TOWN OF PALM BEACH

Information for Town Council Meeting on: January 12, 2022

To: Mayor and Town Council

Via: Kirk Blouin, Town Manager

From: Wayne Bergman, Director of Planning, Zoning & Building

Re: Building Recertification Program

Date: December 22, 2021

GENERAL INFORMATION

As you know from earlier discussions and updates, Palm Beach County and its 39 municipalities have been reviewing the possibility of adopting a building recertification program, similar to and modeled on the Broward County & Miami-Dade building recertification programs.

The need for this type of program was prompted by the collapse of the Champlain Tower in Surfside, FL. I am part of a 40 member Task Force with County staff and the PBC League of Cities, as we developed a draft program. After months of discussion and work by the Task force to draft a program, the Palm Beach County Board of County Commissioners placed their proposed recertification program on hold, as they wait to see what actions the State may take on this issue next year. To date, the only municipality that moved forward with their own program was Boca Raton.

My take on the County's draft program was to propose one change for the Town – to not require every building larger than 3,500 sf to be included in the mandatory recertification program. I think the goal is to recertify the mid and high-rise buildings. Therefore, I am proposing including only "threshold" buildings in the Town program. A threshold building is unique to Florida and is defined by Florida Statutes as "more than 3 stories or 50' in height, OR an assembly use (theater, restaurant, bar, lounge, nightclub) over 5,000 sf or with an occupant load of more than 500 people". This is only my initial recommendation, as the Town leaders may feel different and propose something different. We can also easily modify this program if the County or State eventually adopt a similar program.

I was asked to present this draft program to the Citizen's Association and Civic Association joint meeting in December, 2021, which I did. I stated it was a "draft" program that has not been considered yet by the Town Council. It was putting the proverbial cart before the horse, but I saw no downside in participating since the inspections of the condo buildings is important. I

joined an engineer and a condo attorney in making short presentations to a group of about 40 -50 people, mainly building managers and condo board members from the south end condo buildings.

Even if the Town does not adopt this program, it is a great thing we could recommend to building owners.

I will present a revised presentation at your January meeting and explain the need for this program and how it would actually work. I drafted code and fee changes to implement the program, if the Council is interested.

Attached:
- Presentation Slides
- Draft Program with Inspection Checklists
- Draft Criteria and Guidelines
- Draft Ordinances Required to Implement the Program and Define Violations
- Draft Resolution to Provide a Fee to Perform Inspection Reviews

Building Safety Inspection and Recertification Proposed Process

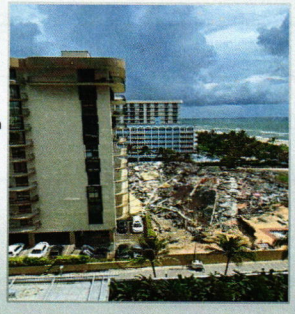
Town Council Presentation

January 11, 2022

Trigger Event

- June 24, 2021 Champlain Towers South collapse.

On **Thursday, June 24, 2021**, at approximately 1:25 a.m. EDT, Champlain Towers South, a 12-story beachfront condominium in the Miami suburb of Surfside, Florida, United States, partially collapsed. Ninety-eight people died.



Gianrigo Marletta/AFP via Getty Images

(AP Photo/Gerald Herbert, File)

Town Reaction

- Immediate letter sent from PZB, Police, Fire & Public Works to all 101 condo associations. The letter included the strong recommendation for the owner to inspect and evaluate their buildings for structural and electrical problems.
- Town staff contacted Palm Beach County staff to determine whether the County would create and implement a building recertification program, similar to Miami-Dade and Broward Counties.

County Reaction

- Task Force created with 40 Palm Beach County Building Officials, County Senior staff, and Palm Beach County League of Cities.
- Numerous meetings held to examine the Miami-Dade and Broward 40-Year Building Recertification programs.
- Draft Palm Beach County program guidelines and inspection checklists.
- Ultimate decision by County Commissioners on October 19, 2021, to not move forward with the program, and wait to see what actions are taken at State level.

