

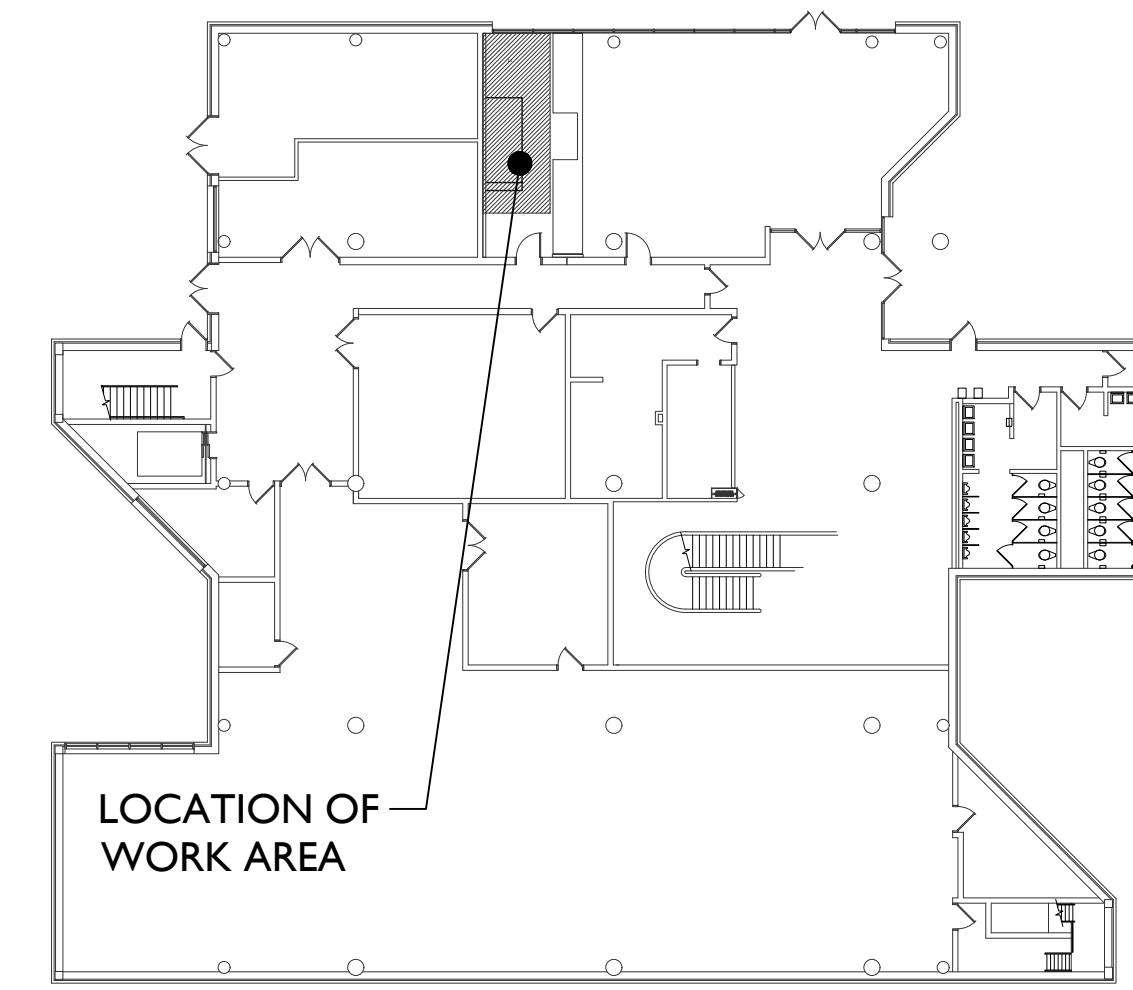
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UNIVERSITY OF SOUTH CAROLINA UPSTATE KITCHEN EXHAUST HOOD INSTALLATION AT THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW) 160 GRAMLING DRIVE, SPARTANBURG, SC 29303 AUGUST 9th, 2019 - ISSUED FOR BID



Project Site:
UNIVERSITY SOUTH CAROLINA UPSTATE
HORACE C. SMITH SCIENCE BUILDING
160 GRAMLING DRIVE
SPARTANBURG, SC 29303



Overall Building Plan:
HORACE C. SMITH SCIENCE BUILDING

Abbreviations

&	AND	EMER.	EMERGENCY	OPP.	OPPOSITE
∠	ANGLE	EQ.	EQUAL	P.C.	PLUMBING CONTRACTOR
@	AT	F.E.	FIRE EXTINGUISHER	P. LAM.	PLASTIC LAMINATE
⊕	CENTERLINE	F.O.F.	FACE OF	PLYVD.	PLYWOOD
#	POUND OR NUMBER	F.O.F.	FACE OF FINISH	PT.	POINT, PAINT
ACP.	ACOUSTICAL CEILING PANEL	FS.	FLOOR SINK	PTD.	PAINTED
ADJ.	ADJUSTABLE	FIN.	FINISH	QT.	QUARRY TILE
A.F.F.	ABOVE FINISH FLOOR	FL.	FLOOR	RAD.	RADIUS
AL.	ALUMINUM	FRT.	FIRE TREATED	REF.	REFERENCE
ARCH.	ARCHITECTURAL	FT.	FEET / FOOT	RGR.	REGISTER
BD.	BOARD	G.A.	GAUGE	REQ'D	REQUIRED
BLDG.	BUILDING	G.C.	GENERAL CONTRACTOR	RM.	ROOM
BLK.	BLOCK	GL.	GLASS	S.	SOUTH
BLKG.	BLOCKING	GYP.	GYPSUM	S.S.	STAINLESS STEEL
BM.	BEAM	GWB.	GYPSUM WALL BOARD	SCHED.	SCHEDULE
BOT.	BOTTOM	H.M.	HOLLOW METAL	SCT.	SUSPENDED CEILING TILE
CAB.	CABINET	HORIZ.	HORIZONTAL	SHT.	SHEET
CER.	CERAMIC	HT.	HEIGHT	SIM.	SIMILAR
CLG.	CEILING	HR.	HOUR	SPEC.	SPECIFICATION
CLKG.	CAULKING	HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	SQ.	SQUARE
CLR.	CLEAR	INSUL.	INSULATION	STD.	STANDARD
CMU.	CONCRETE MASONRY UNIT	JT.	JOINT	STL.	STEEL
COL.	COLUMN	LAM.	LAMINATE	STOR.	STORAGE
CONC.	CONCRETE	LT.	LIGHT	SUSP.	SUSPENDED
CONT.	CONTINUOUS	LT.	LIGHT	TBD.	TO BE DETERMINED
CPT.	CARPET	MAX.	MAXIMUM	T.O.	TOP OF
CT.	CERAMIC TILE	MECH.	MECHANICAL	TEL.	TELEPHONE
DBL.	DOUBLE	MFR.	MANUFACTURER	THK.	THICK
DIA.	DIAMETER	MIN.	MINIMUM	TYP.	TYPICAL
DIM.	DIMENSION	MISC.	MISCELLANEOUS	U.O.N.	UNLESS OTHERWISE NOTED
DN.	DOWN	MRB.	MOISTURE RESISTANT	VCB.	VINYL COVE BASE
DR.	DOOR	MTL.	METAL	VCT.	VINYL COMPOSITION TILE
DTL.	DETAIL	N.	NORTH	VWC.	VINYL WALL COVERING
DWG.	DRAWING	N.I.C.	NOT IN CONTRACT	VERT.	VERTICAL
E.	EAST	N.T.S.	NOT TO SCALE	V.F.	VERIFY IN FIELD
EXIST.	EXISTING	NO.	NUMBER	W.	WEST
E.P.	ELECTRICAL PANELBOARD	NOM.	NOMINAL	W/	WITH
EA.	EACH	O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED	WC	WALL COVERING
E.C.	ELECTRICAL CONTRACTOR	O.H.	OPPOSITE HAND	WO	WITHOUT
EJ.	EXPANSION JOINT	OPNG.	OPENING	WR	WATER RESISTANT
EL.	ELEVATION			WD.	WOOD
ELEC.	ELECTRICAL			WT.	WEIGHT

GENERAL PROJECT NOTES:

- GENERAL CONTRACTOR AND SUB-CONTRACTOR(S) ARE TO BID THIS PROJECT AS DESIGNED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO THOROUGHLY REVIEW THE CONTRACT DOCUMENTS DURING THE BIDDING PROCESS. IF DURING THE BIDDING PROCESS THE CONTRACTOR DETERMINES A DOCUMENT INTERPRETATION OR CLARIFICATION IS REQUIRED, THEY ARE TO SUBMIT IN WRITTEN A REQUEST FOR INTERPRETATION PRIOR TO THEIR SUBMISSION OF THEIR PROPOSAL. IN THE EVENT SAID INTERPRETATIONS AND/OR CLARIFICATIONS ARE NOT SUBMITTED FOR RESOLUTION BEFORE THE AWARD OF THE CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED TO CORRECT OR ADDRESS SAID INTERPRETATIONS/CLARIFICATIONS. PLANS AND SPECIFICATIONS HAVE BEEN DEVELOPED WITH THE INTENT OF MEETING OR EXCEEDING THE MINIMUM REQUIRED AND INDUSTRY STANDARDS. IN THE CASE OF AN INCONSISTENCY WITHIN THE CONTRACT DOCUMENTS, THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE BID AND PROVIDED.
- THE CONTRACTOR(S) AND ALL TRADE SUBCONTRACTORS SHALL TOUR THE JOB SITE AND CAREFULLY EXAMINE AND VERIFY ALL CONDITIONS AND UTILITY SERVICES, BOTH NEW AND EXISTING TO VERIFY THAT SAID CONDITIONS ARE AS INDICATED ON THE CONTRACT DOCUMENTS. IF SUCH CONDITIONS VARY IN ANYWAY THE CONTRACTOR(S) SHALL NOTIFY THE ARCHITECT PRIOR TO SUBMITTING HIS PROPOSAL. ANY ITEMS THAT HAVE NOT BEEN RESOLVED BY ADDENDUM PRIOR TO BID DATE SHALL BE SPECIFICALLY NOTED IN WRITING AND INCLUDED IN THE BID. IF THE CONTRACTOR FAILS TO NOTIFY THE ARCHITECT, THEY ARE PROCEEDING AT THEIR OWN RISK AND SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED TO RESOLVE THE CONDITION.
- NOTICE TO SUBCONTRACTORS, IT IS YOUR RESPONSIBILITY TO BID YOUR SCOPE OF WORK USING THE COMPLETE SET OF PLANS AND SPECIFICATIONS. THE FACT THAT AN ITEM OR A SCOPE OF WORK WAS NOT INDICATED ON YOUR PORTION OF THE DRAWINGS WILL NOT BE ACCEPTABLE AS A REASON FOR AN EXTRA CHARGE IF IT CAN BE FOUND ELSEWHERE IN THE CONTRACT DOCUMENTS.
- THE CONTRACT DOCUMENTS ARE PROVIDED FOR THE PURPOSE OF INDICATING PROPOSED EQUIPMENT LOCATIONS, SIZES, UTILITY REQUIREMENTS AND RELATIVE POSITIONS TO ADJACENT EQUIPMENT AND BUILDING CONDITIONS FOR EITHER ALL NEW OR A COMBINATION OF NEW AND EXISTING EQUIPMENT AS INDICATED ON THE DRAWINGS. IT IS NOT THE INTENT OF THESE PLANS TO RELIEVE THE CONTRACTOR, SUBCONTRACTORS AND ALL OTHER TRADES INVOLVED OF THE RESPONSIBILITY OF VERIFYING AND COORDINATING ALL CONDITIONS, BUILDING ELEMENTS, AND EQUIPMENT, BOTH NEW AND EXISTING WITH THE CONTRACT DOCUMENTS AND ON-SITE CONDITIONS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL TRADE SUBCONTRACTORS RECEIVE COPIES OF ALL ADDENDA OR CHANGES TO THE CONTRACT DOCUMENTS.
- ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SITE AND CONSTRUCTION CONDITIONS AFFECTING WORK UNDER THIS CONTRACT. CONTRACTOR(S) TO COORDINATE STAGING AREAS.
- COORDINATE STRUCTURAL, MECHANICAL, PLUMBING, FIRE SPRINKLERS, KITCHEN, AND ELECTRICAL DIVISIONS WITH OTHER TRADES AFFECTING OR AFFECTED BY SAME.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE PROJECT IN ACCORDANCE WITH ALL PROVISIONS OF APPLICABLE CODES AND ORDINANCES. WORKMANSHIP AND MATERIALS TO BE OF THE HIGHEST INDUSTRY STANDARDS.
- CHANGES IN MATERIALS, DETAILS, SPECIFICATIONS, GENERAL NOTES AND SCHEDULES, OR DELETION OF & REQUIREMENT SHOWN ON THESE PLANS WILL NOT BE ACCEPTABLE WITHOUT FIRST OBTAINING PERMISSION FROM THE ARCHITECT AND CLIENT. TO OBTAIN PERMISSION THE CONTRACTOR SHALL PROVIDE PRICING, RELEVANT DRAWINGS, AND DOCUMENTS.
- CONTRACTOR SHALL REPLACE AND/OR RESTORE ALL MATERIALS STORED OR INSTALLED ON THE SITE LEFT SUBJECT TO DAMAGE OR THEFT.
- PROVIDE FIRST AID AND FIRE PROTECTION AS REQUIRED BY OSHA.
- UNLESS OTHERWISE INDICATED THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT AND MACHINERY, TRANSPORTATION, EQUIPMENT TO ACCEPT DELIVERIES, AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF THE WORK.
- THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL COST FOR TEMPORARY PARTITIONS, FACILITIES, AND SERVICES REQUIRED FOR THE PROPER AND EXPEDITIOUS EXECUTION OF THE CONTRACT WORK. MAKE ALL TEMPORARY CONNECTIONS TO EXISTING UTILITIES IN LOCATIONS ACCEPTABLE TO THE OWNER AND LOCAL AUTHORITIES HAVING JURISDICTION THEREOF. PAY ALL COSTS FOR TEMPORARY ELECTRICAL POWER, WATER, SANITARY FACILITIES AND/OR HEATING.
- THE CONTRACTOR, PROMPTLY AFTER BEING AWARDED THE CONTRACT, SHALL SUBMIT A CONTRACTOR'S CONSTRUCTION SCHEDULE FOR THE WORK. THE SCHEDULE SHALL NOT EXCEED THE LIMITS INDICATED UNDER THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL ADVISE VIA THE CONSTRUCTION SCHEDULE ANY MILESTONE OR CRITICAL DATES AND, IF APPLICABLE, CRITICAL DATES FOR RELATED WORK BY OWNER, BY OTHER CONTRACTORS, OR BY UTILITY COMPANIES OR OTHER AGENCIES. CONTRACTOR TO COORDINATE EQUIPMENT AND/OR FURNITURE INSTALLATION WITH CONSTRUCTION SCHEDULING AND ACCESS.
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS WHICH INCLUDE SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES FOR MATERIALS, EQUIPMENT, FINISHES, ETC. WHICH ARE INDICATED IN THE CONTRACT DOCUMENTS. PRIOR TO THE SUBMITTING TO THE ARCHITECT, THE CONTRACTOR SHALL REVIEW AND APPROVE ALL SUBMITTALS BY AFFIXING THEIR CONTRACTOR'S STAMP TO SAID SUBMITTALS. THE CONTRACTOR SHALL NOT PERFORM ANY PORTION OF THE WORK UNTIL THE RESPECTIVE SUBMITTAL PROCESS IS COMPLETE BY THE CONTRACTOR'S ISSUANCE OF THE SUBMITTALS. THE CONTRACTOR REPRESENTS THEY HAVE DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS AND ANY RELATED FIELD CONSTRUCTION CRITERIA OR WILL DO SO, AND HAS CHECKED THE INFORMATION CONTAINED WITHIN THE SUBMITTALS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE ARCHITECT'S REVIEW OF THE SUBMITTAL IS ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITIES FOR DEVIATIONS, ERRORS, AND/OR OMISSIONS IN THE SUBMITTALS WHICH HAS BEEN REVIEWED AND RETURNED BY THE ARCHITECT.
- SUBSTANTIAL COMPLETION IS THE STAGE IN THE WORK WHEN THE WORK OR DESIGNATED PORTION THEREOF IS SUFFICIENTLY COMPLETE SO THE OWNER CAN OCCUPY OR UTILIZE THE WORK FOR ITS INTENDED USE. WHEN THE CONTRACTOR CONSIDERS THE WORK, OR PORTION THEREOF WHICH THE OWNER AGREES TO ACCEPT SEPARATELY, IS SUBSTANTIALLY COMPLETE, THE CONTRACTOR SHALL OBTAIN A CERTIFICATE OF OCCUPANCY & CERTIFICATES OF INSPECTION AND OTHER INSPECTIONS AND DOCUMENTS REQUIRED BY AUTHORITIES HAVING JURISDICTION AND PREPARE/SUBMIT TO THE ARCHITECT A COMPREHENSIVE LIST OF ITEMS TO BE COMPLETED OR CORRECTED.
- UPON ACCEPTANCE OF SUBSTANTIAL COMPLETION, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING PROJECT CLOSEOUT DOCUMENTS:
 - A COMPLETE SET OF AS-BUILT DRAWING THAT REFLECT ANY CHANGES TO THE ORIGINAL DRAWINGS AND FINISH/MATERIAL SPECIFICATIONS INCLUDING ADDENDA ITEMS AND CHANGE ORDER MODIFICATIONS. CONTRACTOR TO PROVIDE AN ELECTRONIC SCANNED COPY AND PAPER COPY OF THE AS-BUILTS.
 - A HARDBACK BINDER WHICH IS INDEXED, LABELED, AND DIVIDERS FOR WHICH INCLUDES COPIES OF PERMITS, AGENCY OR INSPECTION APPROVALS, THE CERTIFICATE OF OCCUPANCY, A LIST OF SUB-CONTRACTOR AND THEIR PHONE NUMBERS, REVIEWED SHOP DRAWINGS, ALL WARRANTIES, AND OPERATING AND MAINTENANCE MANUALS. PROVIDE PAINT COLORS AND FORMULAS OF ALL PAINTS.
 - RELEASE OF LIENS AND ENCUMBRANCES OR ALTERNATE EVIDENCES.
 - FINAL STATEMENT OF ACCOUNTING WHICH REFLECTS ANY ADJUSTMENTS TO THE CONTRACT SUM.
- THE CONTRACTOR WARRANTS FOR A PERIOD OF ONE YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OR THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY THAT WORK, MATERIALS, AND EQUIPMENT PROVIDED UNDER THE CONTRACT WILL BE FREE FROM DEFECTS, WORK, MATERIALS, AND EQUIPMENT FOUND TO BE DEFECTIVE SHALL BE CORRECTED PROMPTLY BY THE CONTRACTOR. THE CONTRACTOR'S WARRANTY EXCLUDES REMEDY FOR DAMAGE OR DEFECT CAUSED BY ABUSE AND/OR MODIFICATIONS NOT EXECUTED BY THE CONTRACTOR, IMPROPER MAINTENANCE, IMPROPER OPERATION, OR NORMAL WEAR AND TEAR. THE CONTRACTOR SHALL, IN ADDITION, FURNISH AND FULFILL ALL SPECIAL/SPECIFIC WARRANTIES REQUIRED ELSEWHERE BY THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE OWNER TRAINING FOR ALL SPECIALIZED EQUIPMENT REVIEWING EMERGENCY PROVISIONS AND PROPER USE OF CONTROL SYSTEMS, OPERATIONS, AND REQUIRED MAINTENANCE.
- PRIOR TO SUBSTANTIAL COMPLETION THE CONTRACTOR SHALL REMOVE ALL TEMPORARY PROTECTION, DISPOSE OF REMAINING DEBRIS AND HIRE A PROFESSIONAL CLEANING COMPANY TO FULLY SANITIZE AND CLEAN ALL SCOPE AREAS LEAVING THE PROJECT READY FOR OCCUPANCY.
- AT CONCLUSION OF PROJECT PROVIDE 10% OF ALL FINISH MATERIALS AS ATTIC STOCK AND DELIVER TO THE OWNER.
- IF CONTRACTOR WISHES TO MAKE A CLAIM FOR AN INCREASE IN COST AND/OR TIME, THE CONTRACTOR SHALL SUBMIT A CHANGE ORDER REQUEST (COR). FOR ANY CONTRACTOR CLAIM REQUESTING ADDITIONAL COST, THE COR SHALL BE ACCOMPANIED BY A COMPLETE ITEMIZATION OF COSTS INCLUDING LABOR, MATERIALS, EQUIPMENT AND/OR SUBCONTRACTS. THE ALLOWANCE FOR THE COMBINED OVERHEAD AND PROFIT (O&P) INCLUDED IN THE TOTAL COST FOR WORK PERFORMED BY THE CONTRACTOR'S OWN FORCES SHALL BE 15% FOR WORK PERFORMED BY A SUBCONTRACTOR. THE SUBCONTRACTOR IS PERMITTED A COMBINED 15% O&P AND THE CONTRACTOR IS PERMITTED 5% OF THE AMOUNT DUE THE SUBCONTRACTOR.
- BEFORE THE FIRST APPLICATION FOR PAYMENT, THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF VALUES ALLOCATED TO VARIOUS PORTIONS OF THE WORK WITHIN TEN DAYS AFTER AWARD OF CONTRACT. LIST INSTALLED VALUE, MATERIAL AND LABOR, OF EACH MAJOR ITEM OF WORK AND EACH SUBCONTRACT ITEM OF WORK AS A SEPARATE LINE ITEMS. THIS SCHEDULE, UNLESS OBJECTED BY THE ARCHITECT, SHALL BE USED AS A BASIS FOR REVIEWING THE CONTRACTOR'S APPLICATION FOR PAYMENT.

