

SPECIFICATIONS

1. SCOPE

FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS REQUIRED TO COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, BOXES, LIGHTING FIXTURES, PANELS, SWITCHES, RECEPTACLES, DEVICES, FEEDERS, DISCONNECTS, STARTERS, FITTING, AND ALL OTHER WORK INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREIN.

OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY THE LOCAL AUTHORITIES HAVING JURISDICTION AND DELIVER APPROVAL CERTIFICATE TO THE GENERAL CONTRACTOR. ALL ASSOCIATED FEES SHALL BE PAID BY THE CONTRACTOR.

CONTRACTOR SHALL COMPLY WITH CURRENT OSHA REQUIREMENTS. ALL MATERIALS AND EQUIPMENT OF THE ELECTRICAL SYSTEM NECESSARY FOR ITS PROPER OPERATION, BUT NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS BUT REASONABLY IMPLIED, SHALL BE FURNISHED AND INSTALLED WITHOUT ADDITIONAL CHARGE.

THE CONTRACTOR SHALL FULFILL ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS AND SHALL COMPLETE THE IMPROVEMENTS SHOWN ON THE DRAWING AND INDICATED IN THE GENERAL NOTES. ALL SYSTEMS SHALL BE FINISHED AND PROVEN TO BE FULLY OPERATIONAL AND USEABLE.

WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2005 NATIONAL ELECTRICAL CODE AND LOCAL AUTHORITIES HAVING JURISDICTION.

2. SUBMITTALS AND SUBSTITUTIONS

ELECTRICAL CONTRACTOR SHALL SUBMIT FOR THE ENGINEER'S REVIEW (5) COPIES OF INFORMATION ON ALL DEVICES AND WIRING COMPONENTS INTENDED TO BE PROVIDED FOR THIS PROJECT. THIS INCLUDES PANELS, WIRING DEVICES, CONDUIT BOXES, WIRE, AND SYSTEMS DEVICES. ALL SUBSTITUTIONS FOR EQUIPMENT AND MATERIALS OTHER THAN THE EXACT EQUAL OF THAT SPECIFIED MUST BE APPROVED.

3. COORDINATE ALL WORK WITH ALL OTHER TRADES INVOLVED IN THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. AND COORDINATE THE INSTALLATION ACCORDINGLY.

4. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY TEMPORARY POWER FOR ALL TRADES INVOLVED WITH THIS PROJECT. TEMPORARY POWER INSTALLATION SHALL COMPLY WITH OSHA REQUIREMENTS.

5. ALL MATERIAL SHALL FIT THE SPACE AVAILABLE. VERIFY DIMENSIONS AND CLEARANCES AT BUILDING BEFORE COMMENCING WORK.

6. ALL WIRING SHALL BE ROUTED IN E.M.T.-TYPE CONDUIT UNLESS INDICATED OTHERWISE. ALL WIRES AND CABLES SHALL BE COPPER STRANDED COLOR CODED AS INDICATED BELOW. EMT CONDUIT FITTINGS SHALL BE COMPRESSION TYPE. CABLE WINTERGAL GND. STRIP, TYPE MC OR NM MAY BE USED AS PERMITTED BY LOCAL CODES.

7. ALL CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM CONDUCTOR SIZE FOR POWER AND LIGHTING WIRING. USE #14 AWG MINIMUM CONDUCTOR SIZE FOR SIGNAL/CONTROL WIRING. THE INSULATION FOR ALL CONDUCTOR SIZES SHALL BE THINWALL. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS: PHASE-A (BLACK), PHASE-B (RED), PHASE-C (BLU), NEUTRAL (WHITE), AND GROUND (GREEN).

8. POWER WIRE SIZES #12 & #10 AWG SHALL BE SOLID TYPE. ALL OTHERS SHALL BE STRANDED.

9. EACH OUTLET AND/OR FIXTURE IN THE ELECTRICAL SYSTEM SHALL BE PROVIDED WITH AN OUTLET BOX TO SUIT FIELD CONDITIONS.

10. SWITCHES SHALL BE 277V SPECIFICATION GRADE, COLOR AS DIRECTED BY OWNER, WITH NYLON PLASTIC FACEPLATES.

11. DUPLEX CONVENIENCE RECEPTACLES SHALL BE RATED 20AMPS AT 120V, NEMA 5-20R, SPECIFICATION GRADE, WITH NYLON PLASTIC FACEPLATE.

12. CIRCUITS SHALL INCLUDE A GROUND WIRE AS PER NEC 250-122.

13. ALL CONTROL WIRING SHALL BE #14 AWG MINIMUM RED COLOR UNLESS INDICATED OTHERWISE BY EQUIPT. MFR.

14. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING ANY CONSTRUCTION PROPOSALS. NO ALLOWANCE WILL BE MADE FOR LACK OF EXISTING CONDITIONS.