Other Reactions

- State of Florida – Various State legislators have stated that this is an opportune time to revisit condominium laws relating to reserve accounts, in an effort to make sure building owners set aside adequate funds to pay for building safety repairs. Some legislators have also called for a State-wide building safety and recertification program. These efforts will probably face industry and political resistance. Governor DeSantis has said he will wait for the findings from the U.S. Department of Commerce, National Institute of Standards and Technology, regarding the cause of the Surfside building collapse, before determining his next steps.
- The International Code Council (ICC), the Building Owners and Managers Association (BOMA), and the National Institute of building Sciences (NIBS) convened a panel of subject matter experts from around the nation in West Palm Beach on August 17, 2021. Their purpose was to share knowledge and recommendations on how communities around the country monitor the safety of existing buildings, what guidance already exists, and how future catastrophic events may be avoided.

Recent Actions

- A Miami-Dade County Grand Jury completed their review of the Surfside disaster and released a 43 page report that listed their findings. Their recommendations include:

  Updating the County ordinance to require recertifications of buildings every 10 or 15 years (not at 40 years); and

  Extending the recertification program statewide; and

  Revise the Florida Condominium Act to remove a condo board's ability to waive their obligation to fund reserves for building repairs.

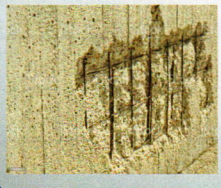
General Construction Methods

- For oceanfront construction, mid and high rise buildings are built upon concrete piles, and the building shells are reinforced concrete slabs with vertical walls made from block with filled-cells or concrete.
- Other parts of the Island see concrete slab on grade with block walls and stem wall foundations on footers, with concrete slabs at grade and both block and frame vertical construction.

Current Problems

- The primary structural problems are varied, ranging from improper construction methods or undersized building components used when the building is constructed, to settling of the ground upon which footers and vertical building components rest, to concrete spalling, to major water intrusion into the reinforced concrete.
- Balconies have their own challenges. Adding carpet or tile to a balcony can trap and hold moisture that weeps into the concrete balconies, eventually affecting the reinforcing steel.
- For water intrusion, proper waterproofing many times can mitigate the damage to concrete and the reinforcing steel embedded in the concrete. This can sometimes be as simple as painting and caulking the exterior building walls.

Spalling Concrete



Other Collapses

Current Town Inspections

- Annual inspection by the Fire Department for the common areas and commercial buildings.
- Permit-driven inspections for new construction, including concrete restoration.
- Complaint-driven inspections for alleged property maintenance issues.
- Annual Facilities Permits.

Draft Program

- 25-Year Building Safety Inspection and Recertification program.
- The requirements would apply to all "threshold" buildings.
- Two written updates presented formally to the Town Council.
- Teleconference with Citizen's Association regarding the status of program and actions of the Town.

Definition of Threshold Building

- "Threshold building" means any building which is greater than three stories or 50 feet in height, or which has an assembly occupancy classification as defined in the Florida Building Code which exceeds 5,000 square feet in area and an occupant content of greater than 500 persons.

  -F.S. 553.71 (12)

Required Documents, Ordinances and Resolutions

- Ordinance to Chapter 18 to create, enable and implement the Building Safety Inspection and Recertification program.
- Ordinance to Chapter 2 to provide for violations.
- Resolution to set fee for reviewing inspection reports.
- Create inspection checklist.

Notice

- Letters sent to owners of threshold buildings. Ninety (90) days to obtain and provide the building safety inspection report.

Inspection

- Building owners hire a licensed engineer or architect, qualified in the practice of structural and/or electrical inspections of mid and high rise buildings to conduct the safety inspections and produce a report listing any deficiencies.

