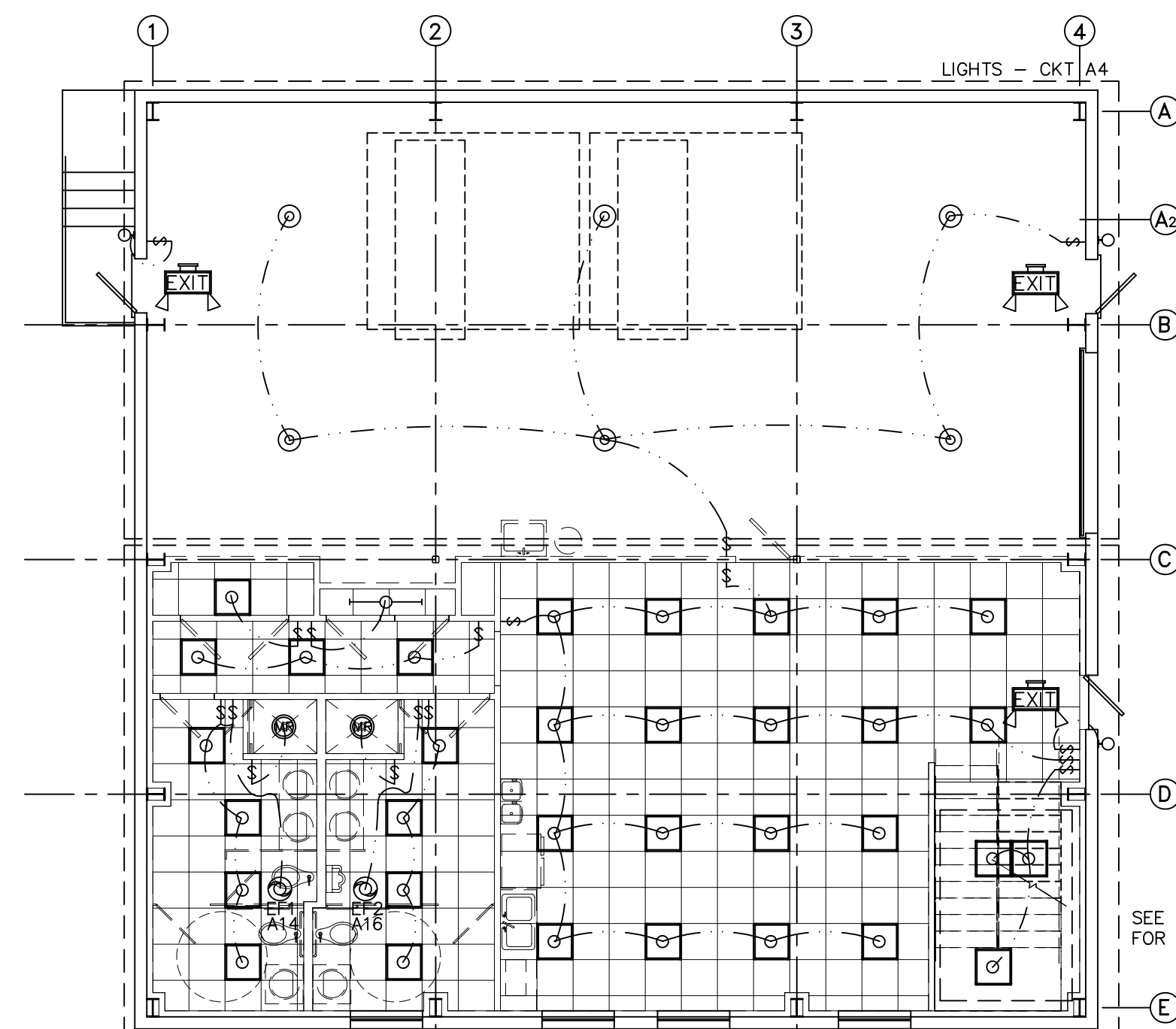
