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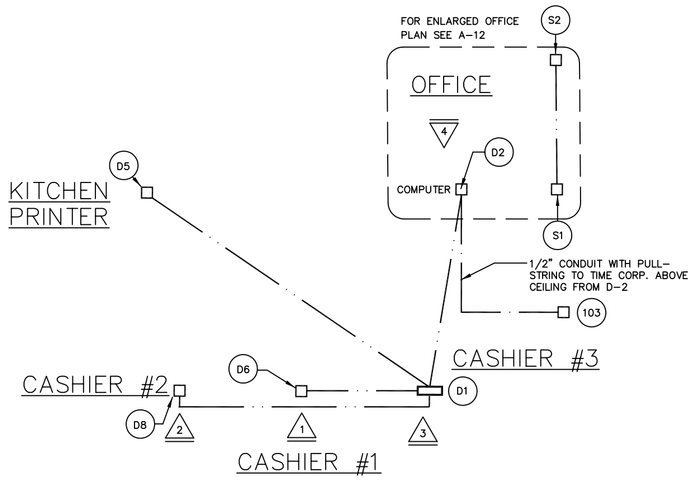
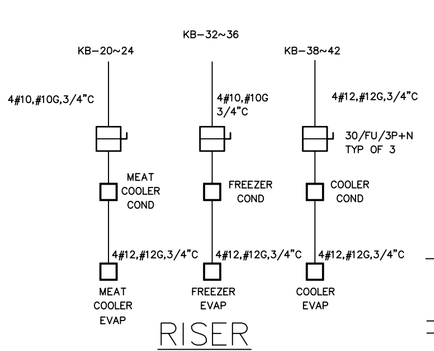
NO.	DIMENSION	LOCATION	REMARKS
D1	12" x 12" x 4" DEEP METAL DATA BOX	⊕ CASHIER #3	IN CABINET ±16" AFF
D2	4" x 2" x 2" DEEP METAL DATA BOX (SINGLE GANG BOX)	OFFICE	ABOVE COUNTERTOP, ±18" OFF CORNER
D5	4" x 2" x 2" DEEP METAL DATA BOX (SINGLE GANG BOX)	AT PRINTER SHELF	RECESSED AT 4'-9" AFF WITH 1" CONDUIT ROUTED FROM CASHIER STAND
D6	(2) SINGLE GANG PANCAKE BOXES BY DATA CONTRACTOR	⊕ CASHIER #1	IN CABINET ±16" AFF
D7	NOT USED		
D8	4" x 4" x 4" DEEP METAL DATA BOX	⊕ CASHIER 2	IN CABINET ±16" AFF
S1	4" x 4" x 2" JUNCTION BOX	WALL MOUNT (MOTION SENSOR)	88" AFF
S2	4" x 4" x 2" JUNCTION BOX	ALARM PANEL	81" AFF

NOTE: PROVIDE, PAINT GRADE, METAL COVER PLATES FOR ALL DATA JUNCTION BOXES.

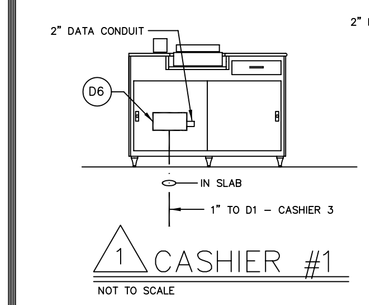
COMPUTER/DATA SYSTEM CONDUIT LAYOUT LINE LEGEND	
——— · ——— · ———	CONDUIT TO BE RUN OVERHEAD
——— ·· ——— ·· ———	CONDUIT TO BE RUN UNDER SLAB
———————	CONDUIT TO BE RUN IN WALL



