JAGGER ENTERPRISES, INC. dba BUCKEYE HOME INSPECTIONS 17204 Dorchester Drive Cleveland OH 44119-1302 phone (216) 486-4663 fax (216) 486-9922

April 12, 1999

Name Deleted, Esq. Law Firm Address Deleted City & State

Your Client: Name Deleted

Address

City & State

Your File #?

At the request of Name Deleted, Esq., a limited, visual inspection of selected portions of the concrete driveway area, access walk and public sidewalk of the name deleted residence located at address deleted, was conducted by Jagger Ent., Inc. dba Buckeye Home Inspections on Thursday, April 08, 1999. The inspector was Jim Jagger. It is the inspector's understanding that the driveway was recently installed. Name deleted was not present at the time of the inspection.

Weather at the time of the inspection was partially sunny with temperature in (upper 60's) and dry. No rain had fallen since Sunday, April 03, 1999.

Observations-

- 1) Front porch concrete pad was in satisfactory condition
- 2) Visual inspection of referenced driveway and contiguous surfaces revealed substantial evidence of severely accelerated and unacceptable deterioration.

Affected areas include the driveway, driveway, driveway apron (the portion of the driveway between the street and public sidewalk), and newer portions (6 blocks) of public sidewalk.

The deteriorated portions of concrete were literally coming apart.

Substantial visible evidence of pitting, scaling (flaking or peeling away of a surface portion of hardened concrete), chipping, and general surface deterioration was visible over broad areas of the above referenced surface. This is not a normal or acceptable condition for a driveway of this age.

Shrinkage cracks were also noted. These were not deemed significant.

Please note that adjoining older portions of public sidewalk are not deteriorated. Although apparently much older than the younger, deteriorated portions of public sidewalk and subject to same climactic stresses as younger, deteriorated six (6)blocks of concrete, older portions of public sidewalk are in excellent condition.

Also, inspector drove around the adjoining neighborhood and noted that the overwhelming majority of concrete sidewalks and driveways ins the area were in good condition and did not exhibit the deteriorated conditions viewed at the name deleted property.

Clearly, the deteriorated public sidewalk and driveway/apron area on Name deleted property does not conform with neighborhood standards.

Please note - Very Important

Although scaling and deterioration of this type is commonly associated with application of ice melting compounds to include salt dripping off parked cars. Deterioration of this type can be reasonably be prevented and is in fact prevented in the overwhelming majority of residence examined by the inspector.

N.B. 2) Most scaling caused by freezing and thawing of concrete exposed to deicers can be prevented by entrained air incorporated in the mix in the proper amount. On driveways, sidewalks, or patios where this has not been done, scaling may occur. Even where deicing salts have not been purposely spread, they may be carried by automobiles and drip onto garage floors and driveways. Slabs may also scale when no salt has been applied if the top surface has had water applied to it during floating or troweling, has had bleed water worked into the surface during various finishing operations, or was floated to early. *

*This quote taken from AMERICAN CONCRETE INSTITUTE 332R-84 "Guide to Residential Cast-in-Place Concrete Construction" Reported by ACI Committee 332. Published 1984 by American Concrete Institute.

Item 2) above indicates that if proper "air entrainment" - defined as 'the intentional incorporation of minute air bubbles in concrete to improve durability to freezing and thawing exposures or to improve workability is achieved, then most scaling can be prevented.

A prudent workman (contractor) should request a certified copy of the mix proportions from the concrete vendor if there is any potential for failure of concrete due to bad mixture or lack of proper "entrained air."

Conclusions-

The above-referenced driveway, driveway apron and six (6) blocks of public sidewalk are in an advanced state of deterioration for their apparent age.

The observed deterioration is excessive and evidence that common (usual and expected) standards of workmanship were not observed.

Evidence of sub-standard workmanship was clearly visible in the name deleted driveway and public sidewalk.

Please note-

The exterior of the **name deleted** residence is very neatly maintained. A driveway must not only be functional but it also must be esthetically pleasing. The driveway is the "entrance" to a person's property. In it's present condition, the **name deleted** driveway is unsightly, does not meet minimum accepted visual standards and detracts substantially from the appearance of the **name deleted** residence.

Suggested Resolution

Remove existing concrete driveway, driveway apron and six (6) blocks of public sidewalk. Replace with new, correctly installed, quality materials, (approximately 1,701 square feet).

Estimated Cost of Suggested Resolution-

\$5953.50, Labor and Materials, plus applicable tax and permits

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,

Jim Jagger President