

**Reed Electrical Services LLC
1902 Fleischer drive. STE. 504
Austin, Tx. 78728**

2/15/2019

Hello Ken,

Yesterday, I had a chance to explore the house located at 1400 Winstead in Austin, Texas, and I found numerous issues with the electrical system. The electric service entrance is undersized, outdated, and poorly located. There is a Federal Pacific main breaker sized at 175 amps. This is concerning, as these breakers have a history of not functioning as they should when overloaded, and allowing unchecked current to flow through under sized wires. Due to its size, and load, I believe this home should have a minimum 200 amp service, but I recommend 320 amps.

I found several breakers that were over sized for the circuits they were serving. Namely a 2 pole 80amp breaker feeding an 8 gauge wire. This is an extreme fire risk. There is a sub panel located in a stairway, about a foot from the floor. The majority of the circuits terminate here, and It would have to be relocated. This is tricky, as the “home runs”, feeding the circuits in the house, would all have to be re pulled. This means extensive sheetrock repair throughout the entire building would be required. There is also a significant amount of branch circuit wiring that is outdated and would need to be replaced.

There would have to be quite a few convenience outlets added throughout to bring the house to code. In addition to adding outlets, we would need to install numerous GFCI devices, AFCI breakers, smoke detectors, and co2 detectors.

With all the additions/remodels, that have occurred over the years, I can assume that most of the original circuits are over loaded. I found places where new wiring has been tied into old, and grounded circuits have been tied into non grounded circuits.

It is my recommendation that the house be completely re wired, from the service entrance throughout. This will be the only way to assure the building is safe and up to code.

Be advised that the electrical portion of this work could run in the \$80,000 to over \$100,00 range, depending on what we find. There will also be extensive framing, sheetrock, trim, and painting work required when we are finished.

I hate to be the bearer of such news, but It might be more cost effective to tear it down and start from scratch. I can only speak for the electrical system, but I have to assume other systems in the house would also need updating.

Feel free to contact me with any questions, and I hope this helps with your budgeting.

Thanks for the opportunity to serve your electrical needs!

Sincerely,

**Brian Nylund VP
Reed electrical services, LLC
512-350-9690**