ELECTRICAL DESIGN NOTE:

The Florida Building Code 2007 and NFPA 70 shall govern the electrical systems in this building project. Where provisions conflict, FBC2007 shall govern.

Plans and design for electrical system in this building are to be furnished by the electrical contractor to the engineer of record, the owner, and the building official for approval prior to construction or ordering any materials.

FBC 2007, 105.3.1.2 Does not require sealed engineering documents to be prepared by or under the direction of an engineer registered under chapter 471Florida Statutes for electrical systems for any new building or addition which requires an aggregate service capacity of not more than 600 amperes (240 volts) on a residential electrical system or 800 amperes (240 volts) on a commercial or industrial electrical system and which costs not more than $50,000.

The electrical plans should meet the following requirements:
1. Electrical:
   - Wiring
   - Services
   - Feeders and branch circuits
   - Overcurrent protection
   - Grounding
   - Wiring methods and materials
   - GFCIs
2. Equipment
3. Special occupancies
4. Emergency systems
5. Communication systems
6. Low voltage
7. Load calculations

Design of Power Systems:
(1) Power systems convey or distribute electrical energy. Items to be included in the design and analysis of these systems are: steady state and transient loads, short circuit protection (design and analysis), load flow, voltage drop, harmonics, and protective device coordination.
(2) "Design" documents applicable to power systems shall at a minimum indicate the following:
(a) System Riser Diagram
(b) Conductor Ampacities (sizes) and insulation type
(c) Protection devices and interrupting capability
(d) Main and distribution panelboard locations and sizes
(e) Circuitry of all outlets and devices
(f) Short circuit analysis
(g) Load computations
(h) Electrical legend
(i) Grounding and bonding
(j) Instrumentation control

Design of Lighting Systems:
(1) Lighting systems convert electrical energy into light. Items to be included in the lighting design and analysis are: Average illuminance, Equivalent spherical illuminance, Uniformity ratios, Visual comfort probability, special purpose lighting, and the requirements of the Florida Energy Efficiency Code, part IX, Chapter 553, Florida Statutes.
(2) "Design" documents for lighting systems shall, at a minimum, indicate the following:
(a) Lighting fixture performance specifications and arrangements
(b) Emergency Lighting
(c) Exit Lighting
(d) Lighting Control and circuiting

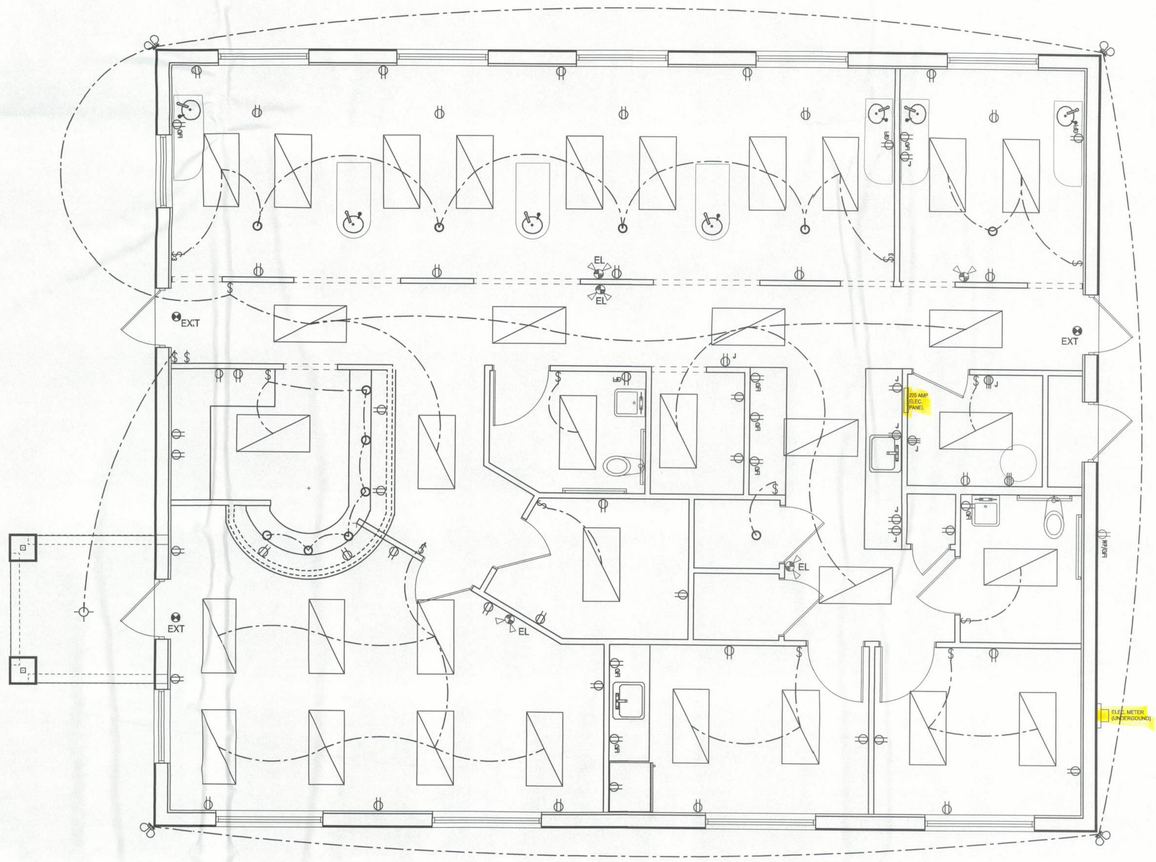
Design of Communications Systems:
(1) Communications systems are utilized to convey messages or data. Items to be included in the design or analysis of these systems are: Human factors engineering, cabling requirements, installation requirements, performance requirements, backup power requirements, the interrelationship of the various systems, and applicable regulatory requirements.
(2) "Design" documents for communications systems shall, at a minimum, indicate the following:
(a) System riser diagram
(b) Equipment legend
(c) Conductor type and installation requirements
(d) Device type and locations
(e) Backup power sources where applicable