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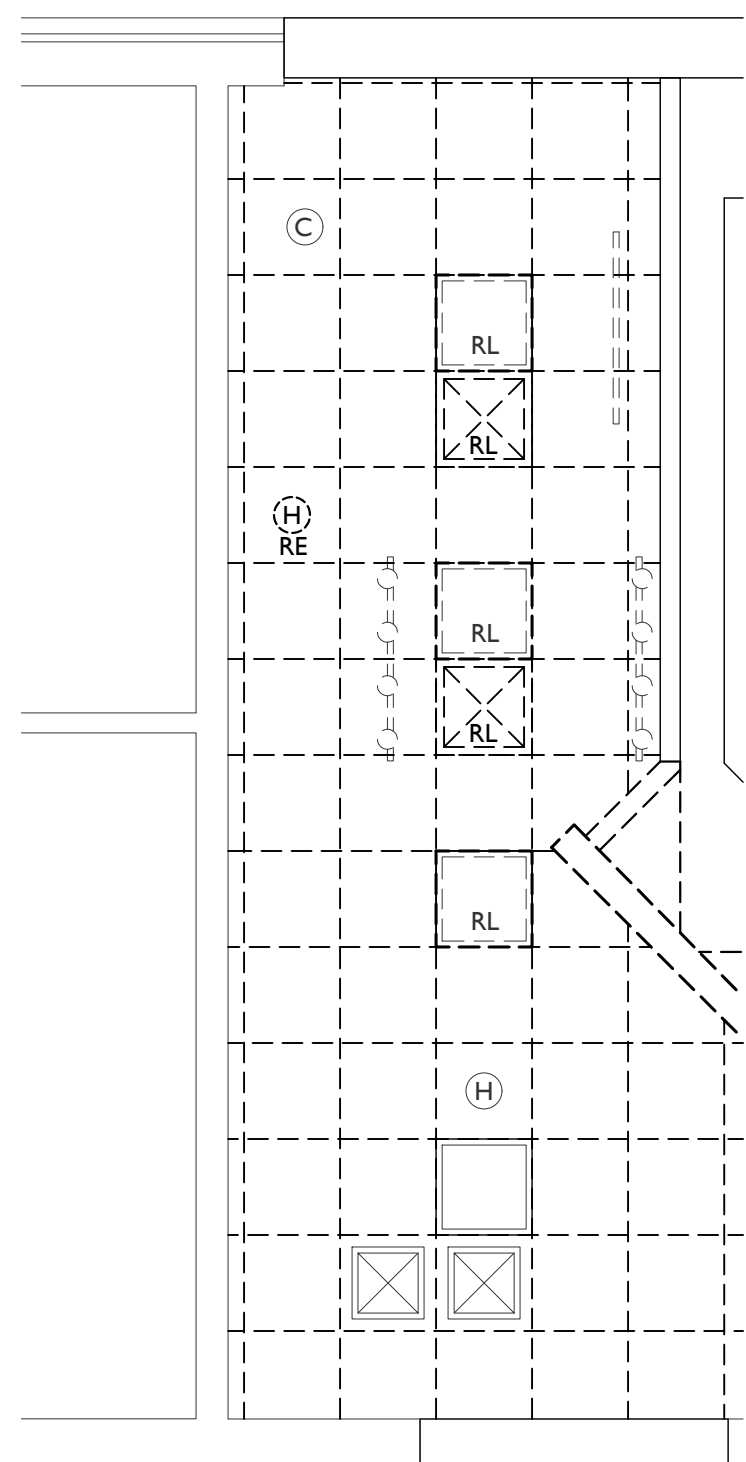
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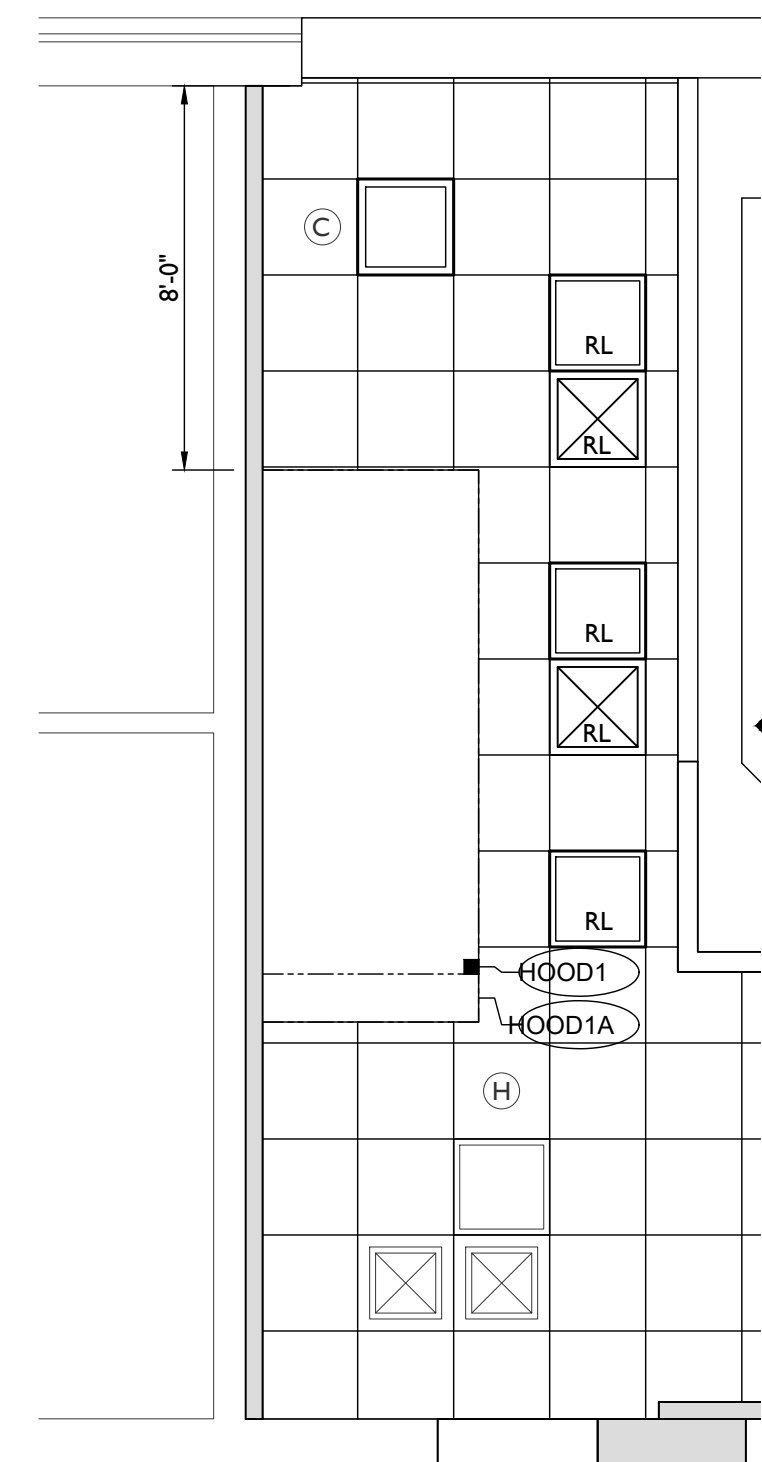
DEMOLITION WORK LEGEND	
	EXISTING CONSTRUCTION TO BE REMOVED
	EXISTING CONSTRUCTION TO REMAIN
	CONTRACT LIMIT LINE
GENERAL DEMOLITION NOTES	
<p>1. THE TERM "REMOVE" SHALL MEAN TO TAKE OFF-SITE AND DISPOSE OF PROPERLY AND LEGALLY ACCORDING TO STATE AND FEDERAL REGULATIONS. CONTRACTOR TO SUBMIT PAPERWORK INDICATING REMOVED OBJECTS, WHERE PROPERLY AND LEGALLY DISPOSED OF ACCORDING TO STATE AND FEDERAL REGULATIONS.</p> <p>2. THE GENERAL CONTRACTOR TO VERIFY WITH THE OWNER'S/CLIENT'S REPRESENTATIVE REGARDING DISPOSITION OF EXISTING EQUIPMENT. ITEMS REMOVED WILL BE SALVAGED FOR REUSE AS NOTED OR LEGALLY DISPOSED OF, OFF SITE BY THE CONTRACTOR.</p> <p>3. THE GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY INSULATED DUSTPROOF PARTITIONS WHERE REQUIRED TO SEPARATE AREAS WHERE NOISY, DIRTY OR DUSTY OPERATIONS ARE PERFORMED. PROVIDE REQUIRED OPENINGS IN SUCH PARTITIONS WITH DUST-PROOF DOORS AND SECURITY LOCKS. SUBMIT PLAN FOR ARCHITECT AND OWNER REVIEW & COMMENT.</p> <p>4. DURING CONSTRUCTION, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING FACILITY AND EQUIPMENT.</p> <p>5. CONTRACTOR(S) TO FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE. FIELD VERIFY EXACT COMPOSITION OF ALL WALLS BEING REMOVED. REPORT CONFLICTS TO A/E CONSULTANT PRIOR TO INITIATING WORK.</p> <p>6. THE CONTRACTOR(S) IS RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICES TO THE SPACES IN THE BUILDING NOT AFFECTED BY THIS WORK. ANY DISRUPTION IN SERVICES REQUIRED TO PERFORM THE WORK OR MODIFY EXISTING PIPING, DUCTWORK OR ANY ASSOCIATED EQUIPMENT SHALL BE COORDINATED WITH A/E CONSULTANT, CONSTRUCTION PROJECT MANAGER AND THE UNIVERSITY FACILITIES GROUP.</p> <p>7. IF UTILITY SYSTEMS, INCLUDING MECHANICAL, PLUMBING/FIRE PROTECTION OR ELECTRICAL SYSTEMS, ARE ENCOUNTERED, THAT ARE NOT INDICATED TO REMAIN BUT GIVE EVIDENCE OF BEING IN USE, PROMPTLY ADVISE THE ARCHITECT FOR INSTRUCTIONS BEFORE PROCEEDING.</p> <p>8. THE CONTRACTOR(S) SHALL PROVIDE ALL LABOR AND MATERIALS REQUIRED TO "CUT AND PATCH" ANY SECTION OF WALLS, FLOORS AND OR CEILINGS AFFECTED BY THE WORK SHOWN ON THE CONTRACT DOCUMENTS. ALL MATERIALS AND FINISHES FOR PATCHES SHALL MATCH ADJACENT FINISHES AND MATERIALS IN THE AREA. IN THE EVENT THAT REPAIRS ARE REQUIRED FOR ERRORS, OMISSIONS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS THAT HAVE NOT BEEN SUBMITTED FOR RESOLUTION PRIOR TO THE WORK BEING INSTALLED, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED TO CORRECT SAID CONDITIONS.</p> <p>9. PROVIDE NECESSARY SHORING, BRACING, AND SUPPORT TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF STRUCTURE OR ELEMENT TO BE DEMOLISHED, AND ADJACENT FACILITIES TO REMAIN.</p> <p>10. ALL CONDUIT AND OR PIPING EXPOSED DURING DEMOLITION, (NOT TO BE REMOVED) SHALL BE CAPPED BEHIND FINISHED SURFACES IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES. SURFACES DISTURBED WILL BE PATCHED AND FINISHED SIMILAR TO THE ADJACENT SURFACES.</p> <p>11. EXECUTE CUTTING AND REMOVAL BY METHODS WHICH SHALL PREVENT DAMAGE TO OTHER WORK, AND SHALL PROVIDE PROPER SURFACES TO RECEIVE INSTALLATION OF PATCHING.</p> <p>12. CUT BY SAWING OR GRINDING, RATHER THAN BY HAMMERING OR CHOPPING. CUT HOLES NEATLY TO MINIMUM SIZES REQUIRED.</p> <p>13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL CUTTING, TRENCHING AND PATCHING REQUIRED BY ALL SUBCONTRACTORS TO MINIMIZE THE NUMBER OF TRENCHES AND COMBINE VARIOUS SERVICES IN COMMON TRENCHES.</p> <p>14. IN ALL AREAS WHICH ARE TO RECEIVE NEW FINISHES, ANY EXISTING EXPOSED SURFACE MOUNTED UTILITY (I.E. CONDUIT, WIREMOLD, WIRING, PIPING, ETC.) SHALL BE RE-ROUTED SO THE UTILITY IS CONCEALED IN WALL AND/OR CEILING. PROPERLY CUT AND PATCH WALL AND/OR CEILING AS REQUIRED TO RECEIVE NEW FINISH.</p> <p>15. INSTALL INFILL / PATCHING TO MATCH ADJACENT WORK IN FINISH, STRUCTURAL QUALITIES, COURSING IF MASONRY, AND OTHER CHARACTERISTICS.</p> <p>a) INFILL / PATCH SURFACES WHICH SHALL BE EXPOSED TO WEATHER IN THE FINISHED WORK TO BE AIRTIGHT AND WEATHERTIGHT.</p> <p>b) INFILL / PATCH SURFACES TO COMPLY WITH FIRE RATINGS, SMOKE-TIGHT RATINGS, ACOUSTICAL CRITERIA AND OTHER PERFORMANCE CRITERIA INDICATED.</p> <p>c) INFILL / PATCH SO THAT INSULATING CHARACTERISTICS AND VAPOR RETARDANCE OF PATCHED SURFACES ARE NOT REDUCED.</p> <p>d) WHERE INFILLING / PATCHING OR CUTTING AND PATCHING ARE PERFORMED SUBSEQUENT TO FINISHING OF SURFACE, OR WHERE NO SUBSEQUENT FINISH IS INDICATED OR SPECIFIED, REFINISH ENTIRE SURFACE AS NECESSARY TO PROVIDE AN EVEN / LEVEL FINISH TO MATCH ADJACENT FINISHES.</p> <p>e) IF SURFACE TO BE INFILLED / PATCHED OR CUT AND PATCHED IS INDICATED OR SPECIFIED TO BE COVERED BY PAINTING OR OTHER FINISH SYSTEM, AND IF INFILL / PATCHING OR CUTTING AND PATCHING IS PERFORMED PRIOR TO INSTALLATION OF FINISH, THEN FINISHING OF SAID AREAS SHALL BE INCLUDED AS WORK OF FINISHING SECTION.</p>	

REFLECTED CEILING PLAN LEGEND FOR HOOD PACKAGE	
	AS PART OF THE NEW EXHAUST HOOD PROJECT, EXISTING CEILING TILE & GRID, REMOVE / RECONFIGURE AS REQUIRED FOR THE INSTALLATION OF THE NEW EXHAUST HOOD, ASSOCIATED DUCTWORK, UTILITIES, ETC. RECONFIGURATION OF THE EXISTING GRID AROUND THE NEW HOOD IS PART OF THE HOOD PACKAGE WORK.
	AS PART OF THE NEW EXHAUST HOOD PROJECT, EXISTING HVAC DIFFUSER TO BE RELOCATED, EXTEND DUCTWORK AS REQUIRED. CONTRACTOR TO THOROUGHLY CLEAN EXISTING GRILL. COORDINATE WITH JKH-1 FOR NEW LOCATION & THE ENGINEERING DWGS. FOR ADDITIONAL INFORMATION.
	EXIST'G LIGHT FIXTURE TO BE DEMO'D OR RELOCATED ("RL") AS PART OF DINING ROOM RENOVATION PROJECT. COORDINATE SCHEDULING OF THE DEMOLITION / RELOCATION WITH THE GENERAL CONTRACTOR UNDER SEPARATE OWNER CONTRACT.
	EXISTING CEILING DEVICE: SECURITY CAMERA ("C") HEAT / SMOKE DETECTOR ("H"), TO BE TEMPORARILY REMOVED OR RELOCATED AS PART OF DINING ROOM RENOVATION PROJECT. COORDINATE SCHEDULING OF THIS WORK WITH THE GENERAL CONTRACTOR UNDER SEPARATE OWNER CONTRACT.



