLE, IN ESTABLISHING DIMENSIONS AND LINES OF RUN, SINCE DIMENSIONS ON THE FINAL ARCHITECTURAL DRAWINGS OR AT THE SITE MAY NOT COINCIDE WITH THOSE SHOWN ON THE ELECTRICAL DRAWINGS, THE CONTRACTORS SHALL VERIFY WITH THE DIMENSIONED ARCHITECTURAL DRAWINGS OR THE SITE CONDITIONS THE EXACT MATERIAL QUANTITIES AND LENGTHS NECESSARY.
- SIGNIFICANT DEVIATIONS OR CHANGES FROM THE DRAWINGS WHICH ARE REQUIRED TO ACCOMPLISH THE INTENT OF THE CONTRACT DOCUMENTS MUST BE REVIEWED WITH THE ARCHITECT AND APPROVED BEFORE PROCEEDING.

#### SHOP DRAWINGS

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, FOUR (4) COPIES MINIMUM, FOR ALL MANUFACTURED PRODUCTS. EACH SHOP DRAWING SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO ASSURE THAT ALL DIMENSIONS, QUANTITIES, CONNECTIONS, CAPACITATES AND ACCESSORIES SHOWN ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS, AND SHALL BE MARKED OR STAMPED TO CONFIRM THAT SUCH REVIEW WAS MADE AND COMPLIANCE WAS
- APPROVAL OF SHOP DRAWINGS BY THE OWNER, OWNER'S AGENT, ARCHITECT, ENGINEER OR DESIGNER, WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF COMPLYING WITH ALL TERMS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PERFORMANCE OF ALL EQUIPMENT PURCHASED, FOR PROPER FIT, AND OTHER DIMENSIONAL

#### 8. <u>RECORD DRAWINGS</u>

CONTRACTOR SHALL MAINTAIN AT THE JOB SITE ONE SET OF DOCUMENTS AS "RECORD DRAWINGS" FOR THE PURPOSE OF DAILY MARKING OF ALL SUBSTANTIAL REVISIONS TO THE DOCUMENTS INCLUDING BUT NOT LIMITED TO ELECTRICAL CHANGES, AND LOCATIONS OF UTILITIES, PANELBOARDS, DISCONNECTS, STARTERS AND OTHER DEVICES REQUIRING PERIODIC OPERATIONAL ATTENTION, ADJUSTMENT, OR SERVICE INCLUDING ACCESS THERETO, AT THE COMPLETION OF THE PROJECT, THIS SET SHALL BE RETURNED TO THE ARCHITECT FOR THE PURPOSE OF MAKING FINAL "AS-BUILT DRAWINGS"

### **EQUIPMENT SUBSTITUTION**

- SPECIFIC MANUFACTURERS AND MODELS OF EQUIPMENT HAVE BEEN USED IN THE DEVELOPMENT OF THE DRAWINGS AND DESIGNS. THIS CONTRACTOR MUST SUBMIT TO THE OWNER ANY CHANGES AND/OR SUBSTITUTIONS FOR APPROVAL PRIOR TO INSTALLATION OR EXECUTION. ANY CHANGES WHICH DO NOT RECEIVE THE OWNER'S APPROVAL MAY BE SUBJECT TO REMOVAL OR REPLACEMENT AS ORIGINALLY SPECIFIED, AND WILL BE AT THE CONTRACTOR'S EXPENSE.
- IF THIS CONTRACTOR SUBSTITUTES FOR SPECIFIED EQUIPMENT ANY OTHER EQUIPMENT WHICH REQUIRES ANY CHANGES TO THE DESIGN, ALL COST OF REDESIGN AND RECONFIGURATION RESULTING FROM SAID SUBSTITUTION SHALL BE BORNE BY THE SUBMITTING CONTRACTOR.

#### EQUIPMENT INSTALLATION AND SUPPORT

- CONTRACTOR SHALL SUPPORT PLUMB, RIGID AND TRUE-TO-LINE ALL WORK AND EQUIPMENT INSTALLED. THIS CONTRACTOR SHALL DETERMINE HOW EQUIPMENT, FIXTURES, ETC., ARE TO BE SUPPORTED, MOUNTED, OR SUSPENDED AND SHALL PROVIDE ACCESSORIES REQUIRED FOR PROPER SUPPORT WHETHER SHOWN ON THE DRAWINGS OR NOT. IF SUPPORTS ARE REQUIRED, CONTRACTOR SHALL SUBMIT DRAWINGS TO THE ARCHITECT FOR APPROVAL.
- PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS PRINTED INSTALLATION AND MAINTENANCE LITERATURE. COMPONENTS REQUIRING PERIODIC MAINTENANCE OR ADJUSTMENTS SHALL BE LOCATED OR INSTALLED AS TO PERMIT ACCESS WITHOUT DAMAGE TO STRUCTURE, FINISHES OR OTHER EQUIPMENT.
  - ALL CONDUIT CONNECTING TO SWITCHGEAR, PANELS, MOTORS, AND OTHER EQUIPMENT SHALL BE INSTALLED WITHOUT STRAIN AT THE CONNECTIONS. THE CONTRACTOR MAY BE REQUIRED, AS DIRECTED, TO DISCONNECT CONDUITS TO DEMONSTRATE THAT THEY HAVE BEEN SO CONNECTED.

#### 11. <u>DEMOLITION</u>

A. ALL EXISTING EQUIPMENT, NOT INDICATED TO BE INCORPORATED INTO THE NEW SYSTEM SHALL BE DISCONNECTED BY THIS CONTRACTOR FOR REMOVAL BY OTHERS FROM THE JOB SITE. CARE SHALL BE USED SO THAT NO DAMAGE IS DONE TO EXISTING BUILDING, PIPING, DUCTWORK, AND/OR ELECTRICAL EQUIPMENT. ANY DAMAGE ATTRIBUTED TO THIS CONTRACTOR SHALL BE REPAIRED OR REPLACED BY

#### 12. <u>CUTTING AND PATCHING</u>

- ALL CUTTING THAT MAY BE NECESSARY FOR THE INSTALLATION OF THE WORK OR ANY REQUIRED PATCHING THAT RESULTS THEREFROM SHALL BE DONE BY THE PROPER TRADE INVOLVED AND SHALL BE INCLUDED AS PART OF THIS CONTRACT. PATCH TO DUPLICATE UNDISTURBED ADJACENT FINISHES, COLORS, TEXTURES AND PROFILES. COLUMNS, BEAMS, GIRDERS OR JOISTS SHALL NOT BE CUT.
- B. ALL WORK AFFECTING ROOF OR STRUCTURES SHALL BE PERFORMED BY LANDLORD'S CONTRACTOR AT TENANT'S EXPENSE.

#### 13. <u>CLEANING</u>

COMPLETION AS IT PERTAINS TO THE CONTRACT COMPLETION DATE IS DEFINED AS THE DAY THE PROJECT IS TURNED OVER TO THE OWNER IN THOROUGHLY CLEAN CONDITION. READY FOR THE OWNER TO TAKE POSSESSION. ALL FIXTURES, MOTORS, EQUIPMENT AND ALL OTHER ELECTRICAL EQUIPMENT FURNISHED OR INSTALLED BY THE CONTRACTOR SHALL BE THOROUGHLY CLEANED.

- PROVIDE THE TESTS AS OUTLINED HEREINAFTER AND OTHER TESTS NECESSARY TO ESTABLISH THE ADEQUACY, QUALITY, SAFETY, COMPLETED STATUS AND SUITABLE OPERATION OF EACH SYSTEM. CORRECT PROMPTLY ANY FAILURE OR DEFECTS REVEALED BY THESE TESTS AND RECONDUCT TEST ON THE CORRECTED ITEMS.
- B. TEST THE GROUNDS WITH A GROUND RESISTANCE DIRECT READING SINGLE-TEST MEGGER.

AVERAGE PHASE CURRENT AND MEASURED INDIVIDUAL PHASE.

- INSULATION RESISTANCE BETWEEN PHASE CONDUCTORS AND GROUND NOT LESS THAN 1,000,000 OHMS. THE PANELBOARDS SHALL HAVE PHASE CURRENTS BALANCED TO WITHIN +/- 10% VARIATION BETWEEN
- AN OPERATIONAL TEST OF THE EMERGENCY LIGHTS AND THE EXIT LIGHTS SHALL BE PERFORMED FOR THE OWNER TO DEMONSTRATE CONFORMANCE TO THE SPECIFICATIONS.
- 15. TEMPORARY ELECTRICAL SERVICE
- TEMPORARY ELECTRICAL SERVICE SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. TEMPORARY LIGHTING SHALL BE PROVIDED BY A LAMP LOCATED FOR EVERY 625 SQUARE FEET OF BUILDING AREA WITH A MINIMUM OF ONE PER ROOM. THE LAMP TO BE 100 WATT AND SHALL BE MAINTAINED BY THE GENERAL CONTRACTOR
- TEMPORARY POWER DISTRIBUTION SHALL BE SUFFICIENT TO ACCOMMODATE THE TEMPORARY LIGHTING AND CONSTRUCTION OPERATIONS. INCLUDING THE USE OF POWER TOOLS (BUT NOT INCLUDING HEAVY-DUTY ELECTRICAL WELDING UNITS), ELECTRICAL HEATING UNITS, AND START-UP OF SPECIFIED BUILDING EQUIPMENT, WHICH IS TO BE TESTED, STARTED OR PLACED INTO OUR USE PRIOR TO COMPLETION OF ITS PERMANENT POWER CONNECTIONS.
- EXCAVATION AND BACKFILL
- CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED AS SHOWN ON PLANS OR REQUIRED FOR PROPER OPERATION. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH EARTH AND THOROUGHLY TAMPED. UTILITY SERVICES, SHALL BE INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE BACKFILLING.

### ELECTRICAL POWER AND LIGHTING

#### RELATED DOCUMENTS

- APPLICABLE PROVISIONS OF AIA DOCUMENT A201, "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION", DIVISION 1 GENERAL CONDITIONS AND SECTION 16100 ELECTRICAL SPECIAL CONDITIONS GOVERN WORK UNDER THIS SECTION.
- B. REFER TO SECTION 16100 ELECTRICAL SPECIAL CONDITIONS REGARDING REGULATIONS AND REQUIREMENTS AFFECTING ALL WORK DESCRIBED IN THIS SECTION.

POWER SERVICE FOR THIS PROJECT SHALL BE PROVIDED FROM THE UTILITY CO. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH TO INSURE THAT ALL WORK AND MATERIALS ARE IN CONFORMANCE WITH THE UTILITY CO'S REQUIREMENTS.

#### <u>NAMEPLATES</u>

- ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, PANELBOARDS, DISCONNECTS TRANSFORMERS, CONTROLS, ETC., SHALL BE IDENTIFIED WITH THREE PLY LAMINATED PLASTIC, THE OUTSIDE LAMINATIONS SHALL BE BLACK. ENGRAVING SHALL EXTEND THROUGH THE FRONT LAMINATION SO THAT THE BLACK LETTERS APPEAR ON A WHITE BACKGROUND. NAMEPLATES SHALL BE PERMANENTLY ATTACHED WITH SCREWS.
- CIRCUIT DIRECTORY SHALL BE TYPEWRITTEN (HANDWRITTEN IS NOT ACCEPTABLE) AND SHALL IDENTIFY CIRCUIT AS TO TYPE AND LOCATION AS FOLLOWS: - FOR LIGHTING CIRCUIT FOLLOWED BY AREA IN WHICH CIRCUIT APPEARS, I.E., "STOCKROOM", "CASH WRAP", ETC. - FOR RECEPTACLE CIRCUIT FOLLOWED BY AREA IN WHICH RECEPTACLE APPEARS, "STOREFRONT", "CASH REGISTER", ETC.

MOTOR IS LOCATED, I.E. "EXH FAN TOILET", "AHU-ROOF", ETC.

### <u>CONDUIT</u>

ALL WIRING SHALL BE RUN IN CONDUIT. THIN WALL EMT CONDUIT SHALL BE USED SIZES 1/2" THROUGH 2-1/2". ALL CONDUITS LARGER THAN 2-1/2" SHALL BE HEAVYWALL. CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SLABS SHALL BE PVC JACKETED FLEXIBLE STEEL CONDUIT (SEALTITE) SHALL BE USED IN WET AREAS AND ON ALL MOTORIZED EQUIPMENT. CABLE MAY BE USED AT THE CONTRACTORS DISCRETION IF ALLOWED BY LOCAL CODES. NO BX, ROMEX, ETC. SHALL BE ALLOWED.

- FOR MOTOR FOLLOWED BY THE EQUIPMENT IDENTIFICATION AND AREA IN WHICH

- B. ALL OPENINGS IN FIRE AND SMOKE WALLS, PARTITIONS, FLOORS AND OTHER SIMILAR PENETRATIONS FOR ELECTRICAL CONDUITS, CABLE OR EQUIPMENT, WHETHER CUT OR IN PLACE, SHALL BE CLOSED WITH A UL APPROVED FIRE RESISTANT SILICONE FOAM SEALANT TO MAINTAIN THE FULL RATING AND INTEGRITY OF THE PARTITIONS, WALLS OR FLOOR.
- CONDUIT BENDS FOR POWER AND LIGHTING CIRCUITS SHALL NOT BE LESS THAN STANDARD RADIUS BENDS. CONDUIT BENDS FOR FEEDERS, TELEPHONE AND COMMUNICATION CIRCUITS SHALL NOT BE LESS THAN LONG RADIUS BENDS.
- D. O.Z. TYPE DX, TX, OR AX CONDUIT EXPANSION DEFLECTION FITTINGS ARE REQUIRED IN ALL CONDUIT RUNS WHERE MOVEMENT MAY BE ENCOUNTERED. ALL EMT COUPLINGS SHALL BE
- E. EXPOSED CONDUIT SHALL BE SECURELY SUPPORTED IN PLACE PER CODE BUT ON A MAXIMUM OF 10 FOOT INTERVALS, WITHIN THREE FEET OF EACH BEND, AT EVERY OUTLET OR JUNCTION BOX AND AT THE END OF EACH STRAIGHT RUN TERMINATING AT A BOX OR CABINET. CONDUIT SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPE WORK. CONDUITS SHALL BE RUN PARALLEL TO AND AT RIGHT ANGLES TO THE BUILDING LINES. GENERALLY, CONDUIT SHALL BE RUN IN CONTACT WITH STRUCTURAL PARTS OF THE BUILDING SO AS TO AVOID SUSPENDED LENGTHS OF CONDUIT. CONDUIT SHALL BE INSTALLED AS TO BE ACCESSIBLE FOR REPLACEMENT AND MAINTENANCE AND GENERALLY CONDUIT SHALL BE INSTALLED TO PERMIT DRAINAGE.

#### 5. <u>WIRE AND CABLE</u>

- A. ALL WIRE AND CABLE SHALL BE COPPER AND RUN IN CONDUIT. ALL WIRE AND CABLE FEEDERS AND BRANCH CIRCUITS SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE CURRENT EDITION OF THE N.E.C. AND SHALL MEET ALL ASTM SPECIFICATIONS. WIRE AND CABLE SHALL BE NEW, SHALL HAVE SIZE, GRADE OF INSULATION VOLTAGE AND MANUFACTURER'S NAME PERMANENTLY MARKED ON OUTER COVERING AT REGULAR INTERVAL AND SHALL BE DELIVERED IN COMPLETE COILS OR REELS WITH IDENTIFYING SIZE AND INSULATION TAGS.
- B. THE ELECTRICAL CONTRACTOR SHALL CALCULATE VOLTAGE DROP ON CONDUCTORS WITH LENGTHS GREATER THAN 75 FEET FROM THE PANELBOARD AND PROPERLY SIZE THE CONDUCTORS PER
- C. POWER CONDUCTORS: NO WIRE LESS THAN NO. 12 SHALL BE USED EXCEPT FOR CONTROL CIRCUITS OR LOW VOLTAGE WIRING. WIRE SIZES NO. 12 TO NO. 10 SHALL BE SOLID EXCEPT WHERE OTHERWISE INDICATED. WIRE SIZES NO. 8 AND LARGER SHALL BE STRANDED. ALL WIRE SIZES SHOWN ARE AMERICAN WIRE GAUGE SIZES. SIZES NO. 12 AWG THROUGH NO. 8 AWG SHALL BE "THHN." SIZE 4 AWG AND LARGER SHALL BE "THW."
- D. CONTINUITY: ALL WIRES SHALL BE CONTINUOUS FROM OUTLET TO OUTLET.
- E. ACCEPTABLE MANUFACTURERS: CABLE AND WIRE SHALL BE STANDARD TYPE AS MANUFACTURED BY GENERAL CABLE COMPANY, CAROL, ANACONDA, ROM OR ITT ROYAL

#### 6. <u>COLOR CODING</u>

- A. A COLOR CODING SYSTEM AS LISTED BELOW SHALL BE FOLLOWED THROUGHOUT FOR FEEDERS AND BRANCH CIRCUITS AND USED AS A BASIS FOR BALANCING LOAD.
- --120/208V: PHASE A--BLACK, PHASE B--RED, PHASE C--BLUE, NEUTRAL--WHITE, GROUND--GREEN
- --277/480V: PHASE A--BROWN, PHASE B--ORANGE, PHASE C--YELLOW, NEUTRAL--GRAY, GROUND--GREEN

#### 7. BOXES AND FITTINGS

- A. ALL OUTLETS SHALL BE PROVIDED WITH GALVANIZED OR SHERARDIZED BOXES SUITABLE IN DESIGN TO THE SPACE THEY OCCUPY AND THE PURPOSE THEY SERVE. WALL MOUNTED OUTLET BOXES, EXCEPT FOR 2" PARTITIONS SHALL BE AT LEAST 1 1/2" DEEP AND/OR DEEPER IF REQUIRED BY THE DEVICE THEY HOLD OR THE NATIONAL ELECTRICAL CODE.
- B. ALL PULLBOXES SHALL BE MADE OF GALVANIZED STEEL, OF METAL GAUGE AND PHYSICAL SIZE AS REQUIRED BY THE N.E.C. FOR THE NUMBER AND SIZE OF RACEWAYS AND CONDUCTORS INVOLVED.
- C. FIXTURE OUTLET BOXES IN OR ON CEILINGS SHALL NOT BE LESS THAN 1-1/2" DEEP OR LESS THAN 4" SQUARE. ALL OUTLET BOXES INTENDED TO SUPPORT FIXTURES SHALL BE EQUIPPED WITH 3/8" FIXTURE STUDS FASTENED THROUGH THE BOTTOM OF THE BOX WITH FOUR BOLTS.

#### 8. CIRCUIT BREAKER PANELBOARDS

- A. PANELS SHALL BE DEAD FRONT, SAFETY TYPE, FURNISHED WITH BRANCH CIRCUIT PROTECTING DEVICES. EQUIPMENT GROUNDING BOX, MAIN BUS AND CABLE LUGS FACTORY ASSEMBLED, WITH ALL COMPONENTS IN PLACE, READY FOR INSTALLATION.
- CURRENT CARRYING CONTACT SURFACES SHALL BE SILVER OR TIN PLATED. THE CIRCUIT BREAKERS SHALL BE OF THE MOLDED CASE, PLUG-IN TYPE SUITABLE FOR VOLTAGE AND AMPERE RATINGS INDICATED ON DRAWINGS AND IN SCHEDULES AND SHALL HAVE A MINIMUM INTERRUPTING CAPACITY OF 22,000 AMPERES FOR 120/208V AND 25,000 AMPERES AT 277/480V.
- C. MAIN BUSES AND CONNECTORS SHALL BE HARD DRAWN COPPER OF 98% CONDUCTIVITY, WITH CURRENT CARRYING CAPACITY TO MAINTAIN ESTABLISHED RISE TESTS AS DEFINED IN UL STANDARD
- D. CABINET SIZES ARE BASED UPON A 20" WIDE BY 6" DEEP PANEL UNLESS OTHERWISE NOTED. PANELBOARDS SHALL BE EQUIPPED WITH FLUSH TYPE LOCK AND CATCH. ALL LOCKS SHALL BE KEYED ALIKE, AND TWO KEYS ARE TO BE SUPPLIED WITH EACH LOCK.
- E. PANELBOARDS TO BE BY SQUARE D, GENERAL ELECTRIC, SIEMENS OR CUTLER HAMMER

#### 9. TRANSFORMERS

- A. DRY-TYPE TRANSFORMERS SHALL BE OF THE ENCLOSED VENTILATED TYPE WITH KVA AND VOLTAGE RATING AS CALLED FOR ON THE DRAWINGS AND WITH 150° CLASS H INSULATION AND MINIMUM OF SIX STANDARD FULL CAPACITY TAPS. SOUND LEVEL SHALL BE LOW AND INSTALLATION SHALL INCLUDE KORFUND OR EQUAL VIBRATION DAMPENING MOUNTS AND FLEXIBLE STEEL CONDUIT FOR PRIMARY AND SECONDARY. (MOUNT TRANSFORMER ON VIBRATION ISOLATORS). LOCATE TRANSFORMER AS NOT TO CAUSE SERVICING OR CLEARANCE DIFFICULTIES OF VIOLATIONS WITH OTHER EQUIPMENT.
- B. COMPARABLE EQUIPMENT AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, SIEMENS OR CUTLER HAMMER.