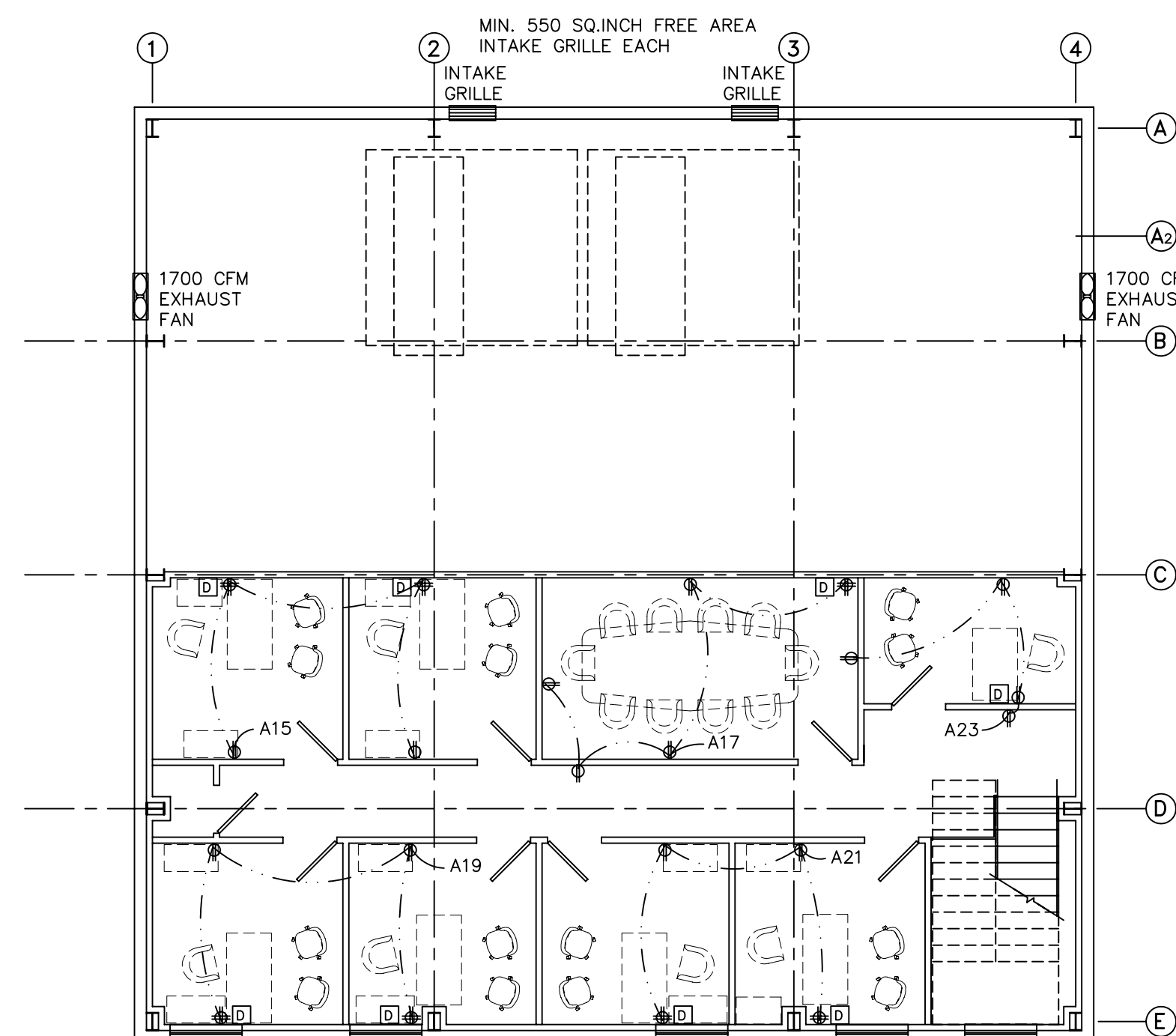


