

March 5, 1990

MR. JOE SLYKER C/O EIGHTY TWO QUEEN 82 Queen Street Charleston, SC 29401

in re: 27 Smith Street
Structural Inspection

Dear Joe,

Confirming our conversations at the time of my inspection of 27 Smith Street, March 2, 1990.

My conclusions are that the house has serious structural deficiencies. In particular, my findings are:

- 1. The roof of the house suffered serious damage in Hurricane Hugo. It is my opinion that the slate roof will require total replacement for repair. This work will probably also require the replacement of portions of the roof sheathing. Most of the attic framing is concealed by the finishes there. These finishes probably conceal termite and/or water damage.
- 2. The chimneys suffered from the battering forces of the winds. The top of the chimney at the former dependency fell over onto the roof. Mortar from all of the chimneys was broken loose; permitting bricks to fall free. Major portions of the chimneys will have to be rebuilt; for their on structural stability and for safe use.
- 3 There is an open separation of the connector from the rest of the house.
- 4. Many elements of the structural wood frame have been compromised by termite infestation. Specifically the sill over the cistern, the sill at the north of the connector to the former dependency, other sills, joists, and wall studs. Prudent repair of the wood framing will require removal and replacement of much of the existing plaster.

Mr. Joe Slyker Page Two March 5, 1990

- 5. I have no data in re the elevation of the first floor; however, based on the Hugo flood line (approximately three inches beneath the finish floor), it is my opinion that the finished first floor does not comply with current Building Code requirements. Since the cost of renovation of this house will easily exceed 50 % of the value of the existing improvements, the house will have to be brought up to the standards of the current codes and ordinances. This would mean that the house would have to be raised and new foundations installed.
- 6. The foundations are in poor condition at this time. There are obvious cracks in the north side foundation wall. Tie rods are holding the sides of the cistern together (the cistern provides foundation for the original northwest corner). The fireplace foundations have been patched. Several of the piers on the south side are out of plumb from settlement. Most of the piers require pointing up. Portions of many of them require rebuilding.
- 7. This report neglects the obvious requirements for exterior renovation of porch rails, columns, siding, and trim; interior renovation of wall, ceiling, and floors; renovation of electrical distribution; renovation of plumbing; installation of heating and air conditioning systems; and the construction of a kitchen.

CIVIL/STRUCTURAL DESIGN

CONSTRUCTION MANAGEMENT/INSPECTION

FACILITY ASSESSMENT

65 BROAD STREET, CHARLESTON, SC 29401-2989 (803) 577-4300 FAX:(803) 577-0007

INC.

May 2, 1996

Dr. George Arana 125 Broad Street Charleston, SC 29401

in re: 27 Smith Street Inspection

Dear George,

Confirming our conversations at the time of our inspection of 27 Smith Street, April 29, 1996:

27 Smith Street is a wood frame, wood sided house built about 100 years ago. Perhaps before the earthquake of 1886.

The inspection included the exterior, portions of the roof and the crawl space.

Please recall that it appears that the front of the house settled. There are cracks in the side foundation wall and the second pier back under the porch. Also, there was a gap between the house and the front house/porch corner pier. This is probably either related to the earthquake or that the house was built on a landfill.

## Exterior

The foundation wall on the north side should be pointed up (at the area between the main house and the Laundry Room).

We found decay in the siding, porch floor, trim and columns:

Lower siding at the north side. Porch floor board at the front column. Column plinth to the left of the front steps.

Porch floor boards and trim to the left of the front steps.

At the second floor porch trim (covering the porch framing).

Second floor porch columns, plinths, and floor boards. At the back gable of the third floor.

\* - This is a cursory list. There may be other areas of decay that need replacement, etc. A comprehensive review should be made.

Water may pond at the driveway.

## Crawl Space

At the front of the front porch, the floor joist have been partially reinforced. Proper repair would have included reinforcement bearing to bearing.

Shims are needed at the front house pier next to the porch.

The wood "mule board" at the front chimney is decaying badly. The wood should be removed and replaced with masonry.

The joist at the back of the Laundry Room needs additional support at the end nearest the original house.

The wedges used between the piers, girders, and floor joists at the rear should be replaced with full surface shims.

At the deck outside the Laundry Room, rainwater washes against the house framing. Also the downspout discharges on top of ductwork. Steps must be taken to divert the water away from the wood and the ductwork.

This inspection and report are done with the best of our experience and ability. However, we cannot be responsible for items we may have overlooked, concealed conditions, or defects that may develop later.

Should you have any questions, please call.

very truly yours,

Russell A. Rosen P.E.

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