1 DEMOLITION REFLECTED CEILING PLAN
KH-1 1/4"=1'-0"

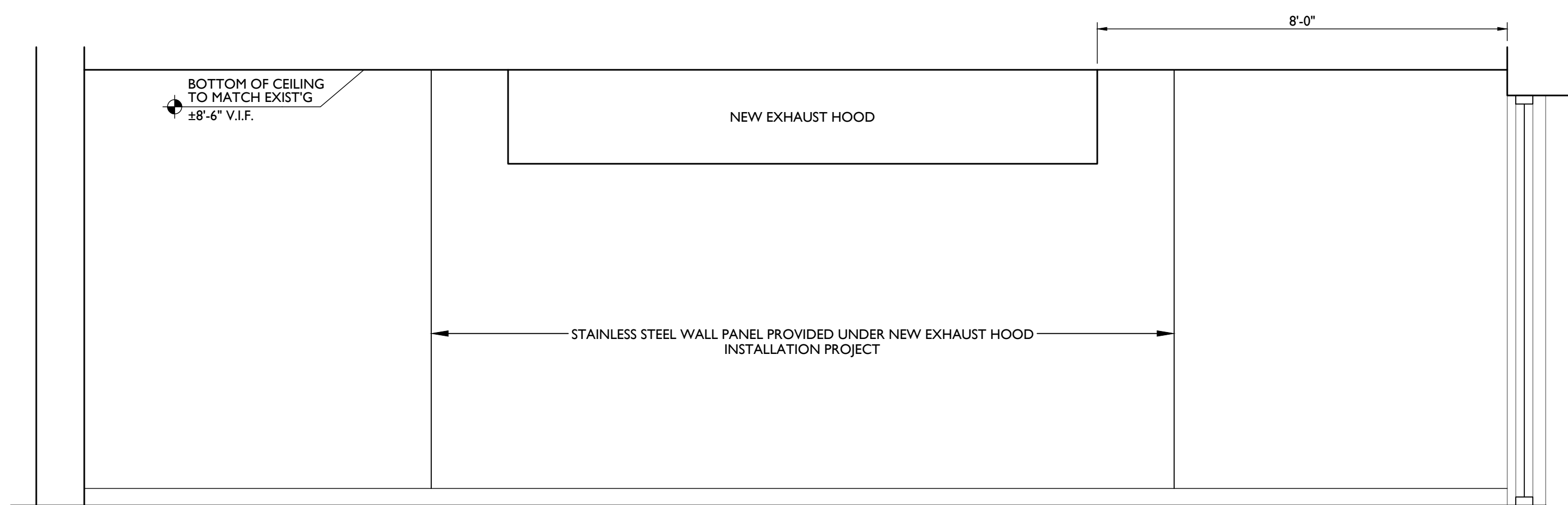
EXHAUST HOOD EQUIPMENT SCHEDULE												
Item No	Qty	Equipment Category	Equipment Remarks	Volts	Phase	Amps	KW	HP	Direct Plug	NEMA	Electrical AFF (in)	Electrical Remarks
HOOD1	1	Exhaust Hood	Refer to M-2 thru M-5 Drawings	*	*	*			X		CLG	*Refer to M-2 thru M-5 Drawings
HOOD1A	1	Exhaust Hood ANSUL System	Refer to M-2 thru M-5 Drawings									



2 EXHAUST HOOD REFLECTED CEILING PLAN
KH-1 1/4"=1'-0"

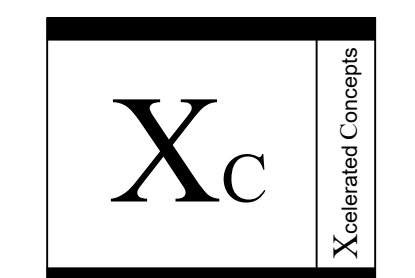
EXHAUST NOTES:

- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL FOOD SERVICE EQUIPMENT RELATED EXHAUST FAN SYSTEMS, MAKE-UP AIR FAN SYSTEMS, DISH-WASHING/POT WASHING EXHAUST FAN SYSTEMS, AND ALL REQUIRED DUCT WORK AS SPECIFIED AND DESIGNATED ON THE ARCHITECT'S AND MECHANICAL ENGINEER'S PLANS & DOCUMENTS. ALL SYSTEMS & ASSOCIATED COMPONENTS INCLUDING THE DUCT WORK TO BE IN COMPLIANCE WITH GOVERNING NATIONAL, STATE, AND LOCAL CODES.
- ALL FOOD SERVICE EXHAUST/MAKE-UP AIR VENTILATORS ARE TO BE IN FULL COMPLIANCE WITH N.F.P.A.#95 REGULATIONS, TO BE U.L. LISTED, AND TO MEET NSF REGULATIONS. ALL SAID VENTILATORS SHALL BEAR THE APPROPRIATE LABEL AFFIXED TO THE EXTERIOR. ALL EXHAUST/MAKE-UP AIR VENTILATORS SHALL BE PROVIDED WITH A MINIMUM OF A 3" AIR-GAP WHERE THE VENTILATOR WILL BE INSTALLED ADJACENT TO A COMBUSTIBLE SURFACE.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED COMPONENTS, INCLUDING BUT NOT LIMITED TO ALL ROOF CURBS, WALL MOUNTING BRACKETS, DISCHARGE PANS, FLASHING, ETC. REQUIRED TO SET THE EXHAUST AND MAKE-UP AIR FAN PACKAGES. THE CONTRACTOR SHALL PROVIDE ALL ROOF OPENINGS AND PENETRATIONS REQUIRED FOR THE DUCTWORK AND ASSOCIATED ELECTRICAL SERVICES AND TO FULLY FLASH AND SEAL ALL OPENINGS AS REQUIRED COMPLETING THE INSTALLATION.
- THE CONTRACTOR SHALL FURNISH AND INSTALL REQUIRED "UNI-STRUT" BRACING SECURED TO THE BASE BUILDING STRUCTURE IN THE AREA WHERE ANY VENTILATOR IS PROPOSED TO BE INSTALLED. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED MATERIALS INCLUDING BUT NOT LIMITED TO ALL-THREAD RODS, BRACKETS, CLIPS AND HANGERS, TO SECURE HOOD TO SUPPORT STRUCTURE PROVIDED IN A FIXED AND RIGID POSITION AS SHOWN ON PLANS. READY FOR FINAL CONNECTIONS TO THE BUILDING DUCTWORK. ALL STANDARD BOX TYPE WALL OR ISLAND STYLE FOOD SERVICE EXHAUST/MAKE-UP AIR VENTILATORS SHALL BE MOUNTED SUCH THAT THE LEADING EDGE IS AT 6'-8" ABOVE FINISHED FLOOR, UNLESS OTHERWISE DIRECTED BY THE ARCHITECT OR ENGINEER. ALL OTHER STYLES OF VENTILATORS SHALL BE MOUNTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES.
- ALL STANDARD BOX TYPE WALL OR ISLAND STYLE FOOD SERVICE EXHAUST/MAKE-UP AIR VENTILATORS SHALL BE MOUNTED SUCH THAT THE LEADING EDGE IS AT 6'-8" ABOVE THE FINISHED FLOOR, UNLESS OTHERWISE DIRECTED BY THE ARCHITECT OR MECHANICAL ENGINEER. ALL OTHER STYLES OF VENTILATORS SHALL BE MOUNTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES. ON ALL STANDARD BOX TYPE WALL OR ISLAND STYLE FOOD SERVICE EXHAUST/MAKE-UP AIR VENTILATORS, THE CONTRACTOR IS TO FURNISH AND INSTALL STAINLESS STEEL TRIM AND OR CLOSURE PANELS FROM THE TOP OF THE VENTILATOR TO 3" ABOVE THE FINISHED CEILING IN THE AREA. ON ALL OTHER STYLE VENTILATORS, THE CONTRACTOR SHALL FURNISH AND INSTALL AN 18 GA. STAINLESS STEEL DUCT ENCLOSURE EXTENDING FROM THE TOP OF THE HOOD AT THE COLLAR TO 3" ABOVE THE FINISHED CEILING AND PROVIDE REQUIRED ANGLE TRIM AT THE OPENING THROUGH THE CEILING.
- ALL EXHAUST/MAKE-UP AIR VENTILATORS, LOCATED OVER COOKING EQUIPMENT, ARE TO BE FURNISHED FULLY PRE-PIPED AND PRE-WIRED FOR AN INTEGRAL FIRE SUPPRESSION SYSTEM. ALL COMPONENTS WITHIN THE VENTILATOR TO BE U.L. LISTED AND IN FULL COMPLIANCE WITH GOVERNING CODES AND ALL PENETRATIONS THROUGH THE HOOD FOR PIPING OR NOZZLE DROPS TO BE FULLY SEALED WITH APPROVED GASKETS.



3 EXHAUST HOOD ELEVATION
KH-1 1/2"=1'-0"

NOTE:
THE OWNER WILL AWARD A SEPARATE CONTRACT FOR THE RENOVATION OF THE CURRENT RETAIL SPACE WHICH SHALL INCLUDE DEMOLITION, NEW MILLWORK, EQUIPMENT, CEILING TILE, AND FINISHES. THIS WORK SHALL RUN CONCURRENT WITH THE NEW EXHAUST HOOD INSTALLATION PROJECT AS DOCUMENTED HEREIN. THE CONTRACTOR SHALL INCLUDE IN HIS BID AN AMOUNT SUFFICIENT TO COVER HIS COST OF FURNISHING NECESSARY ADMINISTRATIVE AND SUPERVISORY FORCES TO COORDINATE HIS OWN WORK AND THAT OF THE OWNER'S FORCES.



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UNIVERSITY OF SOUTH CAROLINA UPSTATE
KITCHEN EXHAUST HOOD
INSTALLATION AT THE
HORACE C. SMITH SCIENCE
BUILDING'S RETAIL FOOD
COURT (WOW)

SEAL:

KEY PLAN:

ISSUED FOR BID 8/9/19

PROJECT NO.:
DRAWN BY: XC
CHECKED BY: XC
SCALE: AS NOTED

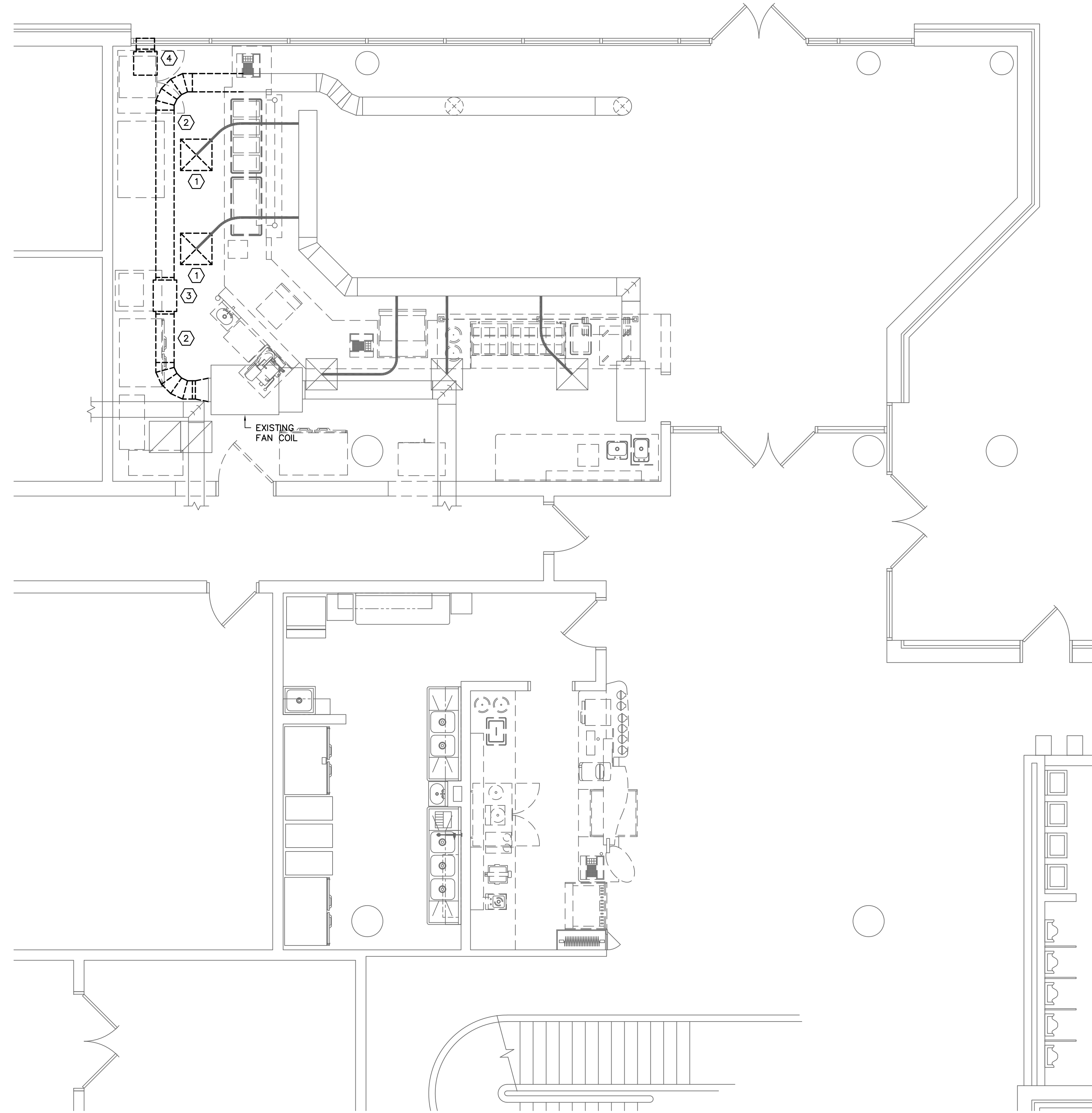
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ARCHITECTURAL
PLANS AND ELEVATION

SHEET NO.:

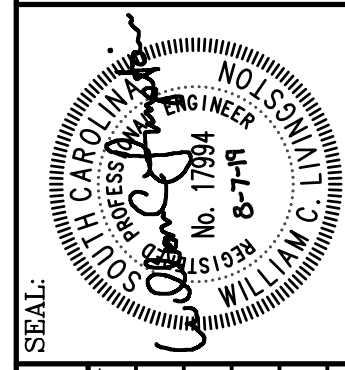
KH-1

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- DEMOLITION NOTES**
- ① RELOCATE EXISTING CEILING DIFFUSER AS SHOWN ON RENOVATION PLAN.
 - ② SHIFT EXISTING SUPPLY DUCT TO COORDINATE WITH NEW HOOD AND DUCTS.
 - ③ RELOCATE EXISTING DUCT HEATER TO COORDINATE WITH NEW HOOD AND DUCTS.
 - ④ REMOVE EXISTING EXHAUST FAN AND LOUVER.