### 10. <u>TOGGLE SWITCHES</u>

A. TOGGLE SWITCHES SHALL BE WHITE AND SHALL BE RATED 20 AMPERES 120/277 VOLT AC TYPE AS MANUFACTURED BY HUBBELL AND SHALL BE AS FOLLOWS:

#### SINGLE POLE --1221-W THREE WAY --1223-W

- B. TOGGLE SWITCHES SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR TO MOUNTING PLATE AND, AT DOORS, INSTALLED ADJACENT TO THE TRIM ON THE STRIKING SIDE OF THE DOOR, REGARDLESS OF THE LOCATION INDICATED ON THE DRAWINGS; THEREFORE, CHECK ALL DOOR SWINGS BEFORE INSTALLATION OF CONDUIT OUTLETS.
- C. COMPARABLE EQUIPMENT AS MANUFACTURED BY COOPER WIRING, SLATER, LEVITON, AND BRYANT WILL BE ACCEPTABLE

#### 11. <u>RECEPTACLES</u>

- A. RECEPTACLES SHALL BE WHITE AS MANUFACTURED BY HUBBELL AND SHALL BE AS FOLLOWS: DUPLEX RECEPTACLE -20A-125 VOLT 5362-W
- B. RECEPTACLES SHALL BE MOUNTED 18" ABOVE THE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- C. COMPARABLE EQUIPMENT AS MANUFACTURED BY COOPER WIRING, SIERRA ELECTRIC CORPORATION, SLATER, BRYANT AND LEVITON WILL BE ACCEPTABLE.

#### 12. <u>DEVICE PLATES</u>

A. DEVICE PLATES SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED. COMPARABLE EQUIPMENT AS MANUFACTURED BY COOPER WIRING, SIERRA ELECTRIC CORPORATION, HARVEY HUBBLE INC., BRYANT AND LEVITON WILL BE ACCEPTABLE. PAINT MATCH ADJACENT FINISH COLOR.

#### 13. <u>DISCONNECT SWITCHES</u>

A. FURNISH AND INSTALL DISCONNECT SWITCHES AS REQUIRED BY CODE. DISCONNECT SWITCHES SHALL BE NEMA HEAVY DUTY TYPE AND UNDERWRITERS LABORATORIES LISTED, MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, CUTLER HAMMER OR SIEMENS.

#### 14. <u>GROUNDING</u>

- A. CONTRACTOR SHALL INSTALL GROUNDING PER NEC. ARTICLE 250 EQUIPMENT GROUNDING SHALL USE ONLY APPROVED GROUNDING CLAMPS AND CONNECTORS AS MANUFACTURED BY PENN-UNION, BURNDY, OR O-Z MFG, COMPANY,
- B. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 250 AND THE UTILITY COMPANY REGULATIONS. CONTRACTOR SHALL CONNECT THE GROUNDING ELECTRODE CONDUCTORS TO THE NEUTRAL BAR INSIDE THE MAIN PANEL.
- C. THE EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF A CONTINUOUS CONDUIT INSTALLATION AND A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR. THIS GROUNDING CONDUCTOR SHALL BE INSTALLED IN EVERY CONDUIT OR RACEWAY WITH THE FEEDER OR BRANCH CIRCUIT CONDUCTORS. THIS GROUNDING SHALL BE EXTENDED FROM THE HOUSING OF EVERY ELECTRICAL LOAD, THROUGH PANELBOARD STATIC GROUNDING BUSSES, TO THE STATIC GROUNDING BUS IN THE MAIN PANEL. THE GROUNDING BUS SHALL BE BONDED TO THE GROUNDING NEUTRAL BAR INSIDE THE MAIN PANEL.

#### 15. <u>LIGHTING FIXTURES</u>

- A. ALL LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED BY ELECT. CONTR., UNLESS NOTED OTHERWISE, THIS CONTRACTOR SHALL INSTALL LIGHTING FIXTURES AND LAMPS AS INDICATED ON THE DRAWINGS AND AS SPECIFIED BELOW, COMPLETE WITH HANGERS, PLASTER FRAMES AND ALL OTHER NECESSARY ACCESSORIES.
- B. ALL BALLAST, STARTERS AND LAMPHOLDERS IN FLUORESCENT LIGHTING EQUIPMENT ARE TO BE ELECTRICAL TESTING LABORATORIES, UNDERWRITERS LABORATORIES AND CERTIFIED BALLAST MANUFACTURERS APPROVED. ALL BALLAST FOR FLUORESCENT FIXTURES SHALL BE OF THE HIGH POWER FACTOR TYPE AND SHALL BE GENERAL ELECTRIC "MAXI-MISER II" OR ADVANCED MARK III. WHERE OCTRON LAMPS ARE SPECIFIED PROVIDE APPROPRIATE BALLASTS.
- C. THIS CONTRACTOR SHALL VERIFY THE FINAL CEILING AND FINISH SCHEDULES TO INSURE THE PROPER INSTALLATION AND MOUNTING OF FIXTURES AND SHALL COORDINATE BEFORE MAKING

### 16. <u>LIGHTING CONTROLS</u>

- A. PANEL #LP8S WITH 8 RELAYS AND BUILT-IN TIME CLOCK AND AS MANUFACTURED BY WATT
- B. TIME SWITCHES SHALL BE 24 HOUR, 7 DAY, DAY SKIPPER 365 DAYS AND HOLIDAYS TYPE AS MANUFACTURED BY TORK, INTERMATIC, OR PARAGON.

#### 17. <u>TELEPHONE SERVICE</u>

A. THIS CONTRACTOR SHALL INSTALL A TELEPHONE SERVICE CONDUIT AS SHOWN ON THE DRAWINGS AND FURNISH AND INSTALL (1) 3' x 4' x 3/4" PLYWOOD PANEL MOUNTED ON THE WALL AT

#### LOCATION SHOWN ON PLANS. 18. <u>SURFACE METAL RACEWAY</u>

A. SURFACE METAL RACEWAY SHALL BE TWO PIECE #2100 AS MANUFACTURED BY WIREMOLD. ALL NECESSARY ACCESSORIES REQUIRED TO FIT THE CONFIGURATION SHOWN SHALL BE PROVIDED. RECEPTACLES SHALL BE 120 VAC, 23 APMS, CATALOG NUMBER #2127GT.

#### 19. FLOOR BOXES N/A

- A. FLOOR BOXES SHALL BE WALKER FOUR COMPARTMENT, ADJUSTABLE COMBINATION BOX WITH TUNNEL AND 2 RECEPTACLE BRACKETS, CATALOG NUMBER RFB-4.
- B. COVERS, RECESSED ACTIVATION WITH CARPET TRIM AND WIRE MANAGEMENT BLOCKS, CATALOG NUMBER RAKM11.
- C. TWO DUPLEX RECEPTACLES SHALL BE INSTALLED IN EACH FLOOR BOX.

### SECTION 16700 FIRE ALARM SPECIAL CONDITIONS

#### 1. GENERAL

GC TO COORDINATE ALL LOCAL FIRE ALARM REQUIREMENTS WITH LOCAL FIRE MARSHALL AND PROVIDE ALL DEVICES REQUIRED FOR A COMPLETE SYSTEM.

END OF DIVISION 16







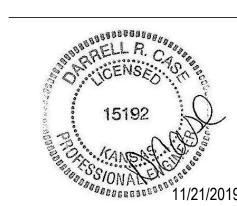
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Description

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Client Approval

Electrical **Specifications** 

43419-KS02 Project # 11/4/2019 Issue Date

Drawn by Checked by

Scale

As indicated

T 636.349.1600 St. Louis, MO 63026 F 636.349.1730

COORDINATE WITH OWNER FOR ON/OFF SCHEDULE 2 TIMECLOCK CONTROL DIAGRAM
SCALE: NONE

			LIGHT FIX	TURE SCHEDULE			LA	MP S	CHE	DULE	NOTES
QTY	SYMBOL	TYPE	CATALOG NUMBER	DESCRIPTION	VOLTS	MOUNTING	LAMP/ FIXT	WATTS/ LAMP	FIXTURE WATTS	LAMP TYPE.	
8	Å	A	#09600190	2'X4' FLAT PANEL LED	120/277	LAY-IN	1	45	45	LED	
1	B	В	#09600207	2'X2' FLAT PANEL LED	120	LAY-IN	1	44	44	LED	
12	B1	B1	#72002513	2'X2' DIRECT/INDERECT TROFFER	120	LAY-IN	1	44	44	LED	
8	T1- <b>Q</b>	T1	HEAD: #18644197 LAMP: #19300772	LED TRACK FOR MURAL AND MENUBOARD.	120	TRACK	1	10	10	LED	2,3
4	$\mapsto$	w	#HL11101GPN	RILEY WALL SCONCE POLISHED NICKEL. G40 LED FILAMENT BULB	120	SURFACE @8'-6"	1	6	6	LED	5
6	4_4	X1	#90902399	DUAL—HEAD EMERGENCY LIGHTING, WHITE HOUSING, 6V, LAMPS INCLUDED	120/277	SURFACE	_	_	10	INCLUDED WITH UNIT	4
2	⊗	E2	#90902323	2 HEAD 6 VOLT EMERGENCY LIGHT	120/277	SURFACE	_	_	5	INCLUDED WITH UNIT	
2	44	RH		DUAL—HEAD REMOTE EMERGENCY FIXTURE, WHITE HOUSING, 6V, LAMPS INCLUDED	6V	SURFACE	2	6	10	INCLUDED WITH UNIT	

ALL LIGHTING FIXTURES AND LAMPS IN THE ABOVE SCHEDULE ARE PROVIDED BY THE CONTRACTOR VIA A NATIONAL CONTRACT WITH HERMITAGE LIGHTING NATIONAL ACCOUNTS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE LIGHTING FIXTURES. ANY QUESTIONS REGARDING FIXTURE AND LAMP TYPES AND INSTALLATION REQUIREMENTS SHALL BE WITH WYATT CULVER OF HERMITAGE LIGHTING (WCULVER@HERMITAGELIGHTING.COM) AT (800) 264-3383 OR (615) 843-3379.

- 1. FOOD SAFE TRIM AVAILABLE AS NEEDED WHEN REQUIRED. PART #18622309 2. PROVIDE TRACK LENGTHS AS SHOWN.
- 2' SECTION: #18624280; 4' SECTION: #18624305; 6' SECTION: #18635039; 8' SECTION: #18627347. 3. PROVIDE TRACK ACCESSORIES AS REQUIRED. PROVIDE EACH TRACK SECTION WITH 2 AMP CURRENT LIMITING END-FEED.
- 4. CAPABLE OF PROVIDING 12W OF REMOTE CAPACITY
- 5. FIXTURE PACKAGED WITH 24" ARM. ARM SHOULD BE FIELD CUT IN FIELD TO 12" FROM FACE OF WALL TO OUTSIDE EDGE OF BEND.

# X1 17 EP1−15 → <u>"EP-1"</u> <u>"EP-2"</u>

### | ELECTRICAL CEILING PLAN SCALE: 1/4" = 1'-0"



- 2. ALL CONDUITS ARE TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. CONDUITS IN EXPOSED CEILING AREAS SHALL EXIT WALLS AS CLOSE TO ROOF/FLOOR STRUCTURAL
- 3. ANY EXISTING MATERIALS OR EQUIPMENT NOT TO BE REUSED MUST BE COMPLETELY REMOVED AND DISPOSED OF PROPERLY. NO EQUIPMENT OR COMPONENTS MAY BE
- 4. THE DIRECTIVE, IF ANY, OF THE BUILDING OFFICIAL SHALL TAKE PRECEDENCE OVER THIS DRAWING REGARDING LOCATION AND NUMBER OF EXIT LIGHTS.
- 6. ALL PENDANT HUNG FIXTURES SHALL BE SUPPORTED DIRECTLY FROM STRUCTURE ABOVE WITH No.9 GAGE WIRE OR APPROVED ALTERNATE SUPPORT WITHOUT USING CEILING SUSPENSION SYSTEM FOR DIRECT SUPPORT.
- 7. ALL LIGHTING FIXTURES MUST BE SUPPORTED BY #12 GAUGE WIRE ATTACHED TO THE GRID MEMBERS WITHIN 3" OF EACH CORNER OF EACH FIXTURE.
- 9. ELECTRICAL CONTRACTOR TO VERIFY LIGHTING FOR WALK-IN COOLER & FREEZER. IS NOT EXISTING. COORDINATE LOCATION WITH SUPPLIED. CONTACT ENGINEER WITH
- 10. EXIT AND EMERGENCY FIXTURES TO BE CIRCUITED BY UNSWITCHED LEG AND PROVIDE CONTINUOUS ILLUMINATION PER NEC 700-12(A) AND NFPA 101, LIFE SAFETY CODE.
- 11. ALL TRACK AND PENDANT LIGHTING FIXTURES POWER IS TO BE FED FROM THE CEILING. DO NOT FEED POWER FOR TRACK OR PENDANT LIGHT FIXTURES FROM THE
- 12. ALL LIGHTING FIXTURES IN FOOD AND BEVERAGE PREP AREA SHALL HAVE PROTECTIVE SHIELDS.
- (1) EMERGENCY EGRESS/EXIT FIXTURES SHALL BE ON A NON-SWITCHED LEG OF CIRCUIT
- (2) TIMECLOCK AND LIGHTING CONTACTOR MOUNTED IN STOCKROOM. SEE 'TIMECLOCK CONTROL DIAGRAM', THIS SHEET. COORDINATE WITH OWNER FOR CONTROL
- (5) NEMA-3R JUNCTION BOX FOR CONNECTION TO SIGNAGE. VERIFY EXACT LOCATION WITH SIGNAGE SUPPLIER, SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS. SIGNAGE SHALL HAVE A BUILT-IN DISCONNECT SWITCH. IF NO SWITCH IS PROVIDED, CONTRACTOR SHALL INSTALL A WEATHER-RESISTANT TYPE SWITCH RATED FOR SIGN
- 7 HOOD SYSTEM CONTROLLER. VERIFY EXACT LOCATION WITH EQUIPMENT SUPPLIER.
- (8) WEATHER-PROOF PHOTOCELL MOUNTED ON ROOF FACING NORTH FOR CONTROL OF EXTERIOR SIGNAGE. COORDINATE EXACT LOCATION IN FIELD. SEE 'TIMECLOCK
- 9 PROVIDE A 1-AMP CURRENT LIMITER END FEED CONNECTION COMPATIBLE WITH

### **ELECTRICAL NOTES:**

- b. ALL EQUIPMENT TO BE LISTED BY A RECOGNIZED TESTING LAB (i.e. U.L., ETC.).

- SEAL CONDUITS THROUGH WALK-IN COOLER/FREEZER PER NEC 300.7(A).



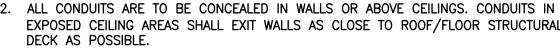
CERTIFICATE OF AUTHORITY NO. E-2951

St. Louis, MO 63026

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REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHTING FIXTURES. VERIFY CEILING TYPE AND PROVIDE NECESSARY MOUNTING HARDWARE TO ACCOMMODATE LIGHT FIXTURES USED. PROVIDE SLOPE CEILING ADAPTERS WHERE



ABANDONED WITHOUT WRITTEN PERMISSION OF THE LANDLORD.

- 5. ALL FIXTURES TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- 8. ALL RACEWAYS IN MILLWORK SHALL BE RUN CONCEALED FROM VIEW.
- PROVIDE FIXTURE IF COOLER DOES NOT HAVE BUILT-IN LIGHT, OR COOLER LIGHTING ANY QUESTIONS REGARDING COOLER LIGHTING.

### SHEET KEYED NOTES

- SCHEDULE(S) AND OTHER REQUIREMENTS.
- (3) CONTRACTOR TO INSTALL A WALL MOUNTED "PIR" OCCUPANCY SENSOR (WATTSTOPPER #PW-100, OR APPROVED EQUAL) FOR LOCAL LIGHTING CONTROL.
- $\langle 4 \rangle$  RESTROOM EXHAUST FANS ARE TO BE CONTROLLED BY OCCUPANCY SENSOR.
- (6) EXHAUST HOOD LIGHTS SUPPLIED WITH HOOD AND MOUNTED IN PRE-WIRED J-BOX. COMPLETE CIRCUITING. SEE MECHANICAL HOOD SHOP DRAWINGS FOR MORE INFORMATION.
- SEE MECHANICAL HOOD SHOP DRAWINGS FOR ADDITIONAL CIRCUITING REQUIREMENTS.
- CONTROL DIAGRAM', THIS SHEET, FOR MORE INFORMATION.

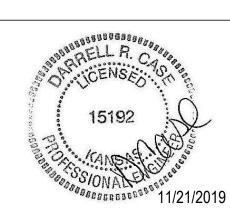
- a. ALL WORK TO COMPLY WITH THE 2017 NEC.
- LIGHT FIXTURES IN CONTACT WITH INSULATION TO BE U.L. LISTED FOR THERMAL BARRIER OR PROVIDE 3" MINIMUM CLEARANCE.
- MOUNT THE FOLLOWING ABOVE FINISHED FLOOR. OUTLETS - 15" (BOTTOM OF BOX MINIMUM) TO 48" (TOP OF BOX MAXIMUM) SWITCHES - 36" (BOTTOM OF BOX MINIMUM) TO 48" (TOP OF BOX MAXIMUM)
- THERMOSTAT 36" (BOTTOM OF BOX MINIMÚM) TO 48" (TOP OF BOX MAXIMÚM) e. ALL PANELS SHALL BE SERIES RATED AND PROPERLY IDENTIFIED PER SECTION
- 110-22, NEC.
- ALL RECEPTACLES IN KITCHEN TO BE GFCI.



Description

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Client Approval

**Electrical Lighting** 

43419-KS02 Project # 11/4/2019 Issue Date

As indicated Drawn by

#### **GENERAL NOTES**

- THE SCOPE OF THE ELECTRICAL WORK SHALL INCLUDE FURNISHING. INSTALLING AND TESTING ALL ELECTRICAL SYSTEMS FOR A COMPLETE AND FULLY OPERABLE INSTALLATION COMPLYING WITH THE LATEST VERSIONS OF ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES.
- 2. LOCATIONS OF EXISTING ELECTRICAL SYSTEM, EQUIPMENT AND DEVICES SHALL BE VERIFIED IN THE FIELD BY THE TENANT'S GENERAL CONTRACTOR(T.G.C.).
- 3. VERIFY ELECTRICAL REQUIREMENTS FOR ALL SPECIAL EQUIPMENT PRIOR TO ANY WORK BEING PERFORMED. PROVIDE ISOLATED GROUND WIRE PER EQUIPMENT MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE CONDUIT FOR MECHANICAL CONTROLS AS REQUIRED BY CODE. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF A/C UNITS AND EXHAUST FANS WITH MECHANICAL CONTRACTOR.
- 4. E.C. SHALL DETERMINE, ARRANGE AND PAY FOR PROPER SERVICE AND METERS.
- 5. E.C. SHALL PROVIDE, AT EACH TELEPHONE JACK INDICATED, AN OUTLET BOX, CONDUIT AND TRIM. THE CONDUIT SHALL EXTEND ABOVE SUSPENDED CEILING. PROVIDE CONDUCTOR TELEPHONE WIRE AS REQUIRED TO EACH BOX.
- 6. E.C. SHALL PROVIDE CORD & PLUGS AS REQUIRED FOR KITCHEN EQUIPMENT. COORDINATE WITH EQUIPMENT MANUFACTURER AND K.E.C.
- WHEN MAIN ELECTRICAL SERVICE IS PROVIDED BY THE LANDLORD, HIS OBLIGATIONS TERMINATE AT THE DISCONNECT. ALL PANELS, FEEDERS, ETC.
- 3. Starter & related wiring shall be furnished & installed by e.C. overload limits shall be installed per given nameplate data on EQUIPMENT. STARTERS SHALL BE INSTALLED AS PER REQUIREMENTS.
- 9. E.C. TO PROVIDE ELECTRICAL OUTLET FIRE PROTECTION PAD FOR ALL RECEPTACLES IN RATED WALL AS MANUFACTURED BY PFP PARTNERS. APPLY TO
- 10. WHERE PORTIONS OF A CABLE RACEWAY OR SLEEVE ARE KNOWN TO BE SUBJECTED TO DIFFERENT TEMPERATURES AND WHERE CONDENSATION IS KNOWN TO AN ISSUE, AS IN COLD STORAGE AREAS OF BUILDINGS OR WHERE PASSING FROM THE INTERIOR TO THE EXTERIOR OF A BUILDING, THE RACEWAY OR SLEEVE SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO COLDER SECTION OF THE RACEWAY OR SLEEVE PER NEC 300.A (A)
- 11. COORDINATE LOCATIONS AND ROUTING OF FEEDERS TO PANELBOARDS WITH LANDLORD AND PROVIDE ALL NECESSARY APPURTENANCES AS REQUIRED BY
- 12. WHERE THE WORD "PROVIDE" IS USED, THE WORD IS UNDERSTOOD TO MEAN "THE ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND MAKE FINAL CONNECTION TO THE EQUIPMENT", UNLESS OTHERWISE NOTED.
- 13. VERIFY EXACT LOCATION, MOUNTING HEIGHT AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PROVIDED BY OTHERS (INCLUDING HVAC EQUIPMENT) PRIOR TO ROUGH-IN AND PROVIDE ALL REQUIRED FUSIBLE SWITCHES, TRANSFORMERS, STARTERS NECESSARY FOR PROPER OPERATION OF EQUIPMENT.
- 14. REFER TO LANDLORD'S DESIGN SPECIFICATION FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE FURNISHED & INSTALLED BY THE E.C.