Review by Building Official

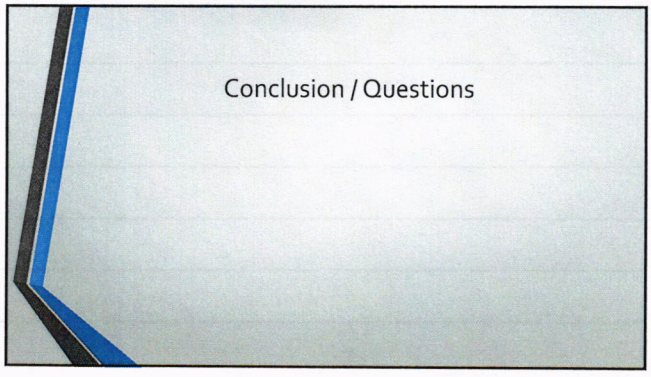
- All inspection reports and checklists would be reviewed by the Town Building Official, with assistance from the Town contract structural engineer.
- Any deficiencies would be noted, and immediate repairs of life safety matters would be required of the building owner.
- Any required safety repairs must be completed within 180 days from receipt of the safety inspection report.

Outstanding Town Issues to Resolve

- Town Council to move forward with the proposed program.
- Staffing needed to administer the new program.
- Hiring structural engineer to assist with Town reviews of the building safety reports.

Benefits

- Having a licensed professional engineer or architect certify - as safe - all Town existing threshold buildings.
- Additional level of protection for residents and their buildings.
- A clean and clear building safety report may assist with property values, real estate sales, and building or unit insurance premiums.


Conclusion / Questions

Town of Palm Beach

Building Safety Inspection and Recertification Program

DRAFT

December 22, 2021

TOWN OF PALM BEACH BUILDING SAFETY INSPECTION PROGRAM YEARLY SCHEDULE

OCTOBER – NOVEMBER - DECEMBER

Building Official must notify property owners whose buildings are subject to the Safety Inspection Program for the specified calendar year.

JANUARY – FEBRUARY - MARCH

90-day period for engineers or architects to perform the safety inspections and return structural and electrical checklists to the Town.

APRIL through SEPTEMBER

180-day period of time for those buildings requiring structural or electrical repairs that pose an immediate threat to life safety to complete the work (repairs that are incidental and non-life threatening can be completed at a later date).

GENERAL CONSIDERATIONS

SCOPE OF STRUCTURAL INSPECTION

The fundamental purpose of the required inspection and report is to confirm in reasonable fashion that the building or structure under consideration is safe for continued use under the present occupancy. As implied by the title of this document, this is a recommended procedure, and under no circumstances are these minimum recommendations intended to supplant proper professional judgment.

Such inspection shall be for the purpose of determining the general structural condition of the building or structure to the extent reasonably possible of any part, material or assembly of a building or structure which affects the safety of such building or structure and/or which supports any dead or designed live load, and the general condition of its electrical systems pursuant to the Florida Building Code.

ln general, unless there is obvious overloading, or significant deterioration of important structure elements there is little need to verify the original design. It is obvious that this has been "time tested' if still offering satisfactory performance. Rather, it is of importance that the effects of time with respect to deterioration of the original construction materials be evaluated. It will rarely be possible to visually examine all concealed construction, nor should such be generally necessary. However, a sufficient number of typical structure members should be examined to permit reasonable conclusions to be drawn.

Visual Examination will, in most cases, be considered adequate when executed systematically. The visual examination must be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the inspecting professional to establish compliance Surface imperfections such as cracks, distortion, sagging, excessive deflections, significant misalignment, signs of leakage, and peeling of finishes should be viewed critically as indications of possible difficulty.

Testing Procedures and Quantitative Analysis will not generally be required for structural members or systems except for such cases where visual examination has revealed such need, or where apparent loading conditions may be critical.

