# Jagger Enterprises, Inc. dba Buckeye Home Inspections 17204 Dorchester Drive Cleveland OH 44119-1302 (216) 486-4663 Fax (216) 486-9922

April 06, 2004

Name deleted, Esq. address deleted

Your client: Mr. Name deleted

address deleted

#### Your File #

At the request of **Name deleted, Esq.**, a limited visual inspection of selected portions of the concrete basement floor and concrete block foundation of the name deleted residence located at address deleted was conducted by Jagger Enterprises, Inc. dba Buckeye Home Inspections on Monday, March 29, 2004. The inspector was Jim Jagger. Mr. name deleted was present at the time of the inspection.

Mr. name deleted indicated that his residence was newly constructed (approximately 8 months old) and that he had concerns regarding the condition of the concrete floor and the concrete block foundation walls. Size of residence given as 1536 square feet.

Weather at the time of the inspection was in the mid  $60^{\circ}$ 's. Skies were sunny.

## Concrete Block Foundation-

- 1) What appeared to be differential settling and shrinkage cracks were present in restricted areas of referenced foundation. Cracks were less than 1/8" wide and displayed no evidence of lateral displacement.
- 2) At the time of the inspection, visual evaluation revealed no evidence of significant structural malconditions. Fractures were within usual and expected ranges for this type of foundation.
- 3) Monitoring of foundation to determine if movement continues is recommended. Monitoring can be accomplished in numerous ways. The easiest way is to neatly fill fractures with an elastomeric (stretchy) caulking compound and see if the caulking deforms over time.
- 4) Mr. name deleted has reported no visible water penetration through foundation walls and none was noted at the time of the inspection.

## Concrete Basement Floor-

- 1) Mr. name deleted has indicated that he has knowledge that perforated 4", black coloured, polyethylene drainage pipe (a.k.a. drain tile) was not fully connected into sump pump. No destructive testing was performed and inspector was unable to verify Mr. name deleted's assertion. Mr. name deleted has indicated that a gap in the drainage pipe was noted very close to the sump pump reservoir. (A sump pump is a reservoir which holds water until an integral pump can lift water up and out of the basement).
- 2) Inspector suspects that Mr. name deleted's assertion concern drainage pipe may be correct. Inspector noted water leaking into holes drilled through reservoir in vicinity of drainage pipe inlet. Referenced leakage

could indicate a disconnected drainage pipe.

- 3) Numerous hairline fractures were visible in floor at time of inspection. At this time, fracturing is cosmetic and has not damaged the structural integrity or utility of the residence.
- 4) Crack control joint spacing was inadequate. Crack control joints were spaced as widely as 11.5'x14' were typical. The thinner the slab, the closer together the joints must be to prevent intermediate cracking. Joints should be spaced (in feet) no more that 2 or 3 times the slab thickness (in inches). No section of concrete more that 9'x9' is advisable.
- 5) Basement floor was measured and was noted to contain 1453 square feet.
- 6) Mr. name deleted was advised (in writing) by builder about requirement for basement concrete floor. Requirements include (but were not limited to) 3" average thick, 2500 psi concrete limestone or gravel aggregate, reinforcing and expansion joints to be properly used as required.
- 7) Mr. name deleted has indicated that he has concerns about long term failure (crumbling) of the concrete. Mr. name deleted has stated that concrete was poured over standing water in the basement. Absent expensive core drilling and lab testing to determine strength and composition, predicting the long term durability of a protected slab in a basement is, at best, an exercise in speculation.

#### Suggested Possible Remedy -

1) Employ a repair contractor to saw cut a small section or concrete

around sump pump and replace reportedly damaged and improperly connected drainage pipe.

- 2) Replace concrete in a good and workmanlike manner.
- 3) Use elastomeric caulking compound to fill fractures in basement floor.
- 4) Monitor basement floor for evidence of future significant deterioration.

**Estimated Cost of Suggested Remedy -**

-\$750.00, Labor and Materials

Please note that latent or concealed deficiencies may exist. Only non-destructive testing was conducted. Portions of the mechanical and structural systems were not able to be fully examined. This inspection is not intended to be nor is it represented as technically exhaustive. This report is not intended to be nor is it represented as an Engineer's survey. We suggested consulting all local, state, federal or other regulatory agencies to determine if facilities are in compliance with appropriate regulations. This report does not constitute an offer to perform above suggested repairs. We do not perform contracting or repair work nor do we make referrals to those who do. Contractors set their own prices and prices among contractors vary widely. We suggest acquiring three (3) competing bids from qualified contractors before making final decisions or hiring and/or employing contractors or tradespersons.

This report prepared and respectfully submitted by,

James Jagger President

photos accompany this report





Member #004590