BOXES AS INSTRUCTED BY MFR. TO PROVIDE RATING TO MEET RATING OF CORRESPONDING WALL.

- 15. NEW & RELOCATED LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS SHALL HAVE OPERABLE PARTS OF THE CONTROLS LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 15" ABOVE THE FLOOR PER A.D.A. REQUIREMENTS. RESOLVE ANY CONFLICT IN MOUNTING HEIGHT WITH ARCHITECT/OWNER PRIOR TO ROUGH IN.
- 16. REFER TO ALL DISCIPLINES, INCLUDING ARCHITECTURAL & KITCHEN, PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- 17. ALL RECEPTACLES IN PUBLIC SPACES SHALL BE LISTED TAMPER-RESISTANT.
- 18. ALL CONDUITS ARE TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. CONDUITS IN EXPOSED CEILING AREAS SHALL EXIT WALLS AS CLOSE TO ROOF/FLOOR STRUCTURAL DECK AS POSSIBLE.
- 19. ALL LOW VOLTAGE WIRING IN CEILING PLENUM (INCLUDING TELEPHONE. DATA, ALARM AND TEMP. CONTROL WIRING) SHALL BE UL LISTED TEFLON PLENUM
- 20. UNLESS OTHERWISE NOTED, ALL ELECTRICAL WORK FOR FABRICATED FOOD SERVICE EQUIPMENT SHALL BE COMPLETELY WIRED BY KITCHEN EQUIPMENT DIVISION TO A JUNCTION BOX OR PULL BOX MOUNTED ON THE EQUIPMENT IN AN ACCESSIBLE LOCATION. FINAL CONNECTIONS TO EQUIPMENT JUNCTION BOX OR PULL BOX AND ALL ELECTRICAL WORK FROM PANEL BOARDS TO BE BY THE ELECTRICAL DIVISION.
- 21. FINAL CONNECTIONS TO ALL EQUIPMENT TO BE BY ELECTRICAL DIVISION, INCLUDING MATERIALS.
- 22. ELECTRICAL DIVISION TO FURNISH AND INSTALL THE FOLLOWING:
- 23. ALL JUNCTION BOXES, ELECTRICAL OUTLETS, COVER PLATES, SWITCHES, ETC., NOT BUILT INTO FIXTURES OR EQUIPMENT. ALL OUTLETS, JUNCTION BOXES, COVER PLATES, ETC., IN DISHROOMS OR AS INDICATED ON SCHEDULES MUST BE VAPOR PROOF.
- 24. ALL PLUGS AND CORDS AS NOTED ON SCHEDULE. ALL CORDS SHALL BE N.E.M.A.—RATED AND U.L.—APPROVED FOR MANUFACTURED AND/OR FABRICATED EQUIPMENT.
- 25. SHUNT-TRIP CIRCUIT BREAKERS/CONTACTORS OR DISCONNECTS FOR FIRE CONTROL SYSTEM SHUT-OFF OF FOODSERVICE EQUIPMENT BELOW HOODS/VENTILATORS AS REQUIRED BY ADOPTED N.F.P.A. AND LOCAL CODES.
- 26. DISCONNECTS OR OTHER DEVICES AS REQUIRED BY CODES.
- 27. WHEN APPLICABLE, ELECTRICAL DIVISION TO PROVIDE CONDUIT AND WIRING, INSTALL ELECTRICAL COMPONENTS (PROVIDED BY K.E.C.) AND INTERWIRE BETWEEN THE FOLLOWING.
- 28. REMOTE REFRIGERATION EQUIPMENT TO EVAPORATOR COILS.
- 29. CONTROL PANELS TO WATER-TYPE, VENTILATORS AND EXHAUST SUPPLY FANS PER MANUFACTURER'S INSTRUCTIONS.
- 30. KITCHEN EXHAUST HOOD/VENTILATORS TO FIRE CONTROL SYSTEM AND SHUT-OFFS.
- 31. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ALL TRADES AND VERIFY THAT ALL EQUIPMENT SHIPPED TO THE SITE IS COMPATIBLE WITH MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS PRIOR TO INSTALLATION OF SAID EQUIPMENT. IN THE EVENT OF ANY DISCREPANCIES, IMMEDIATELY CONTACT DESIGNER BEFORE PROCEEDING.
- 32. ALL DEDICATED CIRCUIT OUTLETS SHALL BE ORANGE
- 33. SUSPENDED ELECTRICAL CONDUITS AND OUTLET BOXES ARE TO BE SUPPORTED FROM THE STRUCTURE USING METAL BRACES.
- 34. THROUGH PENETRATIONS SHALL BE PROTECTED BY AN APPROVED THROUGH-PENETRATION FIRE-STOP SYSTEM INSTALLED AND TESTED IN ACCORDANCE WITH ASTM 814 OR UL1479 WITH A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH OF WATER (2.49Pa). THE SYSTEM SHALL HAVE AN "F" RATING AND A "T" RATING OF NOT LESS THAN 1-HOUR, BUT NOT LESS THAN THE REQUIRED RATING AF THE WALL PENETRATED.

		EQUIF	MENT SCHEDULE						NOTES
KEY	ITEM NAME	MANUFACTURER	MODEL #	VOLTAGE	PH	AMPS	ROUGH-IN	DEVICE	
1	JM DELI CASE	HOWARD-MCRAY	SC-CDS34N-6-JM	120	1	8.7	@24" AFF	Ф	
3	4'-0" DROP-IN COLD UNIT	DELIFIELD	8148-EFN	120	1	7.5	@18" AFF	Ф	
ЗА	2'-0" DROP-IN COLD UNIT	DELIFIELD	N8118-EF	120	1	7.5	@18" AFF	Ф	
4	DELI SLICER	BIZERBA	GSPH MANUAL W/ LIFT	120	1	3.5	@18" AFF	Ф	
8	CASH REGISTER	INFOSOFT	UP100	120	1	5	@24" AFF	Ф	
10	BREAD OVEN NUVU UB-E5/10 AUTOMIST 208 3 32 @-		@48" AFF	0					
17	SINGLE-DOOR PEPSI COOLER	PEPSI	GDM-26	120	1	7.2	@18" AFF	Ф	
18	WALK-IN COOLER	NORLAKE	KLB-74C"	120	1	5	COORDINATE IN FIELD	0	1
18A	WALK-IN COOLER CAPSULE PAK	NORLAKE	CPB075DC-A	208	1	9.3	COORDINATE IN FIELD	ㅁ	2,6
19	19 STEP-IN FREEZER NORLAKE KLF-77C.		KLF-77C"	120	1	10	COORDINATE IN FIELD	0	3
19A	A STEP-IN FREEZER NORLAKE		CPF075DC-A	208/120	1	14.9	COORDINATE IN FIELD	ㅁ	4,7,8
21A	REFRIGERATED COUNTER, SANDWICH TOP	DELIFIELD	4427N-12M MEGA TOP	120	1	7.2	@24" AFF	Ф	
23	EXHAUST HOOD AND FIRE SUPPRESSION SYSTEM	CAPTIVE AIRE	ANSUL	120	1	5	COORDINATE IN FIELD	0	
24	TV	VARIES	42" MONITOR	120	1	3	@8'-6" AFF OR CLG SEE PLANS	ф <b>Б</b>	
26	DRINK DISPENSER	PEPSI	DISPENSER: IDC215 ADAPTOR: 80002957	120	1	9.3	@48" AFF	Ф	5
28	ICED TEA BREWER	BUNN	TB3Q	120	1	14.4	@48" AFF	Ф	
31	COUNTER-TOP FOOD WARMER	APW WYOTT	W-3V	120	1	10	@48" AFF	Ф	
31B	COUNTER-TOP BACON WARMER	WELLS	HSW6 120		1	6.9	@18" AFF	0	10
34	BAG-IN-BOX SYSTEM	PEPSI	PEPSI	120	1	5	@80" AFF	Ф	
40	WATER HEATER	PATRIOT		120	1	3		ð	9
41	ICE MAKER	HOSHIZAKI	KM-515MAH	120	1	11.7	@48" AFF	Ф	
46	SINGLE-DOOR PEPSI COOLER	PEPSI	GDM-26	120	1	7.2	@18" AFF	Ф	

### SHEET KEYED NOTES

- (1) PROVIDE 120V. CONNECTION FOR LIGHTS, DOOR HEATER, FAN, AND/OR DRAIN LINE HEATER. PROVIDE CONNECTIONS PER MANUFACTURERS REQUIREMENTS AND N.E.C. ARTICLE 300-7.
- $\langle 2 \rangle$  MOUNT RECEPTACLE HORIZONTALLY ABOVE WINDOW FOR USE AT STOREFRONT.
- PROVIDE A MOTOR RATED SWITCH AS DISCONNECTING MEANS FOR RE-CIRC PUMP LOCATED ABOVE CEILING. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. RE-CIRC PUMP SHALL BE CONTROLLED BY AUTOMATIC TIMER KIT PROVIDED BY MANUFACTURER, CIRCUIT PER MANUFACTURER RECOMMENDATIONS.
- EXHAUST FAN HOOD. CONTRACTOR SHALL PROVIDE "SHUNT-TRIP" CIRCUIT BREAKERS ON ALL ELECTRICAL EQUIPMENT UNDER THE HOOD. FAN(S) / INTERLOCK AND SHUNT-TRIP SHALL BE WIRED THRU HOOD FIRE SUPPRESSION SYSTEM CONTROL. SEE MECHANICAL HOOD DRAWINGS FOR MORÉ
- (5) FINAL LOCATION OF OUTLETS IN DINING SHALL BE DETERMINED BY OWNER.
- 6 HOOD SYSTEM CONTROLLER. VERIFY EXACT LOCATION WITH EQUIPMENT SUPPLIER. COORDINATE ALL WIRING REQUIREMENTS AND UNIT INTERLOCKS WITH MECHANICAL HOOD DRAWINGS
- $\langle 7 \rangle$  NOT USED.
- © CEILING MOUNTED JUNCTION BOX FOR FUTURE CABLE TV CONNECTION. PROVIDE CONDUIT WITH PULL-STRING BACK TO TELEPHONE BACKBOARD SHELF.
- 9 PROVIDE DEDICATED QUAD RECEPTACLE AT TELEPHONE/DATA/TV SHELF ON NEW SOFFIT. MOUNT 6" BELOW CEILING. COORDINATE EXACT
- PROVIDE 1" CONDUIT WITH PULL-STRING TO LANDLORD TELEPHONE DEMARC LOCATION. FIELD VERIFY.
- (11) CATS DATA OUTLET. PROVIDE 1/2" CONDUIT WITH CATS CABLE TO TELEPHONE/DATA/TV SHELF.
- CIRCULATION OF AIR FROM WARMER TO COLDER SECTIONS OF INTERIOR RACEWAY SYSTEM EXPOSED TO WIDELY DIFFERENT TEMPERATURES SHALL BE PREVENTED. SEAL AS REQUIRED PER NEC 300.7(A). PROVIDE EXPANSION JOINTS FOR CONDUIT AS REQUIRED TO COMPENSATE FOR THERMAL EXPANSION AND CONTRACTION.
- MOUNT WP, GFCI DUPLEX RECEPTACLE IN FREEZER BELOW EVAPORATOR FOR CORD & PLUG CONNECTION OF HEAT TRACE; FURNISH "GARD1-N #W51-24P" HEAT TRACE (24'-0"); WRAP FREEZER DRAINPIPE FROM EVAP IN FREEZER TO HUB DRAIN OR EXIT OF FREEZER AS REQUIRED.
- (14) PROVIDE CATS DATA OUTLET AT TELEPHONE/DATA/TV SHELF ON NEW SOFFIT. MOUNT 6" BELOW CEILING. COORDINATE EXACT LOCATION.
- (15) EC TO PROVIDE QUAD OUTLET INSIDE OF STORAGE NOOK. MOUNT RECEPTACLE AT 54" AFF.

- 1. FOR WALK-IN COOLER LIGHTS AND DOOR HEATER. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX BREAKER.
- 2. FOR WALK-IN COOLER COMPRESSOR/EVAPORATOR. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX FUSE.
- 3. FOR STEP-IN FREEZER LIGHTS, DOOR HEATER, FAN, AND/OR DRAIN LINE HEATER. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. 15A MAX BREAKER.
- 4. FOR STEP-IN FREEZER COMPRESSOR. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER PRIOR TO COMMENCING WORK. DEDICATED DUPLEX RECEPTACLE MOUNTED BELOW COUNTER-TOP WITH IN 6'-0" OF EQUIPMENT
- PROVIDE 30A, 208V/1-PHASE FUSED DISCONNECT WITH (2) 15A FUSES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH
- MANUFACTURER. PROVIDE 30A, 208V/3-PHASE FUSED DISCONNECT WITH (3) 15A FUSES. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER.
- 8. SYSTEM REQUIRES 120V SERVICE FOR FAN MOTORS AND/OR DRAIN LINE HEATERS. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER. 9. PROVIDE 30A, 208V/3-PHASE, NON-FUSED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH PLUMBING
- CONTRACTOR. 10. UNIT TO BE HARDWIRED. SEE SPEC SHEET FOR EXACT MOUNTING REQUIREMENTS.



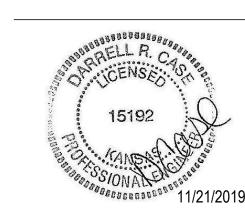




Description

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**PERMIT SET** 

Client Approval

**Engineering Inc.** 

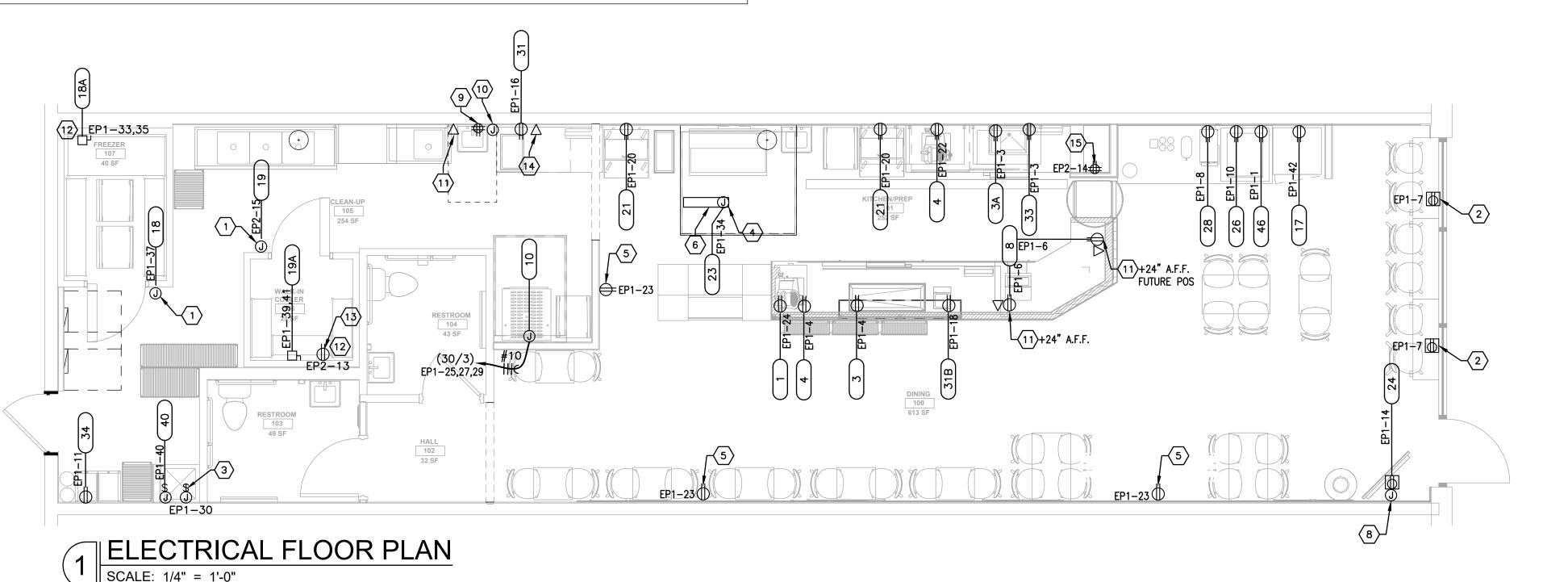
CERTIFICATE OF AUTHORITY NO. E-2951

F 636.349.1730

St. Louis, MO 63026

**Electrical Power** Plan

Project # 43419-KS02 11/4/2019 Issue Date Scale As indicated



277/480V	DEMAND FACTOR	VOLT -	- AMPS
LOAD DESCRIPTION	D.F.	CONNECTED	DEMAND
LIGHTING	1.25	3482	4353
RECEPTACLES	N.E.C. 10K+50% REMAINING	3660	3660
MOTORS	N.E.C. 25%	0	0
KITCHEN EQUIPMENT	N.E.C. 100%	32019	20812
WATER HEATER	1.25	500	625
HVAC EQUIPMENT	1.00	24527	24527
	TOTAL=	<u>64188</u>	53977
PANELI	BOARD LOAD =	V.A.53977	
FULL	LOAD AMPS =	A. 150	

		P	AN	EL	BOARD EP-1			S <u>URFA</u>	CE MOUNTED 42K A.I.C. SE	RIES	RAT	ED		
				1	<u> 20/208</u> VOLTS <u>3</u> PHASE	4	WIF	RE	<del></del>					
				С	IRCUIT BREAKER TYPE 200A				FED FROM	EP-	-2			
		CKT. NO.		NO. POLE	LOAD SERVED	Αø	D- V. Bø	A. Cø	LOAD SERVED	NO. POLE	TRIP AMP	CKT. NO.		
		1	20	1	PEPSI COOLER (47)	864 500			TELEPHONE BOARD	1	20	2	GFI	
	GFI	3	20	1	DROP IN (3A)		863 924	>	DROP IN(3) & SLICER (4)	1	15	4	GFI	
	LO	5	20	1	TIMECLOCK CONTACTOR			500 900	POS (8)	1	20	6	GFI	LO
	TS	7	20	1	SHOW WINDOW REC	180 1728	>		TEA BREWER (28)	1	20	8	GFI	
		9	20	1	UC FRIDGE (33)	\ \	468 1116	>	DRINK DISPENSER (26)	1	20	10	GFI	
		11	20	1	BAG IN BOX (34)			0 1404	ICE MACHINE (41)	1	20	12	GFI	
	TS	13	20	1	SPECIALTY LIGHTS	1492 1080	>		TV (24)	1	20	14		•
	РС	15	20	1	SIGN		1200 1500	>	COUNTERTOP WARMER (31A)	1	20	16	GFI	
LO	TS	17	20	1	GENERAL LIGHTS EF-3&4			790 1500	BACON WARMER (31B)	1	20	18	GFI	
		19	20	1	HVAC REC/DUCT DETECTOR	360 1176	>		SANDWICH TOP (21)	1	20	20	GFI	
		21	20	1	LIGHTS	\ \	500 420	>	SLICER (4)	1	20	22	GFI	
		23	20	1	CONVENIENCE REC			540 1044	MEATCASE (1)	1	20		GFI	
		25	30	3	BREAD OVEN	2219 1176	>		SANDWICH TOP (21)	1	20	26		
		27					2219 1176	>	EF-1	1	20	28		
		29						2219 125	RE-CIRC PUMP	1	20	30		
		31			SHUNT TRIP	0 864	>		EF-2	1	20	32		
		33	20	2	COOLER PAK (18A)		968 600	>	HOOD LIGHTS CONTROL(23)	1	20	34		
		35						968 200	HOOD LIGHTS	1	20	36		
		37	20	1	COOLER LTG. DOOR (18)	600 0	>		SHUNT TRIP			38		
		39	20	2	FREEZER PAK (19A)		1550 500	>	WATER HEATER (40)	1	20	40		
		41						1550 865	PEPSI COOLER	1	20	42		
						12239	14004		TOTAL VA PER PHASE					
							38848		TOTAL VA					

ELECTRICAL ROOM JERSEY MIKES 225/3P FLOOR TO EXISTING UTILITY POWER ( VERIFY DISTANCE WITH LOCAL UTILITY

ALL INFORMATION REGARDING CURRENT CONDITIONS OF THE ELECTRICAL SERVICE ARE VIA SECOND PARTY FIELD SURVEY. EC IS RESPONSIBLE FOR FIELD VERIFICATION OF SITE CONDITIONS AND REPORTING ANY DIFFERENCES OR DISCREPANCIES TO OWNERS REPRESENTATIVE PRIOR TO BID. NO EXTRAS OR CHANGE ORDERS SHALL BE GIVEN FOR CONTRACTOR'S FAILURE TO VERIFY SITE CONDITIONS PRIOR TO BIDDING.