Manual Procedures such as chipping small areas of concrete and surface finishes for closer examinations are encouraged in preference to sampling and/or testing where visual examination alone is deemed insufficient. Generally, unfinished areas of buildings such as utility spaces, maintenance areas, stairwells and elevator shafts should be utilized for such purposes. ln some cases, to be held to a minimum, ceilings or other construction finishes may have to be opened for selective examination of critical structural elements. ln that event, such locations should be carefully located to be least disruptive most easily repaired, and held to a minimum. ln an event, a sufficient number of structural members must be examined to afford reasonable assurance that such are representative of the total structure.

Evaluating an existing structure for the effect of time, must take into account two, basic considerations; movement of structural components with respect to each other, and deterioration of materials.

With respect to the former, volume change considerations, principally from ambient temperature changes, and possible long time deflections, are likely to be most significant. Foundation movements will frequently be of importance, usually settlement, although upward movement due to expansive soils actually may occur. However, it is infrequent in this area. Older buildings on spread footings may exhibit continual, even recent settlements if founded on deep unconsolidated fine grained or cohesive soils or from subterraneous losses or movements from several possible causes.

With very little qualification, such as rather rare chemically reactive conditions, deterioration of building materials can only occur in the presence of moisture, largely to metals and their natural tendency to return to the oxide state in the corrosive process.

ln this marine climate, highly aggressive conditions exist year round. For most of the year, outside relative humidity may frequently be about 90 or 95%, while within air-conditioned buildings; relative humidity will normally be about 35 to 60%. Under these conditions, moisture vapor pressures ranging from about 1/3 to 1/2 pounds per square inch will exist much of the time. Moisture vapor will migrate to lower pressure areas. Common building materials such as stucco, masonry and even concrete, are permeable even with these slight pressures. Since most of our local construction does not use vapor barriers, condensation will take place within the enclosed walls of the building. As a result, deterioration is most likely adjacent to exterior walls, or wherever else moisture or direct leakage has been permitted to penetrate the building shell.

Structural deterioration will always require repair. The type of repair, however, will depend on the importance of the member in the structural system and degree of deterioration. Cosmetic type repairs may suffice in certain non-sensitive members such as tie beams and columns, provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis that the remaining material, if protected from further deterioration can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

Written Reports shall be required attesting to each required inspection. Each such report shall note the location of the structure, description of type of construction, and general magnitude of the structure, the existence of drawings and location thereof, history of the structure to the extent reasonably known, and description of the type and manner of the inspection, noting problem areas and recommending repairs, if required to maintain structural integrity.

FOUNDATION:

lf all of the supporting subterranean materials were completely uniform beneath a structure, with no significant variations in grain size, density, moisture content or other mechanical properties; and if dead load pressures were completely uniform, settlements would probably be uniform and of little practical consequence. ln the real world, however, neither is likely. Significant deviations from either of these two idealism are likely to result in unequal vertical movements.

Monolithic masonry, generally incapable of accepting such movements will crack. Such cracks are most likely to occur at corners, and large openings. Since, in most cases, differential shears are involved, cracks will typically be diagonal.

Small movements, in themselves, are most likely to be structurally important only if long term leakage through fine cracks may have resulted in deterioration. ln the event of large movements, continuous structural elements such as floor and roof systems must be evaluated for possible fracture or loss of bearing.

Pile foundations are, in general, less likely to exhibit such difficulties. Where such does occur, special investigation will be required.

ROOFING SYSTEMS:

Sloping roofs, usually having clay or cement tiles, are of concern in the event that the covered membrane may have deteriorated, or that the tiles may have become loose. Large deflections if merely resulting from deteriorated rafters or joists will be of greater importance. Valley Flashing, and Base Flashing at roof penetration will also be matters of concern.