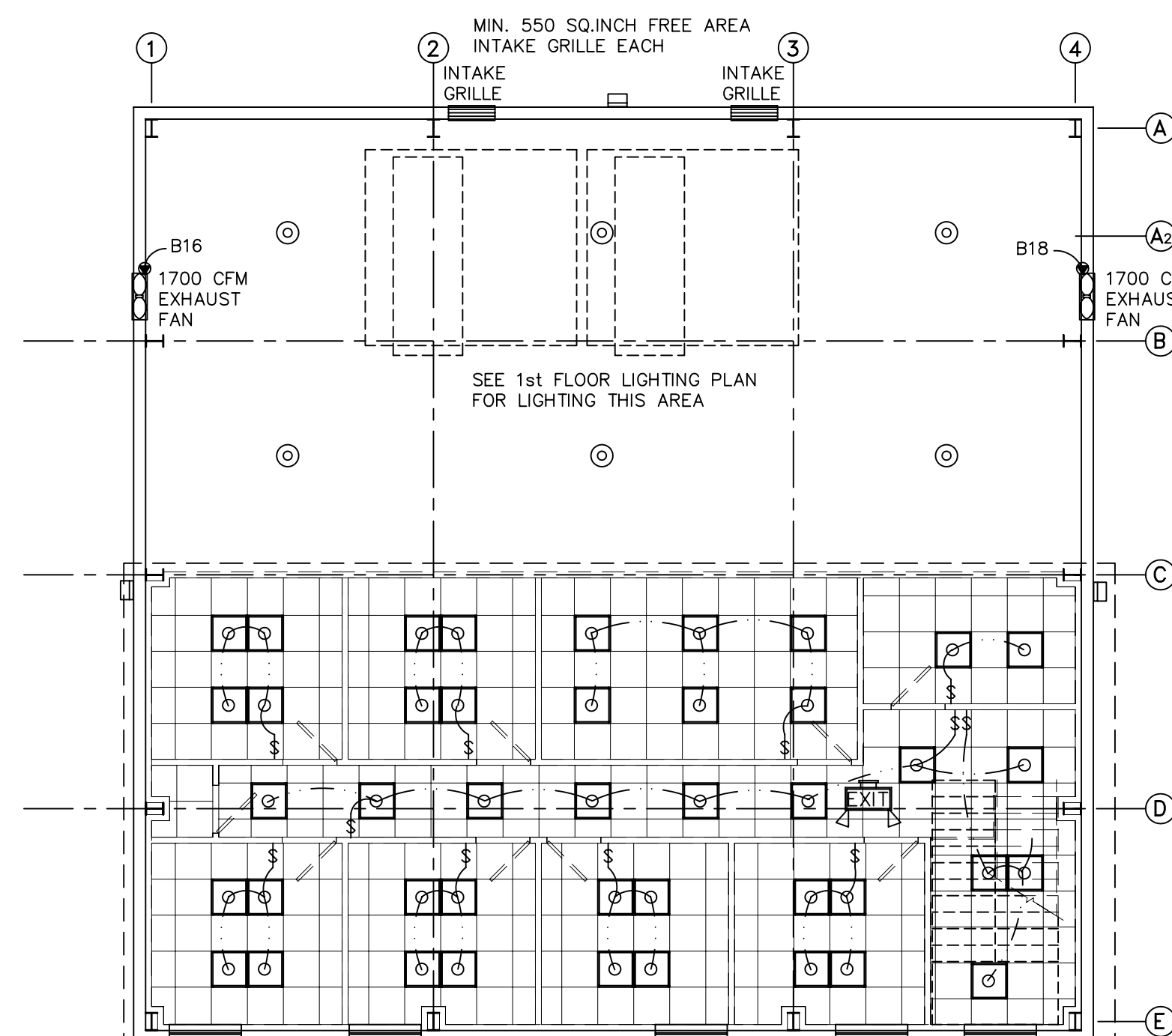
1st FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"