### RISER DIAGRAM KEYED NOTES

EC TO PROVIDE 200 AMP, 120/208 VOLT, 3 PHASE, 4 WIRE MLO PANEL 'EP-1'.

PANEL'EP-2'

120/208V

3ø-4WIRE

200 AMP

M.C.B.

ROOF

PANEL'EP-1'

120/208V

3ø-4WIRE

200 AMP

M.L.O.

- EXISTING 1200 AMP, 120/208 VOLT, 3 PHASE, 4 WIRE, MULTI METER RACK. EXISTING METER AND 225A/3P CIRCUIT BREAKER TO REMAIN.
- $\overline{\langle 3 \rangle}$  EC TO PROVIDE (4) #3/0-CU FEEDERS AND (1) #6 GND IN 2" CONDUIT.
- EC TO PROVIDE 200 AMP, 120/208 VOLT, 3 PHASE, 4 WIRE MCB PANEL 'EP-2'. SEE PANEL SCHEDULES.
- 5 NEW LIGHTING CONTROLS BY EC. SEE DETAIL 2/E2.0

## 2 ELECTRICAL RISER DIAGRAM SCALE: NONE

SEE PANEL SCHEDULES.

- 1. TGC SHALL VERIFY LENGTH OF FEEDERS PRIOR TO (AND INCLUDE PRICING IN) BID.
- 2. VERIFY FAULT CURRENT RATING (AIC) WITH POWER COMPANY.
- 3. PROVIDE PHENOLIC ENGRAVED NAMEPLATES PERMANENTLY ATTACHED TO ALL ELECTRICAL EQUIPMENT STATING
- 4. PER NEC 210.8(B): ALL RECEPTACLES INSTALLED IN KITCHENS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- 5. CONTRACTOR TO BALANCE PANELBOARD PHASE LOADS TO WITHIN 10%...

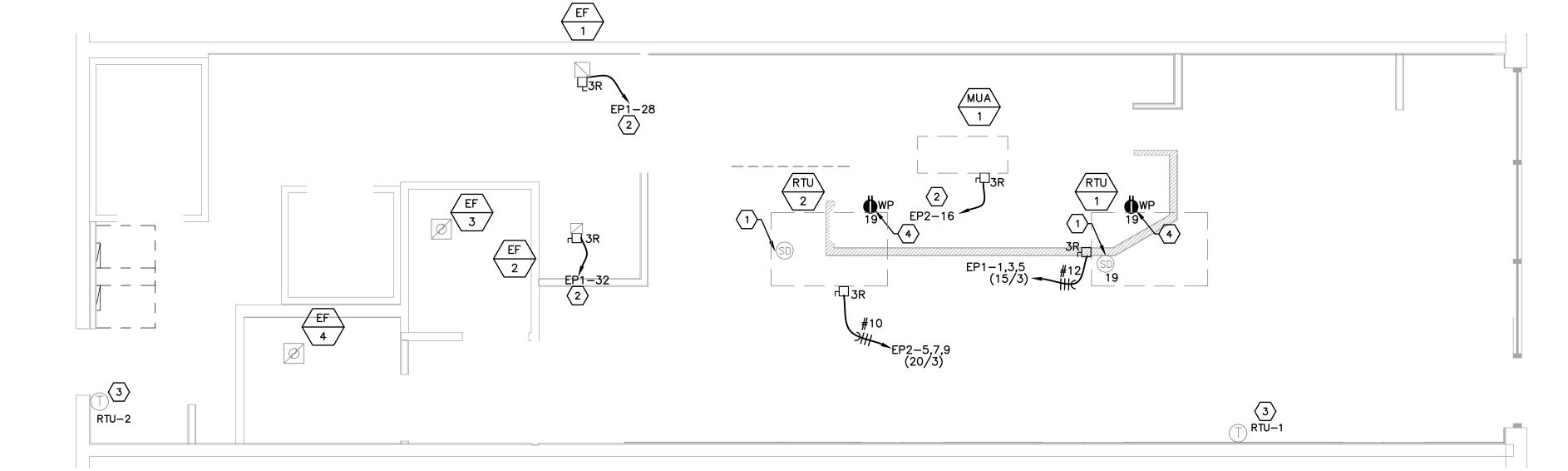
### MECHANICAL EQUIPMENT KEYED NOTES

- 1) IF NOT EXISTING, EC TO PROVIDE DUCT MOUNTED SMOKE DETECTORS IN RETURN AIR DUCT AND MAKE ALL ELECTRICAL CONNECTIONS.
- COORDINATE ALL WIRING REQUIREMENTS AND UNIT INTERLOCKS WITH MECHANICAL HOOD DRAWINGS
- PROVIDE JUNCTION BOX AND CONDUIT WITH PULL STRING TO ABOVE CEILING FOR THERMOSTAT. COORDINATE FXACT LOCATION WITH MECHANICAL CONTRACTOR SPICE.
- EC TO PROVIDE WEATHERPROOF, GFI RECEPTACLE AT HVAC EQUIPMENT, IF NOT EXISTING.

# RISER DIAGRAM & PANEL SCHEDULE GENERAL NOTES:

- AMPERAGE, VOLTAGE, PHASE, HIGH-LEG-DELTA, ETC.

- THERMOSTAT. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO



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



CERTIFICATE OF AUTHORITY NO. E-2951



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**PERMIT SET** 

Client Approval

**Electrical Schedules** 

43419-KS02 Project # 11/4/2019 Issue Date

Drawn by Checked by

As indicated

**E4.0** 

EQUIPMENT AIR BALANCE SCHEDULE

CFM

1500

1500

3000

SUPPLY AIR | RETURN AIR | OUTSIDE AIR | MAKE-UP AIR | EXHAUST AIR | PRESSURE

CFM

750

CFM

+500

+500

+750

-1000

-375

-80

-80

CFM

375

1535 CFM

CFM

500

500

1000



CFM

2000

2000

4000

SERVED

DINING

PREP/STORAGE

HOOD

HOOD

HOOD

TOILET

TOILET

RTU-1

RTU-2

MAU-1

EF-1

EF-2

EF-3

EF-4

TOTALS

	AIR DEVICE SCHEDULE											
PLAN MARK	QTY.	*TITUS MODEL NO.	FACE SIZE	NECK SIZE	FLEX SIZE	TYPE	NOTES					
Α	5	PSS	24"x24"	8" RD.	8" RD.	DIFF.	1,2,3,5					
В	_	_	_	_	_	_	-					
С	2	PSS	24"x24"	6" RD.	6" RD.	DIFF.	1,2,3,5					
D	3	PAR	24"x24"	22"x22"	18" RD.	R.G.	2,3,5					
Ε	_	350RL	26"x16"	24"x14"	-	R.G.	6					
F	_	TMR-AA	24" RD.	12" RD.	12" RD.	DIFF.	2,6					
G	6	S301FS	10"x10"	_	_	DIFF.	2,6,7					

. REFER TO PLAN FOR THROW PATTERN ORIENTATION

. PROVIDE MANUAL VOLUME DAMPER 3. FRAME SHALL FIT LAY-IN CEILING MODULE

4. FRAME SHALL FIT GYPSUM BOARD CEILING 5. PERFORATED DIFFUSER/GRILLE

6. DUCT MOUNTED

7. DUCT MOUNTED GRILLES SHALL BE BLACK. VERIFY COLOR WITH ARCHITECT PRIOR

\* OR APPROVED EQUAL

- OK /	AFFROVED EQUAL								
		EXH	HAUS	ST FA	N SCH	HEDULE			
MARK	MANUFACTURER	MODEL NO.	HP	SP	СҒМ	SONE	WEIGHTS	VOLTS/PH	REMARKS
EF-1	CAPTIVEAIRE	DU50HFA	.5	1.0	1000	15.3	84	115/1	1,2,4
EF-2	CAPTIVEAIRE	DU12HFA	.18	0.5	375	7.9	54	115/1	1,2,3,4
EF-3	GREENHECK	SP-B110	80(W)	0.25	80	2.4	10	115/1	1,5
EF-4	GREENHECK	SP-B110	80(W)	0.25	80	2.4	10	115/1	1,5

- VERIFY ELECTRICAL VOLTAGE AND PHASE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING UNIT. 2. PROVIDE ROOF CURBS AND DISCONNECT WITH FAN. FURNISHED AND INSTALLED BY MECHANICAL
- 3. INTERLOCK OPERATION SUPPLY FANS AND EXHAUST FANS. EF-1, EF-2 WITH MAU-1, RTU-1 AND
- ELECTRICAL INTERLOCK WITH OVEN CONTROLS. 5. FAN TO BE CONTROLLED BY SWITCH

ROOFTOP UNIT SCHEDULE																		
				O.A.			_	LG BH	HEATING MBH				l   ELECTRICAL		ELECTRICAL		WEIGHT	
MARK	MFR	MODEL NO.	СҒМ	CFM	ESP	HP	TOT.	SENS.	IN	OUT	MCA	моср	VOLT/PHASE	LBS	REMARKS			
RTU-1	TRANE	YSC060	2000	500	0.5	1.5	57.0	45.6	150	120	31	45	208/3	756	1,3			
RTU-2	TRANE	YSC060	2000	500	0.5	1.5	57.0	45.6	150	120	31	45	208/3	756	1,3			
MAU-1	CAPTIVEAIRE	D76	750	ı	.4	1.0	-	-	39.2	36.1	1	-	115/1	327	1,2,3			

INTERLOCK OPERATION SUPPLY FANS AND EXHAUST FANS. SEE EXHAUST FAN SCHEDULE FOR ADDITIONAL INFO. 2. VERIFY ELECTRICAL VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING EQUIPMENT.

5. FURNISH AND INSTALL ROOFTOP UNIT. PROVIDE WITH 100% O.A. ECONOMIZER, DISCONNECT SWITCH AND MANUFACTURER RECOMMENDED ROOF CURB. VERIFY LOCATION IN FIELD WITH LANDLORD REPRESENTATIVE.

DESCRIPTION	AREA (SQ. FT.)	AREA OUTDOOR AIR RATE PER IMC TABLE 403.3 (RA)	AREA OUTDOOR AIR (RaAz)	OCCUPANT LOAD RATE PER IMC TABLE 403.3 (PEOPLE/1000 SQ. FT.)	OCCUPANCY CxF /1000 (Pz)	OCCUPANT OUTDOOR AIR RATE PER IMC TABLE 403.3 (Rp)	OCCUPANT OUTDOOR AIR (RpPz)	BREATHING ZONE OUTDOOR AIR (Vbz=RpPz +RaAz)	ZONE AIR DISTRIBUTION EFFECTIVENSS (Ez)	ZONE OUTDOOR AIR (Voz= Vbz/Ez)	SUPPLY AIR DESIGN (Vpz)	OUTDOOR AIR FRACTION (Zp=Voz/Vpz)	
RTU-1													
DINING	644	0.18	115.9	70	32	7.5	240	356	0.8	445	1900	0.23	
M,W.TLT	97	_	-	-	-	-	_	_	0.8	-	100	_	
RTU-2													İ
KITCHEN/PREP	572	0.18	103	_	4	7.5	30	133	0.8	166	2000	80.0	
													ĺ
TOTALS	1269				39					575.75	4000	0.3	
												Ev	
TOTAL REQUIRED OUTDOOR AIR 611												1	1

#### HVAC SYMBOLS LEGEND

SUPPLY AIR DIFFUSER RETURN AIR GRILLE CHILLED WATER SUPPLY GAS LINE —G— CHILLED WATER RETURN —D— CONDENSATE DRAIN LINE HOT WATER SUPPLY TOILET EXHAUST HOT WATER RETURN MOTORIZED DAMPER REF. DISCHARGE LINE REF. SUCTION LINE OUTDOOR AIR RETURN AIR SUPPLY AIR

S.E.

SMOKE DETECTION DEVICE THERMOSTAT SMOKE DETECTOR FLEXIBLE CONNECTION SMOKE EXHAUST AIR DEVICE TYPE AIR VOLUME IN CUBIC

FEET/MINUTE (CFM)

#### HVAC + SPRINKLER KEYED NOTES

- (1) NEW 54"x30" TYPE I GRIDDLE HOOD WITH A 3" INTERNAL STANDOFF AND A LAYER OF INSULATION BEHIND THE HOOD FOR TO COMPLY WITH O" CLEARANCE TO COMBUSTIBLES. PROVIDE COMPLETE FIRE SUPPRESSION SYSTEM FOR EQUIPMENT UNDER HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION.
- $\langle 2 \rangle$  NEW EXHAUST FAN (EF-1) FOR TYPE I GRIDDLE HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION. LOCATE ON ROOF IN FRONT OF TENANT'S SPACE. MAINTAIN MINIMUM 10'-0" HORIZONTAL DISTANCE BETWEEN EXHAUST FAN AND OUTSIDE AIR INTAKES.

RETURN AIR GRILLE

MANUAL DAMPER

FIRE DAMPER

DIFFUSER

R.S.

R.A.G.

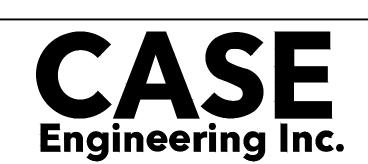
DIFF.

F.D.

- NEW 9"x9" WELDED 16 GAUGE BLACK STEEL GREASE DUCT WITH LIQUID TIGHT EXTERNAL WELD FROM TYPE I GRIDDLE HOOD. ROUTE DUCTWORK THRU AREA ABOVE ROOF OVERHANG AND UP THRU ROOF TO EF-1. PROVIDE CLEAN-OUTS IN HORIZONTAL DUCTWORK AND EACH CHANGE OF DIRECTION AND MAX. 20 FT ON CENTER AS REQUIRED BY CODE.
- $\langle 4 \rangle$  PROVIDE GREASE DUCT WRAP WITH TWO (2) LAYERS OF 3M FIRE BARRIER DUCT WRAP 15A, 1-1/2" THICK WITH 4" PERIMETER AND LONGITUDINAL OVERLAPS WHERE REQUIRED BY CODE. PROVIDE TWO HOUR FIRE RESISTIVE RATING AND ZERO CLEARANCE TO COMBUSTIBLES AT OVERLAP OR COLLAR. 3M FIRE BARRIER DUCT WRAP IS LISTED BY INTERTEK 3MU/FRD 120-13 (FORMERLY OPL GD556F) AND ASTM E 2336. INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO GREASE EXHAUST DUCT DETAIL ON DWG. M2.1 FOR ADDITIONAL INFORMATION.
- 5 NEW 54"x9" PERFORATED SUPPLY PLENUM AT TYPE I GRIDDLE HOOD. PROVIDE TRANSITION FROM 28"x6" CONNECTION TO 12"x12" SUPPLY DUCTWORK. ROUTE DUCTWORK UP THRU ROOF TO MAKE-UP AIR UNIT (MAU-1). BALANCE TO 600 CFM. REFER TO HOOD DRAWINGS FOR INFORMATION.
- 6 NEW MAKEUP AIR FAN (MAU-1) ON ROOF FOR PERFORATED SUPPLY PLENUM AT TYPE I GRIDDLE HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION. LOCATE ON ROOF IN FRONT OF TENANT'S SPACE.
- (7) NEW 45"x54" TYPE II BREAD OVEN HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION.
- 8 NEW EXHAUST FAN (EF-2) FOR TYPE II BREAD OVEN HOOD. REFER TO HOOD DRAWINGS FOR INFORMATION. LOCATE ON ROOF IN FRONT OF TENANT'S SPACE. MAINTAIN MINIMUM 10'-0" HORIZONTAL DISTANCE BETWEEN EXHAUST FAN AND OUTSIDE AIR INTAKES.
- 9 7"x6" EXHAUST DUCT FROM TYPE II BREAD OVEN HOOD. ROUTE DUCTWORK UP THRU ROOF TO  $\underline{\text{EF}}$ -2. TRANSITION DUCT AT FAN.
- NEW 2" EXTERNALLY INSULATED SUPPLY AND MAKE—UP AIR DUCT SUPPLIED AND INSTALLED BY HVAC CONTRACTOR (TYPICAL). SIZES SHOWN ARE CLEAR INSIDE DIMENSIONS. HOLD DUCTWORK HIGH AS POSSIBLE/PRACTICAL BELOW JOIST SPACE.
- 5'-0" FLEXIBLE DUCT (TYPICAL) MAXIMUM. PROVIDE SMOOTH TRANSITION AND PROPER SUPPORTS PER SMACNA. USE FLEXIBLE DUCT FOR FINAL RUNOUT TO DIFFUSER ONLY. REFER TO SCHEDULE FOR
- (12) MANUAL VOLUME DAMPER. (TYPICAL)
- FURNISH AND INSTALL SEVEN-DAY PROGRAMMABLE THERMOSTATS WITH AUTO CHANGEOVER AND RELATED WIRING TO CONTROL ROOF TOP UNITS. THERMOSTATS TO BE HONEYWELL MODEL TB7220. MOUNT AT 45" AFF. VERIFY LOCATION OF THERMOSTATS WITH ELEVATION ON ARCHITECTURAL DRAWINGS. VERIFY PROPER OPERATION IN FIELD.
- 14) NEW CEILING MOUNTED TOILET EXHAUST FANS (EF-3,4). FAN SHALL BE WIRED AND OPERATED THROUGH THE LIGHT SWITCH COORDINATE WITH ELECTRICAL CONTRACTOR PROVIDE 6" EXHAUST THROUGH THE LIGHT SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR. PROVIDE 6" EXHAUST DUCT WITH BACKDRAFT DAMPER AND CONNECT TO 8" EXHAUST DUCT. ROUTE DUCTWORK THRU AREA ABOVE ROOF OVERHANG AND ROUTE THRU ROOF WITH RAIN CAP AS SHOWN. DISCHARGE SHALL BE AT LEAST 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKES. FIELD VERIFY LOCATION. REFER TO EXHAUST FAN SCHEDULE ON THIS SHEET AND TOILET EXHAUST FAN DETAIL 6/M2.1 FOR INFORMATION.
- (15) DOOR TO BE UNDERCUT FOR MAKE-UP AIR.
- 16 FURNISH AND INSTALL 5 TON ROOFTOP UNITS. RTU-1,2. VERIFY LOCATION WITH LANDLORD PRIOR TO ANY WORK.
- SUPPLY AIR DIFFUSER CFM RATES SHALL BE ADJUSTED AS REQUIRED FOR PROPER AIR FLOW AROUND THE HOOD.
- 18 PROVIDE NEW SMOKE DETECTOR IN RETURN DUCT TO MEET CODE REQUIREMENTS.