Design of Alarm Systems:
(1) Alarm systems are used to monitor and alarm a fire or other emergency condition. Items to be included in the design or analysis of these systems are: structure alarm requirements, location and audibility, types of alarms and initiation devices, notification requirements, installation requirements, backup power requirements, applicable regulatory requirements, and the provisions of rule 61G15-32.007, F.A.C.
(2) Design documents for alarm systems shall, at a minimum, indicate the following:
(a) System riser diagram
(b) Device types and locations
(c) Type of conductors and installation requirements including rating identification and listing requirements
(d) Notification requirements
(e) Backup power requirements
(f) Where applicable, backup power sources and inter-ties to other systems/components

Design of Lightning Protection Systems.
(1) Lightning Protection Systems are passive systems used to protect building and structures from damage caused by lightning and static discharges. Items to be considered in the design or analysis of this system include the requirements of NFPA-78.
(2) "Design" documents for lightning protection systems shall indicate:
(a) Air terminals height and spacing
(b) Arrangement of Main and Down conductors
(c) Grounding points and spacing
(d) Legend
(e) Testing requirements of grounds

Design of Grounding Systems.
(1) Grounding Systems are passive systems used to establish an electrical potential reference point in an electrical system for the proper dissipation of energy in case of abnormal or transient conditions.
(2) Design documents for grounding systems shall indicate at a minimum the following:
(a) type and location of grounding electrodes
(b) bonding requirements
(c) testing requirements
(d) conductor material type, size and protection requirements
(e) separate grounding systems, properly bonded, per code and use requirements

	ELECTRICAL LEGEND
	CEILING FAN
	DOUBLE SECURITY LIGHT
	FLUORESCENT LIGHT FIXTURE
	RECESSED CAN LIGHT
	BATH EXAUST FAN WITH LIGHT
	BATH EXAUST FAN
	LIGHT FIXTURE
	DUPLEX OUTLET
	220v OUTLET
GFI	GFI DUPLEX OUTLET
$	WALL SWITCH
$3	3 WAY WALL SWITCH
	WATER PROOF GFI OUTLET



ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"

REVISIONS

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

Blake Construction

New Dentist Office for:
Family Health Center of Columbia County

ADDRESS:
Lake City, Florida
Columbia County

PRINTED DATE:
June 02, 2011

DRAWN BY: Evan Beamsley
CHECKED BY:

FINALES DATE:
2011-05-24

JOB NUMBER:
1104014

DRAWING NUMBER
4
OF 10 SHEETS