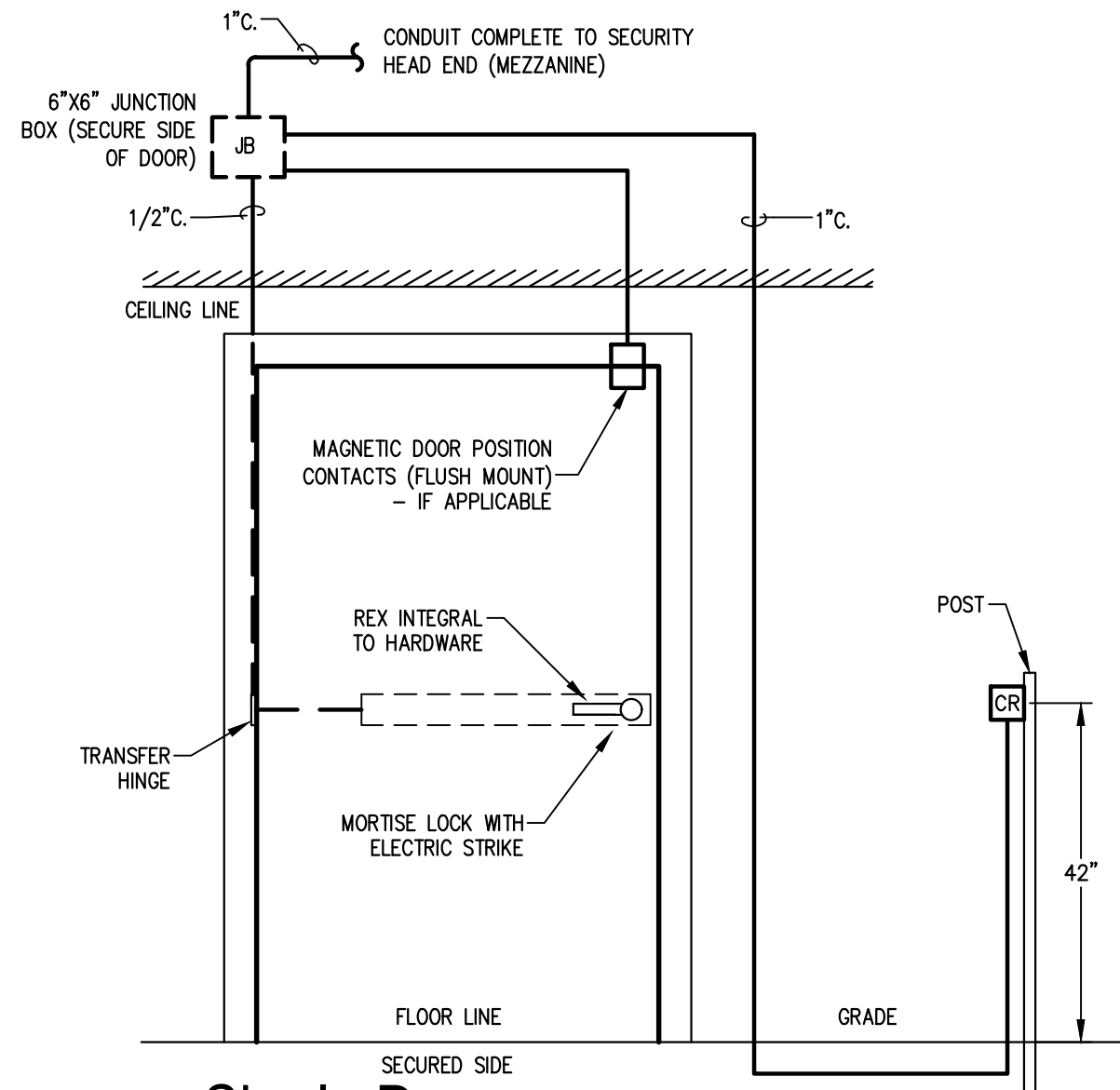
