



**GreenEarth Engineering, Inc.**

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*Let's leave for our children -  
An earth clean and green*

March 10, 2016

Marva Carter  
Property Owner

Re: Structural Observation  
1175 San Bernard St  
Austin, Texas

Dear Ms. Carter,

On March 7, 2016, I performed on-site structural observation of the above referenced property. The purpose of our observation was to assess the general condition of the structural system. The followings are our findings and recommendations:

1. The foundation is pier-beam system. The beams are very old and small compared to the 2012 IRC code. Some of them have signs of decay and it's unreliable to attempt to strengthen them. Replacing the beams would require the temporary lifting of the entire structure and this would likely crack the exterior and interior finish material.
2. The piers are built of CMU blocks which doesn't meet today's code. This foundation system moves with seasonal moisture content change in the soil.

Overall, this structure is in extremely poor condition. It's in danger of structural failure and it's NOT practical to try to keep this house or any portion of it. In order to keep this house, the entire foundation would have to be rebuilt and this has risk involved. The exterior wall structure would likely be twisted or drifted during the temporary shoring process while the new foundation is being built. Obviously, the movement of the exterior wall will likely crack the exterior and interior wall finish. And the integrity of the roof structure will likely be compromised as well.

Please feel free to call me at (512) 289-8086 should you have any questions.

Sincerely,

Tim (Zhigang) Zhang, PE



03/10/2016  
Tim Zhg