Flat roofs with built up membrane roofs will be similarly critical with respect to deflection considerations. Additionally, since they will generally be approaching expected life limits at the age when building recertification is required, careful examination is important. Blisters, wrinkling, alligatoring, and loss of gravel are usually signs of difficulty. Punctures or loss of adhesion of base flashing, coupled with loose counter flashing will also signify possible problems. Windblown gravel, if excessive, and the possibility of other debris, may result in pounding, which if permitted, may become critical.

MASONRY BEARING WALLS:

Random cracking, or if discernible, definitive patterns of cracking, will of course, be of interest. Bulging, sagging, or other signs of misalignment may also indicate related problems in other structural elements. Masonry walls where commonly constructed of either concrete masonry remits or scored clay tile, may have been constructed with either reinforced concrete columns tie beams, or lintels.

Steel bar joists are, of course, sensitive to corrosion. Most critical locations will be web member welds, especially near supports, where shear stresses are high possible failure may be sudden, and without warning.

Cold formed steel joists, usually of relatively light gage steel, are likely to be critically sensitive to corrosion, and are highly dependent upon at least normal lateral support to carry designed loads. Bridging and the floor or roof system itself, if in good condition, will serve the purpose.

Wood joists and rafters are most often in difficult from "dry rot", or the presence of termites. The former (a misnomer) is most often prevalent in the presence of sustained moisture or lack of adequate ventilation. A member may usually be deemed in acceptable condition if a sharp pointed tool will penetrate no more than about one eight of an inch under moderate hand pressure. Sagging floors will most often indicate problem areas. Gypsum roof decks will usually perform satisfactorily except in the presence of moisture. Disintegration of the material and the foam-board may result from sustained leakage. Anchorage of the supporting bulb tees against uplift may also be of importance, with significant deterioration. Floor and roof systems of case in place concrete with self centering reinforcing, such as paper backed mesh and rib-lath, may be critical with respect to corrosion of the unprotected reinforcing. Loss of uplift anchorage on roof decks will also be important if significant deterioration has taken place, in the event that dead ·loads are otherwise inadequate for that purpose.

STEEL FRAMING SYSTEM:

Corrosion, obviously enough, will be the determining factor in the deterioration of structural steel. Most likely suspect areas will be fasteners, welds, and the interface area where bearings are embedded in masonry. Column bases may often be suspect in areas where flooding has been experienced, especially if salt water has been involved.

Thin cracks may indicate only minor corrosion, requiring minor patching. Extensive spalling may indicate a much more serious condition requiring further investigation.

Of most probable importance will be the vertical and horizontal cracks where masonry units abut tie columns, or other frame elements such as floor slabs. Of interest here is the observation that although the raw materials of which these masonry materials are made may have much the same mechanical properties as the reinforced concrete framing, their actual behavior in the structure, however, is likely to differ with respect to volume change resulting from moisture content, and variations in ambient thermal conditions.

Moisture vapor penetration, sometimes abetted by salt laden aggregate and corroding rebars, will usually be the most common cause of deterioration. Tie columns are rarely structurally sensitive, and a fair amount of deterioration may be tolerated before structural impairment becomes important. Usually, if rebar loss is such that the remaining steel area is still about 0.0075 of the concrete area, structural repair will not be necessary. Cosmetic type repair involving cleaning, and patching to effectively seal the member, may often suffice. A similar approach may not be unreasonable for tie beams, provided they are not also serving as lintels. ln that event, a rudimentary analysis of load capability using the remaining actual rebar area, may be required.

FLOOR AND ROOF SYSTEMS:

Cast in place reinforced concrete slabs and/or beams and joists may often show problems due to corroding rebars resulting from cracks or merely inadequate protecting cover of concrete. Patching procedures will usually suffice where such damage has not been extensive. Where corrosion and spalling has been extensive in structurally critical areas, competent analysis with respect to remaining structural capacity, relative to actual supported loads, will be necessary. Type and extent or repair will be dependent upon the results of such investigation.