### GENERAL NOTE

ALL ROOF WORK NEEDS TO BE COORDINATED WITH THE SHELL ROOFING SUBCONTRACTOR AND OR ROOFING MANUFACTURER TO ENSURE NO WARRANTIES ARE VOIDED.



St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. E-2951



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**PERMIT SET** 

Client Approval

Mechanical

43419-KS02 Project# 11/4/2019 Issue Date Scale As indicated

A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.

B. REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED UNDER THIS SECTION.

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CON-STRUCTION DETAILS, BOTH AS ON TENANT CONSTRUCTION DRAWINGS AND LANDLORD'S AS REFERRED TO, BEFORE SUBMITTING HIS BID AS NO ALLOW-ANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

#### INSPECTION OF SITE

ALL PROPOSALS SHALL PRECLUDE THAT CONTRACTOR IS FAMILIAR WITH JOB SITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICA-TIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

#### MATERIALS AND WORKMANSHIP

- A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS, AND UNLESS OTHER-WISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION, AND ON COM-PLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES, <u>DO NOT JUST ABANDON</u>.

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE. THE SUBCON-TRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

- EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PRO-TECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK. HE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND ADJACENT PROPERTY AS WELL.
- B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE WORK AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSUR-ANCE REQUIRED TO PROTECT HIMSELF, OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC

#### CHANGES IN THE WORK

THE TENANT, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CON-JUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. REFER-ENCE SHALL BE MADE TO THE OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE.

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

- THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.
- B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DES-CRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PRO-VIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK. REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

B. CONTRACTOR SHALL SUPPLY TO LANDLORD AND TENANT A CERTIFIED BALANCE REPORT AT COMPLETION OF PROJECT. THIS IS REQUIRED FOR BOTH REMODELED AND NEW STORES.

#### HEATING, VENTILATING AND AIR CONDITIONING

- A. THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION, OR INSTRUCTIONS TO BIDDERS, AND THE GENERAL CON-DITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, HEREWITH, OR OTHERWISE, SHALL BE COMPLIED WITH IN EVERY RESPECT.
- B. THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, OPERATION OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRARY. THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL CONDITIONS THEREON AND/OR THEREIN. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT.

FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COM-PLETE FULLY OPERATIVE HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM EXCEPT AS SPECIFICALLY EXCLUDED BY THE DRAWINGS, AND/OR TENANT'S DIRECTIONS.

- A. 1. ROOFTOP UNITS: FURNISH HEATING AND AIR CONDITIONING AS SCHEDULED. UNIT TO BE COMBINED PACKAGED SYSTEM, ALL SEASON EQUIPMENT, CONSISTING OF GAS HEATING SECTION, BLOWER, DX COIL, COMPRESSOR(S), AND AIR COOLED CONDENSING SECTION. UNIT SHALL BE DESIGNED FOR DOWN FLOW ARRANGEMENT WITH ALL DUCT PENETRATIONS WITHIN FACTORY ROOF CURB.
- 2. FEATURES: UNITS TO BE WOUND FOR VOLTAGE AND PHASE AS SCHEDULED. HEAVY GAUGE ALUMINIZED STEEL, STAINLESS STEEL OR COATED HEAT EXCHANGER WILL BE ACCEPTABLE. UNIT MUST BE A.G.A. APPROVED FOR OUTDOOR APPLICATION. DIRECT EXPANSION COIL WITH FACTORY INSTALLED EXPANSION VALVE — BLOWER SHALL BE OF THE CENTRIFUGAL BELT DRIVEN OR MULTI-SPEED DIRECT DRIVE TYPE WITH FORWARD CURBED BLADES — BLOWER AND MOTOR ISOLATED FOR QUIET OPERATION — BUILT IN MOTOR STARTER WITH OVER VOLTAGE PROTECTION. HERMETICALLY SEALED COMPRESSOR WITH INHERENT OVERLOAD PROTECTION THERMOSTAT - NON-PRORATED 5-YEAR WARRANTY ON COMPRESSOR AND 10-YEAR WARRANTY ON HEAT EXCHANGER - CONDENSER COIL CONSTRUCTED OF COPPER TUBING WITH ALUMINUM FINS — CRANKCASE HEATERS — BUILT IN MOTOR STARTERS ELECTRIC IGNITION - HIGH, LOW PRESSURE CUTOUT ON COMPRESSOR - SHUTOFF VALVES ON LIQUID AND SUCTION LINES - SHORT CYCLE TIMER PROTECTION - FILTER -DRYER - VIBRATION ISOLATION. UNIT FACTORY CHARGED.
- 3. ACCESSORIES: SUPPLY AND RETURN FILTER CASING ASSEMBLY, TWO COMPLETE SETS OF THROWAWAY TYPE FILTERS. FILTERS SHALL BE 2" THICK. ONE SET TO BE REMOVED AND REPLACED JUST PRIOR TO FINAL INSPECTION - FULL ECONOMIZER PACKAGE WITH LOW LEAKAGE FRESH AIR STANDARD RETURN AIR DAMPERS AND DAMPER MOTOR, - MINIMUM POSITION SETTING - PROVIDE MANUFACTURER'S INTERFACE AS REQUIRED FOR OPERATION WITH THERMOSTAT AS SPECIFIED. PROVIDE MOUNTING CURB APPROVED BY NATIONAL ROOF CONTRACTORS ASSOCIATION TO SUPPORT THE ENTIRE ASSEMBLY WITH NAILER STRIP AND AIR TIGHT GASKET.
- E. ALL SINGLE STAGE UNITS WILL BE EQUIPPED WITH PROGRAMMABLE THERMOSTAT.

DESIGN AND STANDARD CONDITIONS FOR THERMOSTAT OPERATION WILL BE AS FOLLOWS:

COOLING: 75°F MAXIMUM OCCUPIED COOLING TEMPERATURE 85°F COOLING NIGHT SETBACK.

HEATING: 70°F MAXIMUM OCCUPIED HEATING TEMPERATURE 60°F HEATING NIGHT SETBACK.

FAN: CONTINUOUS IN OCCUPIED AND RECOVERY MODE AND WITH HEATING OR COOLING EQUIPMENT IN UNOCCUPIED MODE.

DEADBAND: CAPABLE OF MAINTAINING A 5°F DEADBAND.

LEAST 10 HOURS WITHOUT POWER.

CLOCK: 7 DAY CAPABLE OF 7 DIFFERENT DAY SCHEDULES. OVERNIGHT: HAVE A 2 HOUR OVERRIDE ACCESSIBLE TO MANAGER. BACKUP: CAPABLE OF MAINTAINING PROGRAMMED SETTING FOR AT

F. THE HVAC SUBCONTRACTOR SHALL IDENTIFY ALL ROOF MOUNTED HVAC EQUIPMENT AND APPARATUS WITH 2" HIGH PAINTED STENCILED STORE NAME ON ALL SIDES OF EQUIPMENT.

43" TO 60"

A. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

DUCT SIZE <u>GAUGE</u> 12" AND LESS NO. 26 U.S. GAUGE 13" TO 30" NO. 24 U.S. GAUGE 31" TO 54" NO. 22 U.S. GAUGE 55" TO 84" NO. 20 U.S. GAUGE 85" AND OVER NO. 18 U.S. GAUGE

B. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED AS FOLLOWS:

17" AND LESS 'S" AND DRIVE CLEATS 18" TO 30" "L" STANDING SEAMS ON 3'-0" CENTERS 31" TO 54" 1-1/4" STANDING SEAMS

GREASE DUCTS SHALL BE BLACK CARBON STEEL NOT LESS THAN 0.054" (16 GA.). ALL SEAMS, JOINTS, AND PENETRATIONS SHALL HAVE A LIQUID TIGHT, CONTINUOUS, EXTERNAL WELD.

ON 3'-0" CENTERS

1. THE KITCHEN HOOD EXHAUST DUCTWORK SHALL BE ENCLOSED IN A RATED ENCLOSURE PER CODE.

2. THE CONTRACTOR SHALL INCLUDE IN HIS PRICE: -ALL NECESSARY TRANSITION AND CONNECTION FITTINGS TO THE HOOD AND

- ALL CLEAN-OUT ACCESS PANELS AS REQUIRED BY CODE. - ALL ELBOW AND TRANSITION FITTINGS. - ALL HANGERS AND SUPPORTS. -SHOP DRAWINGS SHOWING PROPOSED FABRICATION AND INSTALLATION

COORDINATED WITH EXISTING FIELD CONDITIONS AND OTHER TRADES. ROUND LOW PRESSURE DUCTS SHALL BE SPIRAL WOUND AS MANUFACTURED BY UNITED SHEET METAL COMPANY OR SHOP FABRICATED ROUND DUCTS WITH PITTSBURGH LOCK LONGITUDINAL SEAMS. GAUGES FOR SHOP FABRICATED DUCTS

NO. 20 GAUGE

SHALL BE AS FOLLOWS: UP TO 12" IN DIAMETER NO. 26 GAUGE 13" TO 30" NO. 24 GAUGE 31" TO 42" NO. 22 GAUGE

ELBOWS SHALL HAVE A CENTERLINE RADIUS OF 1-1/2 TIMES DUCT DIAMETER AND MAY BE SMOOTH ELBOWS OR 5 PIECE 90 DEGREE ELBOWS AND 3 PIECE 45 DEGREE ELBOWS. JOINTS OF ROUND DUCTS SHALL BE SLIP TYPE WITH A MINIMUM OF 3 SHEET METAL SCREWS.

- 1. ALL EXPOSED ROUND LOW PRESSURE DUCTWORK SHALL BE INTERNALLY LINED. 2. ALL LOW PRESSURE DUCTWORK SHALL BE EXTERNALLY SEALED USING UNITED SHEET METAL, MMM EC-800, OR HARDCAST DUCT SEALER INSTALLED IN THE JOINTS PRIOR TO CLOSURE. ADDITIONALLY SEAL ALL EXTERNAL TRANSVERSE JOINTS AND FITTING CONNECTIONS EXTERNALLY.
- C. ALL SUPPLY AIR DUCTS (HEATING AND COOLING) AND RETURN AIR DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED STEEL WITH MIN. 1" (R-5) THICK EXTERNAL THERMAL INSULATION EXCEPT DUCT LINED FOR ACOUSTICAL PURPOSES. ALL EXHAUST AND RELIEF AIR DUCTS SHALL BE GALVANIZED STEEL.
- D. CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTDOORS. INSECT SCREENS SHALL BE 10 GAUGE, ONE-HALF INCH (1/2") MESH IN REMOVABLE GALVANIZED
- E. ALL DUCTWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS GUIDE (ASHRAE) AND FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST METHODS RECOMMENDED IN THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) LOW VELOCITY DUCT MANUAL, LATEST EDITION.

- A. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF RIVETS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" x 1-1/4" x 1-1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.
- B. ALL HORIZONTAL DUCTS HAVING A DIMENSION OF 40 INCHES AND MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS.

A. CONTRACTOR WILL PROVIDE WATER TIGHT 24 GA. SHEET METAL FLASHINGS AT ALL EXTERIOR WALLS AND ROOF PENETRATIONS.

B. ALL CUTTING OF ROOF OPENINGS, SUPPORTS FOR ROOF OPENINGS, PITCH PANS, ROOF CURBS, FLASHINGS, COUNTER FLASHINGS, REPAIR TO ROOF, ETC. ASSOCIATED WITH HVAC SUBCONTRACTOR SHALL BE THE RESPONSIBILITY AND PART OF THE CONTRACT HVAC SUB-CONTRACTOR. HE SHALL EMPLOY THE LANDLORD'S ROOFERS FOR THIS WORK SO AS TO MAINTAIN THE ROOF BOND.

A. SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 16 U.S. GAUGE WITH THE LEADING EDGE HEMMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:

EXPOSED OR ACCESSIBLE DUCTWORK - LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE END.

CONCEALED DUCTWORK - LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH

- B. VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE.
- C. FIRE DAMPERS SHALL BE SUPPLIED AND INSTALLED BY HVAC CONTRACTOR AT DUCT PENETRATIONS IN FIRE RATED WALLS, CEILINGS, AND ROOFS AS REQUIRED. COORDINATE WITH LANDLORD, LOCAL FIRE MARSHALL AND ALL CODES AND GOVERNING AUTHORITIES HAVING JURISDICTION.
- D. JOB FABRICATED TURNING VANES SHALL BE ACCEPTABLE IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLEMAN AIR TURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTER-LINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

DUCTWORK FOR EXHAUSTING AIR OR OUTSIDE SUPPLY AIR SHALL BE ALL METAL AND CONSTRUCTED ACCORDING TO RECOMMENDED PRACTICES AS FOUND IN THE LATEST ISSUE OF ASHRAE.

#### SUPPORT OF DUCT SYSTEM

HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE AFOREMENTIONED MANUAL ARE ADHERED TO.

DUCTS SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS AND NOT MORE THAN 8'-0" O.C. STRAIGHT DUCTS UP TO 59" MAX. DIMENSIONS SHALL BE SUPPORTED 6'-0" O.C. DUCTS OVER 60" MAX. DIMENSIONS SHALL BE SUPPORTED AT 4'-0" O.C.

ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.

### ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNEC-

TIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.

CONTRACTOR WILL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATIS-FACTION OF TENANT, WILL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND WILL RECORD VOLUME READINGS IN ACCOR-DANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. ALL PIPING SHALL WITHSTAND AIR PRESSURE TESTING PER GOVERNING PLUMBING CODE.

#### A. AIR DISTRIBUTION SYSTEMS:

- 1. INSPECT INSTALLATION AND VERIFY CONFORMITY TO DESIGN. VERIFY THAT SUPPLY, RETURN, AND EXHAUST DUCTS HAVE BEEN PRESSURE-TESTED FOR LEAKAGE AS RECOMMENDED IN THE APPROPRIATE SMACNA STANDARDS. 2. VERIFY THAT VOLUME AND FIRE DAMPERS ARE PROPERLY LOCATED AND
- 3. VERIFY THAT SUPPLY, RETURN, EXHAUST AND TRANSFER GRILLES, REGISTERS AND DIFFUSERS ARE INSTALLED AND OPERATING PROPERLY.

- B. VERIFY THAT CONTROL COMPONENTS ARE INSTALLED IN ACCORDANCE WITH PROJECT REQUIREMENTS AND ARE FUNCTIONING AS INTENDED, INCLUDING ELECTRICAL POWER, CONTROL AND INTERLOCK WIRING, DAMPER SEQUENCES, SMOKE DETECTORS, ETC.
- C. UPON COMPLETION OF THE INSTALLATION AND START-UP OF THE MECHANICAL EQUIPMENT, TEST, ADJUST AND BALANCE SYSTEM COMPONENTS TO
- OBTAIN OPTIMUM CONDITIONS IN EACH CONDITIONED SPACE IN THE BUILDING.
- D. BEFORE FINAL ACCEPTANCE IS MADE, FURNISH TO THE ARCHITECT THE FOLLOWING DATA:
- 1. SUMMARY OF MAIN SUPPLY, RETURN AND EXHAUST DUCT PILOT TUBE TRANSVERSES AND FAN SETTINGS. 2. AIR QUANTITIES AT EACH SUPPLY, RETURN, RELIEF AND EXHAUST AIR
- HANDLING DEVICE. 3. AIR PRESSURE READINGS ENTERING AND LEAVING EACH SUPPLY FAN AND
- EXHAUST FAN. 4. MOTOR CURRENT AND VOLTAGE READINGS AT EACH EQUIPMENT MOTOR. 5. TEST RESULTS SHALL BE RECORDED ON STANDARD FORMS CONFORMING TO AABC AND NEBB REQUIREMENTS. THE REPORT SHALL INCLUDE AIR FLOW SCHEMATIC DIAGRAMS INDICATING AND IDENTIFYING TEST LOCATIONS SUCH AS DUCT TRANSVERSE, OUTLET READINGS, PRESSURE READINGS AND TEMPERATURE READINGS, AND SHALL BE REFERENCED TO THE RECORDED DATA ON THE
- E. MAKE AN INSPECTION IN THE BUILDING DURING THE OPPOSITE SEASON FROM THAT IN WHICH THE INITIAL ADJUSTMENTS WERE MADE, AND AT THAT TIME MAKE ANY NECESSARY MODIFICATIONS TO THE INITIAL ADJUSTMENTS REQUIRED TO PRODUCE OPTIMUM OPERATION OF THE SYSTEM COMPONENTS, TO PRODUCE
- THE PROPER CONDITIONS IN EACH SPACE. F. INSTRUCTION: THE CONTRACTOR SHALL INSTRUCT THE BUILDING OPERATING PERSONNEL IN THE CONSTRUCTION AND OPERATION OF ALL EQUIPMENT.

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

TEMPORARY SERVICES

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF TEMPORARY SERVICES:

- A. TELEPHONE THE TENANT'S GENERAL CONTRACTOR SHALL INSTALL A JOB SITE TELEPHONE AND NOTIFY TENANT AS LISTED ON SHEET A-1 OF THE TELEPHONE NUMBER AND THE NAME OF THE SUPERINTENDENT.
- TEMPORARY WATER WATER REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR. WATER USED FOR HUMAN CONSUMPTION SHALL CONFORM TO REQUIRE-MENTS OF STATE AND LOCAL AUTHORITIES FOR POTABLE WATER.
- C. TEMPORARY ELECTRICITY TEMPORARY ELECTRIC SERVICE REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE FURNISHED AND PAID FOR BY THE CONTRACTOR WHO SHALL FURNISH, INSTALL, AND MAINTAIN ALL TEMPORARY OVERHEAD CONSTRUCTION, METERS, DROPS, AND OTHER WIRING AND FITTINGS FOR BOTH LIGHT AND POWER AT LOCATIONS REQUIRED IN THE WORK AND SHALL BEAR THE COST OF MAKING THE SERVICE CONNECTIONS. BEFORE FINAL ACCEPTANCE, TEMPORARY ELECTRICAL SERVICE FACILITIES INSTALLED BY THE CONTRACTOR SHALL BE REMOVED AND THE SERVICE CONNECTIONS SEVERED IN ACCEPTABLE MANNER.
- D. TEMPORARY HEAT WHEN REQUIRED FOR PROPER INSTALLATION OR PROTECTION OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY HEATING UNITS AS APPROVED BY THE LANDLORD OR LOCAL AUTHORITY.
- E. COST OF LANDLORD PROVIDED UTILITY SERVICES IF THE LANDLORD WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE

TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY

### NOTE FOR TENANT GENERAL CONTRACTOR

II IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB.

