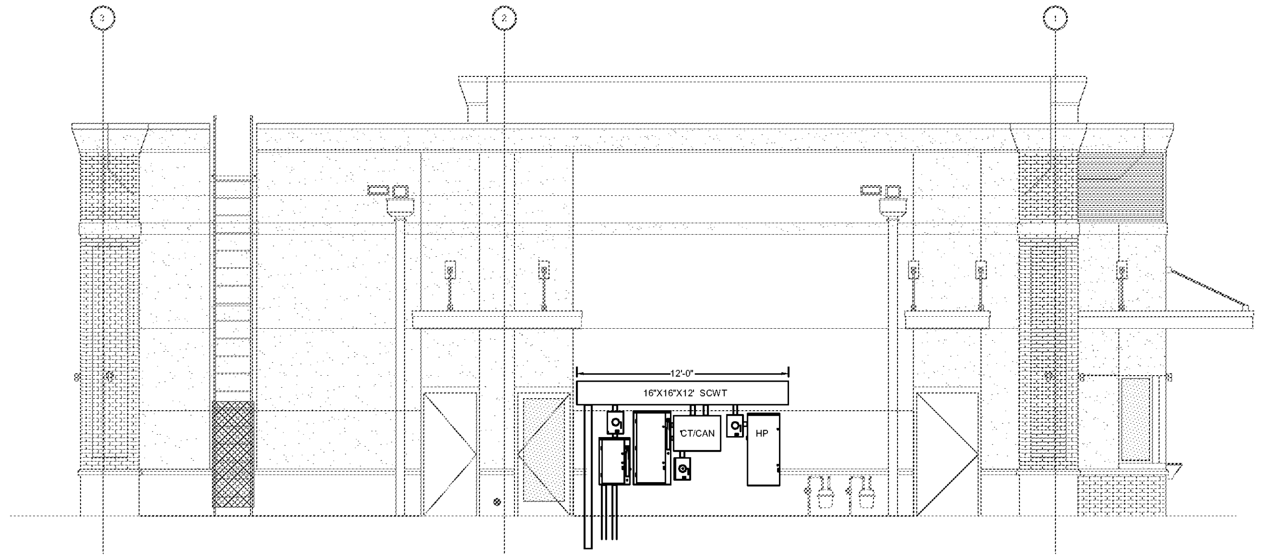
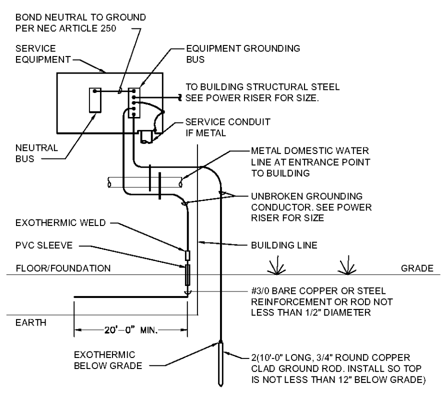


REAR ELEVATION DETAIL

6 / E-2.1 — SCALE: 1/4" = 1'-0"

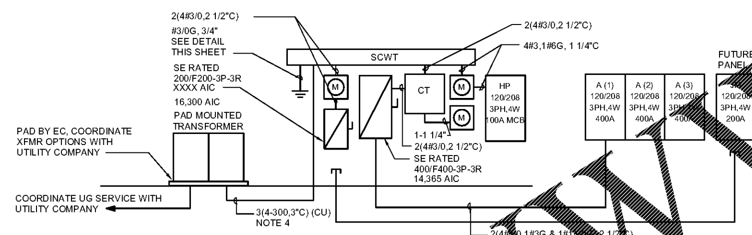
NOTES:
1. DASHED ITEMS ARE FUTURE WORK UNDER SEPARATE PERMIT.
2. DESIGN BASED ON 'SQUARE D' EQUIPMENT.
3. GENERAL CONTRACTOR TO PROVIDE TO-SCALE ELEVATION SHOWING ALL EQUIPMENT TO BE INSTALLED ON ELECTRICAL WALL BRFORE ANY MATERIAL ARE ORDERED OR INSTALLED. ELECTRICAL ENGINEER & OWNER TO APPROVE DRAWING PRIOR TO ANY WORK BEING PERFORMED.