1
DEMOLITION PLAN
 MD-1 SCALE: 1/4" = 1'-0"



SEAL:		CHECKED BY: WCL		DEM DATE: 8/9/19	
		ORIG. BY: DRAWN BY			
		ISSUED FOR BID			

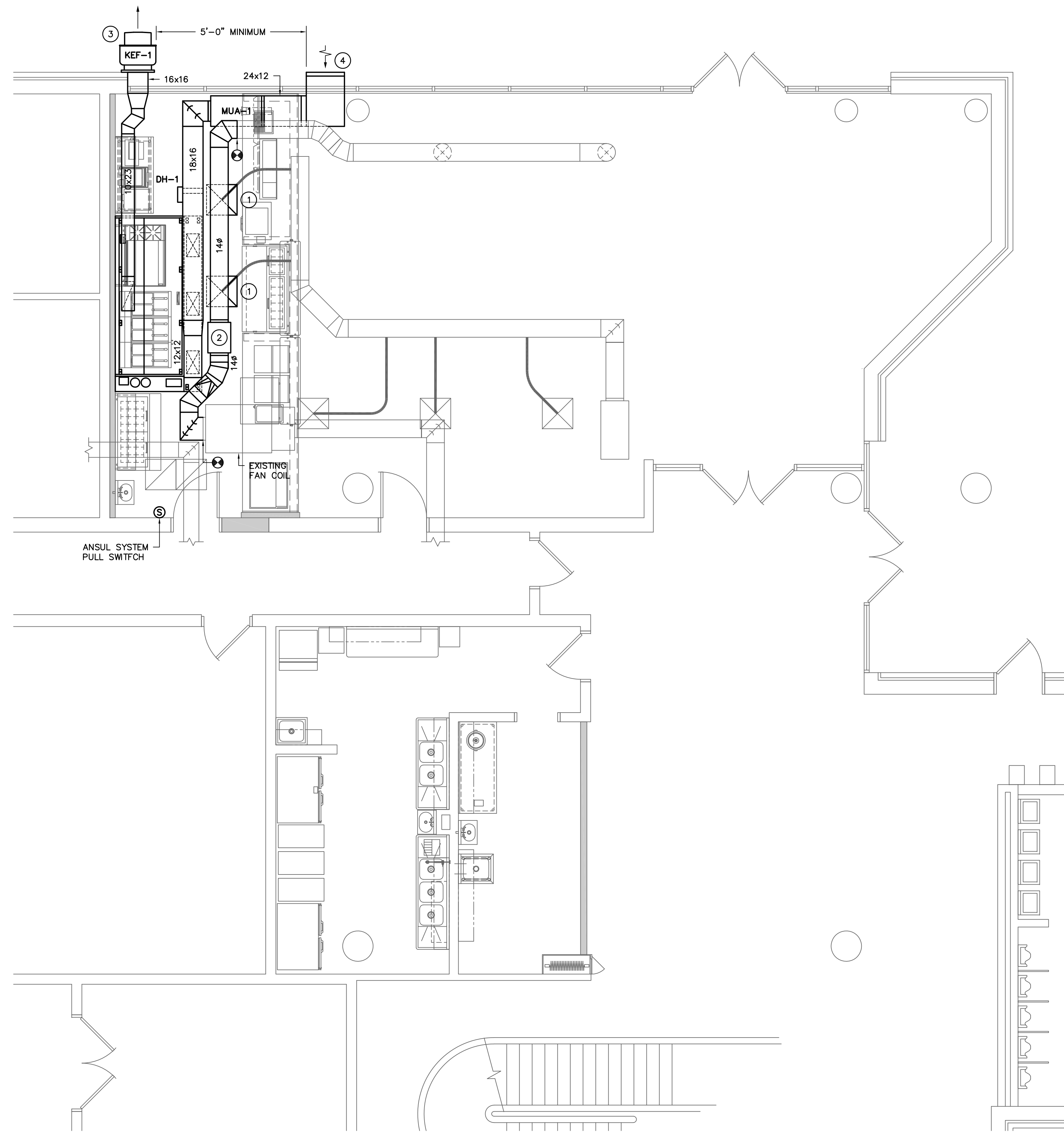
PROJECT TITLE: RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)
 University of South Carolina



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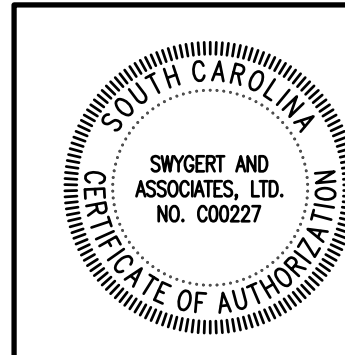
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MD-1
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 OF

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- NOTES TO SHEET**
- ① RELOCATE EXISTING DIFFUSER AS SHOWN.
 - ② RELOCATE EXISTING DUCT HEATER AS SHOWN.
 - ③ WITH DARK BRONZE FINISH. INSTALL MINIMUM 10'-0" ABOVE FINISHED GRADE.
 - ④ 30"x24" ALUMINUM INTAKE LOUVER WITH BIRDSCREEN. DARK BRONZE ANODIZED FINISH.

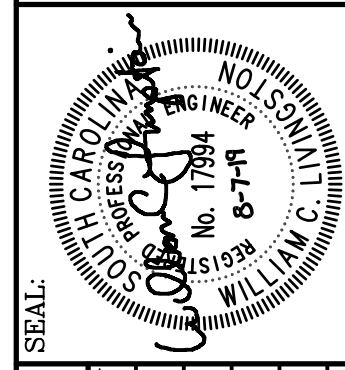
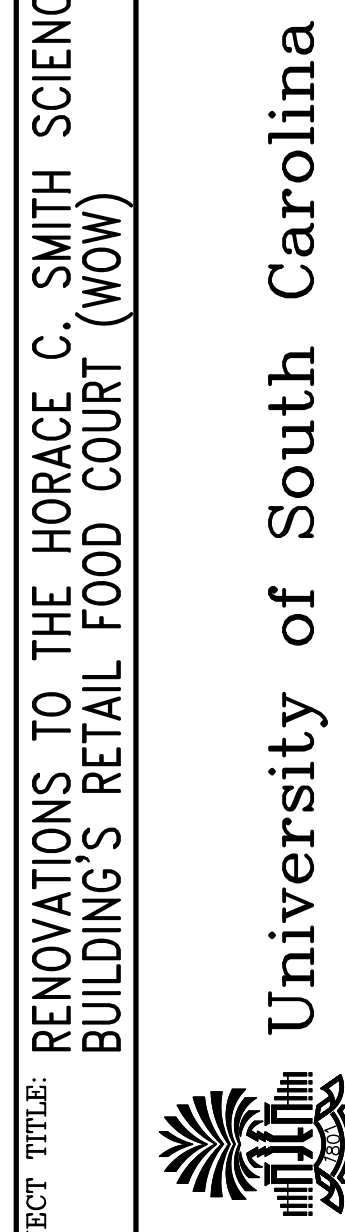
1 RENOVATION PLAN
 M-1 SCALE: 1/4" = 1'-0"



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PROJECT TITLE: RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)



BUILDING:	DRAWING:	DATE:	DRAWN BY:	DEM DATE:	CHECKED BY:
ISSUED FOR BID	07AUG19	8/9/19	WCL		WCL
REV.					

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MAKE-UP AIR FAN SCHEDULE							
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P./W.	SONES (MAX.)	REMARKS
MUA-1	BCF-110-7	INLINE	1920	0.5	3/4 HP	11.7	1, 2, 3
1. PROVIDE CENTRIFUGAL INLINE BELT DRIVE FAN WITH DISCONNECT SWITCH, SPEED CONTROL, AND FLAT FILTER BOX. 2. INTERLOCK WITH HOOD SWITCH BY ELECTRICAL CONTRACTOR. 3. PROVIDE WITH CONTROL CENTER TO INTERLOCK WITH HOOD AND DISCHARGE TEMPERATURE CONTROL FOR ELECTRIC DUCT HEATER.							

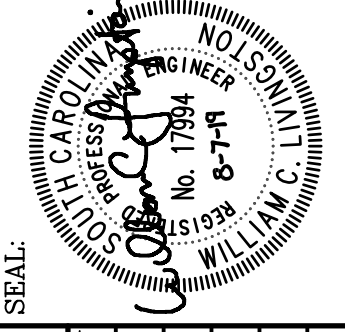
ELECTRIC DUCT HEATER SCHEDULE				
TAG	GREENHECK MODEL	KW	SIZE	REMARKS
DH-1	IDHE	20	16"x16"	1
1. PROVIDE DUCT HEATER WITH CONTROL TRANSFORMER, 2 STAGE HEATING, AIRFLOW SWITCH, DISCONNECT, AND POWER FUSE.				

- ### GENERAL NOTES
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL MECHANICAL CODE, 2009 INTERNATIONAL ENERGY CONSERVATION CODE, AND 2005 SMACNA HVAC DUCT CONSTRUCTION STANDARD. ALL LOCAL CODES OR REQUIREMENTS STILL APPLY.
 - VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
 - DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC.
 - DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
 - ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
 - EXISTING PIPE, DUCTWORK, CONDUIT, ETC. THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
 - ALL DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH PARTITIONS.
 - ALL MECHANICAL ITEMS EXTENDING THROUGH WALLS SHALL BE FLASHED.
 - TURNING VANES SHALL BE PROVIDED AT ALL DUCTWORK ELBOWS AND CHANGES OF DIRECTION TO PROVIDE EVEN FLOW THROUGH DUCT SYSTEM.
 - KITCHEN HOOD EXHAUST DUCTS SHALL BE WELDED AND SLOPED 1/4-INCH PER FOOT MINIMUM BACK TO THE GREASE HOOD. CLEANOUT ACCESS DOORS SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION. DUCT SHALL BE WRAPPED WITH 0-INCH CLEARANCE GREASE DUCT FIRE WRAP (SEE SPECIFICATIONS).
 - PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT PER MANUFACTURER'S INSTRUCTIONS. PROVIDE FULL SPACE FOR COIL REMOVAL AND REPLACEMENT FOR ALL HOT WATER AND CHILLED WATER AIR HANDLING UNITS.
 - THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
 - REMOVAL AND REPLACEMENT OF CEILING, AS REQUIRED FOR INSTALLATION OF NEW WORK, SHALL BE DONE BY GENERAL CONTRACTOR OUTSIDE OF THIS CONTRACT.
 - THIS CONTRACTOR SHALL DO ALL CONTROL WIRING. DIVISION 26 WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL AND ALL CONTROL WIRING SHALL BE ROUTED IN EMT CONDUIT. POWER WIRING AND FIRE ALARM CONNECTIONS SHALL BE BY DIVISION 26. CONTROL WIRING FOR UNIT SHUTDOWN AND SMOKE DAMPER CONTROL SHALL BE BY DIVISION 23.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED.
 - ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
 - THIS CONTRACTOR SHALL PATCH ALL WALLS AND FINISHES TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.
 - THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING HVAC SYSTEMS FROM CONSTRUCTION DEBRIS, DUST AND DIRT FOR THE ENTIRE CONSTRUCTION DURATION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED AS REQUIRED. PROTECTION SHALL INCLUDE FILTER MEDIA OVER ALL RETURN GRILLES AND RETURN DUCT OPENINGS TO PROTECT DUCTS AND EQUIPMENT.
 - CONTRACTOR TO PROTECT EXISTING FIRE PROTECTION SYSTEM.

LEGEND

SYMBOL	DESCRIPTION
	RECTANGULAR SUPPLY DUCTWORK
	RETURN, EXHAUST, FRESH AIR DUCTWORK
48x24	48"x24" RECTANGULAR DUCT
	CONNECTION POINT OF NEW TO EXISTING

**CAMPUS PLANNING
AND CONSTRUCTION**
COLUMBIA, SC 29208



SEAL:	WCL	DEM	DATE	8/9/19
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ORIG. BY:		DATE:	8/9/19	
ISSUED FOR BID		DESCRIPTION		
REV.				

PROJECT TITLE: RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)

University of South Carolina

 Swygert & Associates CONSULTING ENGINEERS <small>DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Post Office Box 11888 Columbia, S.C. 29211 Fax: (803) 791-9830 mail@swygert-associates.com</small>	M-2 OF SHEET IN SET:
	SHEET:

HOOD INFORMATION																	
HOOD NO.	MARK	MODEL	HOOD DIMENSIONS (IN.)			HOOD CONSTR.	COOKING LOAD / DUTY RATING	TOTAL CFM	EXHAUST				SUPPLY		TOTAL WEIGHT LBS.	SECTION LOCATION	
			LENGTH	WIDTH	HEIGHT				COLLAR(S)		CFM	S.P.	MUA CFM	AC CFM			
1	HOOD	XXEW-126-S	126	54	24	430 SS WHERE EXPOSED	HEAVY	2400	10	23		2400	0.552	1920		399	SINGLE

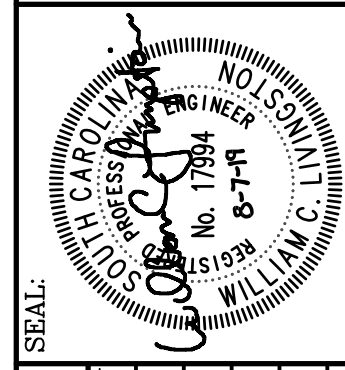
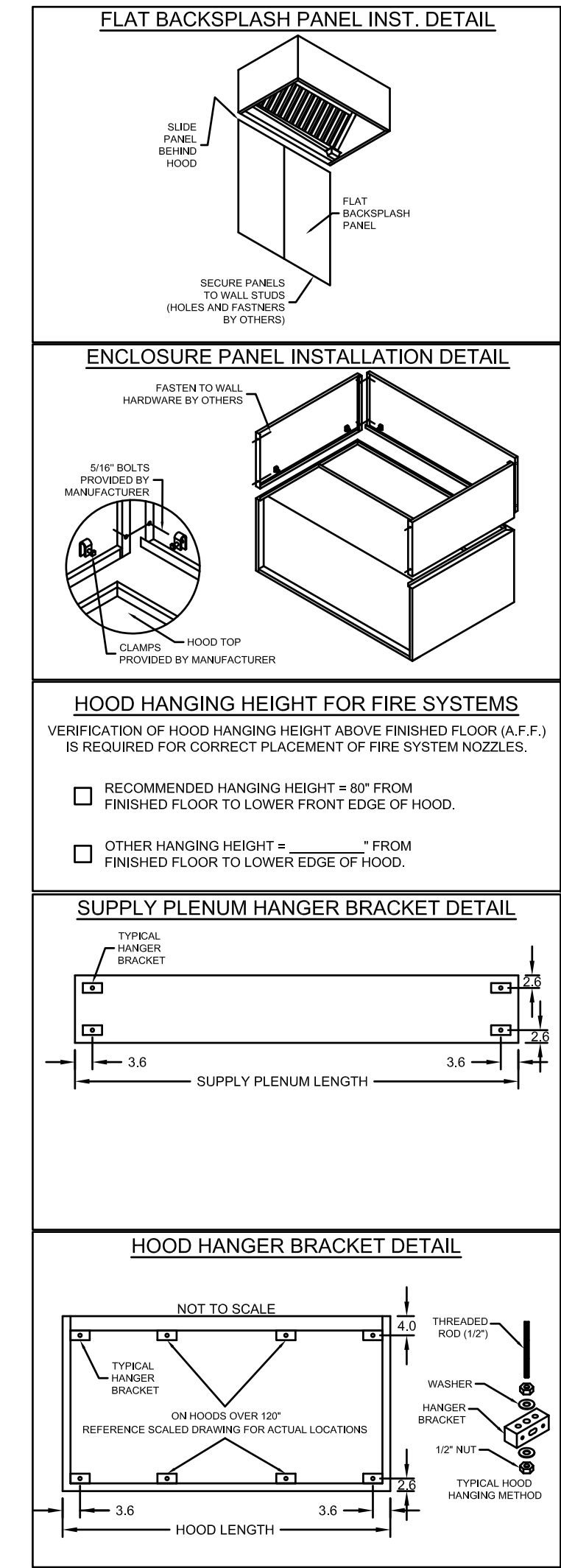
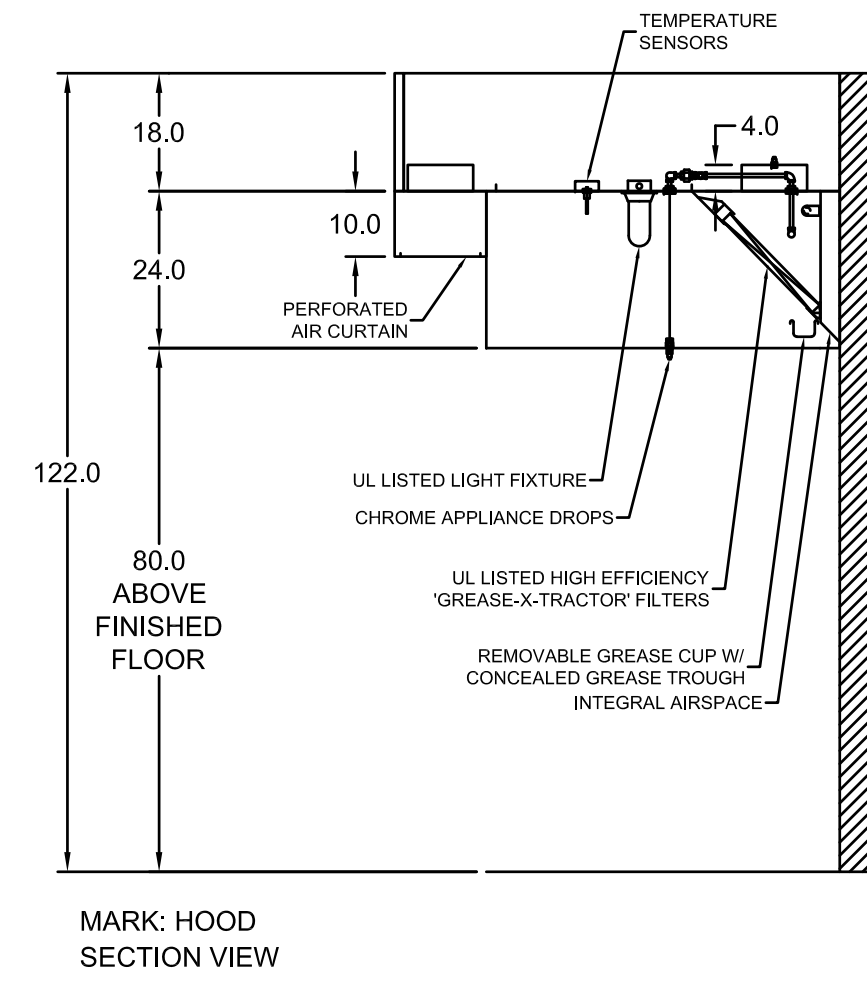
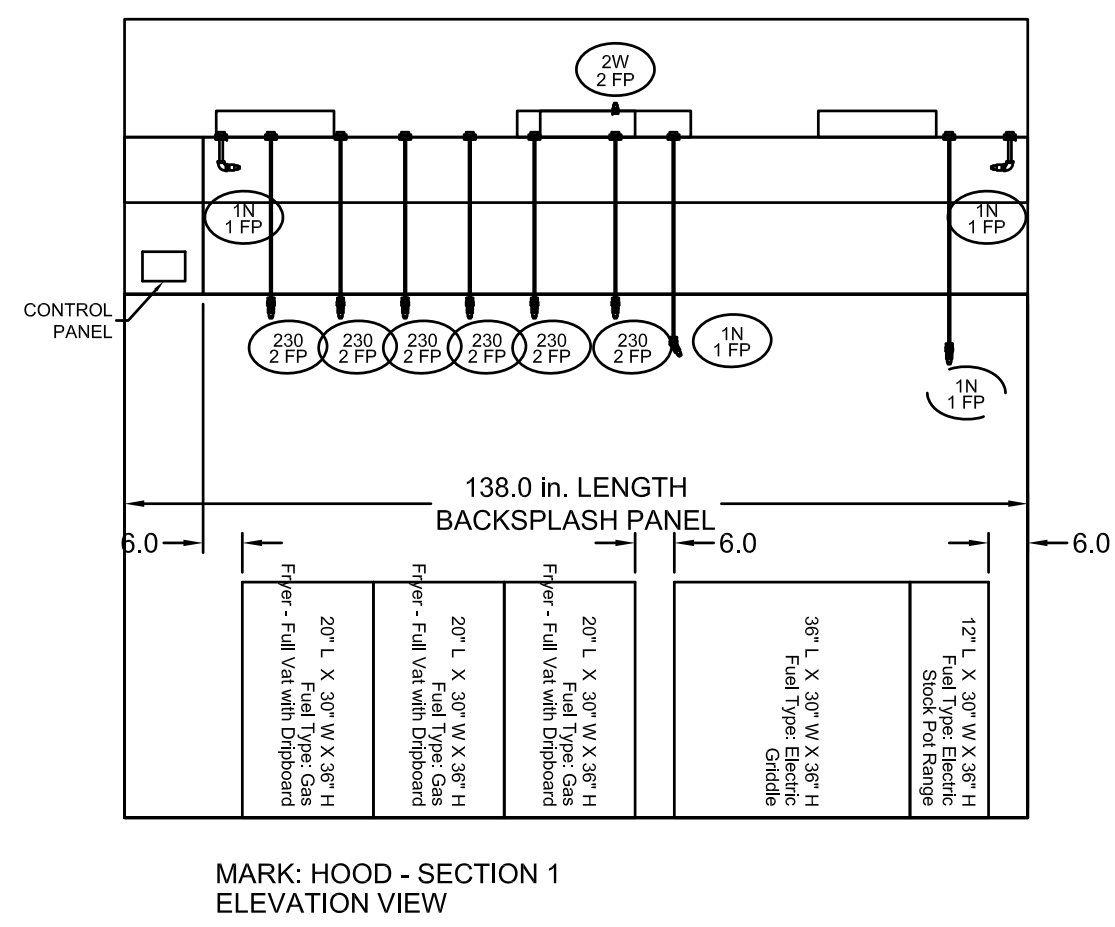
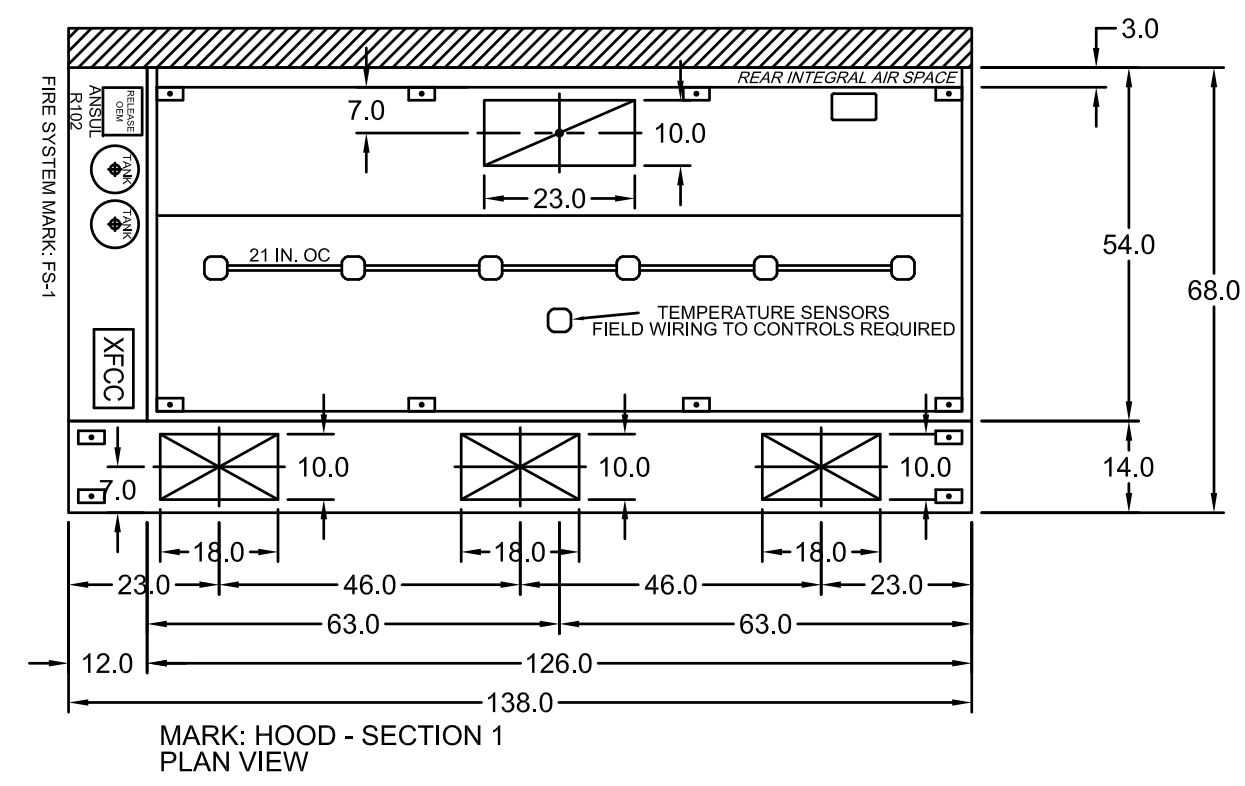
HOOD INFORMATION												
HOOD NO.	MARK	LIGHTING DETAILS			GREASE FILTRATION DETAILS			UTILITY CABINET(S)				
		FIXTURE TYPE	BULB / LAMP INFO	QTY	FOOT CANDLES	TYPE / MODEL MATERIAL	QTY	SIZE (IN.) L H	LOCATION	FIRE SYSTEM TYPE	SIZE	MODEL
1	HOOD	LED		6	50.4	X-TRACTOR STAINLESS STEEL	4	16 20	LEFT	ANSUL R102	6	XECC SWITCHES