#### NOTE FOR GENERAL CONTRACTOR:

IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES AND SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB

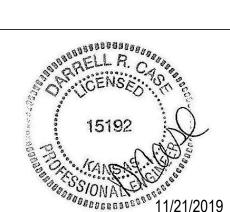
MIKES -PARK

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MECHANICAL **SPECIFICATIONS** 

43419-KS02

11/4/2019

As indicated

Project# Issue Date

Scale Drawn by

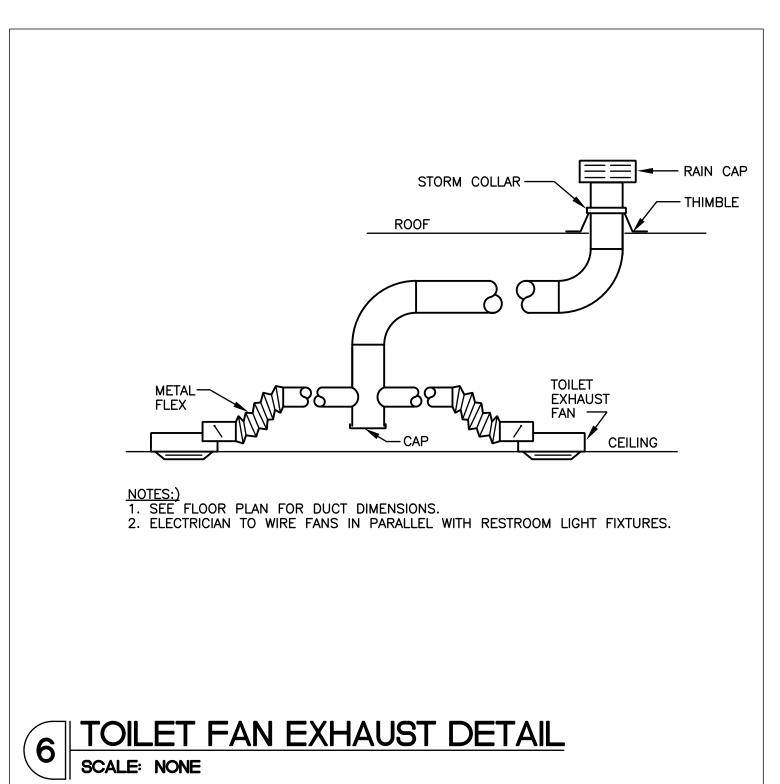
T 636.349.1600

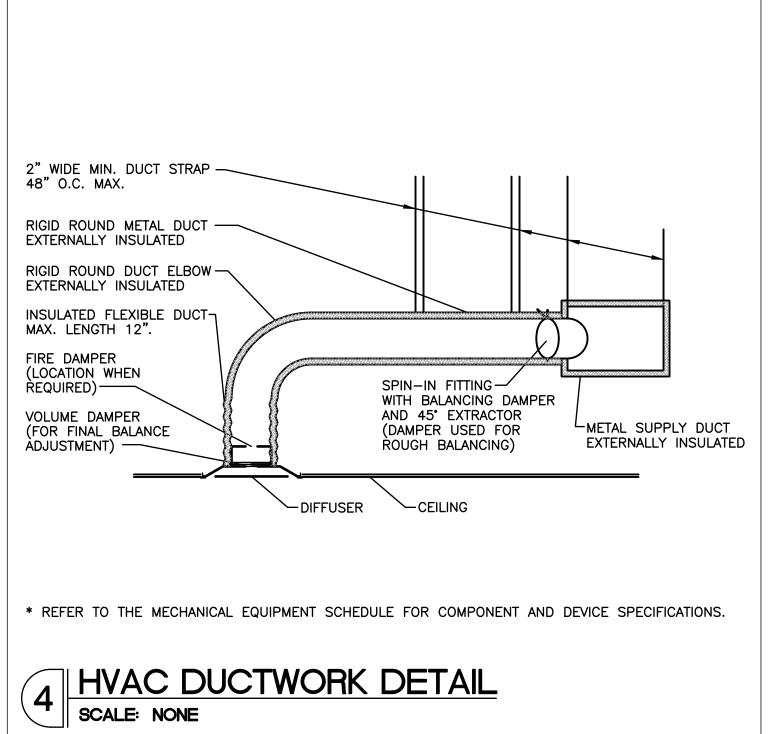
F 636.349.1730

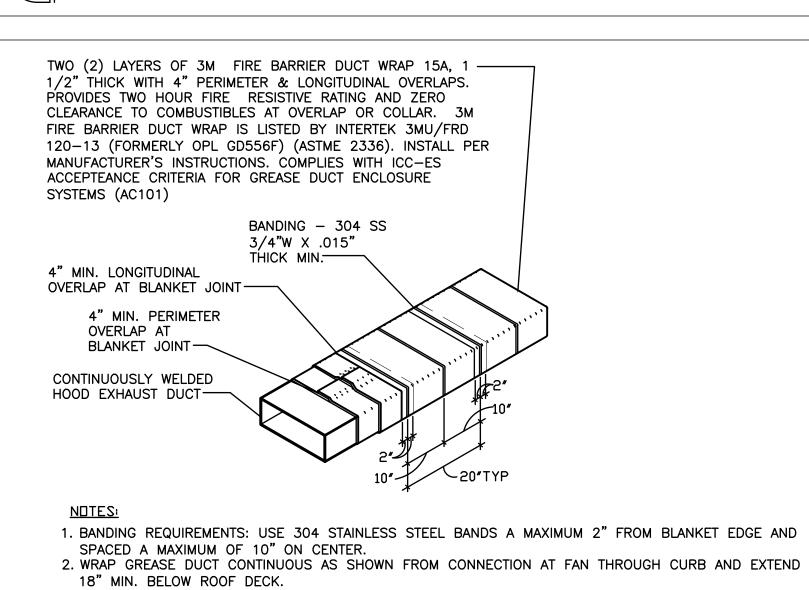
796 Merus Court

St. Louis, MO 63026

CERTIFICATE OF AUTHORITY NO. E-2951





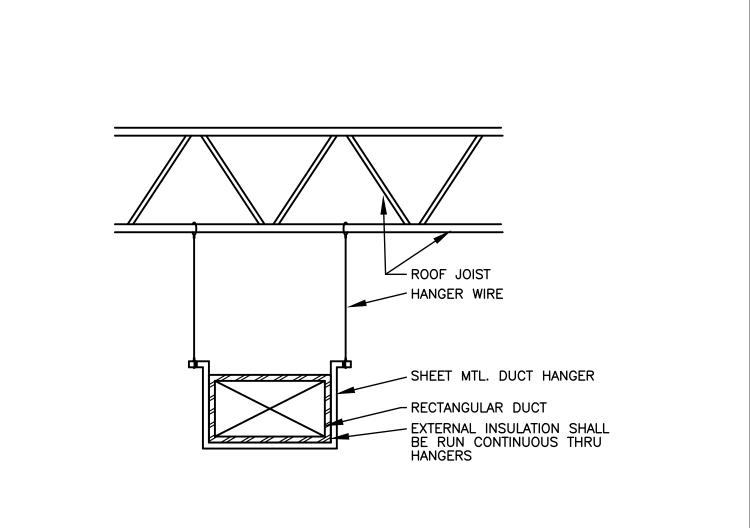


1. BANDING REQUIREMENTS: USE 304 STAINLESS STEEL BANDS A MAXIMUM 2" FROM BLANKET EDGE AND

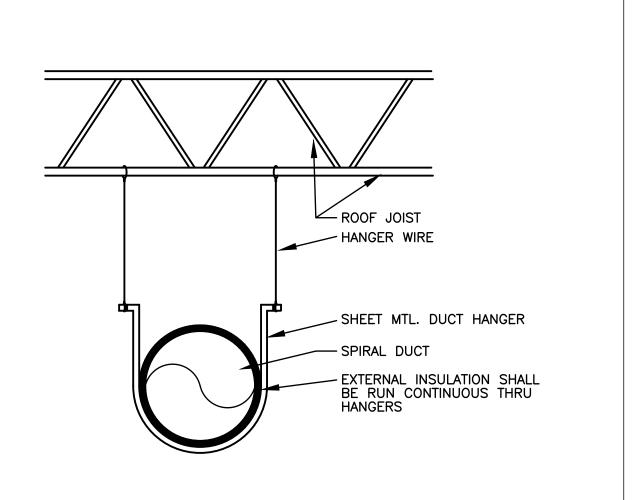
3. FOR HORIZONTAL RUNS OF EXHAUST DUCTS PROVIDE TYPICAL TRAPEZE SUPPORT SYSTEM WITH 1/2" HANGER RODS A MAXIMUM OF 6" FROM INSULATION EDGE. TRAPEZE SUPPORTS SHALL BE SPACED A MAXIMUM OF 60" ON CENTER FROM CENTERLINE OF VERTICAL EXHAUST DUCT.

4. SLOPE HORIZONTAL EXHAUST DUCT RUNS A MINIMUM OF 1/4" PER FOOT (2% SLOPE) TOWARDS 5. PROVIDE INSULATED ACCESS DOORS OR PANELS FOR CLEANING AND INSPECTION OF DUCT. PROVIDE AN APPROVED SIGN ON EACH ACCESS DOOR OR PANEL WHICH READS "ACCESS PANEL - DO NOT

GREASE DUCT DETAIL 2 GREASE SCALE: NONE



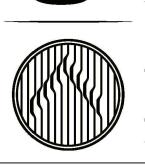
5 DUCT HANGER DETAIL
SCALE: NONE



3 ROUND DUCT HANGER DETAIL SCALE: NONE

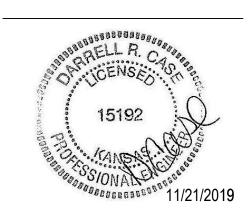


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Client Approval

Mechanical **Details** 

43419-KS02 Project# 11/4/2019 Issue Date Scale As indicated



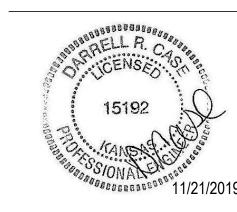




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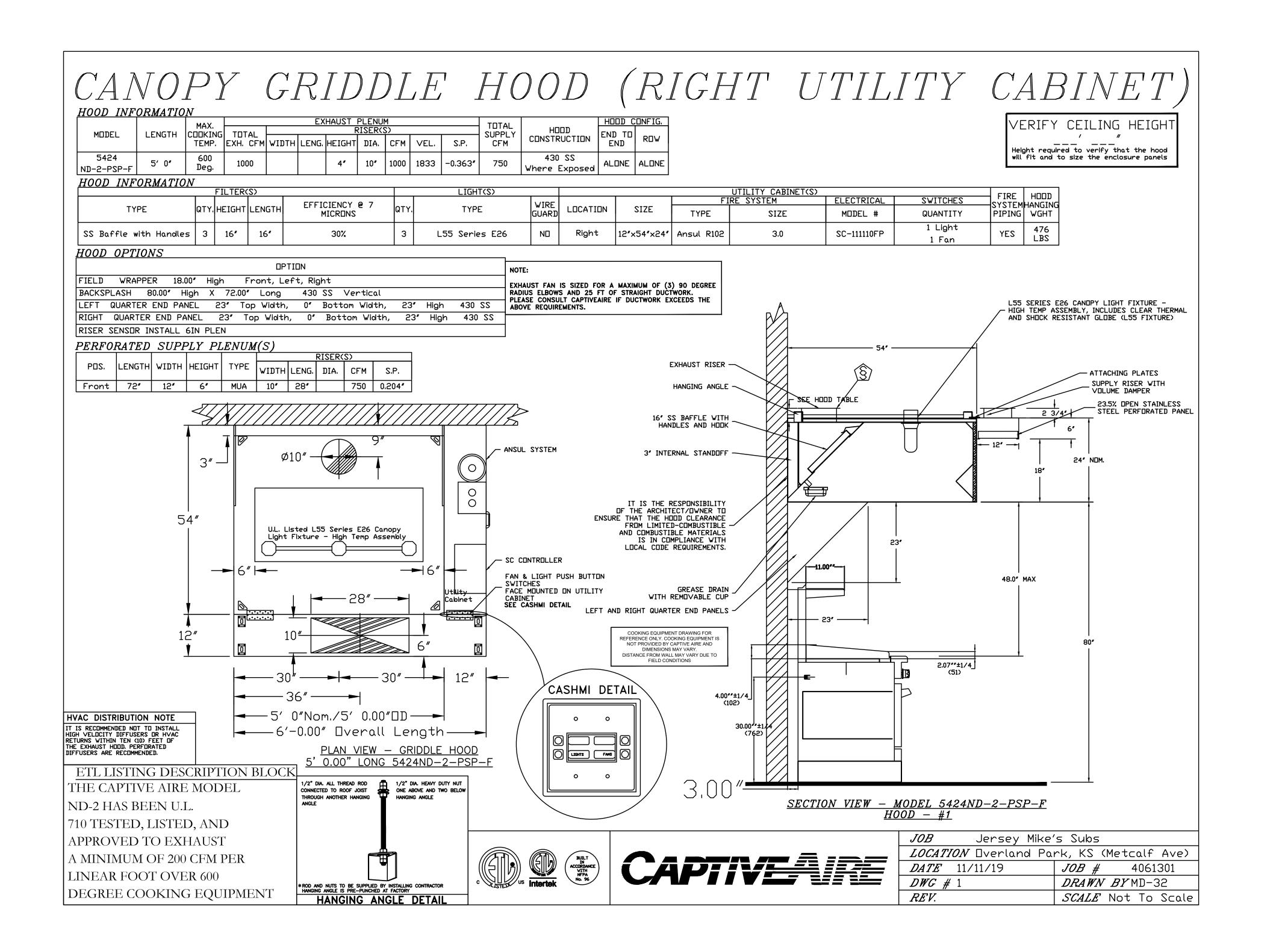
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Mechanical **Details** 

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Drawn by Checked by

Engineering Inc. St. Louis, MO 63026 F 636.349.1730





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Drawing

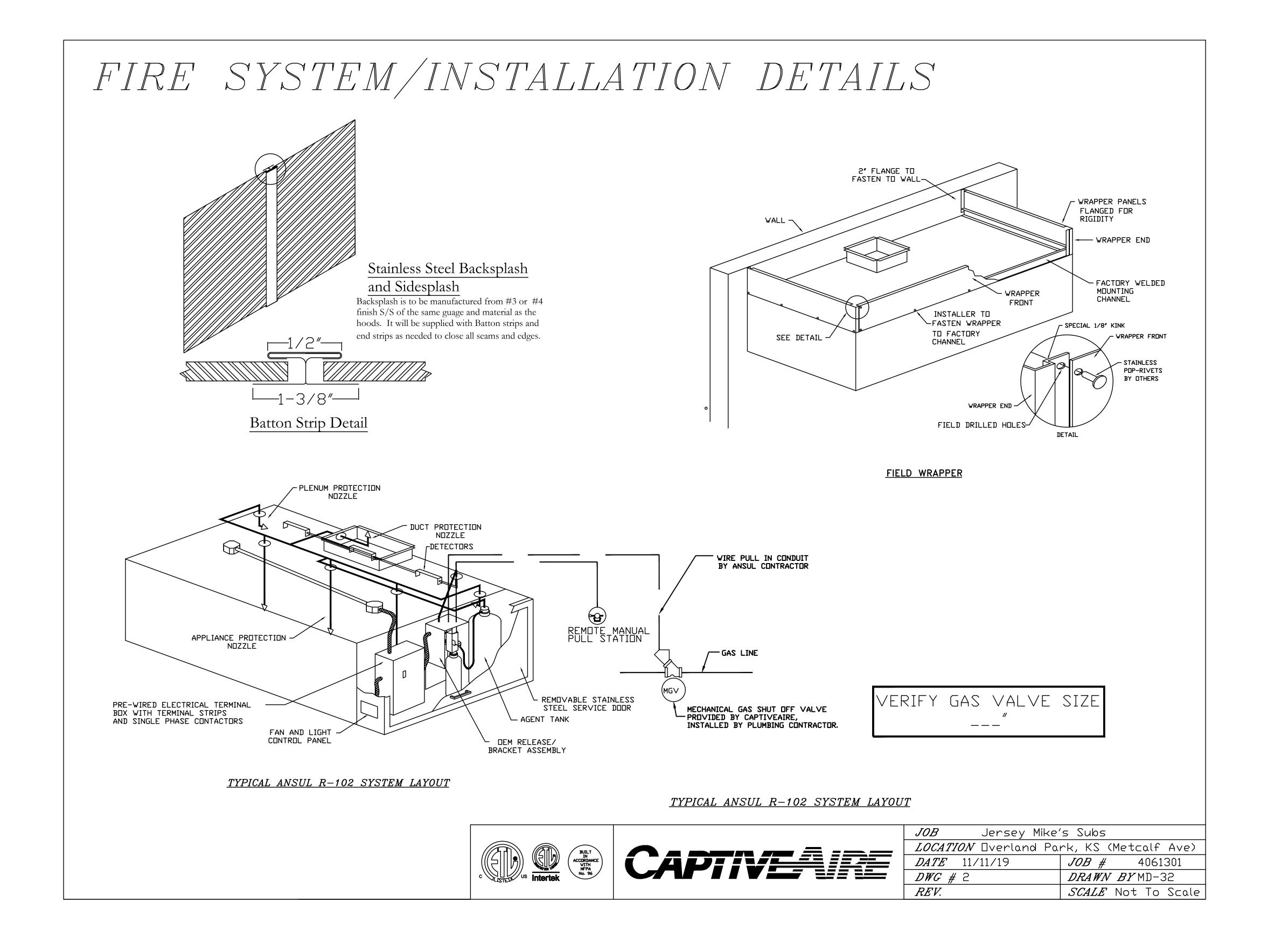
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OCUMECT · SHAPE · MOVE





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Hood Drawing

Project # 43419-KS02

Issue Date 11/4/2019

Scale As indicated NGB

Drawn by

Checked by

M3.2

# FIRE SYSTEM/INSTALLATION DETAILS

NOTES

- FIELD PIPE DROPS AS SHOWN

SLEEVING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS

- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, - MAXIMUM 9 ELBOWS IN SUPPLY LINE - MINIMUM 72 INCHES OF AGENT LINE FROM TANK TO FIRST NOZZLE. - IF APPLICABLE, PRE-PIPED CHARBROILER DROPS ARE SHIPPED LOOSE. - FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

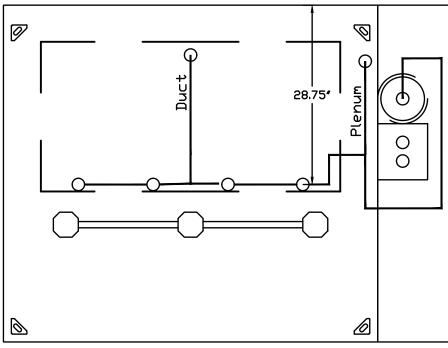
> - APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS

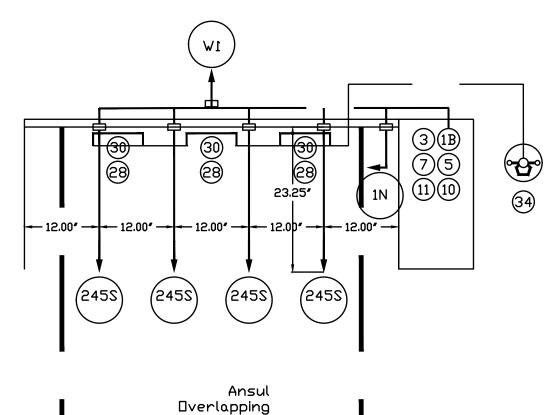
Job Name: Jersey Mike's - PROTOTYPE
Drawn By: DL-32
System Size: ANSUL-3.0 Total FP required: 10
Hood # 1 5' 0.00" Long x 54" Wide x 24" High
Riser # 1 Size: 10" Dia.
Hood # 1 Metal Blow-Off Caps included.

