

GERVASIO & ASSOC., INC.

CONSULTING ENGINEERS

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July 6, 2021

SCOTTSDALE SHADOWS HOA

Attn: Board of Directors

7800 East Camelback Road

Scottsdale, AZ 85251

RE: SCOTTSDALE SHADOWS - ENTIRE SITE

7800 East Camelback Road, Scottsdale, Arizona

BUILDING SAFETY

G&A Job No. 1099 F

Gentlemen:

This letter is written to alleviate the concerns of the HOA members and its Board of Directors (Board) on the safety of the Scottsdale Shadows HOA (SSH) buildings. Based on our extensive experience as Structural Forensic Engineers (SFE) and Design Engineers, and our study of the SSH Construction Drawings (CDs) and the CDs for the Surfside Florida Champlain Towers (Towers), the SSH building's design is a much stronger and safer structural system than the Towers. Mr. Ramiro Wong, General Manager, gave us a flash drive of the SSH CDs and I reviewed every structural CD that had units. These include only buildings in Regime 5 & 6. If Regime 5 & 6 are not typical, then we need to study the others. My partner, Fred Nelson, S.E., was activated as a FEMA SE and is currently working at the Towers. On being activated, he received the CDs for the Towers and our staff of four senior SFEs met, studied them, copied them, and have a preliminary understanding of the tragedy. Therefore, based on both preliminary evaluations and our experience, the SSH building design should not be a concern. A very important difference in the designs between SSH and the Towers is that the SSH buildings can experience significant visible movement before they become dangerous. Also important is any problems would be isolated to a small area in lieu of a major tragedy as at the Towers. Most likely, if SSH had a problem, one of your members would already have notified maintenance of any visible significant movement (VSM).

SSH Regime 5 & 6 consist of masonry bearing walls on the outside and hallways with prestressed concrete planks (PCPs) spanning between them. These PCPs are also the ceilings of each unit. This system was very common when the SSH condominiums were constructed. Therefore, the design SEs and the contractors should have been very familiar with the construction. The SSH system is also very resistant to the environment. The recreation facility is different, but is also standard construction, similar to a residence.

Your original request was for us to present a proposal to inspect your HOA. Based on the size of your HOA and our need to enter every unit, this would be expensive, time consuming, and most likely, not find any VSM. As explained above, your building design is much different and safer than the Towers. We are prepared to assist the HOA and work with the Board to determine the most economical program to evaluate the safety of your buildings.

The evaluation of each unit to find VSM does not require a SFE. It can be performed by a lay person with our guidance to discover issues and our SFE evaluation when issues are found. The use of lay persons has many possibilities and could be cost effective. One possibility would be for us to create a manual for a lay person's use. The manual could be used today, periodically in the future, and when issues arise. We recommend that the Board, with our assistance, evaluate these possibilities. The following are typical of the ultra conservative recommendations we would make.

First, the exterior and hallway masonry walls are important. We have extensive experience with cracks in masonry. Minor thin cracks are to be expected. If cracks exceed 1/8 inch in width and are longer than 3 feet, which are also to be expected, they should be evaluated by a SFE. Second, the ceilings should not have rust stains and few cracks parallel to the hallways. We are familiar with the PCP units and historically they have performed very well. We have investigated very few PCPs with problems. The junction of the PCP and the masonry walls are extremely important. For both the PCP and the Junction, we can present sketches as to what to observe. These sketches can be modified as we gain experience working with you. Finally, there could be areas that a lay person could not evaluate. We can isolate them and if we can evaluate them, we will. If not, we will explain how to observe them periodically for VSM, what would be critical, and when to call us for evaluation.

The cost of investigating your complex by a SFE will be very expensive, and based on your design CDs, we believe is not cost effective. Regardless, if the Board wants us to present a proposal for an investigation of SSH we will. As an alternate, with the guidelines outlined above, we recommend working with the Board to explore other cost effective programs of evaluation.

Sincerely,

GERVASIO & ASSOC., INC.



Joseph A. Gervasio, P.E.
President

JAG:blm