

**ROSEN** AND  
CONSULTING ENGINEERS

ASSOCIATES,  
INC.

- CIVIL/STRUCTURAL DESIGN
- CONSTRUCTION MANAGEMENT/INSPECTION
- FACILITY ASSESSMENT

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September 24, 1999

Gateway Walk Antiques  
161 ½ King Street  
Charleston, SC 29401

Attn: Mary Moore-Jacoby

In re 161 and 161 ½ King  
Site Assessment

Gentlemen,

This will confirm my conversations with Paul Jacoby at the time of our inspections of 161 and 161 ½ King St., September 23rd and 24<sup>th</sup>, 1999.

General

161 and 161 ½ King St. appear to be a single address divided for convenience sometime in its history.

After completing the inspection, it appears as though the structures share a common wall with 159 King St.

My opinion is that the building was originally constructed sometime early in the 1800's.

The building is presently used for retail space(s) on the 1<sup>st</sup> floor with apartments on the 2<sup>nd</sup> floor.

The primary structural system is masonry; however, it appears as though the structure at 161 may bear on a wood frame wall on the south (left) side.

Exterior

The mortar used in constructing the masonry is what I refer to as sand-clay mortar. That is, the primary mortar between the brick is of sand and clay with some oyster shells. On the surface, a lime cement mortar was used to keep weather out and prevent failure of the interior mortar. Much of the lime cement mortar has failed, and therefore, it exposes the sand-clay mortar. Much of the exterior masonry needs to be pointed up to protect the sand-clay mortar. Also at the

interior, I showed Mr. Jacoby where much of the sand-clay mortar has turned to dust, and those surfaces where accessible should be pointed up.

There is tremendous vine growth at the roof and around the back yard. These vines should be removed by an experienced professional. The uncovered surfaces should be properly prepared and painted or coated as need be.

My opinion is that the standing seam metal roof is in need of surface preparation and coating at this time.

There were two air conditioning compressors at the outside of the building. I estimate that one may date from 1980 and the other from 1986. Please be advised that this equipment may be approaching the end of its normal useful life.

My opinion is that all of the exterior wood surfaces require some minor repair, surface preparation, and painting at this time.

There is an exterior shed underneath the rear porch and a bathroom attached to the rear of the building. Both of these are in an advanced state of decay, and will require significant repair.

The window at the rear of the building requires significant repair to its sash and frame.

#### 161 Shop

There is extensive termite damage at the back door.

#### 161 ½ shop

There is water entry at the back office under the apartment door.

Both furnaces, evaporators, and air handlers for the building are in the hall of this space. They are not readily accessible. I strongly recommend that modifications be made to where these units may be easily accessed.

My opinion, based on the little that I could observe, is that the evaporators are probably clogged with dust and the filters need to be replaced. A service call should be made to check out this equipment. Recall also that the tenant in the upstairs apartment said that air conditioning was very poor during the summer.

#### 161 apartment #1 (the front apartment)

The kitchen was satisfactory. The fireplace at the front is satisfactory. The chimney at the center bedroom should be

relined. My opinion is that much of the brick is loose there and may contribute to failures of the chimney and of the sidewall.

There is a water drip at the tub that should be corrected.

The electrical sub panels have fuses on the circuits.

### Attic

Attic framing is very light. My opinion is that this attic framing may be a replacement from the original attic framing of the building.

The shoring along the North side at the Northeast corner is very badly damaged by insects and moisture. We also found at least one ceiling joist that had extensive termite damage.

The masonry at the crack in the wall will have to be rebuilt in that area. The damage is too great to simply re-point.

When this is done I strongly recommend that a shoring wall or knee wall be installed parallel to the North wall from the front wall to approximately 20' distribute the roof load to the ceiling joist and to the building structure.

We found knob and tube wiring in the attic. At this time the thought is that it is abandoned, however, this should be checked.

The vertical gap between 159 and 161 King St. needs to be caulked.

Shims, etc., need to be installed in the framing of the attic between the roof purlins and the supporting members in many places.

Please recall that it was our finding that the front wall was simply a 4 inch brick veneer. We do not know what happened with the original front wall.

A fair amount of repairs were made at the rear and south sides; the framing technique is similar to the older work.

### Crawl Space(s)

161

For the most part the joists in the crawl space at 161 King are satisfactory. There was very little insect damage, etc. found there. Shims are needed at the supplemental sills.

Screw jacks have been installed to provide support at the rear portion.

The wiring here needs minor attention.

There was a drop of water found on piping here. See discussion at 161 1/2.

161 1/2

There is wide spread termite damage throughout the crawl space at 161 1/2. There have been many repairs in this area.

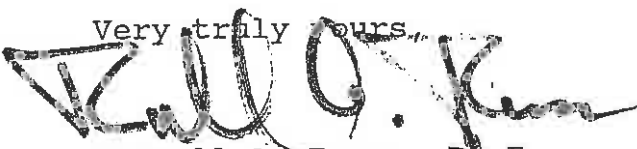
There are several supplemental sills. There is a railroad screw jack under one of these sills.

This area really needs a comprehensive replacement. However, minor reinforcing and an additional supplemental sill along the South side may suffice for the time being.

It appears that there are several pin holes in the water supply piping, requiring repair or replacement.

Should you have any questions, please call.

Very truly yours,



Russell A. Rosen, P. E.

RAR/meb

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