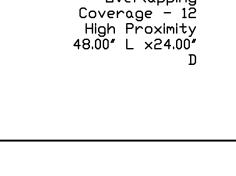
#### LEGEND - FIRE CABINET ANSUL SYSTEM

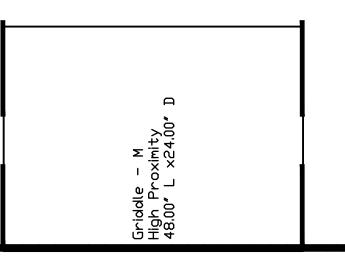
1.5 GALLON TANK 3 GALLON TANK DEM AUTOMAN RELEASE DEM REGULATED RELEASE DEM REGULATED ACTUATOR ANSULEX LIQUID AGENT (3 GAL.) ANSULEX LIQUID AGENT (1.5 GAL.) CARTRIDGE (101-20) CARTRIDGE (101-30) CARTRIDGE (LT-A-101-30) DOUBLE TANK CARTRIDGE TEST LINK DOUBLE MICROSWITCH HOSE ASSEMBLY DUCT NOZZLE (430913) 1100 DUCT NOZZLE (419337) NOZZLE ASSEMBLY (419336) NDZZLE ASSEMBLY (419333) NOZZLE ASSEMBLY (419335) NOZZLE ASSEMBLY (419334) 1/2N NOZZLE ASSEMBLY (419338) NOZZLE ASSEMBLY (419340) NDZZLE ASSEMBLY (419339) 230 NDZZLE ASSEMBLY (419343) 2120 NOZZLE ASSEMBLY (419342) NOZZLE ASSEMBLY (419341) DETECTOR BRACKET LOW TEMP FUSIBLE LINK HIGH TEMP FUSIBLE LINK MECHANICAL GAS VALVE MGV ELECTRICAL GAS VALVE EGV REMOTE MANUAL PULL STATION 34 SWIVEL ADAPTOR



Model: ND-2-PSP-F Size: 54"x24" Length: 5' 0"











<i>JOB</i> Jersey Mike	's Subs
<i>LOCATION</i> Dverland Pa	rk, KS (Metcalf Ave)
<i>DATE</i> 11/11/19	<i>JOB #</i> 4061301
<i>DWG #</i> 3	DRAWN BYMD-32
REV.	SCALE Not To Scale

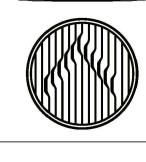
Engineering Inc. T 636.349.1600 796 Merus Court

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F 636.349.1730

St. Louis, MO 63026

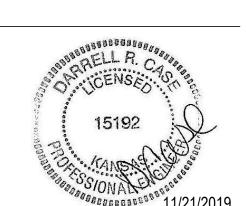






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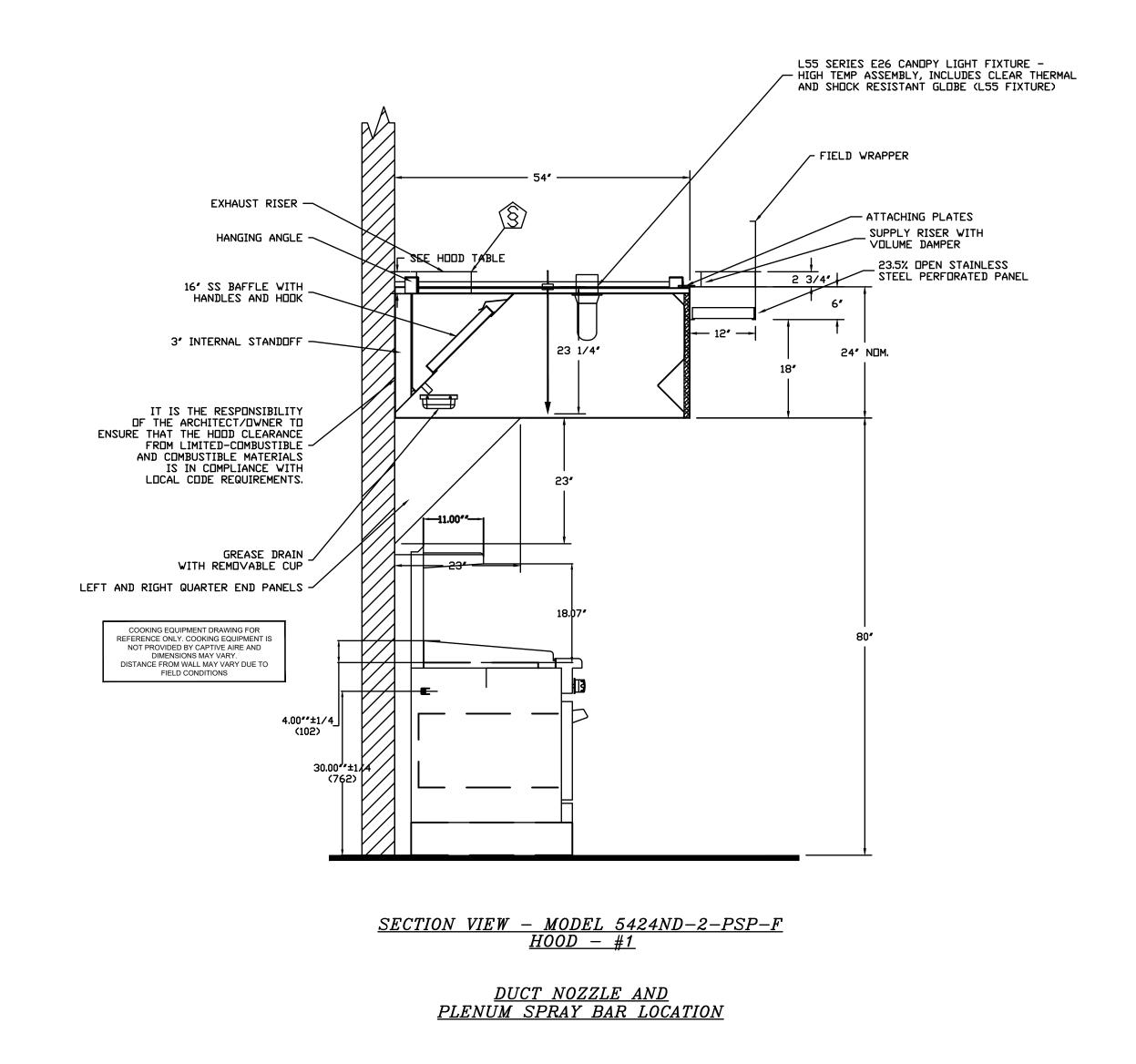
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Drawing

43419-KS02 Project# 11/4/2019 Issue Date Scale As indicated

# ANSUL APPLIANCE PROTECTION DETAILS







	<i>JOB</i> Jersey Mike'	s Subs
_	<i>LOCATION</i> Overland Pa	rk, KS (Metcalf Ave)
=	<i>DATE</i> 11/11/19	<i>JOB #</i> 4061301
7	DWG # 4	<i>DRAWN BY</i> MD-32
	REV.	SCALE Not To Scale

St. Louis, MO 63026 F 636.349.1730





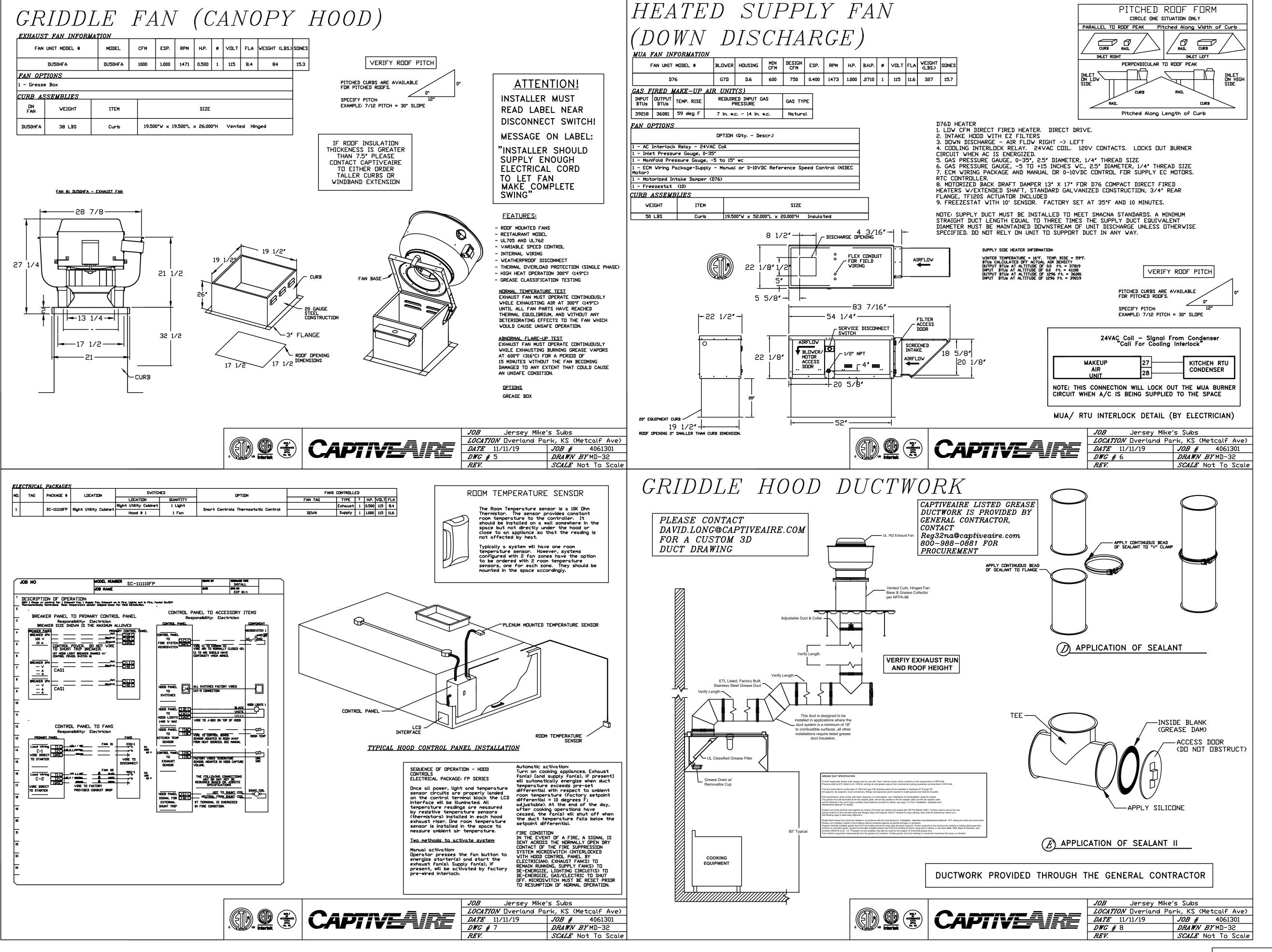
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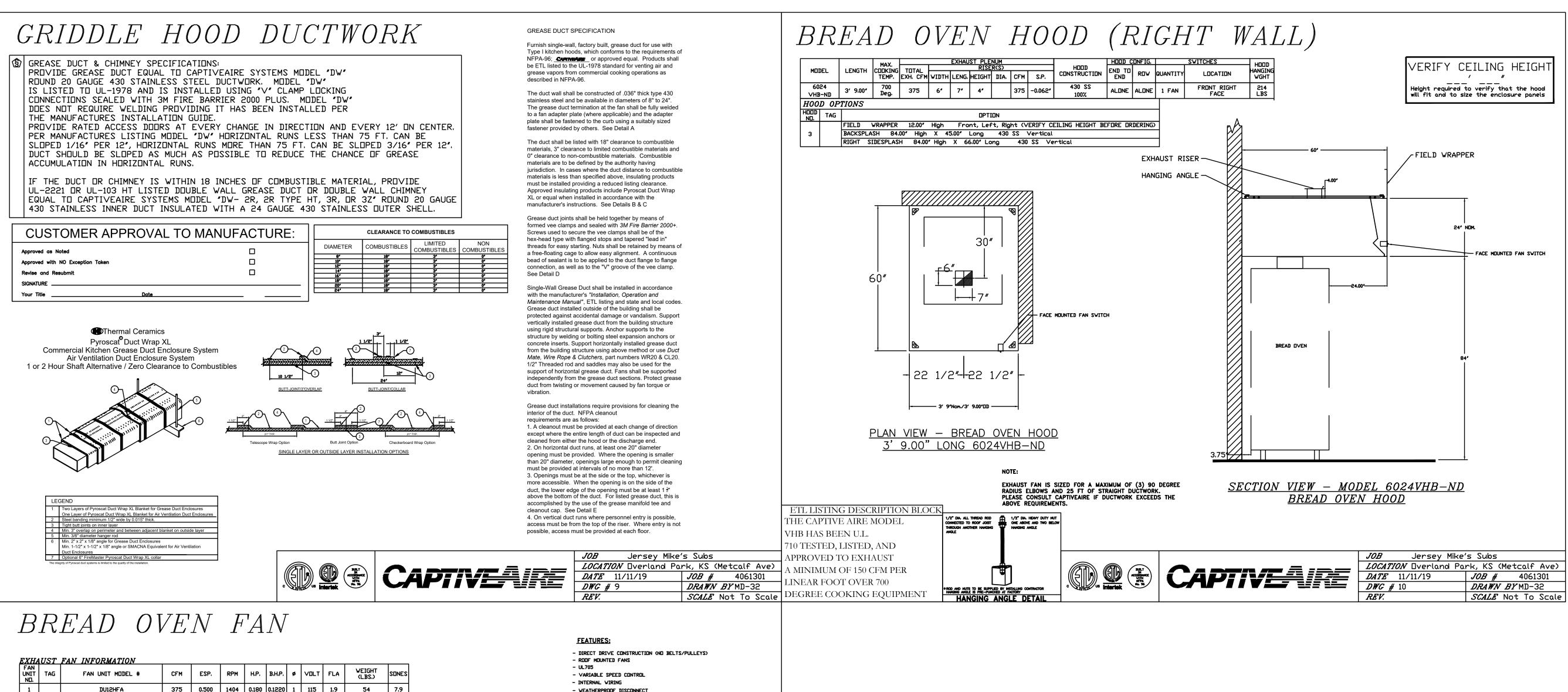
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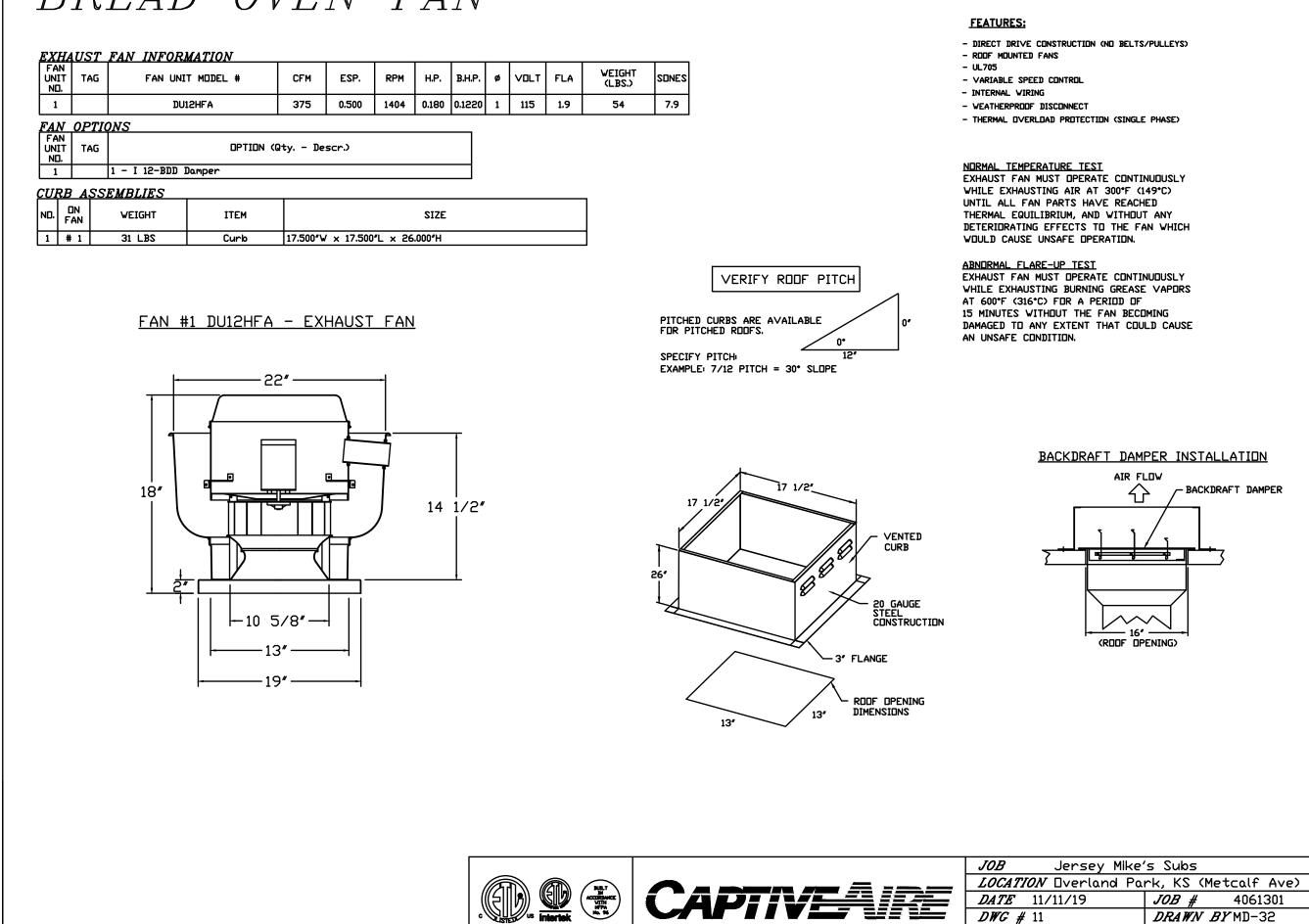
Drawing

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certification relating to the performance of products and materials beyond

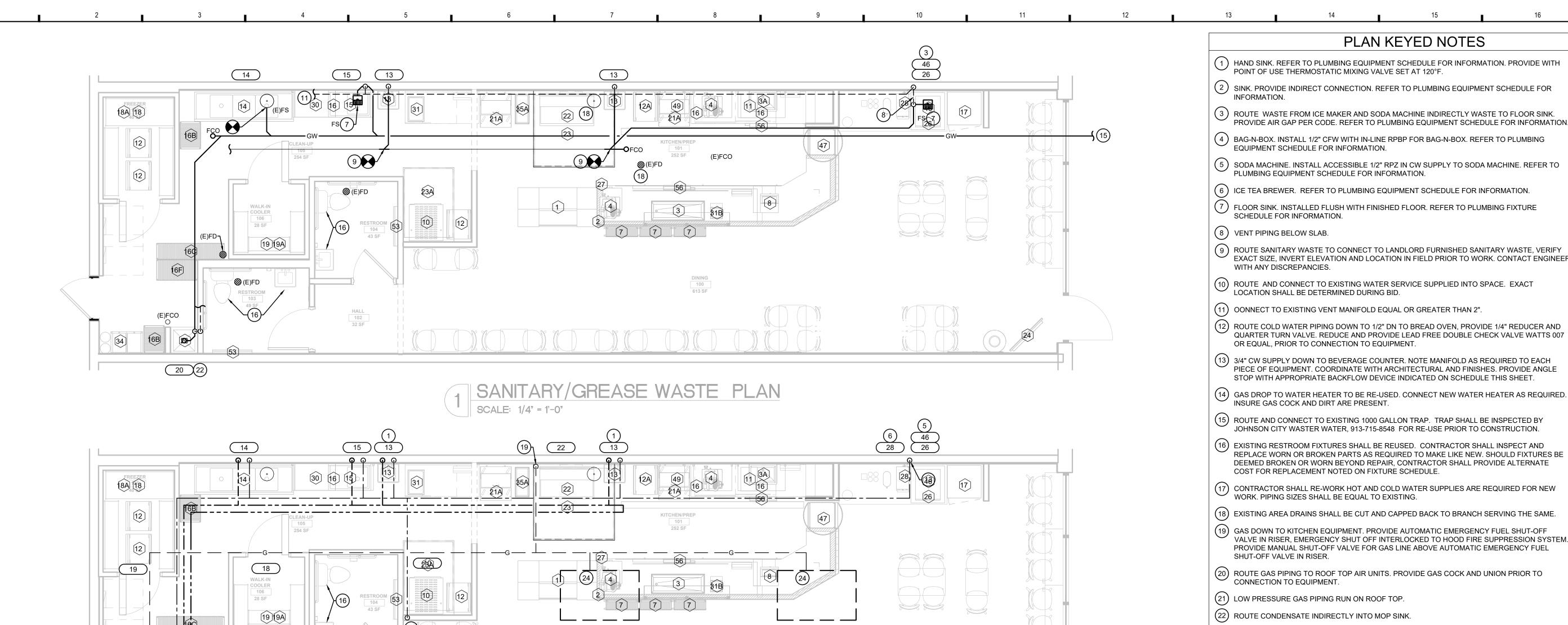
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### GENERAL NOTES

- VERIFY ALL PIPING IS GRADED AS PER CODE AND INSTALLED AS CALLED FOR IN DRAWINGS AND REQUIRED FOR PROPER OPERATION.
- PROVIDE WALL PLATES, STOPS, SUPPLIES, TRAPS AND DRAIN OUTLETS FOR ALL KITCHEN EQUIPMENT AND MISCELLANEOUS EQUIPMENT.
- 3. CONNECT ALL EQUIPMENT AND FIXTURES SUPPLIES BY OTHERS.
- 4. ALL HOT WATER PIPING SHALL BE FIBERGLASS INSULATED (R=4.0 MIN. RATING).
- PROVIDE NAIL GUARDS AS REQUIRED.
- 6. ALL WORK TO BE DONE IN ACCORDANCE WITH ALL LOCAL CODES AND REQUIREMENTS.
- VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO BID AND START OF WORK.
- 8. ALL EXPOSED PIPING FOR DESIGNATED DISABLED ACCESS FIXTURES SHALL BE COVERED OR OTHERWISE WRAPPED IN ACCORDANCE WITH A.D.A. REQUIREMENTS AND LOCAL AUTHORITY.
- 9. ALTERNATE MATERIAL NOT IDENTIFIED IN DRAWINGS BUT APPROVED BY LOCAL AUTHORITY SHALL BE SUBMITTED TO ARCHITECT AND PLUMBING ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
- 10. PLUMBING CONTRACTOR TO FURNISH AND INSTALL ALL MATERIAL AND PIPING REQUIRED FROM
- ROUGH-IN LOCATION TO EQUIPMENT CONNECTION LOCATIONS, BOTH SUPPLY AND WASTE (DIRECT & INDIRECT).
- 11. ALL HORIZONTAL LINES AS EXTENDED AND CONNECTED TO EQUIPMENT SHALL BE RUN AT HIGHEST POSSIBLE ELEVATION AND NOT LESS THAT 6 INCHES ABOVE FINISHED FLOOR SURFACE TO PROVIDE CLEARANCE FOR CLEANING AT ALL SUCH LOCATIONS.
- 12. PLUMBING CONTRACTOR TO INSTALL FAUCETS, AND WASTE ON ALL SINKS AND MAKE FINAL
- 13. ALL INTERIOR PIPING FOR GREASE WASTE SYSTEM SHALL BE PCV, SOLVENT WELDED.