Precast members may present similar deterioration conditions. End support conditions may be important. Adequacy of bearing, indications of end shear problems, and restraint conditions are important, and should be evaluated in at least a few typical locations.

CONCRETE FRAMING SYSTEMS:

Concrete deterioration will, in most cases be similarly related to rebar corrosion possibly abetted by the presence of salt-water aggregate or excessively permeable concrete. ln this respect, honeycomb areas may contribute adversely to the rate of deterioration. Columns are frequently most suspect. Extensive honeycomb is most prevalent at the base of columns, where fresh concrete was permitted to segregate, dropping into form boxes. This type of problem has been known to be compounded in areas where flooding has occurred, especially involving salt water.

ln spall areas, chipping away a few small loose samples of concrete may be very revealing. Especially, since loose material will have to be removed even for cosmetic type repairs, anyway. Fairly reliable quantitative conclusions may be drawn with respect to the quality of the concrete. Even though our cement and local aggregate are essentially derived from the same sources, cement will have a characteristically dark grayish brown color in contrast to the almost white aggregate. A typically white, almost alabaster like coloration will usually indicate reasonably good overall strength. The original gradation of aggregate can be seen through a magnifying glass. Depending upon the structural importance of the specific location, this type of examination may obviate the need for further testing if a value of 2000 psi to 2500 psi is sufficient for required strength, in the event that visual inspection indicates good quality for the factors mentioned.

WATERPROOFING:

Adequacy of seals and waterproofing is of concern to ensure corrosion protection. Further modifications to exposed exterior surfaces, such as decks, balconies and exposed walkways that may trap moisture and lead to deterioration should be evaluated. Areas of concentration include: 1) pool decks, rooftop gardens, green roofs, 2) sealing around vertical supports, 3) pump control room ceilings below deck, 4) roof connections at sheer walls, 5) window, doors and attachments from balconies. Seals around roof membranes, A/C stances, shear wall connections and joint connections should be examined.

WINDOWS:

Window condition is of considerable importance with respect to two considerations. Continued leakage may have resulted in other adjacent damage and deteriorating anchorage may result in loss of the entire unit in the event of severe wind storms short of hurricane velocity. Perimeter sealant, glazing, seals, and latches should be examined with a view toward deterioration of materials and anchorage of units for inward as well as outward (section) pressures, most importantly in high buildings.

WOOD FRAMING:

Older wood framed structures, especially of the industrial type, are of concern in that long term deflections may have opened important joints, even in the absence of deterioration. Corrosion of ferrous fasteners will in most cases be obvious enough. Dry rot must be considered suspect in all sealed areas where ventilation has been inhibited, and at bearings and at fasteners. Here too, penetration with a pointed tool greater than about one eighth inch with moderate hand pressure, will indicate the possibility of further difficulty.

LOADING:

lt is of importance to note that even in the absence of any observable deterioration, loading conditions must be viewed with caution. Recognizing that there will generally be no need to verify the original design, since it will have already been "time tested", this premise has validity only if loading patterns and conditions remain unchanged. Any material change in type and/or magnitude or loading in older buildings should be viewed as sufficient jurisdiction to examine load carrying capability of the affected structural system.

SCOPE OF ELECTRICAL INSPECTION
(Main Distribution Equipment and Feeder Circuits Only)

The purpose of the required inspection and report is to confirm with reasonable fashion that the building or structure and all habitable and non-habitable areas, as deemed necessary by the inspecting professional to establish compliance, are safe for continued use under present occupancy. As mentioned before, this is a recommended procedure, and under no circumstances are these minimum recommendations intended to supplant proper professional judgement. Items 1-4 shall be evaluated by means of thermal imaging during time of high demand.