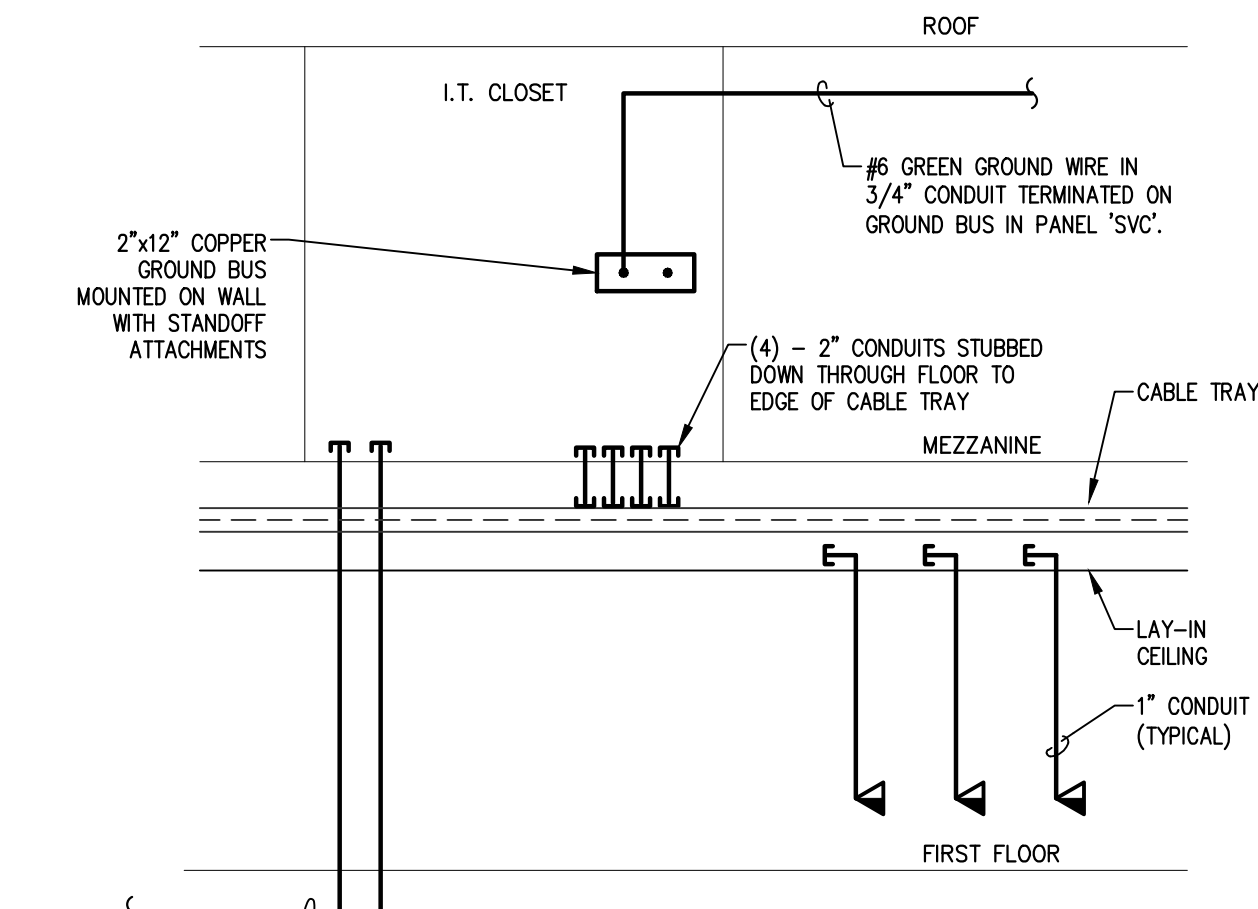