NOTE:	

1. REFER TO RISER DIAGRAM ON SHEET P2.2 FOR PIPE SIZES.

2. REFER TO PLUMBING FIXTURE SCHEDULE ON SHEET P2.2 FOR KEYED NOTES AND . ( ) 3. ALL EXPOSED DRAIN PIPING FOR 3-COMP SINK, PREP SINK SHALL BE PIPED IN COPPER.

—— GW ——	GREASE WASTE LINE
	VENT LINE
— — G— —	GAS LINE
	COLD WATER LINE
	HOT WATER LINE
	HOT WATER RETURN LINE
$-\!$	SHUT-OFF VALVE
$-\!$	BACKFLOW PREVENTER
$oldsymbol{\Theta}$	POINT OF CONNECTION
CW	COLD WATER
HW	HOT WATER
TW	TEMPERED WATER
FW	FILTER WATER
FS	FLOOR SINK

FLOOR DRAIN

TRAP PRIMER

THERMOSTATIC MIXING

PLUMBING SYMBOLS

——— SAN ———— SANITARY SEWER LINE

EQUIPMENT LEGEND					
EQUIP ##	DESCRIPTION				
10	BREAD OVEN				
13	HAND SINK (WALL HUNG)				
14	3 COMPARTMENT SINK				
15	PREP SINK				
18	WALK-IN COOLER				
19	WALK-IN FREEZER				
20	MOP SINK				
22	GRILL				
26	DRINK DISPENSER				
28	ICE TEA BREWER				
34	BAG-N-BOX				
40	WATER HEATER				
40					

ICE MAKER

BACK FLOW PREVENTER ASSEMBLY REQUIREMENTS							
TYPE OF EQUIPMENT ON SYSTEM	METHOD OF CROSS CONNECTION CONTROL	MANUFACTURE AND MODEL NUMBER	REMARKS				
CARBONATOR SODA SYSTEM	REDUCED PRESSURE ZONE ASSEMBLY	WATTS SS009-3QT ASSE 1013 CERT	STAINLESS STEEL BODY WITH QUARTER TURN VALVE SS STRAINER.				
ICE MACHINE	REDUCED PRESSURE ZONE ASSEMBLY	WATTS LF-009-QT-S	STAINLESS STEEL BODY WITH QUARTER TURN VALVE BRONZE STRAINER.				
TEA MACHINE	DOUBLE CHECK VALVE ASSEMBLY	WATTS 9D-LF ASSE 1022/1024 CERT.	STAINLESS STEEL BODY WITH QUARTER TURN VALVE BRONZE STRAINER.				
WATER SERVICE	REDUCED PRESSURE ZONE ASSEMBLY	WATTS LF-919-QT	LEAD FREE CAST COPPER WITH QUATER TURN				

3. BRONZE BODIED BACKFLOW PREVENTERS ARE PERMISSABLE IF ALLOWED BY LOCAL CODES

2. EACH BACKFLOW PREVENTER MUST HAVE TESTING PORTS.

BACK FLOW PREVENTER ASSEMBLY REQUIREMENTS					TABLE 10-3 GRAVITY GREASE INTERCEPTOR SIZING		
TYPE OF EQUIPMENT ON SYSTEM	METHOD OF CROSS CONNECTION CONTROL	MANUFACTURE AND MODEL NUMBER	REMARKS	-	DFU'S	INTERCEPTOR VOLUME	
CARRONATOR	DEDUCED DDESSURE	WATTE CC000 20T	STAINLESS STEEL BODY		8	500 GALLONS	
CARBONATOR SODA SYSTEM	REDUCED PRESSURE ZONE ASSEMBLY	ASSE 1013 CERT	WITH QUARTER TURN VALVE SS STRAINER.		21	750 GALLONS	
ICE MACHINE	REDUCED PRESSURE	WATTS LF-009-QT-S	STAINLESS STEEL BODY WITH QUARTER TURN VALVE	1	35	1,000 GALLONS	
	ZONE ASSEMBLY		BRONZE STRAINER.		90	1,250 GALLONS	
TEA MACHINE	DOUBLE CHECK VALVE ASSEMBLY	WATTS 9D-LF ASSE 1022/1024 CERT.	STAINLESS STEEL BODY WITH QUARTER TURN VALVE		172	1,500 GALLONS	
			BRONZE STRAINER.		216	2.000 GALLONS	
WATER SERVICE	REDUCED PRESSURE	WATTS LF-919-QT	LEAD FREE CAST COPPER		210	2,000 GALLONS	
	ZONE ASSEMBLY		WITH QUATER TURN		307	2,500 GALLONS	
1. CONTRACTOR SH	HALL PROVIDE INDIVIDUAL	BACKFLOW PREVENTERS FO	OR EACH PIECE OF EQUIPMENT.		342	3,000 GALLONS	

428

TABLE TO CALCULATE DRAINAGE FIXTURE UNITS FOR

FIXTURES

TOTAL DRAINAGE UNITS

NUMBER OF TOTAL DRAINAGE

FIXTURE UNITS

**GREASE WASTE** 

DRAINAGE

FIXTURE UNITS

FIXTURE

FLOOR SINK

MOP SINK

**Engineering Inc.** 3,000 GALLONS 4,000 GALLONS

St. Louis, MO 63026

F 636.349.1730

PLAN KEYED NOTES

PROVIDE AIR GAP PER CODE. REFER TO PLUMBING EQUIPMENT SCHEDULE FOR INFORMATION.

EXACT SIZE, INVERT ELEVATION AND LOCATION IN FIELD PRIOR TO WORK. CONTACT ENGINEER

QUARTER TURN VALVE. REDUCE AND PROVIDE LEAD FREE DOUBLE CHECK VALVE WATTS 007

PIECE OF EQUIPMENT. COORDINATE WITH ARCHITECTURAL AND FINISHES. PROVIDE ANGLE STOP WITH APPROPRIATE BACKFLOW DEVICE INDICATED ON SCHEDULE THIS SHEET.

(13) 3/4" CW SUPPLY DOWN TO BEVERAGE COUNTER. NOTE MANIFOLD AS REQUIRED TO EACH

JOHNSON CITY WASTER WATER, 913-715-8548 FOR RE-USE PRIOR TO CONSTRUCTION.

REPLACE WORN OR BROKEN PARTS AS REQUIRED TO MAKE LIKE NEW. SHOULD FIXTURES BE DEEMED BROKEN OR WORN BEYOND REPAIR, CONTRACTOR SHALL PROVIDE ALTERNATE

VALVE IN RISER, EMERGENCY SHUT OFF INTERLOCKED TO HOOD FIRE SUPPRESSION SYSTEM.

PROVIDE MANUAL SHUT-OFF VALVE FOR GAS LINE ABOVE AUTOMATIC EMERGENCY FUEL

23) EXISTING 50 GALLON -40 MBH WATER TO BE RE-USED. COMPLETELY DRAIN TANK. COORDINATE

(24) CONDENSATE FROM MECHANICAL UNIT SHALL DISCHARGE INDIRECTLY ONTO ROOF.

INFORMATION.

EQUIPMENT SCHEDULE FOR INFORMATION.

SCHEDULE FOR INFORMATION.

WITH ANY DISCREPANCIES.

PLUMBING EQUIPMENT SCHEDULE FOR INFORMATION.

OR EQUAL, PRIOR TO CONNECTION TO EQUIPMENT.

COST FOR REPLACEMENT NOTED ON FIXTURE SCHEDULE.

WORK. PIPING SIZES SHALL BE EQUAL TO EXISTING.

SHUT-OFF VALVE IN RISER.

CONNECTION TO EQUIPMENT.

ADDITIONAL REQUIREMENT WITH GC.

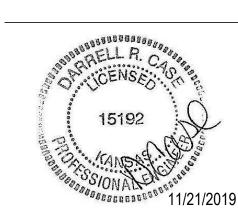
INSURE GAS COCK AND DIRT ARE PRESENT.





IKES -PARK

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### **PERMIT SET**

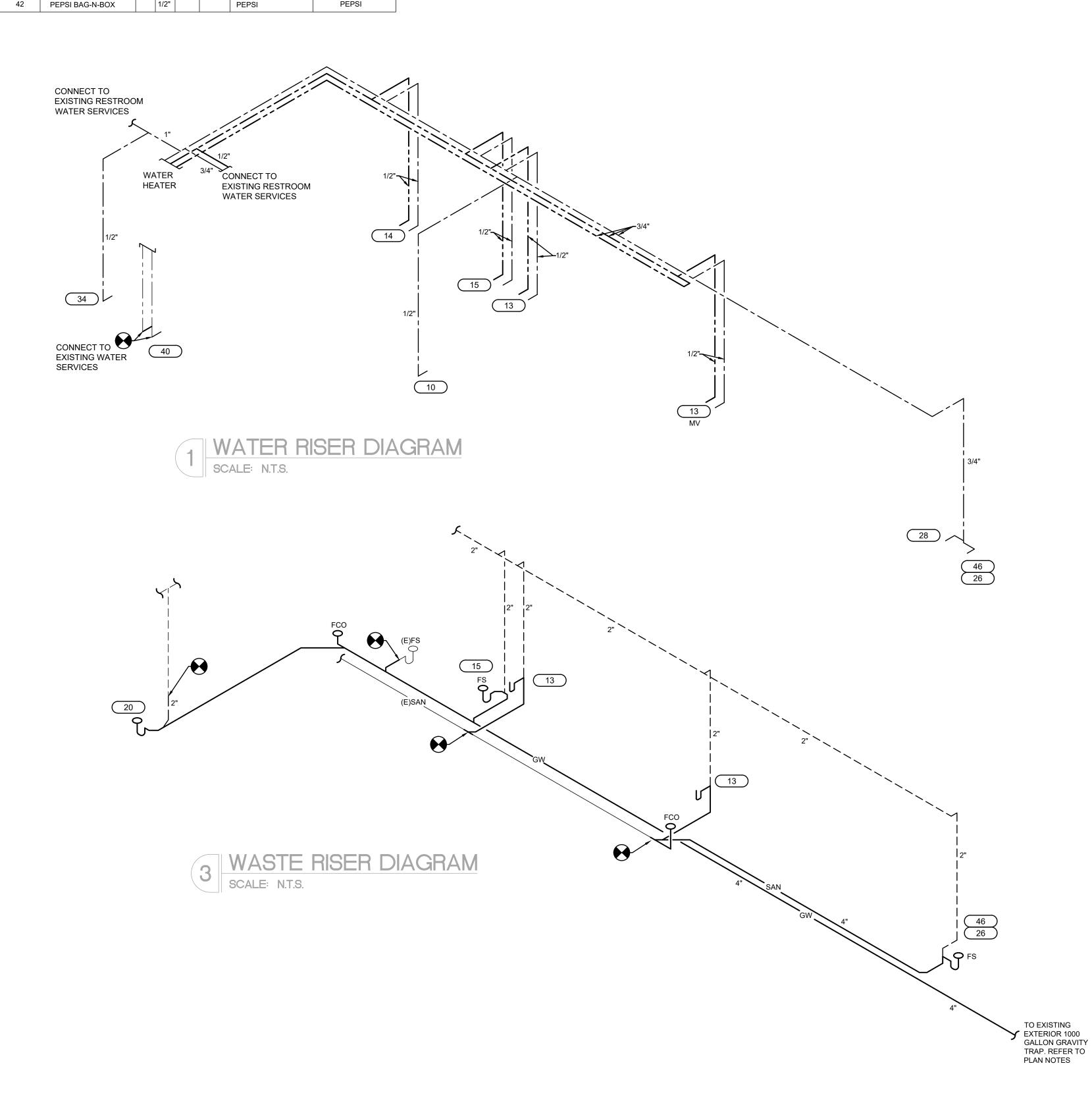
Client Approval

Plumbing
Plan

43419-KS02 Project# 11/4/2019 As indicated

					_			
KITCHEN EQUIPMENT SCHEDULE								
EQUIP ##	DESCRIPTION		ATER	UMBIN WA DDIREC	IG ASTE TNDIREC	MANUFACTURER T	MODEL NO.	
10	BREAD OVEN		1/4"		FS	NUVU	UB-E5/ 10 AUTOMIST	
13	HAND SINK (WALL HUNG	\$)	1/2"	2"		CHG	FS170141005JM	
13A	HAND SINK (DROP IN)		1/2"	2"		CHG	FS171014JM	
14	3 COMPARTMENT SINK		1/2"		FS	UNIVERSAL/CHGP	3N1620-2018	
15	PREP SINK		1/2"		FS	UNIVERSAL/CHGP	1N1620-1D18	
18	WALK-IN COOLER					NORLAKE	6'-0X 12'-0 CUSTOM	
19	WALK-IN FREEZER					NORLAKE	6'-0X 12'-0 CUSTOM	
20	MOP SINK	3/4"	3/4"	3"		EXIST -CLEAN AND US	E 2X2	
22	GRILL					IMPERIAL	IR-G48T-XB-JB11	
26	DRINK DISPENSER		1/2"		FS	DISPENSER: DC215, ADAPTOR; B0002957	PEPSI	
28	ICE TEA BREWER		1/2"		FS	BUNN	TB3Q	
34	BAG-N-BOX		1/2"			PEPSI	PEPSI	
40	(E)WATER HEATER	1"	1"			EXISTING		
42	PEPSI BAG-N-BOX		1/2"			PEPSI	PEPSI	

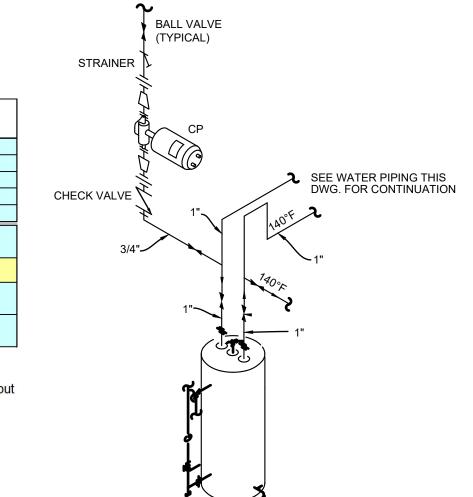
	PLUMBING FIXTURE SCHEDULE								
MARK	FIXTURE	SAN.	VENT	C.W.	H.W.	REMARKS			
WC	WATER CLOSET -ADA FLOOR SET	4"	2"	1/2"	-	KOHLER KELSTON K-3755 FLUSH TANK, 1.28 GPF, ELONGATED BOWL WIT CHURCH #9500C ELONGATED WHITE OPEN FRONT SEAT, HANDLE ON RIGHT SIDE.			
LAV	LAVATORY -ADA	2"	2"	1/2"	1/2"	KOHLER KINGSTON K-2005 WITH K-15597-5P FAUCET, 0.5 GPM, GRID STRAINER, TAILPIECE, P-TRAP, SUPPLY STOPS AND MIXING VALVE ON SUPPLY. PROVIDE AND INSTALL WRAP FOR TAIL PIECE, TRAP, AND HOT WATER.			
FS	FLOOR SINK - HALF GRATE	3"	2"	-	-	J.R. SMITH 3060Y-12, CAST IRON FLANGED, ROUND RECEPTOR WITH SEEPAGE OPENINGS, ACID RESISTANT COATED INTERIOR, NB HALF GRATE, INTERIOR DOME STRAINER.			
FD	FLOOR DRAIN	2"	2"	-	-	J.R. SMITH 2010Y, CAST IRON FLANGED, ROUND.			
СР	CIRCULATION PUMP	-	-	3/4"	-	BELL AND GOSSETT NBF-33, ALL BRONZE BODY, NORYL IMPELLER, 125 WATTS, 120 VOLT WITH TC-1 AUTOMATIC TIMER KIT			
MV	THERMOSTATIC MIXING VAVLE POINT OF US	-	-	1/2"	1/2"	ACORN ST-70 SET TO 110°			
	POINT OF US								

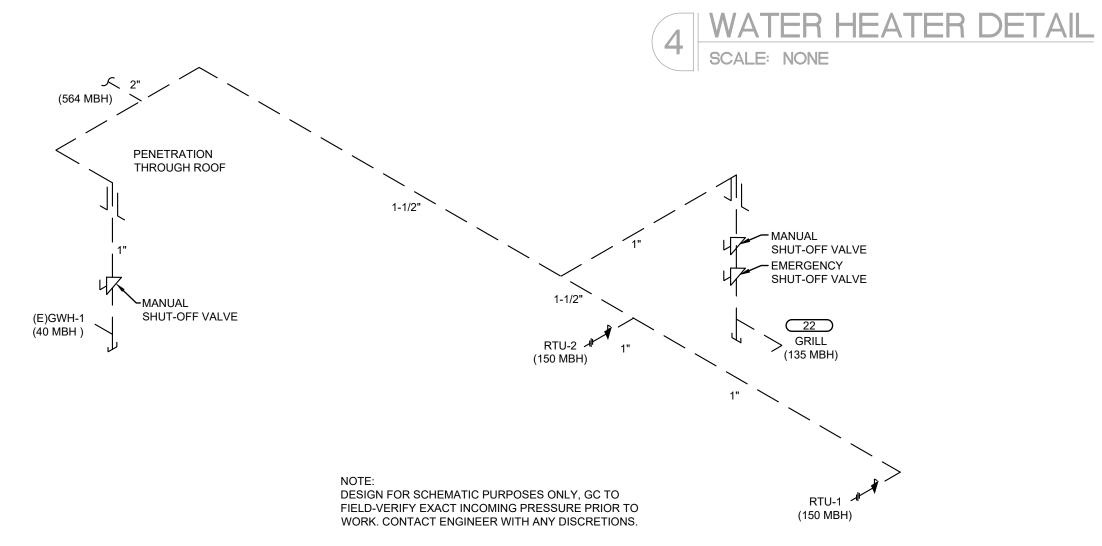


### WATER HEATER CALCULATION

Fixture Type	Qty	GPH	Total GPH
3 Compartment Sink		40	40
Mop Sink	1	25	25
Prep Sink	1	30	30
Lavatory 2		5	10
Hand Sink	5.0	10.0	
Adjust Demand Factor and Storage Factor as result project requirements. Below adjust tempera	Total Demand GPH	115	
and heater efficiency basesd on project needs.		Demand Factor	0.45
		Required Recovery	52
Recovery (GPH) times	Storage Factor	51.75	

52 GPH x 8.33 lbs/gal x 80 Rise x 90 % Efficiency Equals 38318 BTU Input EXISTING WATER HEATER - AO SMITH: 6 50 NBRT - 52 GALLONS 40 MBH-81 GALLON RECOVERY





# 2 GAS RISER DIAGRAM SCALE: N.T.S.

GAS LOAD SUMMARY							
SYSTEM	DESIGNATION	EQUIPMENT	MBH				
DOMESTIC WATER	GWH	GWH WATER HEATER					
		SUB-TOTAL	40				
KITCHEN EQUIPMENT	(22)	GRILL	135				
		SUB-TOTAL	135				
DUIL DING LIFATING	EXISTING RTU-1	ROOF TOP UNIT	150				
BUILDING HEATING	EXISTING RTU-2	150					
	SUB-TOTAL 3						
TOTAL NAT	URAL GAS CONNECTED	LOAD	475				
	MBH CAPACITY						
GAS METER REQUIREMENTS	TOTAL DEVELOPED LENGTH INCLUDING EQUIVALENT PIPE LENGTH FOR FITTING AND VALVE FRICTION LOSSES TO GAS METER.  CONSULT GAS UTILITY COMPANY FOR REGULATOR RATING						

CASE Engineering Inc.

St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. E-2951

F 636.349.1730





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**PERMIT SET** 

Client Approval

Checked by

Plumbing 43419-KS02 Project#

11/4/2019 As indicated Drawn by

P2.0