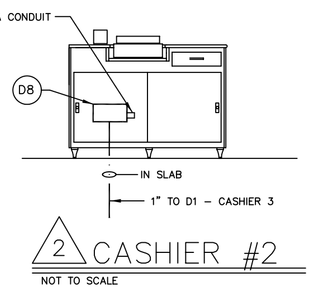
COMPUTER DATA LAYOUT
SIMPLIFIED



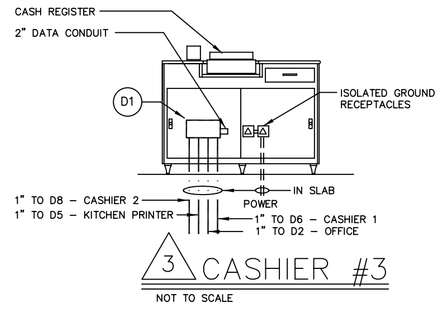
RISER
COOLERS/FREEZER REMOTE CONDENSERS



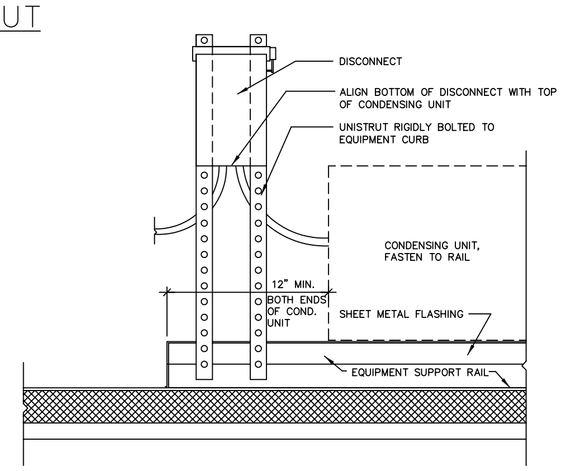
1 CASHIER #1
NOT TO SCALE



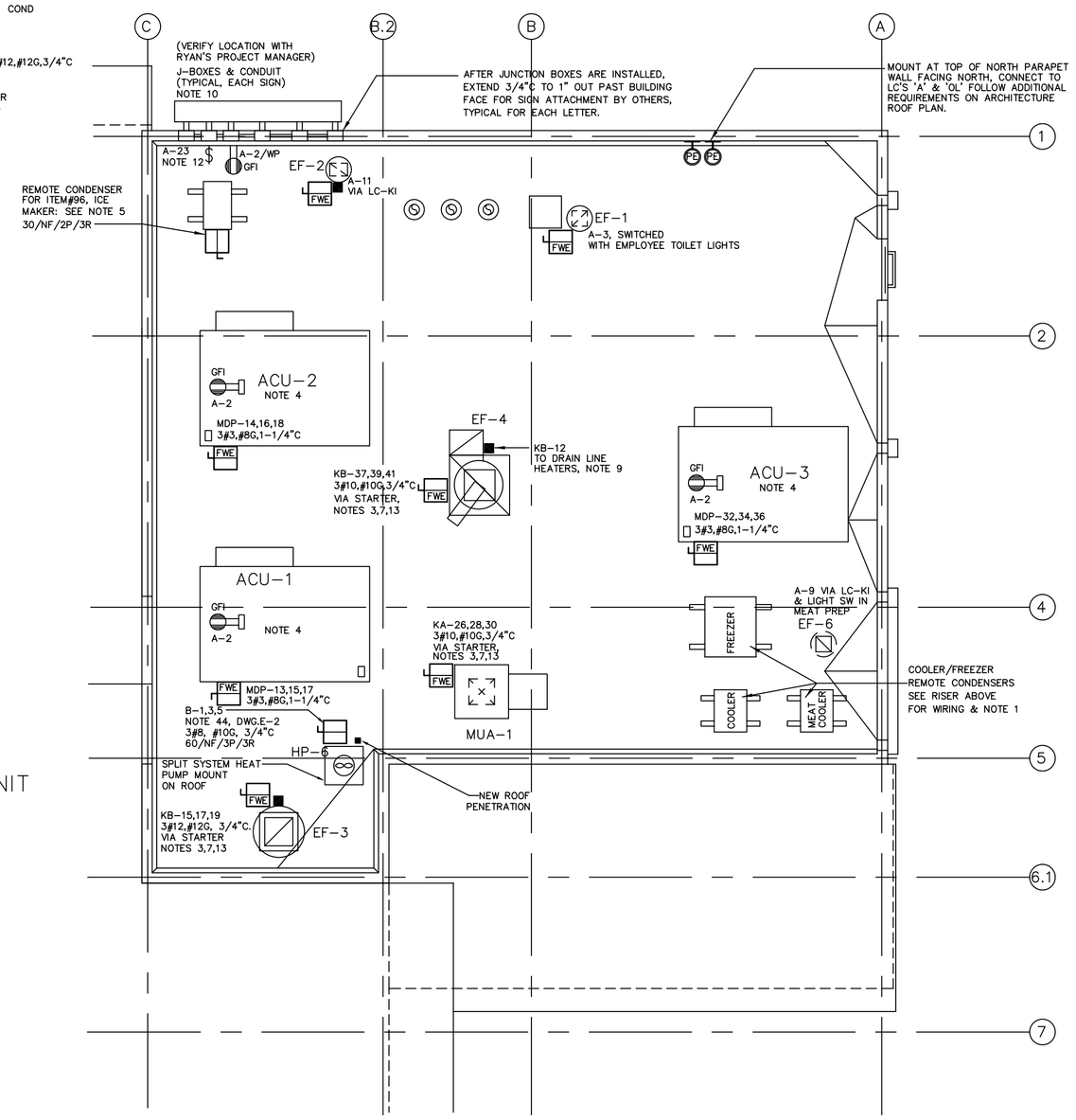
2 CASHIER #2
NOT TO SCALE



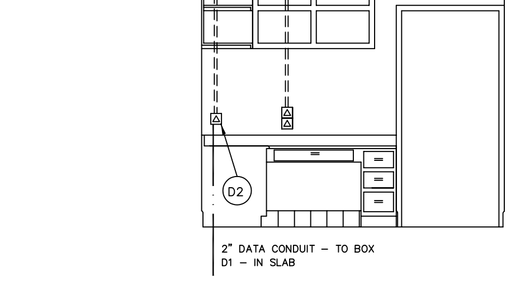
3 CASHIER #3
NOT TO SCALE



TYPICAL @ ROOF TOP CONDENSENING UNIT DISCONNECT MOUNT
NOT TO SCALE



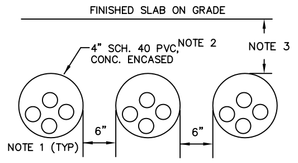
ELECTRICAL ROOF PLAN
SCALE: 3/16" = 1'-0"



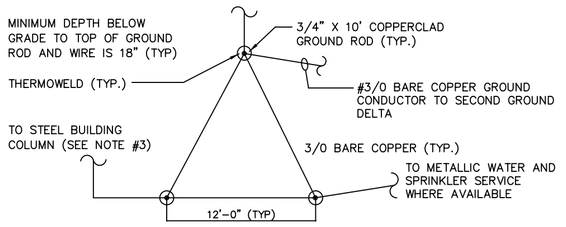
4 OFFICE
NOT TO SCALE

SERVICE ENTRANCE INSTALLATION NOTES:

1. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 6" SPACING BETWEEN ADJACENT RACEWAYS.
2. CONTRACTOR SHALL USE CLEAN COMPACTED FILL TO ASSURE UNIFORM HEAT DISSIPATION.
3. MINIMUM BURIAL DEPTH SHALL COMPLY WITH N.E.C. ART. 300-5, 18" MIN.
4. CONDUITS SHALL BE ENCASED WITH A MINIMUM OF 3" CONCRETE, ALL SIDES.
5. PANEL "MDP" SHALL BE EQUIPPED WITH A SEPARATE GROUNDING BUSBAR BONDED TO THE PANEL CABINET. NEUTRAL CONDUCTORS SHALL BE ISOLATED FROM GROUND PAST THE LOAD SIDE OF THE SERVICE DISCONNECTING MEANS.
7. IF OVERHEAD SERVICE IS REQUIRED BY THE UTILITY COMPANY, CONSULT THE ELECTRICAL ENGINEER.