SUPPLY PLENUM INFORMATION																				
HOOD NO.	MARK	POS.	TYPE	SIZE (IN.)			INSULATED	DAMPER(S)	LED LIGHT(S)		TOTAL CFM	COLLARS								
				L	W	H			SUPPLIED	QTY		TYPE	MOUNTING	QTY	W	L	DIA.	CFM	S.P.	VEL.
1	HOOD	FRONT	ASP	138	14	10	NO	NO	NO		1920	MUA	FACTORY	3	10	18		640	0.13	512

HOOD OPTIONS

- UL 710 LISTED W/ OUT EXHAUST FIRE DAMPER - UL #R25625
- BACK INTEGRAL AIR SPACE - 3 IN WIDE
- 18 IN HIGH CEILING ENCLOSURES - FRONT LEFT RIGHT - FIELD INSTALLED
- FACTORY MOUNTED EXHAUST COLLAR(S)
- BACKSPLASH 80.00 IN HIGH 138.00 IN LONG
- PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY
- STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH

PROVIDE WITH FULL SYSTEM STARTUP AND TESTING AS REQUIRED BY CODE OFFICIAL.



SEAL:	W.C. SMITH
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PROJECT TITLE: RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)

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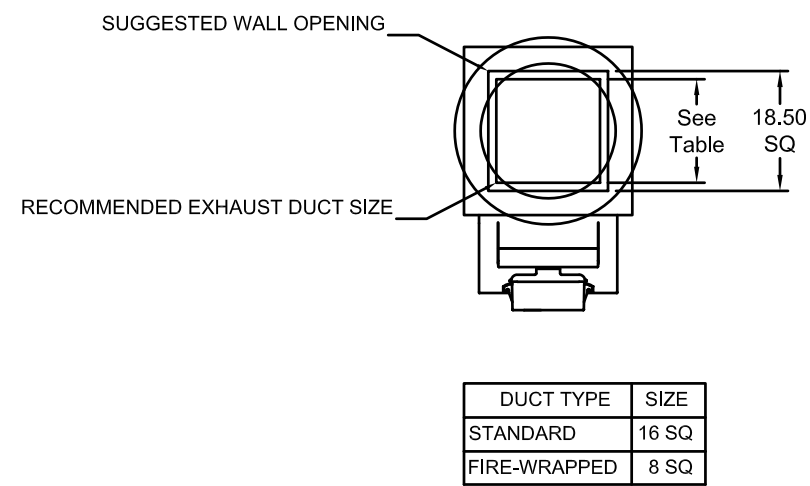
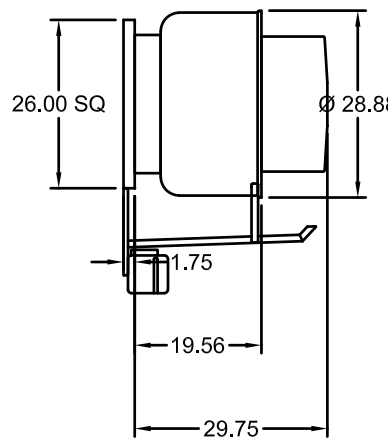
Belt Drive Upblast Centrifugal Roof Exhaust Fan

MARK INFORMATION			FAN INFORMATION					MOTOR INFORMATION					
QTY	MARK	MODEL	VOLUME (CFM)	TOTAL EXTERNAL SP (IN WG)	FAN RPM	OPERATING POWER (HP)	WEIGHT (LB.)	SIZE (HP)	V/C/P	ENCLOSURE	MOTOR RPM	WINDINGS	NEC FLA*
1	KEF-1	XRUB-161-10	2,400	1	1,234	0.74	101	1	208/60/3	OP	1725	1	2.1

*NEC FLA - Based on tables 150 or 148 of National Electrical Code 2002. Actual motor FLA may vary, for sizing thermal overload, consult factory.

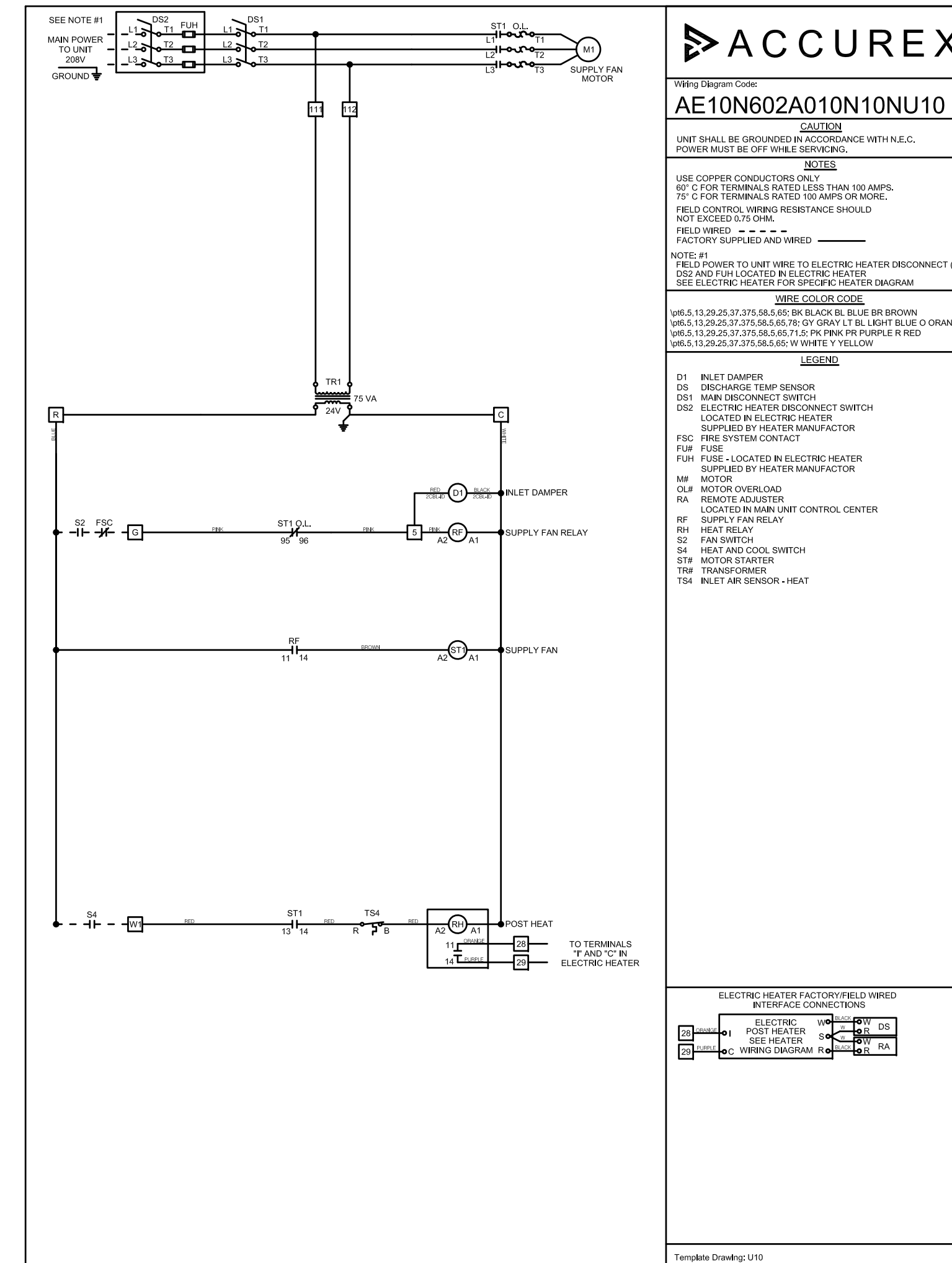
SWEF-1 : SELECTED OPTIONS AND ACCESSORIES

- Larger curb cap size - 26 in. square
- Skidwall Mounting - Fan Configured for Wall-Mounted Applications
- UL/cUL 762 Listed - "Power Ventilators for Rest. Exh. Appliances"
- Switch, NEMA-1, Toggle, Shipped with Unit
- High Temp Curb Seal Rated for Continuous Duty at 2000 F (Attached)
- Grease Pan Kit - Containment Configured for Wall-Mounted Applications (PN:879148)
- Grease Trap (PN:475538)
- Heat Baffle (Attached)



DUCT TYPE	SIZE
STANDARD	16 SQ
FIRE-WRAPPED	8 SQ

DUCT DIMENSIONS ARE LARGEST POSSIBLE DUCT TO FIT THROUGH CURB. CONSULT SYSTEM DESIGN ENGINEER FOR RECOMMENDED DUCT SIZE.
OVERALL HEIGHT MAY BE GREATER DEPENDING ON MOTOR.



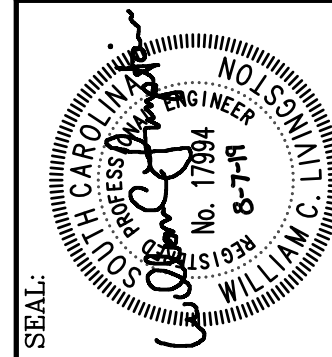
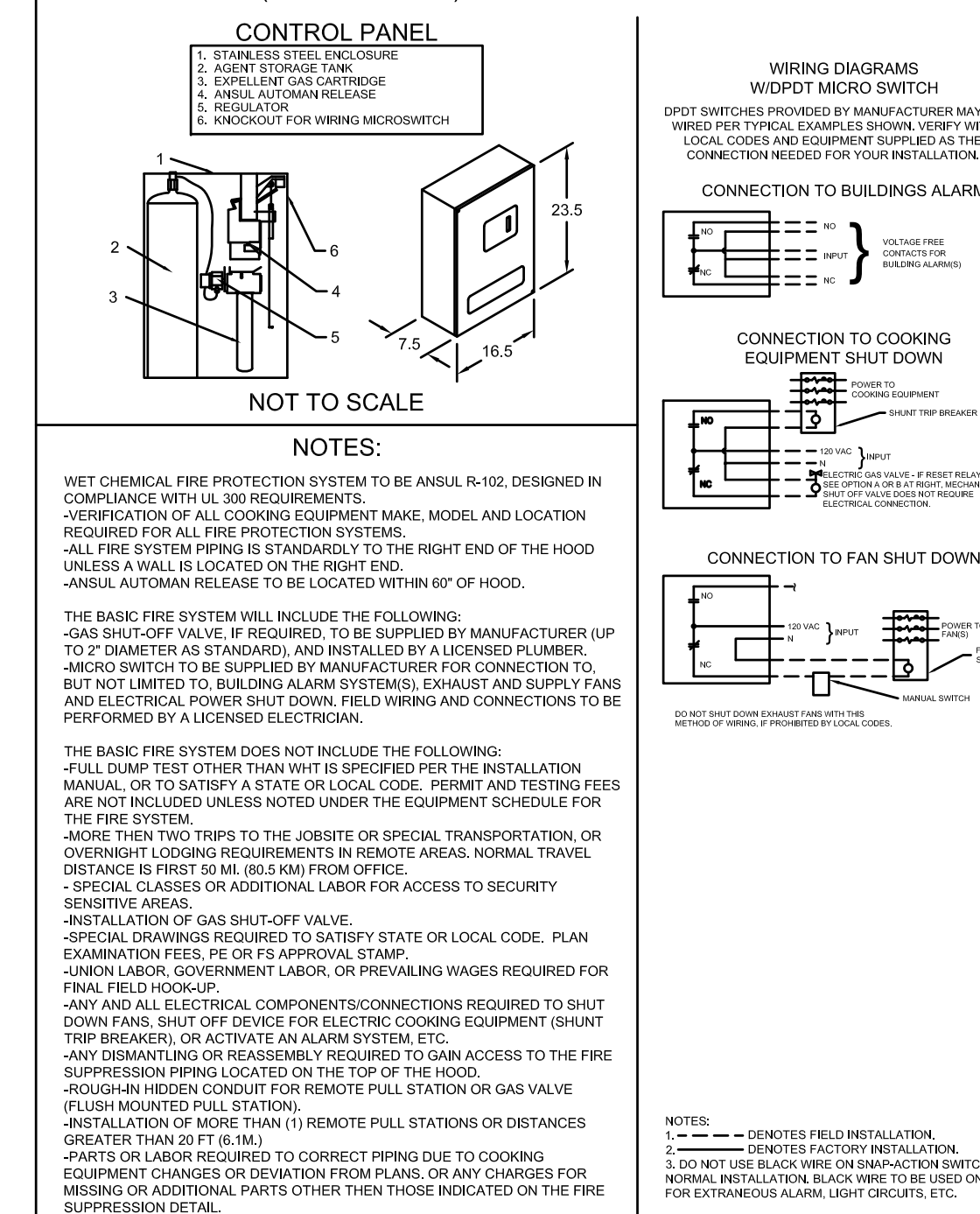
FIRE SYSTEM INFORMATION

MARK	MODEL	LOCATION	FLOW POINTS		SUPPLY LINE	DETECTION	MARK(S) PROTECTED BY FIRE SYSTEM
			HOODS	PCU			
FS-1	ANSUL R-102 WET CHEMICAL	CABINET - LEFT END OF HOOD	18 UTILIZED 22 AVAILABLE		CONTINUOUS	FUSIBLE LINK	HOOD SECTION 1