1st FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"



2nd FLOOR POWER PLAN
SCALE: 1/8" = 1'-0"



2nd FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

VERIFY WITH OWNER NUMBER AND LOCATIONS TELEVISION OUTLET 84" A.F.F., RUN CABLE RG-59 TO TELEPHONE BOARD, PROVIDE OUTLET AND CABLE TO MATCH, STUB 3/4" ABOVE CEILING. PROVIDE BLOCKING IN WALL FOR SUPPORT OF FUTURE BRACKET. PROVIDE INSULATED NYLON BUSHING ON END OF CONDUIT FOR PROTECTION OF WIRE.

NOTE: PROVIDE ROMEK WIRING, UNLESS NOT ACCEPTED BY LOCAL AUTHORITY, THEN PROVIDE BENT IN ANY EVENT, ALL WORK AND MATERIAL SHALL COMPLY WITH NEC

NOTE: ELECTRICAL CONTRACTOR MAY MODIFY ELECTRICAL PROVIDED THAT ALL WORK IS IN COMPLIANCE WITH NEC AND FBC

[D] DATA - FIELD VERIFY NUMBER & LOCATION

PROVIDE LIGHTING CONTROLS PER THE FLORIDA ENERGY CODE - SECTION C405 ELECTRICAL POWER AND LIGHTING SYSTEMS (MANDATORY) 5th EDITION

Lighting controls shall comply with the FBC Energy Conservation section C405.2. Provide manual and automatic controls for all spaces. Automatic controls will not be allowed in areas with electrical panels.

Install GFCI protection for 125V 15A and 20A receptacles located within 6' of sinks: 210.B(9)(5). ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE CODE APPROVED COMPONENTS AND EQUIPMENT, AND TO VERIFY THAT ALL CONNECTED LOAD AND ADJUST SERVICE AS REQUIRED. ALL WORK SHALL BE DONE PER THE FLORIDA BUILDING CODE, NEC AND ANY GOVERNING AUTHORITIES.

600.5 Branch Circuits. (A) Required Branch Circuit. Each commercial building and each commercial occupancy accessible to pedestrians shall be provided with at least one outlet in an accessible location at each entrance to each tenant space for sign or outline lighting system use. The outlet(s) shall be supplied by a branch circuit rated at least 20 amperes that supplies no other load. Service hallways or corridors shall not be considered accessible to pedestrians.

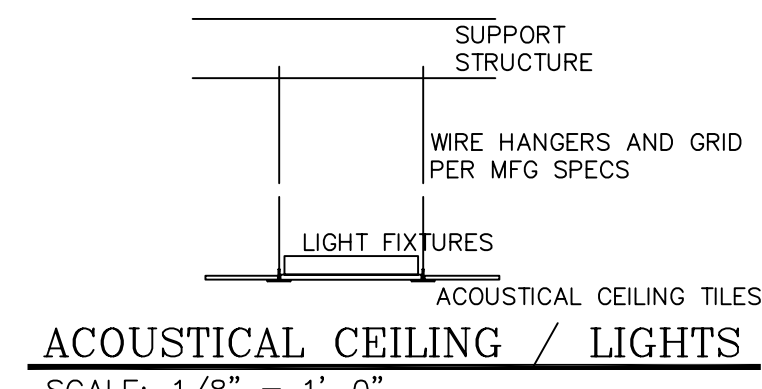
NOTE: EXIT-EMERGENCY LIGHTS CONNECTED TO LIGHT CKT IDENTIFIED FOR GENERAL LIGHTS IN CORRESPONDING LIGHT SPACE

PROVIDE A FUNCTIONAL TEST OF THE LIGHTING CONTROL SYSTEM PER FBC ENERGY CONSERVATION SECTION 408.3.

Provide Lights and Emergency Lights at Exterior Doors per FBC Section 1006.