15. PANELBOARDS TO BE BOLTED CIRCUIT BREAKER TYPE, 208Y/120V, OR 480Y/277V WITH COPPER BUSSES, RATED AS INDICATED ON THE SCHEDULES.

16. ANY QUESTIONS ON THE SCOPE AND LIMITATIONS ASSOCIATED WITH THE WORK OR ON THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR PROMPT RESOLUTION PRIOR TO PROCEEDING WITH ANY OF THE WORK. THE CONTRACTOR MAY NOT CLAIM ADDITIONAL FEES FOR WORK INSTALLED IMPROPERLY WHEN THERE ARE QUESTIONS PENDING ON A PORTION OF THE CONSTRUCTION DOCUMENTS.

17. THE ELECTRICAL CONTRACTOR SHALL NOT SUPPORT ANY CONDUIT RUN FROM THE MAINLINE TO BAR.

18. THE ELECTRICAL CONTRACTOR SHALL DEVELOP A SET OF "AS-BUILT" DRAWINGS FOR SUBMITTAL TO THE ENGINEER AT THE COMPLETION OF THE WORK TO IDENTIFY ALL BRANCH CIRCUITS OF PANELBOARDS, SCHEDULES AND ACTUAL INSTALLATION DETAILS. THE "AS-BUILT" SET SHALL BE DELIVERED TO THE ARCHITECT WITHIN 30 DAYS AFTER THE COMPLETION OF THE WORK.

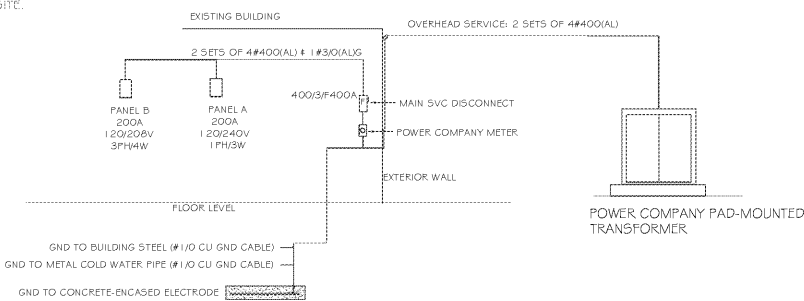
VOLTAGE: 120/208Y V MAIN DEVICE: 200A MLO TYPE: TYPE 1 FRAME 65 RATING: 200A - 1.6 3W		PANEL SCHEDULE PANEL 'A'										MOUNTING: RACK MOUNT 10" X 20" X 18"			
CKT #	ITEM	WIRE SIZE	KVA	PHASE LOADS		ERRR SURT	FVA	WIRE SIZE	ITEM	CKT #	PHASE LOADS			BSCR SIZE	KVA
				DA	DB						DC	DA	DB		
1	LTS - CORRIDOR	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - CORRIDOR	2				
3	LTS - 4 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - 4 YR CLSBRM	4				
5	LTS - 1-1/2 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - 2 YR CLSBRM	6				
7	LTS - 2-1/2 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - 3 YR CLSBRM	8				
9	LTS - 4 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - KITCHEN	10				
11	LTS - RECEPTION OFFICE	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	LTS - EXTERIOR	12				
13	RECEPT - <1 YR CLSBRM GFCI	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - 1 YR CLSBRM GFCI	14				
15	RECEPT - 1-1/2 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - 1-1/2 YR CLSBRM GFCI	16				
17	RECEPT - 2 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - 2 YR CLSBRM GFCI	18				
19	RECEPT - 2-1/2 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - 2-1/2 YR CLSBRM GFCI	20				
21	RECEPT - 3 YR CLSBRM	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - 4 YR CLSBRM	22				
23	SPARE									SPARE	24				
25	RECEPTION OUTLETS	12/2 WG	1.0	20A	2.0	X	20A	1.0	12/2 WG	OFFICE OUTLETS	26				
27	RECEPT - COMPMAL ROOM	12/2 WG	1.0	20A	2.0	X	20A	1.0	12/2 WG	CLOTHES WASHER	28				
29	RECEPT - CORRIDOR	12/2 WG	1.0	20A	2.0	X	20A	1.0	12/2 WG	RECEPT - CORRIDOR	30				
31	RECEPT - GYM/PE DR	12/2 WG	0.8	20A	1.6	X	20A	0.8	12/2 WG	RECEPT - ELEC. WATER FTH	32				
33	RECEPT - KITCHEN	12/2 WG	1.0	20A	2.0	X	20A	1.0	12/2 WG	RECEPT - KITCHEN GFCI	34				
35											36				
37											38				
39											40				
41											42				
PHASE TOTALS				15.6	11.0										
TOTAL CONNECTED LOAD:				15.6	11.0		24.6	11.3	33A						