FIRE SYSTEM OPTIONS AND ACCESSORIES

FULL INSTALLATION (INCLUDES PRE-PIPED HOOD(S) WITH DETECTION AND FACTORY COORDINATED INSTALL.)
CHROME SLEEVES FOR FACTORY PROVIDED APPLIANCES DROPS - INCLUDED
METAL BLOW-OFF CAPS - INCLUDED
GAS VALVE - INCLUDED - MECHANICAL SHUTOFF VALVE, 2", (ANSUL) - PART# ANSULMECHSHUTOFFVALVE200
HOOD SUPPRESSION AGENT - INCLUDED - 6 GAL. - (2) 3.0 TANK(S)
REMOTE PULL STATION - STANDARD - INSTALLATION AT SINGLE POINT OF EGRESS

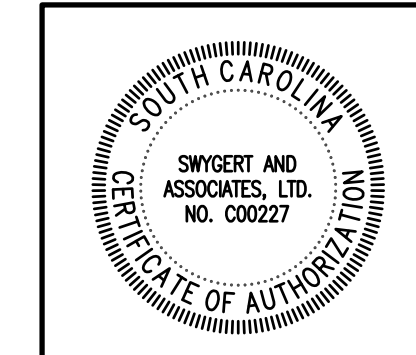
ANSUL R102 (WET CHEMICAL) FIRE PROTECTION SYSTEM - MODEL FSSC



BUILDING:	DRAWING:	DATE:	BY:	DATE:	BY:	DATE:	BY:
	07AUG19		WCL	8/9/19			

PROJECT TITLE: RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)

UNIVERSITY OF South Carolina



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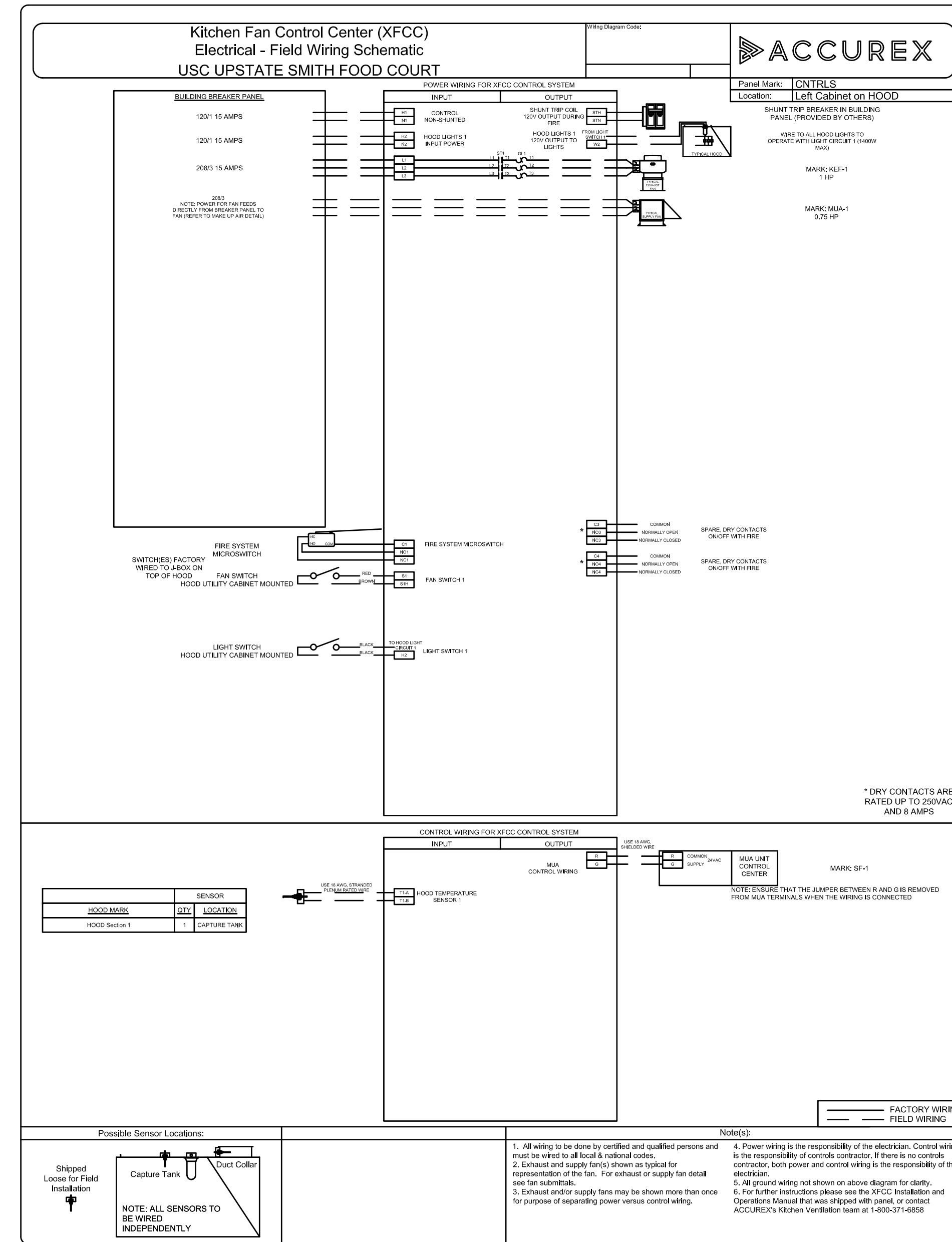
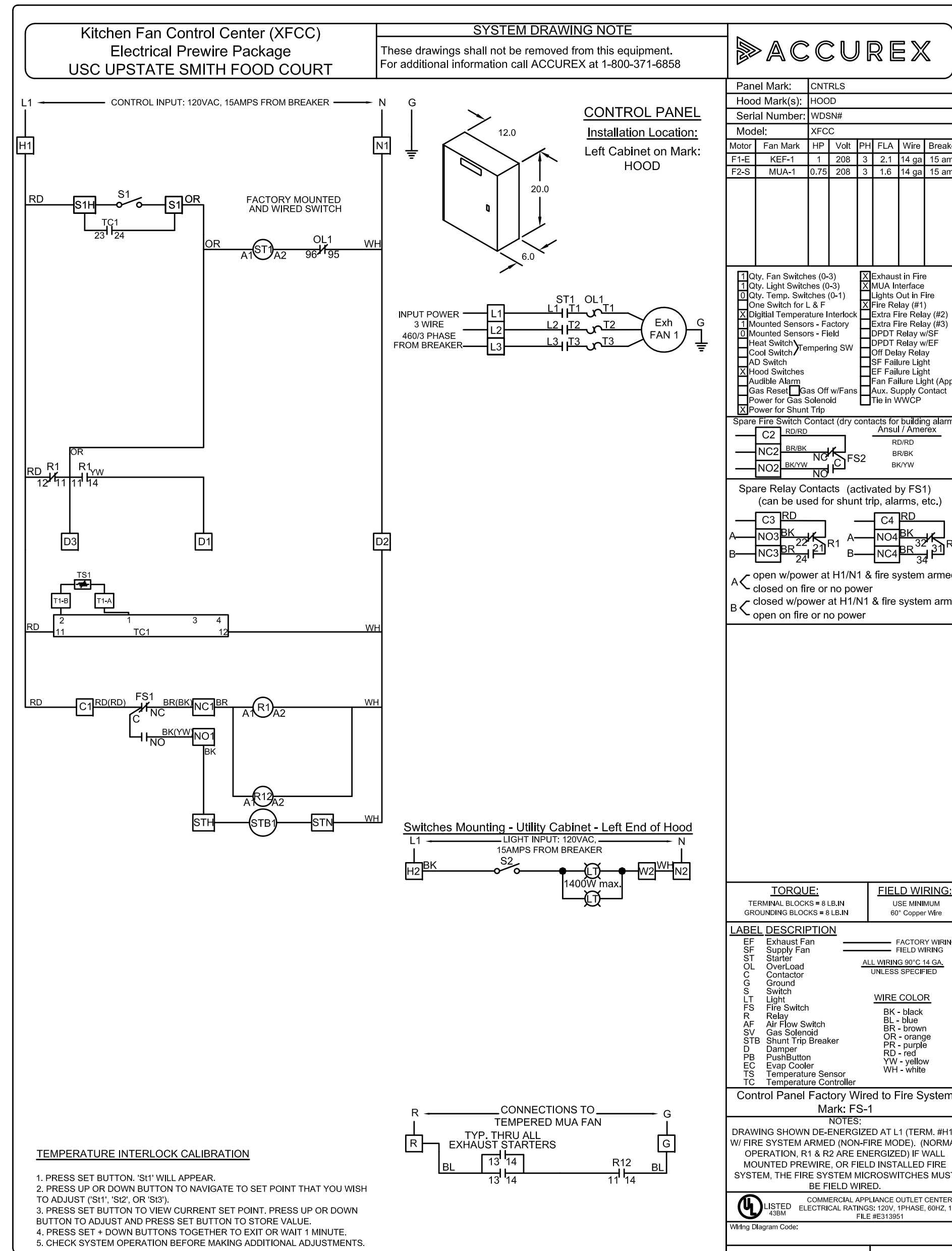
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CONTROL INFORMATION

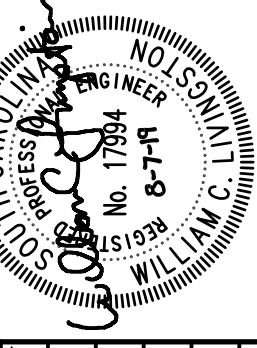
MARK	ELECTRICAL CONTROL PACKAGE		USER INTERFACE		FANS CONTROLLED				
	MODEL	LOCATION	TYPE	LOCATION	MARK	CONTROL	VOLT	PHASE	HP
CNTRLS	XFCC	CABINET - LEFT END OF HOOD	SWITCHES	CABINET - LEFT END OF HOOD	KEF-1	EXHAUST	208	3	1
					MUA-1	SUPPLY	208	3	3/4

CONTROL FEATURES

- STARTERS PROVIDED IN CONTROL PANEL - QTY 1
- 2 POSITION LIGHT SWITCH - QTY 1
- 2 POSITION FAN SWITCH - QTY 1
- FACTORY MOUNTED EXHAUST TEMPERATURE SENSORS - QTY 1
- TURN ON EXHAUST IN FIRE
- MUA INTERFACE
- POWER FOR SHUNT TRIP
- THERMAL OVERLOADS IN CABINET
- CONTROL PANEL FACTORY WIRED TO FIRE SYSTEM



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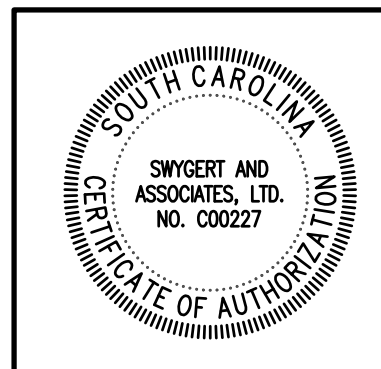
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DATE:	DATE
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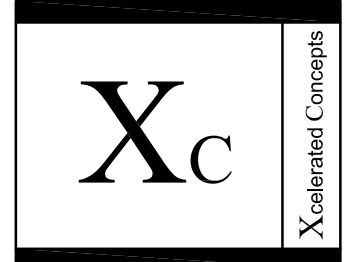
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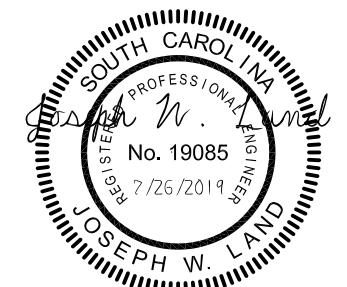
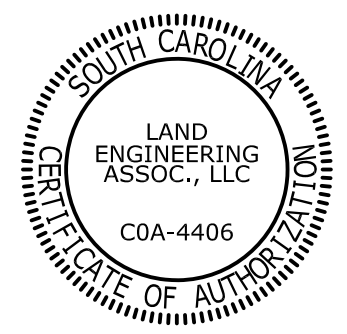


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UNIVERSITY OF SOUTH CAROLINA UPSTATE RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)

LEA LAND ENGINEERING ASSOCIATES, LLC

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SEAL:

KEY PLAN:

ISSUED FOR BID: 8/9/19

PROJECT NO.: SXO-2019-02

DRAWN BY: JSJ

CHECKED BY: JWJ

SCALE: NO SCALE

DRAWING TITLE:

GENERAL NOTES, LEGEND, DETAILS, AND SCHEDULES

SHEET NO.:

E-1

GENERAL CONSTRUCTION NOTES

- PROVIDE ALL WORK IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
 - INTERNATIONAL BUILDING CODE 2015 EDITION
 - INTERNATIONAL EXISTING BUILDING CODE 2015 EDITION
 - NFPA 70 - NATIONAL ELECTRICAL CODE 2014 EDITION
 - NFPA 72 - NATIONAL FIRE ALARM CODE 2013 EDITION
 - ANSI A117.1 - ACCESSIBLE AND USABLE 2017 EDITION BUILDINGS AND FACILITIES
 - PROVIDE NEW RACEWAY AND WIRING TO ALL EQUIPMENT INDICATED ON THE CONTRACT DRAWINGS. THE DRAWINGS INDICATE PARTIAL RACEWAY AND WIRING REQUIREMENTS TO HELP CLARIFY DESIGN INTENT. WHERE RACEWAY AND/OR WIRING IS NOT INDICATED FOR DEVICES, FIXTURES, OR EQUIPMENT THE ARRANGEMENT, GROUPING, AND ROUTING SHALL BE PROVIDED IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE.
 - ALL ELECTRICAL MATERIALS SHALL BE U.L. TESTED & LISTED OR BE TESTED & LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
 - ALL CONDUIT PENETRATIONS THROUGH WALLS SHALL BE 2-HOUR FIRESTOPPED IN ACCORDANCE WITH DETAILS SHOWN ON THIS DRAWING.
 - RACEWAYS SHALL BE EMT WITH COMPRESSION TYPE FITTINGS UNLESS NOTED OR DETAILED OTHERWISE. FINAL CONNECTIONS TO EQUIPMENT SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.
 - CIRCUITS SHALL BE TWO #12 AWG COPPER THHN CONDUCTORS WITH ONE #12 AWG COPPER GREEN-INSULATED GROUND WIRE IN 3/4" EMT RACEWAY UNLESS NOTED OTHERWISE ON PLAN.
 - JUNCTION BOXES SHALL BE STEEL TYPE WITH SCREW COVER, SIZED AND SUPPORTED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
 - INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH DUCTS, PIPES, STRUCTURAL MEMBERS, OR OTHER SYSTEMS.
 - THOROUGHLY CLEAN ALL EQUIPMENT AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION. THE CONTRACTOR SHALL INSTRUCT THE OWNER'S PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF ALL SYSTEMS.
 - THE CONTRACTOR SHALL GUARANTEE THE WORK INSTALLED UNDER THIS CONTRACT FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.
 - CUTTING, DRILLING, AND PATCHING: PROVIDE CHASES, SLOTS, AND OPENINGS IN EXISTING BUILDING COMPONENTS TO ALLOW FOR ELECTRICAL INSTALLATIONS. PERFORM CUTTING, DRILLING, FITTING, AND PATCHING REQUIRED TO:
 - A) INSTALL EQUIPMENT, MATERIALS, AND RACEWAYS IN EXISTING STRUCTURES.
 - B) REMOVE AND REPLACE DEFECTIVE WORK THAT DOES NOT CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - C) UPON WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER, UNCOVER AND RESTORE WORK TO PROVIDE FOR ARCHITECT/ENGINEER OBSERVATION OF CONCEALED WORK.
- PROTECT EXISTING STRUCTURES, FURNISHINGS, FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS WHILE PERFORMING CUTTING, DRILLING, FITTING, AND PATCHING.
- PATCH AND PAINT EXISTING SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS THAT MATCH EXISTING MATERIALS. PATCHING AND PAINTING SHALL BE PERFORMED BY EXPERIENCED INSTALLERS.

LOADS SERVED				EXISTING PANEL "K1"			
BKR.	LOAD	CKT.	(S / N)	CKT.	LOAD	BKR.	LOADS SERVED
NO.	AMPS	NO.		NO.	AMPS	NO.	
SANDWICH/SALAD PREP REFRIGERATOR	20	0.8	1	2	1.0	20	REFRIGERATOR (PIZZA PREP)
SHUNT-TRIP FOR 3-POLE BREAKER BELOW	ST	-	3	4	1.2	20	RECEIPT PRINTER
DEEP FAT FRYER FILTER	20	1.0	5	6	0.9	20	DRAWER TYPE WARMER
DEEP FAT FRYER CONTROLS	20	0.1	7	8	1.2	20	HOLDING CABINET
REFRIGERATOR (SHORTY)	20	0.6	9	10	0.1	20	DISPLAY CASE (REFRIGERATED)
MICROWAVE	20	1.6	11	12	1.2	20	POS SYSTEM
SANDWICH GRILL	20	1.8	13	14	0.0	20	SPARE
CONVEYOR TOASTER	20	1.8	15	16	0.0	20	SPARE
SODA/ICE DISPENSER	20	1.5	17	18	0.0	20	SPARE
RECEIPTACLE	20	0.2	21	20	0.0	20	SPARE
FOOD WARMER	20	1.2	23	24	0.5	15	HOOD CONTROL POWER
REFRIGERATOR (UNDER COUNTER)	20	0.2	25	26	-	ST	SHUNT-TRIP FOR 1-POLE BREAKER BELOW
FOOD WARMER	20	1.2	27	28	1.4	20	HOOD LIGHTS
FOOD WARMER	20	1.2	29	30	0.5	-	-
SPARE	20	0.0	31	32	0.5	15	KITCHEN EXHAUST FAN "KEF-1"
SPARE	20	0.0	33	34	0.5	-	-
SPARE	20	0.0	35	36	-	ST	SHUNT-TRIP FOR 3-POLE BREAKER BELOW
SPARE	20	0.0	37	38	0.4	-	-
SPARE	20	0.0	39	40	0.4	15	HOOD MAKE-UP AIR FAN "MUA-1"
SPARE	20	0.0	41	42	0.4	-	-

NOTE: CIRCUIT BREAKERS ARE EXISTING (FURNISHED UNDER A SEPARATE CONTRACT), INCLUDING THE ONE IN SPACES 3,5,7,9.

