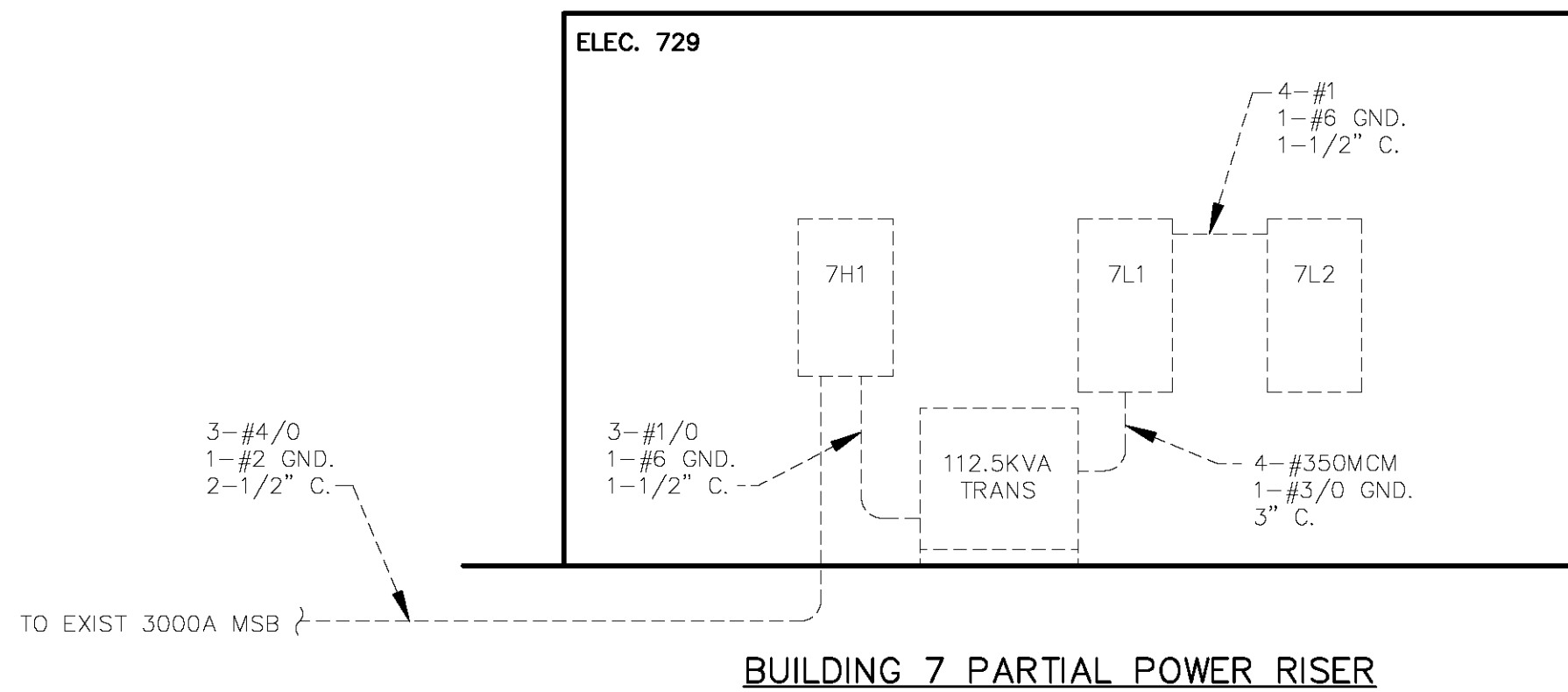


ELECTRICAL LEGEND

- CIRCUIT/ CONDUIT
BRANCH CIRCUIT HOMERUN
FA- DUCT SMOKE DETECTOR
AHU AIR HANDLER UNIT
FA FIRE ALARM
EF EXHAUST FAN
FACP FIRE ALARM CONTROL PANEL
SF SUPPLY FAN
VAV VARIABLE AIR VOLUME UNIT



LOAD CALC. FOR BUILDING 7

BASED ON 18,215 SQ.FT.

HVAC	35.4 KVA
LTG. (2W/SQ.FT.)	36.4 KVA
RECEPTS. (3W/SQ.FT.)	54.6 KVA
MISC. (2W/SQ.FT.)	36.4 KVA
TOTAL	162.8 KVA (195.8 A)

GENERAL (EXISTING) NOTES:

- A. ALL EQUIPMENT/APPARATUS/INFORMATION INDICATED BY 'LIGHT DASHED LINETYPE' IS EXISTING TO REMAIN.
B. POWER RISER/PANEL SCHEDULES ARE A REFERENCE POINT ONLY. PRIOR TO BIDDING PROJECT FIELD VERIFY EXISTING CONDITIONS AND REPORT TO ENGINEER IF ANY ELEC PANELS WILL REQUIRE THE ADDITION OF BREAKERS (AND/OR) HAVE NO AVAILABLE SPACE.