Provide daylight zone control per C405.2.2.3.

Provide sign circuits per 600.5(A).



SECTION 808 ACOUSTICAL CEILING SYSTEMS 808.1 Acoustical ceiling systems. The quality, design, fabrication and erection of metal suspension systems for acoustical tile and lay-in panel ceilings in buildings or structures shall conform to generally accepted engineering practice, the provisions of this chapter and other applicable requirements of this code.

808.1.1 Materials and installation. Acoustical materials complying with the interior finish requirements of Section 803 shall be installed in accordance with the manufacturer's recommendations and applicable provisions for applying interior finish.

808.1.2 Fire-resistance-rated construction. Acoustical ceiling systems shall be installed in accordance with the provisions of ASTM C635 and ASTM C636.

808.1.3 Fire-resistance-rated construction. Acoustical ceiling systems that are part of fire-resistance-rated construction shall be installed in the same manner used in the assembly tested and shall comply with the provisions of Chapter 7.

ELECTRICAL LEGEND

⓪ GENERAL OUTLET	⓪ SPECIAL OUTLET	⓪ COMPUTER NETWORK CONNECTOR	⓪ HI-BAY 65 W LED EQUIV. TO 400 W MH
⓪ SWITCHED OUTLET	⓪ PHONE DISCONNECT	⓪ LIGHT SWITCH	⓪ MOISTURE RESISTANT
⓪ BRACKET LIGHT	⓪ 2' X 2' OR 2' X 4' 3 OR 4 BULB	⓪ EMERGENCY LIGHTS	⓪ WALL PAK (TIMER & PHOTO SENSOR)
⓪ BATTERY BACKUP	⓪ EXIT LIGHTS	⓪ BATTERY BACKUP	⓪ EXIT LIGHTS WITH EMERGENCY LIGHTS

FIELD VERIFY WITH OWNER NUMBER AND LOCATIONS

ALL LIGHTS TO BE LED

Calculated CFM

Width =	26 ft
Length =	52 ft
Height =	25 ft
Air Changes =	6 per Hour
Air Change in Minutes =	10 frequency
Area =	1352 sf
Volume =	33800 cf
Hourly Change =	3400 Fan Required (CFM)
2 FANS =	3400/2 = 1700 CFM (MIN./FAN)

NOTE:
2 OR MORE EXHAUST FANS MAY BE USED PROVIDED COMBINED EXHAUST EQUAL OR > TOTAL REQUIRED CFM
10 MINUTES / AIR CHANGE
ADJUST IF REQUIRED
MODIFICATION OF EXHAUST SYSTEM IS PERMITTED TO BE MODIFIED PROVIDED THE MODIFICATION IS IN COMPLIANCE WITH THE FBC

ASHRAE 90.1-2010 Automatic receptacle control is required for 125V receptacles (15 and 20A) Applications: private offices, open office areas (including modular partition receptacles), and computer classrooms 50% of all receptacles must be controlled Occupancy sensing or timeclock controls can be used for compliance Plug-in strips or devices cannot be used for compliance the receptacle shall be controlled and not the plug-in loads.

NOTES THE ELECTRICAL CIRCUITRY IS SHOWN FOR PANEL LOADING, THE ELECTRICAL CONTRACTOR MAY REDISTRIBUTE AS REQUIRED TO PROVIDE MOST ECONOMICAL METHOD OF CONNECTIONS AND SHORTEST RUNS. WIRE RUNS SHALL BE SUCH THAT THE VOLTAGE DROPS SHALL NOT EXCEED THOSE PERMITTED BY NEC. ALL ELECTRICAL SHALL BE IN COMPLIANCE WITH THE NEC COORDINATE ALL WORK WITH THE EQUIPMENT SUPPLIER AND COMPONENTS SELECTED OR DESIRED BY OWNER. ALL WIRING IN PATIENT CARE AREAS SHALL BE GROUNDED PER NEC 517.13 FBC 13-415 LIGHTING COMPLIANCE. ADD INFRARED MOTION SWITCHES IN ALL AREAS EXCEPT PATIENT TREATMENT AREAS (SEE DRAWINGS) REQUIRED IN SPACES OF 5000 SF OR GREATER (PROVIDE IF REQUESTED BY OWNER OR REQUIRED BY MUNICIPALITY) VERIFY ALL CONNECTED LOADS AND EQUIPMENT NAME PLATE AND ADJUST, IF REQUIRED. VERIFY WITH OWNER.