RESISTANCE TO GROUND SHALL BE LESS THAN 25 OHMS

SERVICE GROUNDING DETAIL

1 / E-2.1 — NO SCALE



POWER RISER DIAGRAM

2 / E-2.1 — DIAGRAMMATIC ONLY

NOTES:
1. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY [illegible] CONFIRM AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER & AT CT CABINET. NOTIFY ENGINEER PRIOR TO GEAR SUBMITTALS IF FIELD CONDITIONS ARE DIFFERENT THAN INDICATED HERE IN.
2. THE CONTRACTOR SHALL COORDINATE WITH TENANT UPFIT PLANS PRIOR TO PLACING INTERIOR PANELBOARD AND GENERATING SUBMITTALS.
3. THE CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGHING IN CONDUITS FOR GEAR PLACEMENT. MATCH ARCHITECTURAL ELEVATIONS. BASIS OF DESIGN IS SQUARE D.
4. THE CONTRACTOR SHALL COORDINATE AND PROVIDE SECONDARY FEEDER FROM TRANSFORMER TO SERVICE TROUGH. COORDINATE REQUIREMENTS WITH UTILITY COMPANY PRIOR TO ROUGH IN.

PANELBOARD SCHEDULE - 'A'

MAIN: 400A MLO W/FEED THRU LUGS | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LTG	REC	MTR	A/C	HTG	KIT	MISC	LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1	12	1/2"	REAR AIR CURTAIN							0.5	1.5							DIRECTIONAL SIGNS	1/2"	12	1	20	2
3	20	1	12	1/2"	TEMP LTS/REC	0.2	0.2						1.0							MENU BOARD	1/2"	12	1	20	4
5	20	1			SPARE								1.5							DIRECTIONAL SIGNS	1/2"	12	1	[illegible]	6
7	20	1			SPARE										1.0					DRIVE THRU AIR CURTA	1/2"	12	[illegible]	[illegible]	8
9	20	1			SPARE									0.9						SERVICE RECEPTS.	1/2"	[illegible]	[illegible]	[illegible]	10
11	20	1			SPARE														0.2	LIGHTING CONTROL	1/2"	12	[illegible]	20	12
13					SPACE								1.0							ORDER POINT CANO[illegible]	[illegible]	12	[illegible]	20	[illegible]
15					SPACE								1.0							DT PRE-MENU	1/2	[illegible]	[illegible]	20	16
17					SPACE														0.5	FIRE SMOKE DTR [illegible]	1/2"	[illegible]	1	[illegible]	18
19					SPACE												1.5			RPZ B[illegible]OW	1/2"	[illegible]	1	20	20
21					SPACE												1.5			RP[illegible]BACK[illegible]LOW	1/2"	[illegible]	1	20	22
23					SPACE								1.2							S[illegible]AGE	[illegible]	12	1	20	24
25					SPACE								1.2							S[illegible]GE	1/2"	12	1	20	26
27					SPACE									0.5						REC[illegible]	1/2"	12	1	20	28
29					SPACE															SPAC[illegible]					30
31					SPACE											[illegible]									32
33	20	1	12	1/2"	EF-1	0.1	0.2					0.2				[illegible]				[illegible]3	3/4"	8	3	35	34
35	20	1	12	1/2"	DRIVE THRU WINDOW							1.2													36
37									5.5							[illegible]									38
39	60	3	6	1"	RTU-1				5.5							5.5				RTU-2	1"	6	3	60	40
41									5.5							5.5									42
43																				NO SPACE					44
45	400	3	SEE	RISER	PANEL 'A2/A3'															NO SPACE					46
47					FEED THRU															NO SPACE					48

LIGHTING (KVA): [illegible]	LOAD TOTALS: 0.3 / 0.[illegible] / [illegible].0 / 16.6 / 0.0 / 0.0 / 1.9 — [illegible].4 / 1.4 / 1.0 / 26.0 / 3.0 / 0.0 / 0.7		CONNECTED LOAD (KVA): 59.7
RECEPTACLES (KVA): [illegible]			DEMAND LOAD (KVA): 61.6
MOTORS (KVA): 1.[illegible]	PHASE A	21 KVA	174.0 AMPS
A/C (KVA): 42.[illegible]	PHASE B	20 KVA	168.5 AMPS
HEATING (KVA): 3.0	PHASE C	19 KVA	156.5 AMPS
KITCHEN (KVA): 0.0		KVA	AMPS
MISCELLANEOUS (KVA): [illegible]6			

CONNECTED LOAD (AMPS): 165.6
DEMAND LOAD (AMPS): 171.6

NOTES: ** - INDICATES BREAKER WITH LOCK OFF DEVICE.