P:\PROJECTS\17-034 DURHAM TECH FACILITIES SVCS (BUD 3.0 CAD) V2.0 ELECTRICAL\1.1.DWG Plotted By: BRUCE NEWMAN - 9/12/2018 2:20 PM

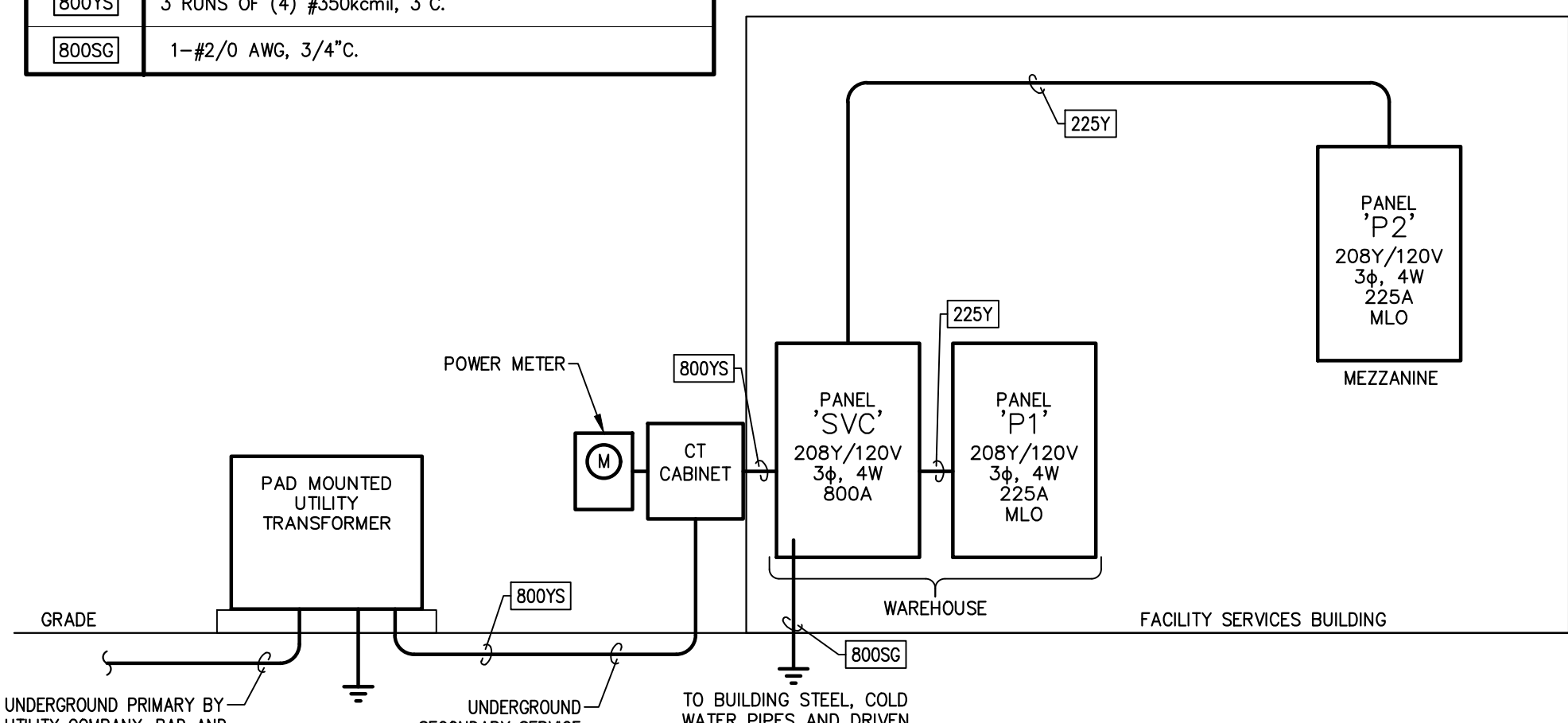


1
E3.1
Single Door
(With Electric Strike) Security Detail
SCALE: NONE