PROVIDE OVERCURRENT PROTECTION PER NEC 230-90, 230-94, 430-72 PROVIDE INTERRUPTING CAPACITY PER NEC 110-9 / 110-10 LOCATE OVERCURRENT DEVICES PER NEC 240-21

FIELD VERIFY LOCATION OF METER AND SERVICE CONNECTION. ALL ELECTRICAL TO BE VERIFIED AND IF ANY CONDITIONS FOUND THAT NEED TO BE MODIFIED, THEN CONTACT THE ENGINEER. VERIFY LENGTH OF WIRE RUNS AND INCREASE SIZE OF WIRE AS REQUIRED PER NEC IF THE VOLTAGE DROP EXCEEDS THE LIMITS AS SET BY NEC. PROVIDE DISCONNECTS AND ALL INTERFACING PER NEC. ALL WORK SHALL BE IN COMPLIANCE WITH NEC. PROVIDE SHUNT TRIP IF REQUIRED BY LOCAL AUTHORITY

NOTE: MIN. SHORT CKT CURRENT INTERRUPTING CAPACITY SYMMETRICAL AMPS PER UTILITY COMPANY

PROVIDE DISCONNECTS AND ALL INTERFACING PER NEC. ALL WORK SHALL BE IN COMPLIANCE WITH NEC. MIN. SHORT CKT CURRENT INTERRUPTING CAPACITY SYMMETRICAL AMPS PER UTILITY COMPANY MOTOR MANUFACTURER TO SUPPLY FAULT CURRENT ASYMMETRY AND SHALL BE INCLUDED IN TOTAL INTERRUPTING CURRENT CAPACITY

***** ELECTRICAL ***** OCPD = OverCurrent Protection Device GUTTER SIZING: Per Table 310-16 thru 310-19 ELECTRICAL CALC: Page 1-10 GENERAL LIGHTING: Per 220-3(b); 220-10(b) SHOW WINDOW LIGHTING: Per 220-12; 220-10(b) TRACK LIGHTING: 410-102 SIGN LIGHTING: Per 220-10(b); 600-5(b)(3) RECEPTACLES (CONTINUOUS LOAD): Per 220-3(c)(7); 220-10(b) RECEPTACLES (NON-CONTINUOUS LOAD): Per 220-3(c)(7); 220-10(b) (DEMAND FACTORS): Per 220-3(c)(7); 220-13

GENERAL CONDUIT NOTE: ALL CONDUIT TO BE RIGID METALIC OR PVC WITH BONDED GROUNDING PER NEC

ELECTRICAL CONTRACTOR TO VERIFY WITH THE OWNER ALL LIGHTING AND RECEPTACLES IN THE WAREHOUSE. IF REQUIRED, MODIFY OR INCREASE THE ELECTRICAL SERVICE. NOTE: ALL RECEPT. IN WAREHOUSE TO BE GFI

ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE CODE APPROVED COMPONENTS AND EQUIPMENT, AND TO VERIFY THAT ALL CONNECTED LOADS AND ADJUST SERVICE AS REQUIRED. ALL WORK SHALL BE DONE PER THE FLORIDA BUILDING CODE, NEC AND ANY GOVERNING AUTHORITIES.