COORDINATE ADDITIONAL PANEL SECTIONS AND BREAKER CONFIGURATION WITH TENANT PANELS PRIOR TO ORDERING

NEMA 3R, SER, PANELBOARD SCHEDULE - 'HP'

MAIN: [illegible]00A MCB | VOLTAGE: 208/120 | PHASE: 3 | WIRE: 4 | MOUNTING: SURFACE | AIC: 22,000 | NOTES:

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LTG	REC	MTR	A/C	HTG	KIT	MISC	LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1			SPARE								0.2	0.4						REC/LIGHTS	1/2"	12	1	20	2
3	20				SPARE								1.2							PYLON SIGN	1/2"	12	1	20	4
5					SPACE								0.8							SITE LIGHTING	3/4"	10	1	20	6
7					SPACE														0.2	LIGHTING CONTROL	1/2"	12	1	20	8
9					SPACE								0.8							SITE LIGHTING	3/4"	10	1	20	10
11					SPACE								0.5							BUILDING LIGHTS	1/2"	12	1	20	12
13					SPACE															SPACE					14
15					SPACE															SPACE					16
17					SPACE															SPACE					18
19					SPACE															SPACE					20
21					SPACE															SPACE					22
23					SPACE															SPACE					24

LIGHTING (KVA): 3.5	LOAD TOTALS: 0.0 / 0.0 / 0.0 / 0.0 / 0.0 / 0.0 / 0.0 — 3.5 / 0.4 / 0.0 / 0.0 / 0.0 / 0.0 / 0.2		CONNECTED LOAD (KVA): 4.1
RECEPTACLES (KVA): 0.4			DEMAND LOAD (KVA): 5.0
MOTORS (KVA): 0.0	PHASE A	1 KVA	6.3 AMPS
A/C (KVA): 0.0	PHASE B	2 KVA	16.7 AMPS
HEATING (KVA): 0.0	PHASE C	1 KVA	11.2 AMPS
KITCHEN (KVA): 0.0		KVA	AMPS
MISCELLANEOUS (KVA): 0.2			

CONNECTED LOAD (AMPS): 11.4
DEMAND LOAD (AMPS): 13.8

NOTES: ** - INDICATES BREAKER WITH LOCK OFF DEVICE.

PANEL 'HP' DEMAND CALCS

LIGHTING	3.54	KVA X	125	%	=	4.4 KVA
RECEPTAC TOTAL	0.36	KVA				
1ST	10.00	KVA X	100	%	=	0.4 KVA
REMAIN	0.00	KVA X	50	%	=	0.0 KVA
MOTORS	0.00	KVA X	100	%	=	0.0 KVA
A/C	0.00	KVA X	100	%	=	0.0 KVA
HEATING	0.00	KVA X	100	%	=	0.0 KVA
LOCKED-OUT LOAD	____	KVA X	100	%	=	0.0 KVA
KITCHEN	0.00	KVA X	65	%	=	0.0 KVA
MISCELLANEOUS	0.20	KVA X	100	%	=	0.2 KVA
TOTAL =		13.8 amps			=	5.0 KVA

PANEL 'A' DEMAND CALCS

LIGHTING	8.70	KVA X	125	%	=	10.9 KVA
RECEPTAC TOTAL	1.80	KVA				
1ST	10.00	KVA X	100	%	=	1.8 KVA
REMAIN	0.00	KVA X	50	%	=	0.0 KVA
MOTORS	1.00	KVA X	100	%	=	1.0 KVA
A/C	42.55	KVA X	100	%	=	42.6 KVA
HEATING	3.00	KVA X	100	%	=	3.0 KVA
LOCKED-OUT LOAD	____	KVA X	100	%	=	0.0 KVA
KITCHEN	0.00	KVA X	65	%	=	0.0 KVA
MISCELLANEOUS	2.60	KVA X	100	%	=	2.6 KVA
TOTAL =		171.6 amps			=	61.6 KVA

VOLTAGE DROP SCHEDULE

120 VOLT BRANCH CIRCUITS UP TO 8 AMPS

RUN DISTANCE IN FEET			WIRE SIZE AWG
1'	-	120'	[illegible]
121'	-	[illegible]0'	#[illegible]
191'	-	[illegible]	#8
301'	-	47[illegible]	#6