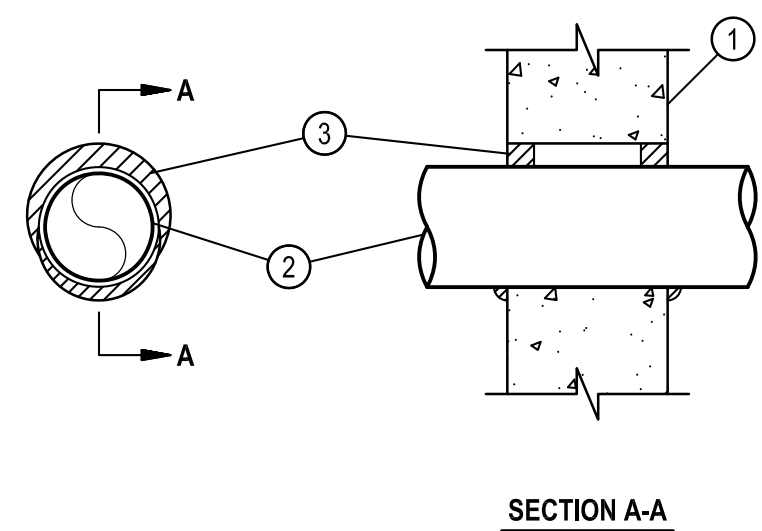
EXISTING CIRCUIT BREAKER WITH 24-VDC SHUNT TRIP COIL. TOTAL LOAD (KVA): 25.0

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING ELECTRICAL PANELBOARD, FLUSH MOUNTED - TO REMAIN IN PLACE.		FIRE ALARM SYSTEM ADDRESSABLE RELAY INTERFACE CONTROL MODULE (PROVIDE A MODULE THAT IS COMPATIBLE WITH A GAMEWELL FCI E3 SERIES FIRE ALARM CONTROL PANEL). MOUNT IN A STEEL BACKBOX.
	ELECTRICAL CONNECTIONS TO A MOTOR OR TO MOTOR DRIVEN EQUIPMENT.		FIRE ALARM SYSTEM ADDRESSABLE MONITOR INTERFACE CONTROL MODULE (PROVIDE A MODULE THAT IS COMPATIBLE WITH A GAMEWELL FCI E3 SERIES FIRE ALARM CONTROL PANEL). MOUNT IN A STEEL BACKBOX.
	STEEL JUNCTION BOX, WALL MOUNTED.		EXISTING SURFACE MOUNTED CONTROL PANEL - TYPE AS NOTED ON PLAN.
	STEEL JUNCTION BOX, UNIT OR CEILING MOUNTED UNLESS NOTED OTHERWISE.		EXISTING CEILING MOUNTED FIRE ALARM SYSTEM COMBINATION AUDIBLE/STROBE NOTIFICATION APPLIANCE - TO REMAIN IN PLACE.
	ELECTRICAL DISCONNECT SWITCH - RATINGS AND FEATURES AS INDICATED ON PLAN. PROVIDE CLASS RKS FUSES OF RATINGS INDICATED ON NAMEPLATE DATA.		EXISTING WALL MOUNTED FIRE ALARM SYSTEM COMBINATION AUDIBLE/STROBE NOTIFICATION APPLIANCE - TO REMAIN IN PLACE.
	EXISTING 2'x2' RECESSED FLUORESCENT TROFFER, SWITCHLEG AS INDICATED BY LOWER-CASE LETTER - RELOCATE AS INDICATED ON PLAN.		EXISTING FIRE ALARM HEAT DETECTOR - RELOCATE WHERE INDICATED ON PLAN.
	EXISTING LIGHT SWITCH WITH SWITCHLEG DESIGNATED BY LOWER-CASE LETTER - TO REMAIN IN PLACE.		

System No. W-J-1226

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1, 2, 3 and 4 Hr (See Item 3)	F Ratings — 1, 2, 3 and 4 Hr (See Item 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating At Ambient — Less Than 1 CFM/Sq Ft	FH Ratings — 1, 2, 3 and 4 Hr (See Item 3)
L Rating At 400 F — 4 CFM/Sq Ft	FTH Rating — 0 Hr
	L Rating At Ambient — Less Than 1 CFM/Sq Ft
	L Rating At 400 F — 4 CFM/Sq Ft



- Wall Assembly — Min 6 in. (152 mm) thick lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified Concrete Blocks*. Max diam of opening is 5-3/4 in. (146 mm). See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.
- Through Penetrant — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tube and periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe, conduit or tube to be rigidly supported on both sides of wall assembly.
 - A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit.
 - D. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic conduit.
 - E. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - F. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Fill, Void or Cavity Material — Sealant — Fill material applied within annulus, flush with both surfaces of wall. Type and thickness of sealant is dependent on F and FH Ratings as indicated in Table below. An additional 1/2 in. (13 mm) diameter bead of sealant applied at penetrant/gypsum board interface at point contact location on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE or CP 606 Sealant

F, FH Ratings hr	Sealant Type	Sealant Thickness, in. (mm)
1, 2	FS-ONE or CP 606	5/8 (16)
3	FS-ONE or CP 606	1 (25)
4	FS-ONE	1 (25)

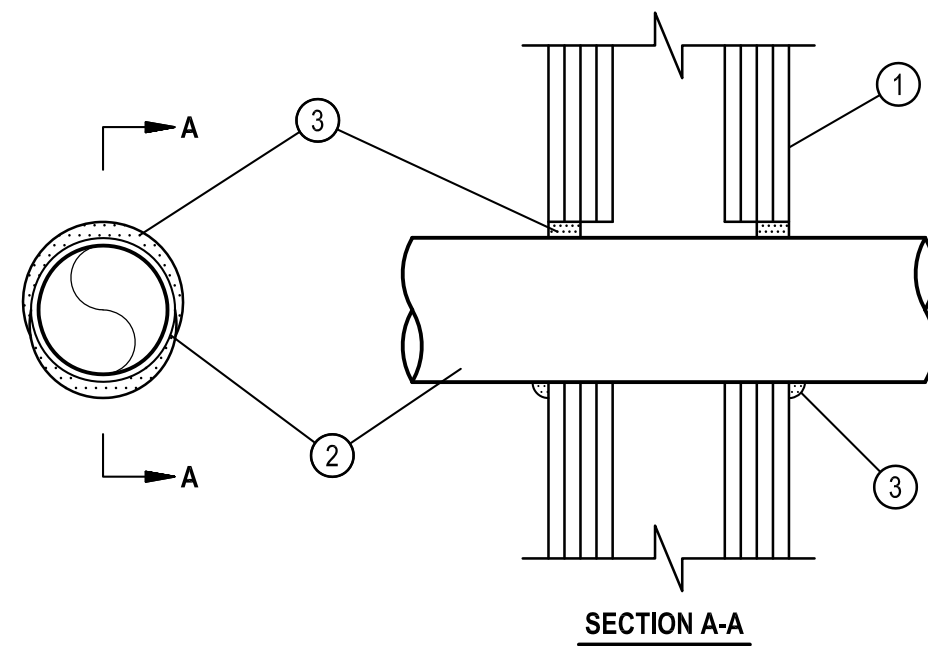
*Bearing the UL Classification Mark



1 FIRESTOP DETAIL - CONCRETE
E-1 NO SCALE

System No. W-L-1252

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)	F Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Rating — 1, 2, 3 and 4 Hr (See Items 1 and 3)	FT Rating — 0 Hr.
L Rating At Ambient — Less Than 1 CFM/Sq Ft	FH Ratings — 1, 2, 3 and 4 Hr (See Items 1 and 3)
L Rating At 400 F — Less Than 1 CFM/Sq Ft	FTH Rating — 0 Hr.
	L Rating At Ambient — Less Than 1 CFM/Sq Ft
	L Rating At 400 F — Less Than 1 CFM/Sq Ft



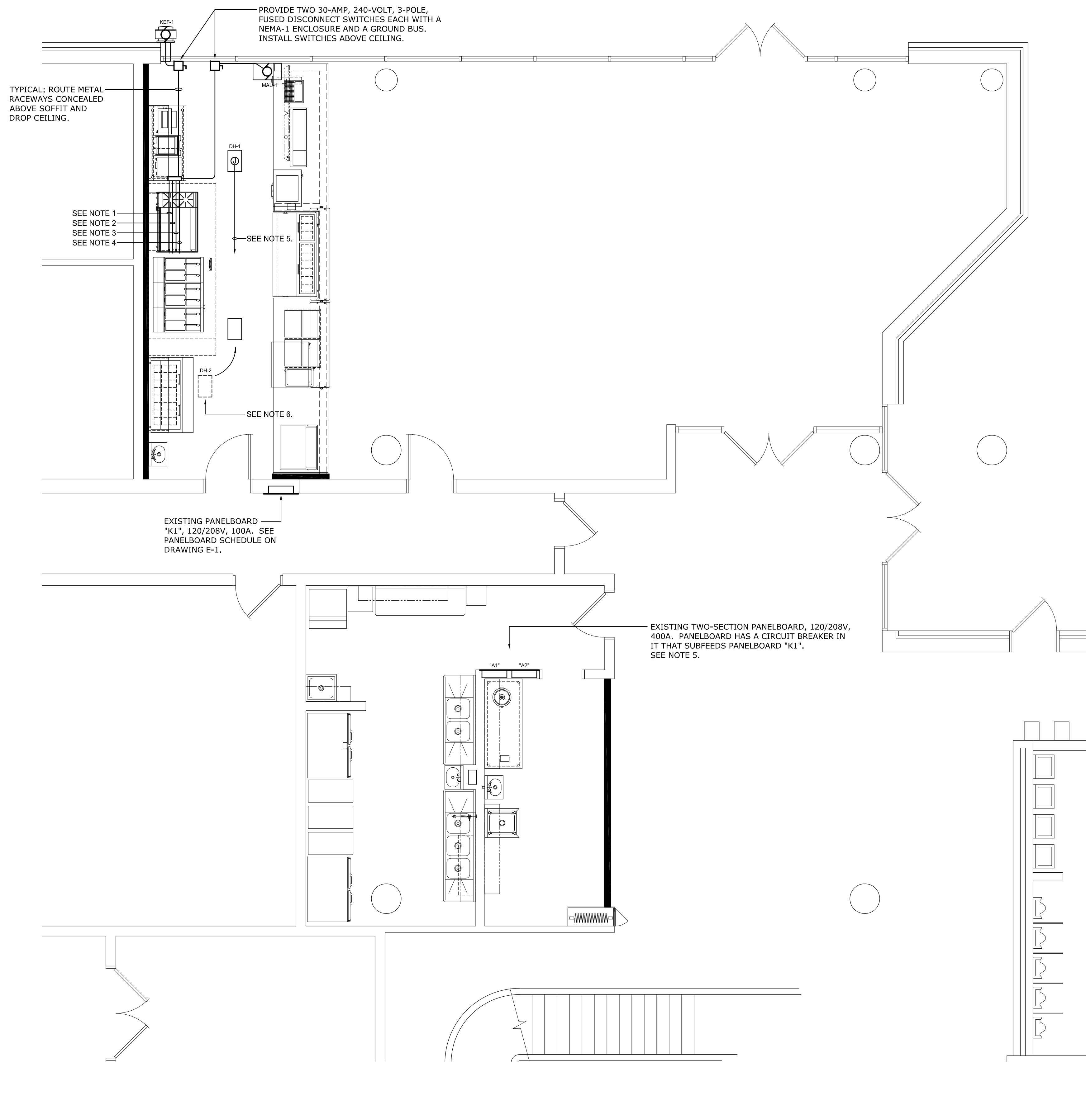
- Wall Assembly — The 1, 2, 3 or 4 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs — Wall framing shall consist of steel channel studs. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
 - B. Gypsum Board — Min 5/8 in. (16 mm) thick with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall or Partition Design in the UL Fire Resistance Directory. Max diam of opening is 5-3/4 in. (146 mm).
- The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.
- Through Penetrant — One metallic pipe, conduit or tube to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe, conduit or tube and periphery of opening shall be min 0 in. (point contact) to max 7/8 in. (22 mm). Pipe, conduit or tube to be rigidly supported on both sides of wall assembly.
 - A. Steel Pipe — Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe — Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
 - C. Conduit — Nom 4 in. (102 mm) diam (or smaller) rigid steel conduit.
 - D. Conduit — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic conduit.
 - E. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - F. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
- Fill, Void or Cavity Material — Sealant — Fill material applied within annulus, flush with both surfaces of wall. Type and thickness of sealant is dependent on F and FH Ratings as indicated in Table below. An additional 1/2 in. (13 mm) diameter bead of sealant applied at penetrant/gypsum board interface at point contact location on both surfaces of wall. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE or CP 606 Sealant

F, FH Ratings hr	Sealant Type	Sealant Thickness, in. (mm)
1, 2	FS-ONE or CP 606	5/8 (16)
3	FS-ONE or CP 606	1 (25)
4	FS-ONE	1 (25)

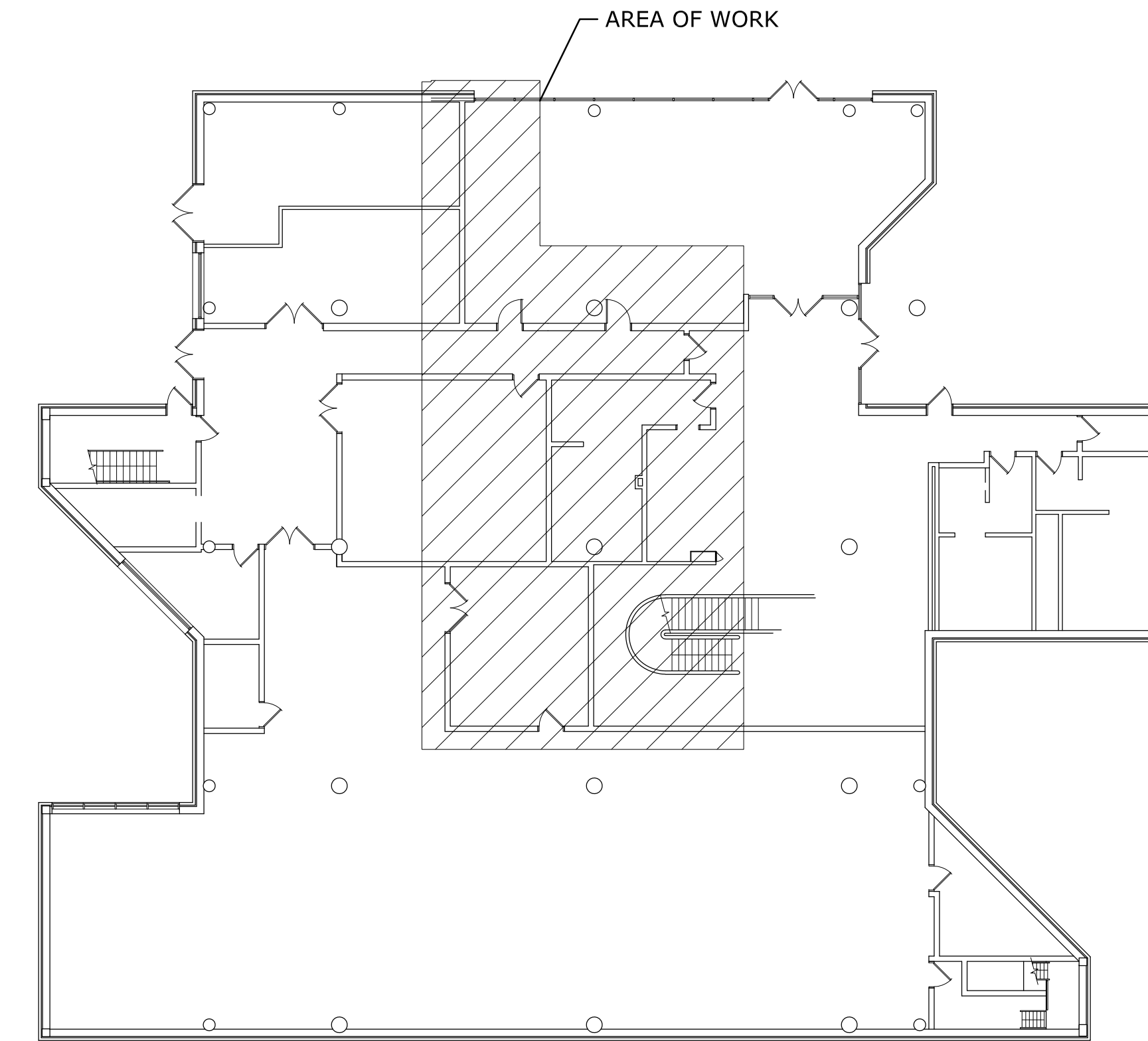
*Bearing the UL Classification Mark



2 FIRESTOP DETAIL - STUD WALLS
E-1 NO SCALE



1 ELECTRICAL RENOVATION PLAN
 SCALE: 1/4" = 1'-0"
 1/4" = 1'-0" scale feet



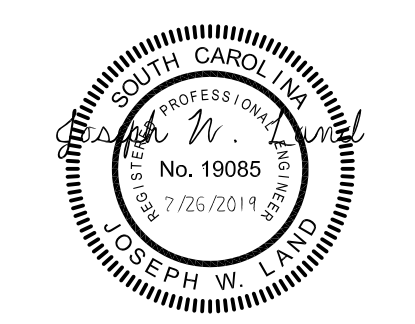
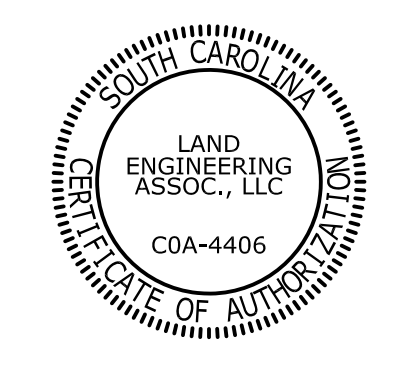
2 KEY PLAN
 SCALE: 1/16" = 1'-0"
 1/16" = 1'-0" scale feet