PROVIDE FULL SIZED CABLE TO WATER PIPING AT SIZE REQUIRED PER TABLE 250-66 IF WATER SERVICE TO STRUCTURE IS METALLIC, CONNECTION TO BE MADE WITHIN 5' OF WATER ENTRANCE IN ACCORDANCE WITH 250-50(A), IF WATER SERVICE IS NON-METALLIC, MAKE CONNECTION TO METALLIC WATER PIPING (IF PRESENT) IN ACCORDANCE WITH 250-104(A)

BOND TO WATER PIPING IN BUILDING, PROVIDE BONDING JUMPERS AS REQUIRED IF ANY POSSIBLE PIPING INSULATION IS PRESENT IN ACCORDANCE WITH 250-68(B)

IF CONNECTION IS MADE IN ACCORDANCE WITH 250-50(A), PROVIDE GROUND TO GROUND ROD IN ACCORDANCE WITH 250-50(A)(2)

CONTINUE BOND WIRE AT FULL SIZE TO ANY GAS PIPING (IF PRESENT), EXPOSED STRUCTURAL STEEL (IF ISOLATED FROM OTHER STRUCTURE) AND ALL SEPARATELY DERIVED ELECTRICAL SYSTEMS OR OTHER SYSTEMS AS REQUIRED BY NEC 240-104

5/8"φ x 20'-0" LONG COPPER CLAD STEEL GROUND ROD INSTALLED IN ACCORDANCE WITH 250-50(C) ONLY PROVIDE IF REQUIRED PER 250-50(A)(2)

ELECTRICAL GROUNDING DETAIL

NTS

AP Construction Contractor, LLC 439 River Isle Ct. Longwood, Florida 32779

FOR New Control Room Florida Caribbean Distillers Co 425 Recker Highway, Auburndale, Polk County, Florida

JULIAN J. GARCIA Architect - Engineer 700 West Central Avenue Winter Haven, Florida Phone: (863) 294-4780 Web Site: jgarcia.com

1804908C-Auburndale

DRAWN: JJC CHECKED: JJC DATE: 10/25/19 SCALE: AS SHOWN JOB NUMBER: 1804908C-Auburndale SHEET: 6 OF 8 SHEETS

PANEL "A"

EQ. TO: SQ "D"	TYPE:	MAIN: BRK 100 AMP	VOLTS: 120/208 V, 3 Ph, 4W, 5-S.N.	PANEL: "A"	Type	Load
R 1 20 12	RECEPTACLE	720	2 20 12	LIGHTING	1320	L
R 3 20 12	RECEPTACLE	720	4 20 12	LIGHTING	620	L
R 5 20 12	RECEPTACLE	720	6 20 12	LIGHTING	1810	L
R 7 20 12	RECEPTACLE	900	8 20 12	LIGHTING	0	L
R 9 20 12	RECEPTACLE	1080	10 20 12	LIGHTING	0	L
R 11 20 12	RECEPTACLE	1080	12 20 12	LIGHTING	0	L
R 13 20 12	RECEPTACLE	900	14 20 12	EXHAUST FAN (EF1)	300	N
R 15 20 12	RECEPTACLE	1080	16 20 12	EXHAUST FAN (EF2)	300	N
R 17 20 12	RECEPTACLE	1080	18 20 12	IT SERVER	350	R
R 19 20 12	RECEPTACLE	1080	20 20 12	IT SERVER	350	R
R 21 20 12	RECEPTACLE	1080	22 20 12	REFRIGERATOR	1800	N
R 23 20 12	RECEPTACLE	700	24 20 12	REFRIGERATOR	1800	N
R 25 20 12	RECEPTACLE	0	26 20 12	MICROWAVE	1100	N
R 27 20 12	RECEPTACLE	0	28 20 12	WATER HEATER	0	N
R 29 20 12	RECEPTACLE	0	30 30 10	WATER HEATER	4500	N
R 31 20 12	RECEPTACLE	0	32 30 10	DRINKING FOUNTAIN	4500	N
R 33 20 12	RECEPTACLE	0	34 20 12	DRINKING FOUNTAIN	1120	N
R 35 20 12	RECEPTACLE	0	36 20 12	DRINKING FOUNTAIN	0	N
R 37 20 12	RECEPTACLE	0	38 20 12	DRINKING FOUNTAIN	0	N
R 39 20 12	RECEPTACLE	0	40 20 12	DRINKING FOUNTAIN	0	N
R 41 20 12	RECEPTACLE	0	42 20 12	DRINKING FOUNTAIN	0	N
		3600	3950	3500	7570	2040
					7910	