VOLTAGE: 120/208Y V MAIN DEVICE: 200A MLO TYPE: TYPE 1 FRAME 65 RATING: 200A - 3.0 4W		PANEL SCHEDULE PANEL 'B'										MOUNTING: RACK MOUNT 10" X 20" X 18"				
CKT #	ITEM	WIRE SIZE	KVA	PHASE LOADS			ERRR SURT	FVA	WIRE SIZE	ITEM	CKT #	PHASE LOADS			BSCR SIZE	KVA
				DA	DB	DC						DA	DB	DC		
1	SPARE									SPARE	2					
3	SPARE									SPARE	4					
5	SPARE									SPARE	6					
7	SPARE									SPARE	8					
9	SPARE									SPARE	10					
11	SPARE									SPARE	12					
13	SPARE									SPARE	14					
15	SPARE									SPARE	16					
17	SPARE									SPARE	18					
19	SPARE									SPARE	20					
21	SPARE									SPARE	22					
23	SPARE									SPARE	24					
25	SPARE									SPARE	26					
27	SPARE									SPARE	28					
29	SPARE									SPARE	30					
31	SPARE									SPARE	32					
33	SPARE									SPARE	34					
35	CLOTHES DRYER	12/2 WG	3.0	40A	3.0			40A	4-0	WATER HEATER	36					
37											38					
39	RTU 1	12/2 WG	6.0	60A	6.0			60A	1-0	RTU 2	40					
41											42					
PHASE TOTALS				6.0	11.5	11.5										
TOTAL CONNECTED LOAD:				6.0	11.5	11.5										

ELECTRICAL POWER NOTES:

- GFCI RECEPTACLES IN ALL BATHROOMS, NEAR SINKS, AND EXTERIOR RECEPTACLES.
- PANEL BOARDS TO BE LABELED IN ACCORDANCE WITH NEC 408.4
- GROUND ELECTRODE CONDUCTORS ARE INSTALLED IN ONE CONTINUOUS LENGTH WITHOUT SPLICES OR JOINTS
- ALL CIRCUITS TO HAVE GROUND CONDUCTORS
- ALL CIRCUITS ARE TO BE GROUND CONCEALED
- LIGHTING SHALL BE CONTAINED IN CUT-OFF TYPE LUMINARIES AND SHALL BE DIRECTED IN TOWARDS THE PROPERTY SO AS NOT TO REFLECT INTO ADJACENT RESIDENTIAL PROPERTIES
- EXTERIOR LIGHTS ARE FULL CUT-OFF TYPE AND NO CHANGES SHALL BE MADE
- THE BRANCH CIRCUIT FEEDING THE UNIT EMERGENCY LIGHTING SHALL BE THE SAME CIRCUIT AS THAT SERVING THE NORMAL LIGHTING IN THE AREA AND CONNECTED AHEAD OF ANY LOCAL SWITCHES

ALL BRANCH BREAKERS NOT SPECIFIED SHALL BE 20 AMP SINGLE POLE.
ALL BRANCH CIRCUIT CONDUCTORS NOT SPECIFIED SHALL BE #12 WIRE WITH #12 GROUND.
ALL ELECTRICAL EQUIPMENT AND SERVICE FROM EXISTING METER ON SITE.



- NOTES:
- SERVICE GROUND PER NEC ARTICLE 250
 - THE EXACT A/C RATING OF ALL SERVICE EQUIPMENT AND PANELBOARDS SHALL BE COORDINATED WITH THE POWER COMPANY'S AVAILABLE FAULT CURRENT AND ADJUSTED ACCORDINGLY
 - ALL MULTI-CIRCUIT HOMERUNS SHALL BE PROTECTED WITH MULTI-POLE, SIMULTANEOUS-TRIP CIRCUIT BREAKERS PER N.E.C. 210.4B
 - COMPLETE AFCI PROTECTION IS REQUIRED FOR ALL CIRCUITS, PER 2017 NEC.

Order Plans @ www.LDILine.com

<p>NOTES:</p> <p>THIS DRAWING IS ONE OF THE SETS OF DRAWINGS FOR THE PROJECT. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES HAVING JURISDICTION. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES HAVING JURISDICTION.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 15%;">Date</th> <th style="width: 80%;">Revisions / Submissions</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	No.	Date	Revisions / Submissions																															<p>SHEET TITLE</p> <p style="font-size: 18pt; font-weight: bold;">ELECTRICAL PANEL SCHEDULE, RISER, NOTES</p> <p>PROJECT NAME</p> <p style="font-size: 14pt; font-weight: bold;">CREEK STONE ACADEMY CHILDCARE CENTER</p> <p>2485 MEMORIAL DRIVE ATLANTA, GA 30317 (DEKALB COUNTY)</p>	<p>STAMP</p> <p style="font-weight: bold; font-size: 10pt;">ISSUED FOR CONSTRUCTION</p>	<p>ISSUE DATE: FEB 2019 PROJECT: CREEK STONE DRAWN: TEAM</p> <p>SHEET No.:</p> <p style="font-size: 24pt; font-weight: bold;">E3</p>
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