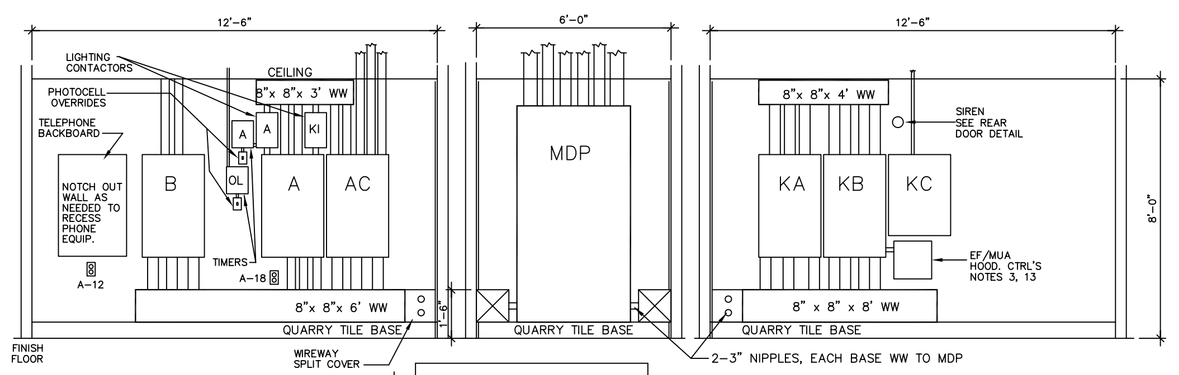
UNDERGROUND SERVICE ENTRANCE DETAIL

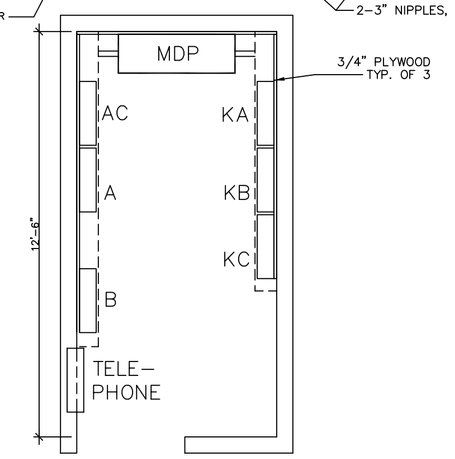


SERVICE GROUNDING ELECTRODE DETAIL

GROUNDING NOTES

1. ELECTRICAL CONTRACTOR TO MEASURE GROUND RESISTANCE AND SUBMIT RESULTS TO THE OWNER'S REPRESENTATIVE. RESISTANCE SHALL NOT EXCEED 5 OHMS.
2. GROUNDING SHALL COMPLY WITH ART. 250 OF THE NEC
3. PROVIDE STEEL COLUMN CONNECTION FROM EACH DELTA, TWO TOTAL.

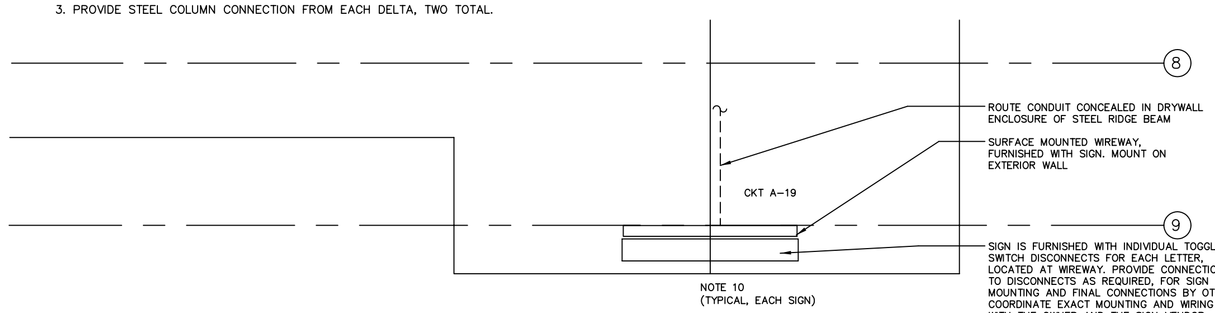




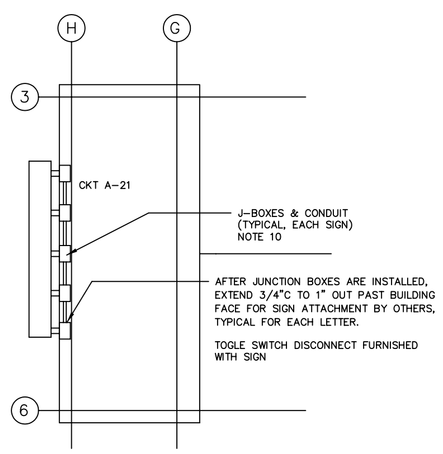
ELECTRICAL ALCOVE PLAN
SCALE: 3/8 = 1'-0"

ELECT ROOM ARRANGEMENT NOTES:

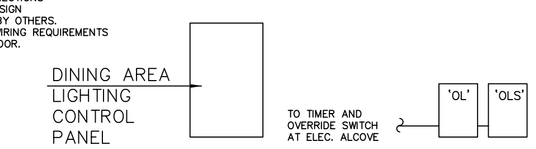
1. PROVIDE AND INSTALL 3/4" PLYWOOD FOR SUPPORT OF PANELBOARDS, CONDUIT DEVICES, AND MISCELLANEOUS EQUIPMENT AS INDICATED. (PLYWOOD TO BE PAINTED, ALL SIDES INCLUDING BACK, PRIOR TO INSTALLATION OF PANELBOARDS, CONDUIT DEVICES, AND ANY MISCELLANEOUS EQUIPMENT)
2. PANEL "KC" CIRCUITS SHALL BE ROUTED ONLY WITH LIKE CIRCUITS IN CONDUIT. DO NOT ROUTE THESE CIRCUITS IN SAME CONDUIT AS NORMAL POWER CIRCUITS.
3. PROVIDE WIREWAYS ABOVE PNLBDS FOR ELECTRICAL HOME RUNS. CONNECT WIREWAYS TO EACH ELECTRICAL PANEL WITH 2" OR 4"C, THREE OR MORE AS REQUIRED; PROVIDE 20% SPARE 'FILL.'
4. OMIT
5. RACEWAYS RUN ON THE SURFACE IN THE ELECTRICAL ALCOVE WALL SHALL BE EMT OR WIREWAY AND INSTALLED IN A NEAT AND WORKMANLIKE MANNER. FASTEN RACEWAYS TO WALL AS REQUIRED BY NEC ART. 346.
6. NIPPLES BETWEEN PNLBDS AND WW'S – 24" MAX (NEC ART 310, NOTES TO TABLES #8, EX. No. 3) AND NO MORE THAN 30 CURRENT CARRYING CONDUCTORS IN EACH;PROVIDE 20% SPARE 'FILL.'
7. REFER TO A-6, SEC 4, & ELEVATION SHEET A-11 FOR CURB DETAILS.
8. SEAL BETWEEN WW'S AND CURB, AND MDP AND CURB, WITH SILICONE CAULKING.
9. HEIGHT OF MDP AND PANELBOARDS A, B, AC, KA, AND KB WILL BE DIFFERENT FOR SQUARE D AND G.E. EQUIPMENT. (NQOD) SQUARE D 20"W x 35"H x 5.75D (AQ) GENERAL ELECTRIC 20"W x 49"H x 9.5D MDP SQUARE D 86"H x 42"W x 9.5D (VERIFY) MDP GENERAL ELECTRIC 75"H x 44"W x 16"D (VERIFY) ADJUST EXACT MOUNTING ARRANGEMENT TO SUIT MANUFACTURER USED AND COODINATE CURB DETAILS WITH G.C.

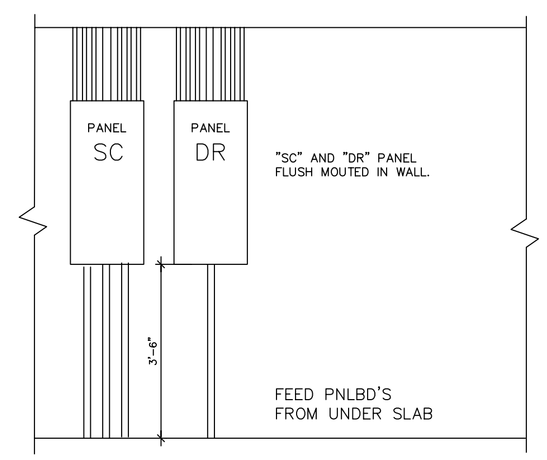


SIGNAGE CONNECTION DETAIL AT ENTRANCE
SCALE: 3/16" = 1'-0"



SIGNAGE CONNECTION DETAIL AT TOWER
SCALE: 3/16" = 1'-0"





PANELS 'DR', 'SC', & LTG CTRL ELEV
SCALE : NONE

GENERAL NOTES:

