



Site Plan



View of Typical Residential Building



Elevation During Investigation

**Client:**

Terrace Square Condominium Association

**Scope of Work:**

Since this 560-unit residential, eight-building complex was constructed in two phases during the 1970's, many residents have reported leaking exterior walls in all buildings. Large areas of face brick at each building were observed to spall the exterior brick "crust". A past history of deferred maintenance and a prior building investigation failed to address all sources of these widespread, persistent problems.

The condominium board consulted HAG to further investigate why the buildings continued to leak. Our team implemented strategies that included:

- A survey of the interiors of the 75+ units that continued to report problems and assembly of work orders to immediately address items for homeowners that could receive short-term repairs quickly by on-site staff or maintenance contractors
- Examination of the original construction drawings, past reports and repair histories for the project
- Performance of an overall visual inspection with standard high-resolution and thermal-imaging cameras, noting any broad patterns of distress for all buildings
- An up-close / "hands on" inspection (by aerial lift) of all building facades in which all observable exterior defects for each building elevation were identified and digitally recorded. This included the sounding of approximately 250,000 face brick
- The preparation of charted "Façade Distress Maps" for each building elevation, noting the exact location and quantity for each type of defect observed for the Owner's records
- The removal of face brick, digital recording of inspection openings at key suspect wall areas and analysis of the results with a structural engineer
- Laboratory testing of suspect masonry materials to evaluate their physical properties and continued suitability
- Preparation of a comprehensive Condition Assessment Report of our findings to meet the highest industry standards of care for the Owner