

December 18, 1989

Mr. Franklin Robson
21 Broad Street
Charleston, SC 29401

IN RE: Hurricane Damage
16 Water Street
Flood Damage

Dear Franklin:

On the afternoon of December 7, 1989, I did an inspection of 16 Water Street.

The purpose of this inspection was to advise you regarding damages caused by flooding accompanying Hurricane Hugo.

The house was substantially damaged by flood waters. My findings were:

- A. The waters have caused buckling of finish flooring throughout the first floor.
- B. The buoyancy of the floor system as the water rose lifted the framing members enough that shims and/or masonry bearing points floated or fell away. Extensive attention to sill and/or joist bearing is needed (see next item).
- C. The water compromised existing brick and mortar foundations. These older brick were poorly fired when produced. The mortar was a sand/clay/oyster shell material (with no "cement" as we use today). The saturation and drying of the brick has weakened and/or destroyed much of their load carrying ability. Much of the mortar simply became mud again.

Many of the brick in the foundation walls, and especially the chimneys, either were washed out of position or fell away.

- D. Cracks in the cistern walls indicate that the cistern broke as the rising waters tried to float it. The cistern is a foundation component of several phases of the home.

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- E. The first floor heat and air system is totally destroyed.
- F. The electrical wiring, ^e Etc. should be evaluated by an experienced electrician. It is my oppinion that much of it should be replaced.

It is my opinion that the most practical way to implement those repairs is to take advantage of the "balloon" framing system of the house and remove the first floor system. This can be done because the walls rest on the sills independently of the floors. By removing the floor, repairs can be made from above (and below) rather than having to perform the necessary removals and repairs in the limited crawlspace height. All masonry, framing, and a substantial part of the HVAC work could be done prior to replacing the floor system. This will also provide a more level finish floor than attempting the repairs from below.

~~If you feel....~~ PARAGRAPHS

Very truly yours,

Russell A. Rosen, PE

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December 20, 1989

Mr. Franklin Robson
21 Broad Street
Charleston, SC 29401

IN RE: Hurricane Damage
16 1/2 Water Street
Flood Damage

Dear Franklin:

On the afternoon of December 7, 1989, I did an inspection of 16 1/2 Water Street.

The purpose of this inspection was to advise you regarding damages caused by flooding accompanying Hurricane Hugo.

This is on a slab foundation. There is no crawl space.

My findings were that flood waters covered the first floor. There is buckling and warping of the floor. Although it was not visible there may be problems concealed in the walls and/or insulation.

If you feel that conditions have changed subsequent to this inspection, do not hesitate to contact us as we will be happy to re-inspect and issue an addendum to our findings if it proves necessary. Good luck with your repairs.

We would like to thank you for allowing us to be of assistance during this time of urgency. We have all felt the effects of Hurricane Hugo and hope that our services have helped to ease your feelings of anxiety and loss in the wake of this tragedy.

Your very truly,

Russell A. Rosen, P.E.

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