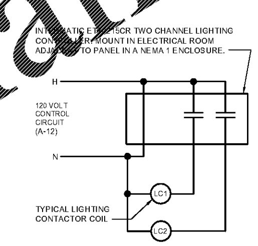
120 VOLT BRANCH CIRCUITS 9 AMPS [illegible] 14 AMPS

RUN DISTANCE IN FEET			WIRE SIZE AWG
1'	-	[illegible]	#12
66'	-	110'	#10
111'	-	170'	#8
171'	-	270'	#6

277 VOLT BRANCH CIRCUITS UP TO 14 AMPS

RUN DISTANCE IN FEET			WIRE SIZE AWG
1'	-	160'	#12
161'	-	250'	#10
251'	-	390'	#8
391'	-	620'	#6

WIRE SIZES INDICATED IN PANEL SCHEDULES ARE MINIMUM WIRE SIZES. CONTRACTOR SHALL UPSIZE WIRES BASED ON LOAD AND LENGTH OF RUN AS INDICATED IN SCHEDULE ABOVE.

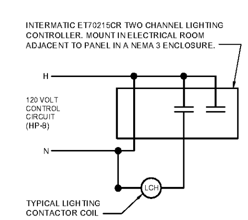


CONTACTOR	COIL VOLTAGE	POLES	CIRCUITS SWITCHED
LC-1	120	9	A-2,4,6,8,10,24,26
LC-2	120	6	SPARE

LIGHTING CONTROL DETAIL

2A / E-2.1 — NO SCALE

SEE PART 9 SPECIFICATIONS SHEET E-0.1 FOR PROGRAMMING REQUIREMENTS OF TIME CLOCK.

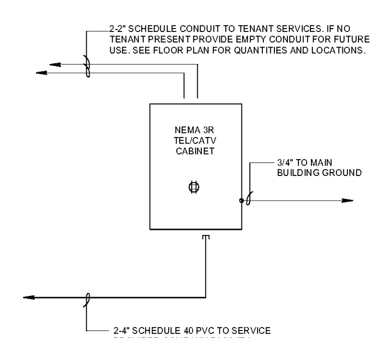


CONTACTOR	COIL VOLTAGE	POLES	CIRCUITS SWITCHED
LC-H	120	9	HP-4,6,10,12

LIGHTING CONTROL DETAIL

2B / E-2.1 — NO SCALE

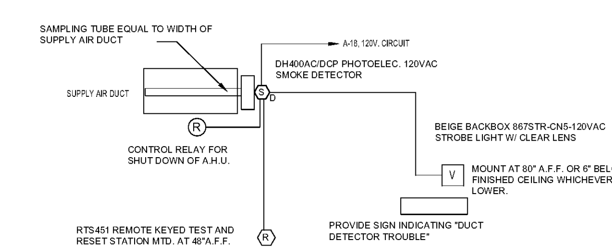
SEE PART 9 SPECIFICATIONS SHEET E-0.1 FOR PROGRAMMING REQUIREMENTS OF TIME CLOCK.



COORDINATE ALL WORK WITH UTILITY CO. REPRESENTATIVE.

TELEPHONE RISER DIAGRAM

3 / E-2.1 — DIAGRAMMATIC ONLY



DUCT DETECTOR MOUNTING DETAIL

4 / E-2.1 — DIAGRAMMATIC ONLY

SIGNALING EQUIPMENT MODEL NUMBERS ARE FOR EDWARDS SIGNALING AND SECURITY SYSTEMS.
DUCT DETECTOR & REMOTE TEST MODEL NUMBERS ARE FOR SYSTEM SENSOR.

ALL EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE LATEST LOCAL CODES.

SMOKE DETECTOR TO BE SUPPLIED BY EC TO MC FOR INSTALLATION INTO DUCTWORK.
EC TO PROVIDE, WIRE AND TEST OPERATION OF DETECTOR AND NOTIFICATION DEVICES.

SEE MECHANICAL PLANS FOR LOCATION OF A/V DEVICES.

ROBERT JOHNSON architects
1808 West Morehead St.
Charlotte, NC 28208
T 704 / 342.1058
F 704 / 342.3043

STAMPS

CONSULTANT

WAVE ENGINEERING

ALBEMARLE SHOPS

CHARLOTTE, NC

PROJECT NUMBER 1943

ISSUE DATE

FOR CONSTRUCTION ONLY 07.01.20

DRAWING DATA

DRAWN BY: GKG
CHECKED BY: BRD/MJS

SHEET TITLE

ELECTRICAL RISERS, SCHEDULES, & DETAILS

SHEET NUMBER

E-2.1