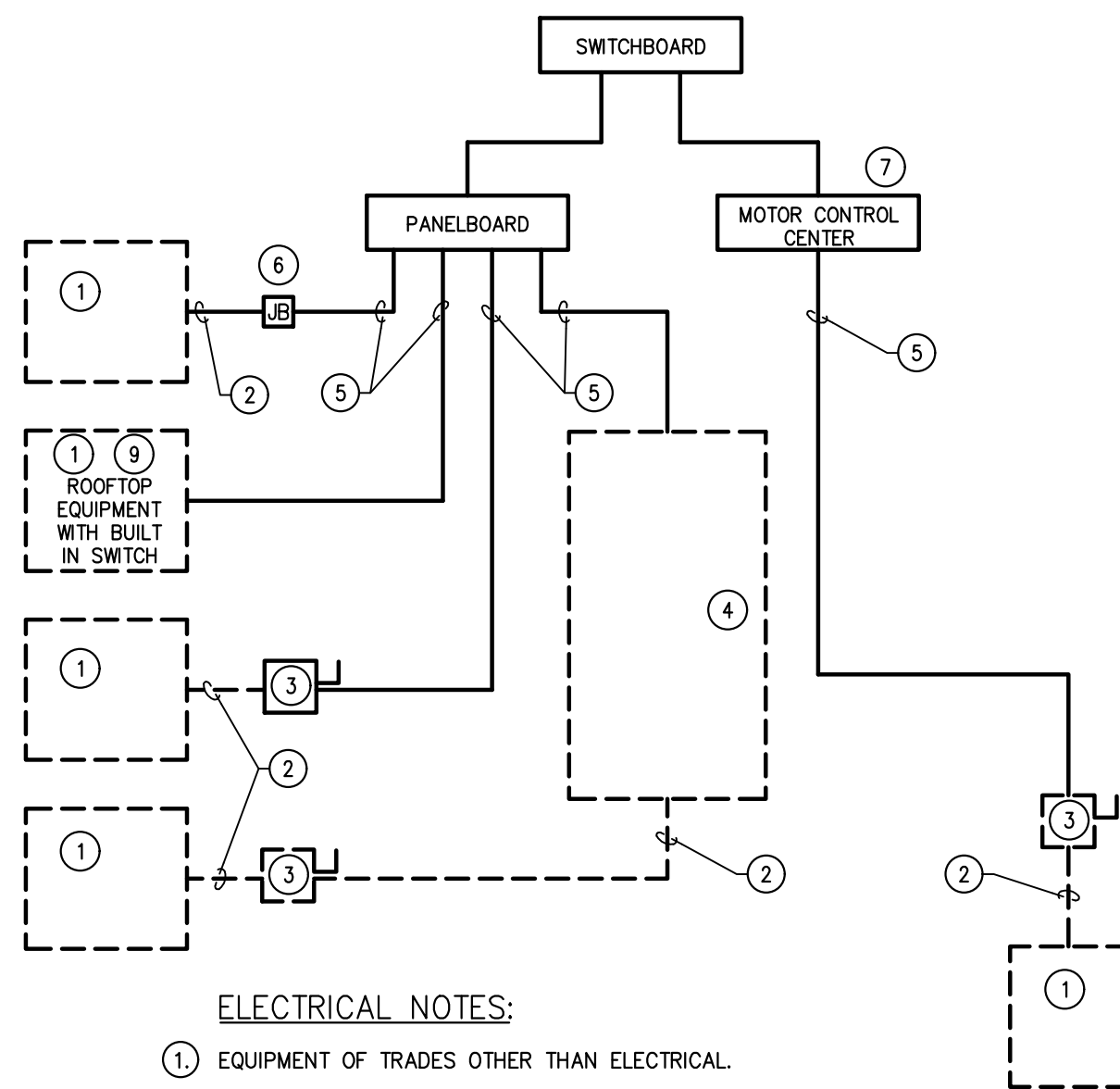


2
E3.1
Telecom Riser
SCALE: NONE

CONDUIT AND CABLE SCHEDULE	
SYMBOL	MINIMUM SIZE CONDUCTORS AND CONDUIT
225Y	3-#4/0, 1-#4/0 N., 1-#4 EGC, 2-1/2" C.
800YS	3 RUNS OF (4) #350kcmil, 3" C.
800SG	1-#2/0 AWG, 3/4" C.