1. REMOTE CONDENSER UNITS (3) FOR FREEZER/COOLER UNITS ARE SUPPLIED BY AND INSTALLED BY OWNER'S EQUIPMENT VENDOR. ELECTRICAL CONTRACTOR SHALL MAKE ELECTRICAL POWER CONNECTIONS TO SERVICE DELIVERY POINT ON UNITS. CONTROL WIRING TO TERMINATE AT DEFROST TIMER. (WIRING OF TIMER ALSO BY ELEC. CONTRACTOR).
2. RACEWAY, WIRING DEVICES, DISCONNECTS, ETC. ON ROOF SHALL BE UL LISTED, NEMA 3R.
3. EF-3, EF-4, FED FROM PNLBD 'KB', AND MUA-1 FED FROM PNLBD 'KA', VIA EF/MUA CONTROL PANEL IN ELECTRICAL ALCOVE AS SHOWN ON PANEL SCHEDULES. SEE ELEMENTARY ON DRAWING V-3.
4. ACU 1 THRU 3 WILL BE FURNISHED FACTORY EQUIPPED WITH DISCONNECTING MEANS AND 15A GFI SERVICE RECEPTACLE.
5. REMOTE CONDENSER UNITS FOR ITEMS #96 (ICEMAKERS) ARE SUPPLIED BY AND INSTALLED BY OWNER'S EQUIPMENT VENDOR. ELECTRICAL CONTRACTOR SHALL CONNECT. PROVIDE 2#12, #12G, 3/4"C BETWEEN EACH ROOFTOP REMOTE CONDENSER/DISC AND EACH ICEMAKER INSIDE, F/C&P. SEE SHEET E-2, WAIT. STATION ONE FOR SIMILAR DETAIL.
6. NO MORE THAN 8 CURRENT CARRYING CONDUCTORS (2{3#+1N+1G}) SHALL BE RUN IN ANY CONDUIT (THRU 40A CKTS.)
7. CONDUIT PENETRATIONS THROUGH ROOF SHALL BE COORDINATED WITH GENERAL CONTRACTOR BEFORE INSTALLATION. ROUTE THROUGH HVAC OR OTHER EXISTING OPENINGS WHERE EVER POSSIBLE.
8. CONTRACTOR SHALL PULL OWNER FURNISHED CABLE IN COMPUTER DATA WIREWAYS. TERMINATION BY OTHERS.
9. DRAIN LINE HEATERS ARE NOT SWITCHED BY FAN DISCONNECT. HEATERS ARE "ON" AT ALL TIMES TO PREVENT GREASE FROM SOLIDIFYING IN THE DRAIN LINE. HEATERS FURNISHED BY FOOD SERVICE VENDOR, INSTALLED BY ELECTRICAL CONTRACTOR
10. ROUTE AND CONNECT 2 #10, 1 #10G, 3/4" CONDUIT AS SHOWN TO "RYAN'S" SIGNS PER OWNER'S SIGN PLAN. SIGNS ARE BY OTHERS. NUMBER AND EXACT LOCATION OF SIGNS ARE INDICATED ON OWNER'S SIGN PLAN.
11. ROOFING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL VENT BOOTS REQUIRED FOR ELECTRICAL ROOF PENETRATIONS. CONTRACTOR TO COORDINATE ROOF PENETRATIONS WITH ALL TRADES. REFERENCE DETAIL ON DRAWING A-3.
12. ROOF ACCESSIBLE DISCONNECT SWITCH, LOCKABLE 30A, 2-POLE, TOGGLE SWITCH MOUNTED IN "FS" BOX WITH WEATHER PROOF COVER.
13. CONTRACTOR TO BE RESPONSIBLE FOR FIELD WIRING FROM THE HOOD CONTROL PANEL TO EF-3, EF-4, MUA-1 AND THE FIRE SUPPRESSION SYSTEM INTERLOCKS. REFER TO THE WIRING DETAIL ON DRAWING V-3 FOR EXACT REQUIREMENTS.

REVISIONS

REV.	DESCRIPTION	DATE	BY
A			R.D.B.

RYAN'S FAMILY STEAK HOUSES, INC.
199 HUNT STREET · GREER, S.C. 29650 · (864) 879-1000

Ryan's® FAMILY STEAK HOUSE

ELECTRICAL ROOF, ALCOVE AND COMPUTER PLANS

DESIGNED: R.A.D. DATE: 08-13-99

STORE TYPE PT9L

DRAWING NO. E-3