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Ms. Irene Dumas Tyson
The Boudreaux Group
1200 Park Street
Columbia, SC 29201

RE: Unitarian Universalist Fellowship of Columbia
Columbia, South Carolina
BEA Project No. AB2707
Narrative of Existing Electrical Conditions

Dear Irene:

Per your request, the following is a breakdown of the existing electrical conditions of the above-referenced building:

Electrical Service and Distribution

The building is served with a 400 amp, 208 volt, 3 phase overhead service by South Carolina Electric & Gas. The pole mounted transformer bank is located in the right-of-way behind the church. The electrical service enters the building on the rear exterior wall (opposite side of building from Heyward Street). On this wall is a 400 amp fused main disconnect switch. The size of the four service conductors are 500kcmil. Adjacent to the main disconnect switch is a service meter.

From the main switch, the service conductors in conduit are routed above the ceiling into the electrical/mechanical equipment room (near the center of the building) and terminates into another 400 amp fused disconnect switch. This switch feeds a long distribution wireway (gutter) on the north wall of the equipment room. The following is fed from this wireway:

- (1) 100 amp, 120/208v panel
- (3) 50 to 70 amp, 120/208v loadcenters
- (9) Fused disconnect switches for HVAC equipment
- (2) Molded case circuit breakers for HVAC equipment

There are two additional loadcenters in the building; one adjacent to the exterior main service disconnect switch and one in the administration office.

The majority of the electrical equipment is 30 to 50 years old. Panels in the equipment room do not have code compliant working clearances. The storage of cleaning and other types of materials in the equipment room, especially in front of electrical equipment, is a potential hazard and is not code compliant.

Most of the branch circuits are not in conduits. The conductors are in poor condition.

Lighting

Existing lighting in the building is as follows:

Sanctuary – Hidden indirect fluorescent fixtures down the center of space with decorative incandescent sconce on south wall between windows. There are four spot light type fixtures to light the pulpit area. Lighting in this space is controlled by low voltage switching (two locations).

Assembly Room – Globe shaped incandescent pendants for general lighting. There is a track assembly on the ceiling with 5 theatrical type and 6 spot light type fixtures. This is fed with exposed extension cords hung from the ceiling.

Kitchen, Corridor, Offices, and Classrooms – Linear fluorescent fixtures with T-12 type lamps and magnetic ballasts.

Restrooms – Incandescent ceiling and vanity mounted fixtures.

Life Safety – Exit signs are dated and do not appear to be battery backed. There are several wall mounted emergency egress lighting units.

Exterior – Main entry has a 4-lamp incandescent ceiling fixture. There are several building mounted flood lights and one 400 watt cobra head type, leased fixture on a pole. The exits do not have emergency exterior egress lighting.

For the most part, the existing lighting in the building produces adequate lighting levels, but the systems are in need of more effective and more energy efficiency fixtures.

Convenience Receptacles

There are several duplex receptacles throughout building. Majority are fed with surface mounted raceway. There are several missing or broken device plates. It appears that there is not a sufficient number of receptacles in the kitchen for the appliances present (i.e coffee makers, microwaves, toaster, etc.). These receptacles are not GFI type. Restrooms receptacles are not GFI type.

Telephone and Internet

Existing voice/data equipment is located in storage closet off main classroom/office area corridor. There are approximately 6 phone locations in the building and several internet access points in the offices. The equipment is fairly new.

Fire Alarm

There is not a fire alarm system in this building.

In conclusion, the existing electrical system in this building does not meet the present needs or safety concerns of the building occupants. An electrical renovation including a fire alarm system installation is strongly recommended.

If you have any questions, please give us a call or email.

Sincerely,

Cliff

Clifton E. Stringfield

Principal