3
E3.1
Power Riser Diagram
SCALE: NONE



ELECTRICAL NOTES:

- EQUIPMENT OF TRADES OTHER THAN ELECTRICAL.
- CONDUIT & WIRING BY HVAC, PLUMBING CONTRACTOR, OR OTHER TRADES.
- IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
- A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. LOCATE ADJACENT TO EQUIPMENT.
- FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
- JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. IF NO STARTER OR DISCONNECT IS SUPPLIED, A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
- PROJECTS UTILIZING AN MCC, THE STARTER, CB, OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS, START UP, AND TEST EQUIPMENT.
- IF THE ROOF TOP FAN IS NOT PROVIDED WITH BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A DISCONNECT SWITCH.
- IN A SINGLE PRIME CONTRACT, IT IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR TO COORDINATE BETWEEN THE ELECTRICAL AND THE OTHER TRADES.

4
E3.1
Electrical Equipment Connection
SCALE: NONE

PANEL 'SVC'																															
NOTES	CKT	LOAD	DESCRIPTION	COND	EGC	N	W	CB	LOAD	CB	W	N	EGC	COND	DESCRIPTION	LOAD	CKT	NOTES													
	1	8955	PANEL 'P1'	SEE RISER				225	8955					125	1	-	6	1 1/4"	PHP-4	0	2	ALT G2									
	3	7415	-		3P				7415		3P	1	-	-	-	-	-	0	4	ALT G2											
	5	6505	-							6505		-	1	-	-	-	-	0	6	ALT G2											
	7	20295	PANEL 'P2'		225	20295					125	1	-	6	1 1/4"	PHP-5	0	8	ALT G2												
	9	18465	-		3P				18465		3P	1	-	-	-	-	-	0	10	ALT G2											
	11	19293	-							19293		-	1	-	-	-	0	12	ALT G2												
2	13	5000	EUH-1	3/4"	10	-	6	60	6272		20	12	-	12	3/4"	EF-2	1272	14	2												
2	15	5000	-	-	-	-	6	3P	6272		3P	12	-	-	-	-	1272	16	2												
2	17	5000	-	-	-	-	6	-		6272	-	12	-	-	-	-	1272	18	2												
2	19	5000	EUH-2	3/4"	10	-	6	60	6272		20	12	-	12	3/4"	EF-3	1272	20	2												
2	21	5000	-	-	-	-	6	3P	6272		3P	12	-	-	-	-	1272	22	2												
2	23	5000	-	-	-	-	6	-		6272	-	12	-	-	-	-	1272	24	2												
2	25	5000	EUH-3	3/4"	10	-	6	60	10000		60	6	-	10	3/4"	EUH-6	5000	26	2												
2	27	5000	-	-	-	-	6	3P	10000		3P	6	-	-	-	-	5000	28	2												
2	29	5000	-	-	-	-	6	-		10000	-	6	-	-	-	-	5000	30	2												
2	31	5000	EUH-4	3/4"	10	-	6	60	5000							SPACE		32													
2	33	5000	-	-	-	-	6	3P	5000							SPACE		34													
2	35	5000	-	-	-	-	6	-		5000						SPACE		36													
2	37	5000	EUH-5	3/4"	10	-	6	60	5000							SPACE		38													
2	39	5000	-	-	-	-	6	3P	5000							SPACE		40													
2	41	5000	-	-	-	-	6	-		5000						SPACE		42													
	N/A																														
208Y/ 120 VOLTS 3 PHASE										4 WIRE										SURFACE MOUNT											
800 BUSS AMPS N/A MLO										X GROUND BAR										NEMA 1											
800 FEEDER AMPS										X SE RATED										22K A/C MINIMUM											
800 MCB AMPS X MCB																															
NOTES:														AMPS				PHASE TOTALS:				KVA									
1 SQUARE D PANELBOARD														514.95				PHASE A:				61.79									
2 DEDUCT BREAKER, WIRE, CONDUIT AND DISCONNECT SWI TH FOR ALTERNAT E G2.														486.87				PHASE B:				58.42									
3 ALTERNAT E G2 (PHP-4 & 5) CONNECTED LOAD IS SHOWN AS ZERO SINCE THE UNIT HEATERS IN THE BASE BID ARE HIGHER.														486.18				PHASE C:				58.34									
														496.00				TOTAL CONNECTED				178.56									
4														475.93				TOTAL DEMAND *				171.33									