ELECTRIC SERVICE:

A description of the type of service supplying the building or structure must be provided, stating the rating (Voltage, Amperage & Phase) of the system, if it is protected by fuses or circuit breakers, which shall be operational and functional per the equipment manufacturer's standards. Proper grounding of the service should also be visually verified. All electric rooms and utility meter locations shall have working clearance for all equipment per NEC Article 110.26 and as necessary for service personnel to perform both work and inspections. All wire ways, electric panels and associated equipment shall be in good mechanical condition, free of unused openings, and equipped with properly functioning doors and covers throughout the entire building or structure.

BRANCH CIRCUITS:

Branch circuits for all common areas in the building must be clearly identified at each panel board and an evaluation of the conductors and terminations at all panels must be performed. All equipment and devices used in the building, including emergency generators, elevators, air conditioning equipment, etc. shall be effectively grounded per NEC Article 250.

CONDUIT RACEWAYS:

All wiring methods present in the building must be detailed on the report and individually inspected, where reasonably accessible. All wiring methods shall be appropriate for the building type and acceptable per NEC Chapter 300 for the present use. The evaluation of each type of conduit and cable, if applicable, must be done individually. The conduits in the building should be free of erosion, and checked for considerable dents or damage that may be prone to cause damage to the conductors. The conductors and cables in all conduit systems should be chafe free, and their loads should not exceed the ratings specified per NEC Article 310. All conduit supports shall be secure and inspected for erosion.

LIFE SAFETY SYSTEMS/ FLORIDA FIRE PREVENTION CODE:

Florida Statute and the scope of this document does not allow for testing of built in fire protection systems such as fire alarms and fire sprinkler systems by anyone other than properly licensed fire system contractors. These systems are required to be inspected, tested and

maintained on a frequency determined by the licensing authority and as directed within the Florida Fire Prevention Code, or by local jurisdiction amendments. The compliance for ITM of these systems is under the scope and authority of the local fire official. This inspection/survey shall include a visual verification that systems have been maintained by evidence of proper documentation on site and will serve as a good check and balance that the complete building life safety system has been maintained. The inspection may also document the visual presence of emergency lighting, exit lighting and egress pathway illumination. If any concerns are presented from these observations the report shall be submitted to the local building official who shall consult with the local fire official for remedial action.

STRUCTURAL SAFETY INSPECTION REPORT FORM

Inspection Firm or Individual Name:_____

Address:_____

Telephone Number:_____

Inspection Commenced Date:_____ Inspection Completed Date:_____

_____ No Repairs Required

_____ Repairs are required as outlined in the attached inspection report

_____ Immediate Repairs Needed, restricted use

_____ Building Safe

_____ Building Unsafe

Licensed Professional,
Engineer/Architect Name: _____

License Number: _____

I am qualified to practice in the discipline in which I am hereby signing. I affirm that I do not have an affiliation or other financial interest in the subject building(s).

SEAL

Signature_____ Date:_____

This report has been based upon the minimum inspection guidelines for building safety inspection developed by the Palm Beach County League of Cities Building Officials Subcommittee To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the electrical system, based upon careful evaluation of observed conditions, to the extent reasonably possible.

1. DESCRIPTION OF STRUCTURE:		
a. Name on Title:		
b. Street Address:		
e. Legal Description:		
d. Owner's Name:		
e. Owner's Mailing Address:		
f. Folio Number of Property on which Building is Located:		
g. Building Code Occupancy Classification:		
h. Present Use:		
i. General Description, Type of Construction:	Square Footage:	Number of Stories:
j. Special Features:		
k. Additional Comments:		

l. Additions to original structure:

2. PRESENT CONDITION OF STRUCTURE:
a. General alignment (Note: good, fair, poor, explain if significant):
1. Bulging:
2. Settlement:
3. Deflections:
4. Expansion:
5. Contraction:
b. Portion showing distress (Note, beams, columns, structural walls, floor, roofs, other):
c. Surface conditions - describe general conditions of finishes, noting cracking, spalling, peeling, signs of moisture penetration and stains:
d. Cracks - note location in significant members. ldentify crack size as HAIRLINE if barely discernible; FINE if less than 1 mm in width; MEDIUM if between 1 and 2 mm width; WIDE if over 2 mm:

e. General extent of deterioration - cracking or spalling of concrete or masonry, oxidation of metals; rotor borer attack in wood:
f. Previous patching or repairs:
g. Nature of present loading indicate residential, commercial, other estimate magnitude:
h. Protection from undermining