PANEL- 7H1		SURF MOUNTED BOT FEED		480/277 V, 3 PH, 4 W, 10,000 A.I.C.		225 AMP, MAIN EXISTING PANEL		BKR	
SERVING	AWG KVA	AMP	CKT	PHASE A B C	CKT	AMP	KVA	AWG	SERVING
EXISTING LOADS									EXISTING LOADS
			1		2				
			3		4				
			5		6				
			7		8				
			9		10				
			11		12				
			13		14				
			15		16				
			17		18				
			19		20				
			21		22				
			23		24				
			25		26				
			27		28				
			29		30				
			31		32				
			33		34				
			35		36				
			37		38				
			39		40				
			41		42				
TOTAL CONN. LOAD- 162.8 KVA (NET ADDITION OF 19.9 KVA, VERIFY EXISTING AMPACITY)									

PANEL- 7L2				SURF MOUNTED BOT FEED				208/120 V, 3 PH, 4 W, 10,000 A.I.C.				125 AMP, MAIN LUGS EXISTING PANEL			
SERVING		AWG SIZE	KVA LOAD	AMP	CKT	PHASE A B C	CKT	AMP	KVA LOAD	AWG SIZE	SERVING				
SPARE				20	1		2	20	1.1	12	EF				
SPARE					3		4				EXISTING LOADS				
SPARE					5		6				↓				
SF-0A-71		12	1.1	20	7		8				EF-7-3(E)				
EF-7-1		12	1.1	20	9		10	20	1.1	12	SF-0A-72				
VAV UNITS		12	1.0	20	11		12	20	1.1	12	EXISTING LOADS				
EF-7-2(E)		12	1.1	20	13		14				SPARE				
EXISTING LOADS					15		16	20			EXISTING LOADS				
↓					17		18								
SPARE				20	19		20								
EXISTING LOADS					21		22								
					23		24								
					25		26								
					27		28								
					29		30								
					31		32								
					33		34								
					35		36								
					37		38								
					39		40								
					41		42								
↓											↓				
TOTAL CONN. LOAD-				KVA	(NET SUBTRACTION OF 2.3 KVA FROM EXISTING LOAD)										

PANEL SCHEDULE(S) NOTES:

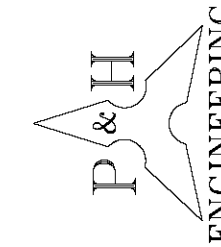
1. BREAKER SIZE IS FOR REFERENCE ONLY, PROVIDE BREAKER SIZE & TYPE TO MATCH MECHANICAL EQUIPMENT SELECTIONS.

ELECTRICAL SPECIFICATION

1. SCOPE: PROVIDE A COMPLETE ELECTRICAL SYSTEM AS SHOWN AND MEET THE REQUIREMENTS OF APPLICABLE STATE AND LOCAL CODES. OBTAIN AND PAY FOR ALL PERMITS, INSPECTIONS AND CONNECTIONS NECESSARY FOR THIS WORK.
2. SITE INSPECTION: VISIT AND THOROUGHLY INSPECT SITE BEFORE SUBMITTING BID. ASSUME RESPONSIBILITY FOR MEETING ALL EXISTING SITE CONDITIONS AFFECTING THE WORK
3. GUARANTEE: PROVIDE ALL NEW MATERIALS AND EQUIPMENT, AND GUARANTEE SAME FOR ONE YEAR FROM DATE OF ACCEPTANCE.
4. CIRCUIT BREAKERS SHALL BE MOLDED CASE, WITH QUICK-MAKE AND QUICK-BREAK ACTION FOR BOTH MANUAL AND AUTOMATIC OPERATION, WITH THERMAL MAGNETIC TRIP ELEMENTS. SAFETY SWITCHES SHALL BE QUICK-MAKE, QUICK-BREAK TYPE, IN GENERAL PURPOSE ENCLOSURE.
5. ELECTRICAL CONDUIT: INSTALL ALL WIRING IN MINIMUM SIZE 1/2" CONDUIT. EMT SHALL BE USED GENERALLY FOR INTERIOR WIRING. M/C CABLE MAY BE USED ONLY WHERE TOTALLY CONCEALED AND PERMITTED BY CODE. FLEXIBLE STEEL CONDUIT SHALL BE USED FOR FINAL CONNECTION TO ALL MOTORIZED EQUIPMENT. UNDERGROUND CONDUIT SHALL BE PVC.
6. WIRE AND CABLE: ALL WIRING SHALL BE COPPER WITH THHN OR XHHW INSULATION. WIRING SUBJECTED TO ELEVATED TEMPERATURES SHALL BE DERATED AS REQUIRED BY THE NEC. WIRE SIZES NO. 6 AND LARGER SHALL BE STRANDED.
7. BRANCH CIRCUITS: INSTALL ALL WIRING IN CONDUIT AS SHOWN. NO SMALLER THAN NO. 12 SHALL BE USED FOR ANY BRANCH CIRCUIT. WIRING FOR MOTORS, HEATING AND OTHER MISCELLANEOUS EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS.
8. TESTING AND MARKING: COMPLETELY TEST AND MARK ALL WIRING AND EQUIPMENT INSTALLED AND LEAVE THE INSTALLATION IN PERFECT WORKING ORDER.
9. ELECTRICAL/MECHANICAL COORDINATION: UNLESS SPECIFICALLY REQUIRED OTHERWISE, PROVIDE ALL DISCONNECT DEVICES FOR A/C EQUIPMENT AND PROVIDE ALL POWER WIRING. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL A/C CONTROL DEVICES AND WIRING.
10. THE DUCT SMOKE DETECTORS SHALL TIE TO AND BE COMPLETELY COMPATIBLE WITH THE EXISTING BUILDING FIRE ALARM SYSTEM. DUCT SMOKE DETECTORS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR.

REVISIONS

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FLA. REG. # EB-0004577



SUWANNEE COUNTY MIDDLE SCHOOL
HVAC MODIFICATIONS - BUILDING 7
LIVE OAK, FLORIDA

DATE: 2-17-12

SCALE: 1/8"=1'-0"

DRAWN: DBH

JOB: 1947

SHEET:

E-2

OF 2 SHEETS

2/16/12
1947E2