- RENOVATION NOTES**
- HOOD CONTROL CIRCUIT:** PROVIDE TWO #12 AWG COPPER THHN COLOR CODED CONDUCTORS WITH ONE #12 AWG GREEN-INSULATED COPPER GROUND WIRE IN 3/4" EMT RACEWAY FROM PANELBOARD "K1" TO THE KITCHEN HOOD FOR CONNECTION TO THE 120-VOLT CONTROL POWER INPUT OF THE HOOD. FINAL RACEWAY CONNECTION TO THE HOOD SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.
 - HOOD LIGHTING CIRCUIT:** PROVIDE TWO #12 AWG COPPER THHN COLOR CODED CONDUCTORS WITH ONE #12 AWG GREEN-INSULATED COPPER GROUND WIRE IN 3/4" EMT RACEWAY FROM PANELBOARD "K1" TO THE KITCHEN HOOD FOR CONNECTION TO THE 120-VOLT LIGHTING POWER INPUT OF THE HOOD. FINAL RACEWAY CONNECTION TO THE HOOD SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.
 - HOOD EXHAUST FAN CIRCUIT:** PROVIDE THREE #12 AWG COPPER THHN COLOR CODED CONDUCTORS WITH ONE #12 AWG GREEN-INSULATED COPPER GROUND WIRE IN 3/4" EMT RACEWAY FROM PANELBOARD "K1" TO THE KITCHEN HOOD ELECTRICAL PANEL FOR CONNECTION TO THE 208-VOLT, 3-PHASE, EXHAUST FAN POWER INPUT TERMINALS OF THE HOOD. ALSO PROVIDE SAME CIRCUIT WIRING AND RACEWAY FROM THE EXHAUST FAN OUTPUT TERMINALS OF THE HOOD ELECTRICAL BOX, THROUGH THE DISCONNECT SWITCH AND TO THE EXHAUST FAN MOTOR. FINAL RACEWAY CONNECTION TO THE HOOD AND TO THE MOTOR SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.
 - HOOD MAKE-UP AIR FAN CIRCUIT:** PROVIDE THREE #12 AWG COPPER THHN COLOR CODED CONDUCTORS WITH ONE #12 AWG GREEN-INSULATED COPPER GROUND WIRE IN 3/4" EMT RACEWAY FROM PANELBOARD "K1" TO THE KITCHEN HOOD ELECTRICAL PANEL FOR CONNECTION TO THE 208-VOLT, 3-PHASE, MAKE-UP AIR FAN POWER INPUT TERMINALS OF THE HOOD. ALSO PROVIDE SAME CIRCUIT WIRING AND RACEWAY FROM THE MAKE-UP AIR FAN OUTPUT TERMINALS OF THE HOOD ELECTRICAL BOX, THROUGH THE DISCONNECT SWITCH AND TO THE MAKE-UP AIR FAN MOTOR. FINAL RACEWAY CONNECTION TO THE HOOD AND TO THE MOTOR SHALL BE MADE WITH FLEXIBLE METAL CONDUIT.
 - DUCT HEATER DH-1 CIRCUIT:** EXISTING PANELBOARD "A1/A2" IS A #PR1A, 2-SECTION, 120/208 VOLT PANEL WITH A 400 AMP RATED MAIN CIRCUIT BREAKER. PROVIDE A 3-POLE, 80 AMP RATED CIRCUIT BREAKER IN PANELBOARD TO SERVE NEW DUCT HEATER "DH-1". PROVIDE FOUR #4 AWG COPPER THHN COLOR CODED CONDUCTORS WITH ONE #8 AWG GREEN-INSULATED COPPER GROUND WIRE IN 1.25" EMT RACEWAY FROM PANELBOARD "A1/A2" TO THE DUCT HEATER. FINAL RACEWAY CONNECTION TO THE DUCT HEATER SHALL BE MADE WITH FLEXIBLE METAL CONDUIT. IT IS NOTED ON THE MECHANICAL DRAWINGS THAT THE DUCT HEATER WILL BE SUPPLIED WITH A DISCONNECT SWITCH - NOTIFY ENGINEER IF A DISCONNECT IS NOT SUPPLIED WITH THE DUCT HEATER UNIT. UPDATE CIRCUIT DIRECTORY IN PANELBOARD TO REFLECT ADDED LOAD.
 - EXISTING DUCT HEATER DH-2:** REWORK AND EXTEND EXISTING SUPPLY RACEWAY AND CONDUCTORS CURRENTLY SERVING DUCT HEATER "DH-2" AS REQUIRED TO ACCOMMODATE RELOCATION OF THE EXISTING DUCT HEATER - SEE MECHANICAL DRAWINGS.

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UNIVERSITY OF SOUTH CAROLINA UPSTATE
 RENOVATIONS TO THE HORACE C. SMITH SCIENCE BUILDING'S RETAIL FOOD COURT (WOW)

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SEAL:

KEY PLAN:

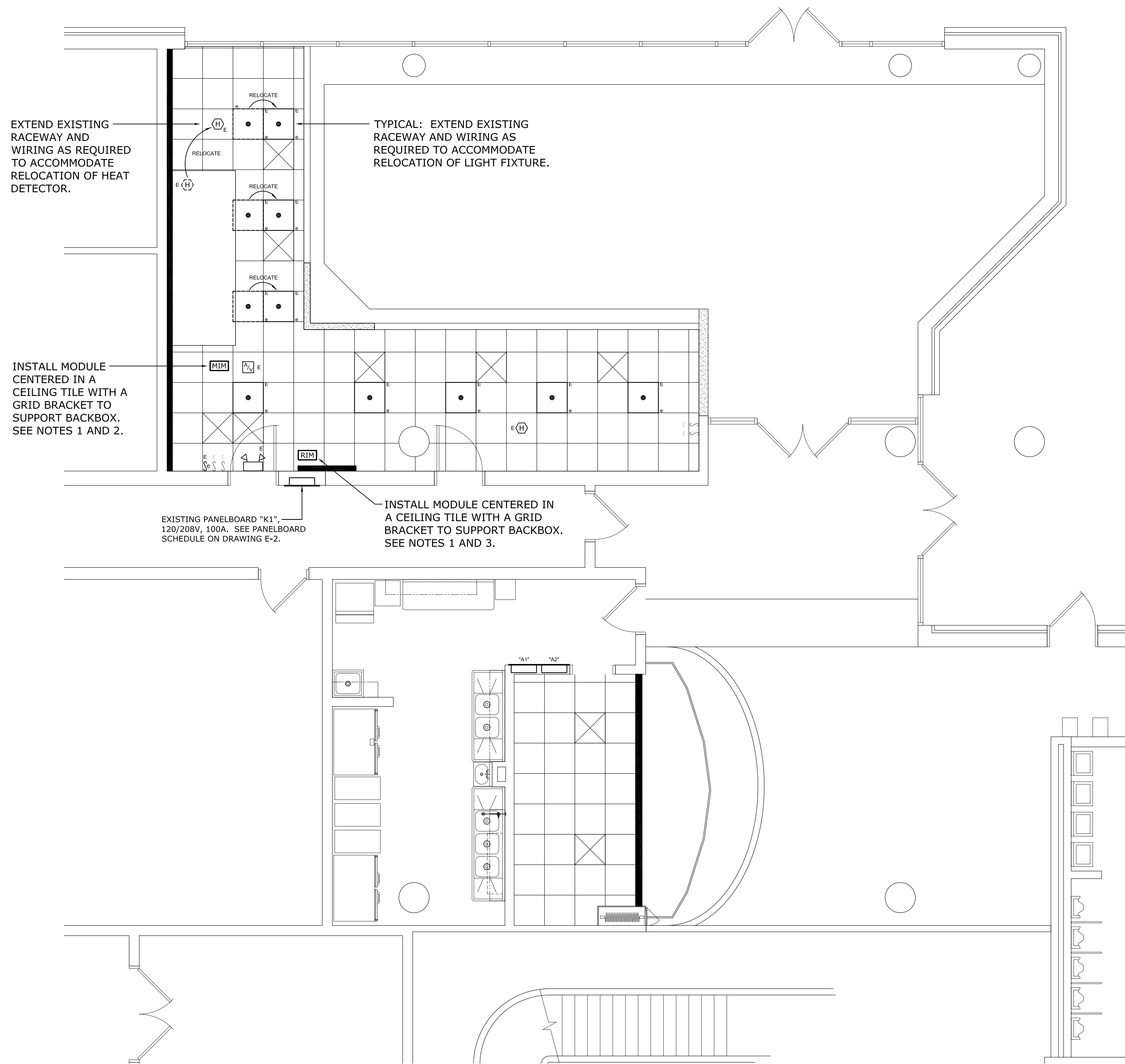
ISSUED FOR BID: 8/9/19

PROJECT NO.: SXO-2019-02
 DRAWN BY: JSJ
 CHECKED BY: JWJ
 SCALE: 1/4" = 1'-0"
 DRAWING TITLE:

ELECTRICAL RENOVATION PLAN

SHEET NO.:

E-2



EXTEND EXISTING RACEWAY AND WIRING AS REQUIRED TO ACCOMMODATE RELOCATION OF HEAT DETECTOR.

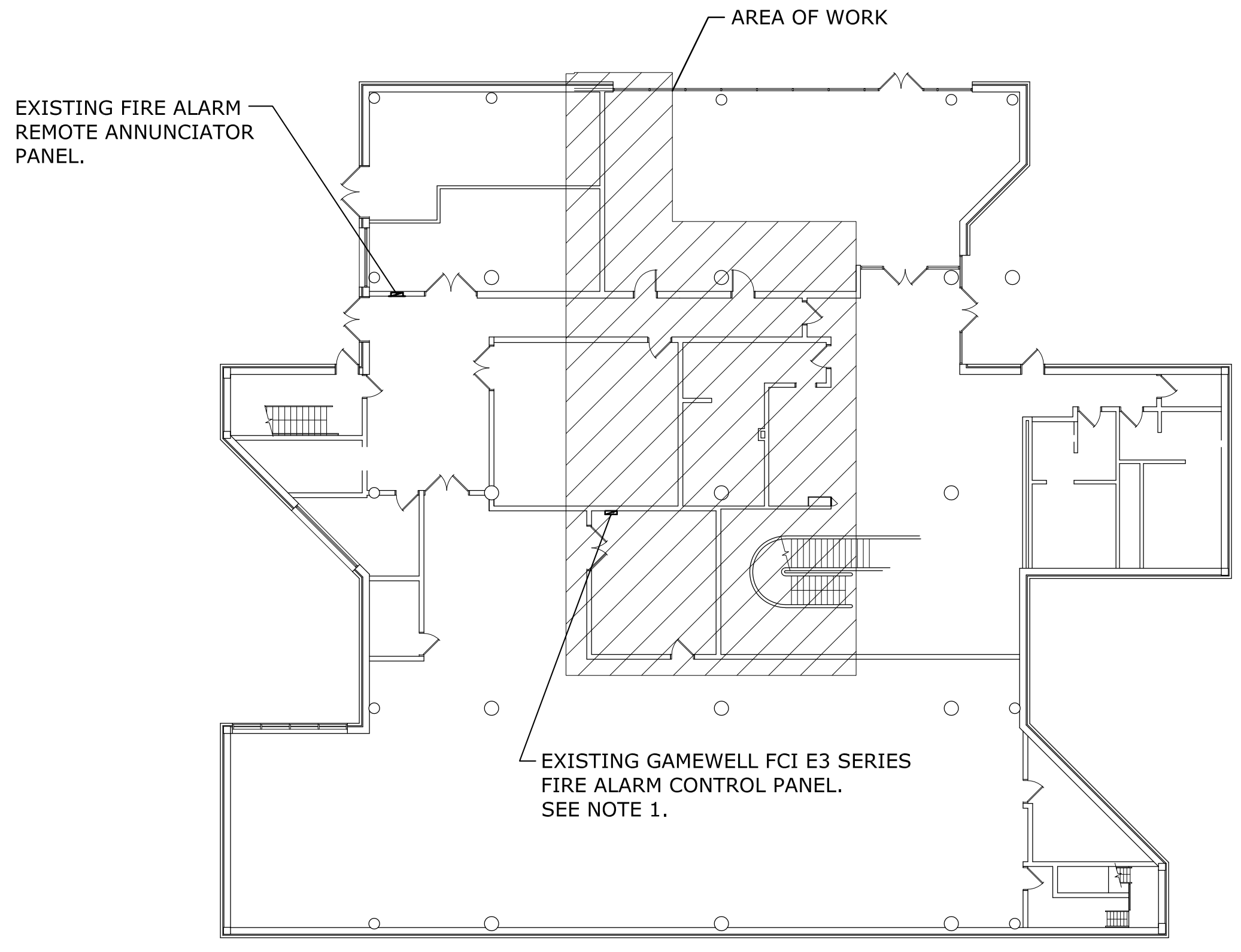
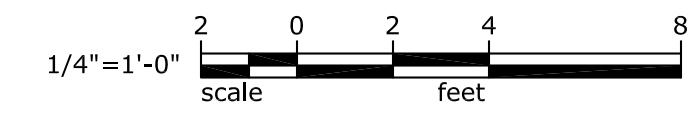
INSTALL MODULE CENTERED IN A CEILING TILE WITH A GRID BRACKET TO SUPPORT BACKBOX. SEE NOTES 1 AND 2.

TYPICAL: EXTEND EXISTING RACEWAY AND WIRING AS REQUIRED TO ACCOMMODATE RELOCATION OF LIGHT FIXTURE.

EXISTING PANELBOARD "K1", 120/208V, 100A. SEE PANELBOARD SCHEDULE ON DRAWING E-2.

INSTALL MODULE CENTERED IN A CEILING TILE WITH A GRID BRACKET TO SUPPORT BACKBOX. SEE NOTES 1 AND 3.

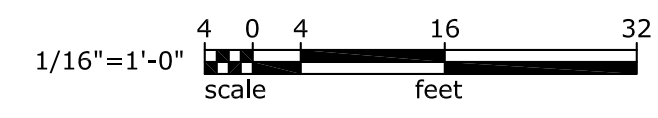
1 LIGHTING & FIRE ALARM RENOVATION PLAN
SCALE: 1/4" = 1'-0"



EXISTING FIRE ALARM REMOTE ANNUNCIATOR PANEL.

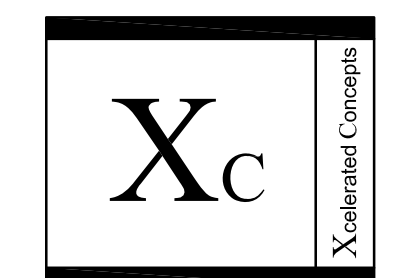
EXISTING GAMEWELL FCI E3 SERIES FIRE ALARM CONTROL PANEL. SEE NOTE 1.

2 KEY PLAN
SCALE: 1/16" = 1'-0"



RENOVATION NOTES

- EXISTING FIRE ALARM SYSTEM:** THE EXISTING FIRE ALARM CONTROL PANEL IS A GAMEWELL FCI E3 SERIES SYSTEM. PROCURE THE SERVICES OF A GAMEWELL FCI TECHNICIAN TO SUPERVISE THE REWORKING OF EXISTING DETECTION AND NOTIFICATION CIRCUITS AS REQUIRED TO SERVE NEW DETECTION DEVICES AND NOTIFICATION APPLIANCES. GAMEWELL FCI TECHNICIAN SHALL ALSO PROVIDE CUSTOM PROGRAMMING OF THE EXISTING FIRE ALARM CONTROL PANEL TO PROPERLY SUPPORT NEW DEVICES AND TO TEST THE MODIFIED FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 72 REQUIREMENTS.
- HOOD SUPPRESSION SYSTEM:** CONNECT MONITOR INTERFACE MODULE (MIM) TO MONITOR ALARM CONTACTS OF THE HOOD FIRE SUPPRESSION SYSTEM. WIRING SHALL BE CLASS B TYPE AND SHALL BE PROVIDED IN 3/4" EMT RACEWAY. FINAL RACEWAY CONNECTION TO HOOD SHALL BE MADE WITH FLEXIBLE METAL CONDUIT. PROVIDE SIGNALING LINE CIRCUIT WIRING IN 3/4" EMT RACEWAY FROM THE FIRE ALARM CONTROL PANEL TO THE MONITOR MODULE, OR T-TAP AN EXISTING LOCAL SIGNALING LINE CIRCUIT TO SERVE THE MODULE.
- SHUNT-TRIP FOR PANEL "K1" CIRCUIT BREAKERS:** PROVIDE 24-VDC POWER WIRING IN 3/4" EMT RACEWAY FROM FIRE ALARM PANELS IN THE MAIN ELECTRICAL ROOM TO PANELBOARD "K1" IN ORDER TO POWER 24-VDC COILS OF EXISTING SHUNT-TRIP BREAKERS LOCATED IN PANELBOARD "K1" (SEE PANELBOARD SCHEDULE ON DRAWING E-2). ROUTE POWER WIRING THROUGH RELAY INTERFACE MODULE (RIM) AND PROGRAM THE FIRE ALARM CONTROL PANEL TO TRIP ALL CIRCUIT BREAKERS WITH A SHUNT-TRIP FEATURE WHEN AN ALARM CONDITION OCCURS ON THE HOOD FIRE SUPPRESSION SYSTEM. PROVIDE SIGNALING LINE CIRCUIT WIRING IN 3/4" EMT RACEWAY FROM THE FIRE ALARM CONTROL PANEL TO THE RELAY MODULE, OR T-TAP AN EXISTING LOCAL SIGNALING LINE CIRCUIT TO SERVE THE MODULE.

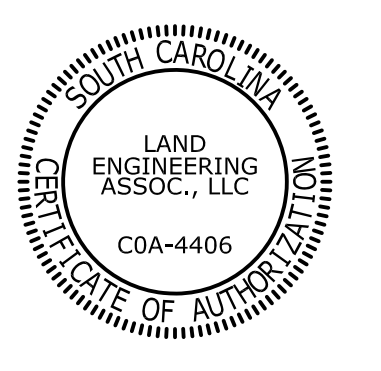


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SEAL:

KEY PLAN:

ISSUED FOR BID: 8/9/19

PROJECT NO.: SXO-2019-02
DRAWN BY: JSJ
CHECKED BY: JWL
SCALE: 1/4" = 1'-0"

DRAWING TITLE:
LIGHTING & FIRE ALARM RENOVATION PLAN

SHEET NO.:

E-3