LOAD TYPES:
L = LIGHTING
K = KITCHEN
R = RECEPTACLES
H = HVAC / MOTORS
N = NONCONCURRENT
E = MISC.EQUIPMENT
M = LARGEST MOTOR

Connected: 3600
Diversified Design Load: 80 Amps x 1.25 = 100 Amp Panel

PANEL "B"

EQ. TO: SQ "D"	TYPE:	MAIN: BRK 400 AMP	VOLTS: 120/208 V, 3 Ph, 4W, 5-S.N.	PANEL: "B"	Type	Load
R 1 20 12	RECEPTACLE	8000	2 80 8	VELO FILTER 1	20300	L
R 3 20 12	AC UNIT #1	8000	4 80 8	VELO FILTER 1	20300	L
R 5 20 12	NON-CONCURRENT	8000	6 80 8	VELO FILTER 1	20300	L
R 7 20 12	NON-CONCURRENT	8000	8 80 8	VELO FILTER 1	20300	L
R 9 20 12	AC UNIT #2	6000	10 80 8	VELO FILTER 2	20300	L
R 11 20 12	NON-CONCURRENT	6000	12 80 8	VELO FILTER 2	20300	L
R 13 20 12	AHU #1	1840	14 20 12	WAREHOUSE FAN 1	0	N
R 15 20 12	AHU #2	1840	16 20 12	WAREHOUSE FAN 2	3511	N
R 17 20 12	WAREHOUSE FAN 1	0	18 20 12	WAREHOUSE FAN 2	3531	N
R 19 20 12	WAREHOUSE FAN 1	0	20 20 12	WAREHOUSE FAN 2	0	N
R 21 20 12	WAREHOUSE FAN 1	0	22 20 12	WAREHOUSE FAN 2	0	N
R 23 20 12	WAREHOUSE FAN 1	0	24 20 12	WAREHOUSE FAN 2	0	N
R 25 20 12	WAREHOUSE FAN 1	0	26 20 12	WAREHOUSE FAN 2	0	N
R 27 20 12	WAREHOUSE FAN 1	0	28 20 12	WAREHOUSE FAN 2	0	N
R 29 20 12	WAREHOUSE FAN 1	0	30 30 10	WAREHOUSE FAN 2	0	N
R 31 20 12	WAREHOUSE FAN 1	0	32 30 10	WAREHOUSE FAN 2	0	N
R 33 20 12	WAREHOUSE FAN 1	0	34 20 12	WAREHOUSE FAN 2	0	N
R 35 20 12	WAREHOUSE FAN 1	0	36 20 12	WAREHOUSE FAN 2	0	N
R 37 20 12	WAREHOUSE FAN 1	0	38 20 12	WAREHOUSE FAN 2	0	N
R 39 20 12	WAREHOUSE FAN 1	0	40 20 12	WAREHOUSE FAN 2	0	N
R 41 20 12	WAREHOUSE FAN 1	0	42 20 12	WAREHOUSE FAN 2	0	N
		13840	13840	12000	40800	44131
					44131	

LOAD TYPES:
L = LIGHTING
K = KITCHEN
R = RECEPTACLES
H = HVAC / MOTORS
N = NONCONCURRENT
E = MISC.EQUIPMENT
M = LARGEST MOTOR

Connected: 13840
Diversified Design Load: 280 Amps x 1.25 = 350 Amp Panel