3. INSPECTIONS:
a. Date of notice of required inspection:
b. Date(s) of actual inspection:
c. Name and qualifications of individual submitting report:
d. Description of laboratory or other formal testing, if required, rather than manual or visual procedures:
e. Structural repair-note appropriate line:
1. None required:
2.Required (describe and indicate acceptance):

4. SUPPORTING DATA:

a. _____ sheet written data

b. _____ photographs

c. _____ drawings or sketches

5. MASONRY BEARING WALL = lndicate- good, fair, poor on appropriate lines:
a. Concrete masonry units:
b. Clay tile or terracota units:
c. Reinforced concrete tie columns:
d. Reinforced concrete tie beams:
e. Lintel:
f. Other type bond beams:
g. Masonry finishes -exterior:
1. Stucco:
2.Veneer:
3. Paint only:
4. Other (describe):
h. Masonry finishes - interior:
1. Vapor barrier:
2. Furring and plaster:
3. Paneling:
4. Paint only:
5. Other (describe):
i. Cracks:
1. Location - note beams, columns,other:
2. Description:
j. Spalling:
1. Location- note beams, columns, other:
2. Description:
k. Rebar corrosion-check appropriate line:
1. None visible:
2. Minor-patching will suffice:

3. Significant-but patching will suffice:
4. Significant-structural repairs required:
1. Samples chipped out for examination in spall areas:
1. No:
2. Yes - describe color, texture, aggregate, general quality:

6. FLOOR ANO ROOF SYSTEM AND WATERPROOFING:
a. Roof:
1. Describe (flat, slope, type roofing, type roof deck, condition):
2. Note water tanks, cooling towers, air conditioning equipment, signs, other heavy equipment and condition of support:
3. Note types of drains and scuppers and condition:
b. Floor system(s):
1. Describe (type of system framing, material, spans, condition):
c. lnspection - note exposed areas available for inspection, and where it was found necessary to open ceilings, etc. for inspection of typical framing members:
d. Waterproofing Have finishes been added after construction? ____ Yes ____ No For waterproofing inspection findings, add Supplemental Inspection Report

7. STEEL FRAMING SYSTEM:
a. Description:
b. Exposed Steel- describe condition of paint and degree of corrosion:
c. Concrete or other fireproofing - note any cracking or spalling and note where any covering was removed for inspection:
d. Elevator sheave beams and connections, and machine floor beams - note condition:

8. CONCRETE FRAMING SVSTEM:
a. Full description of structural system:
b. Cracking:
1. Not significant:
2. Location and description of members affected and type cracking:
c. General condition:
d. Rebar corrosion - check appropriate line:
1. None visible:
2. Location and description of members affected and type cracking:
3. Significant but patching will suffice:

4. Significant - structural repairs required (describe):
e. Samples chipped out in spall areas:
1. No:
2. Yes, describe color, texture, aggregate, general quality:

9.WINDOWS:
a. Type (Wood, steel, aluminum, jalousie, single hung, double hung, casement, awning, pivoted, fixed, other):
b. Anchorage- type and condition of fasteners and latches:
c. Sealant - type of condition of perimeter sealant and at mullions:
d. Interiors seals - type and condition at operable vents:
e. General condition:

10. WOOD FRAMING:
a. Type - fully describe if mill construction, light construction, major spans, trusses:
b. Note metal fitting i.e., angles, plates, bolts, split pintles, other, and note condition:
c. Joints - note if well fitted and still closed:
d. Drainage - note accumulations of moisture:
e. Ventilation - note any concealed spaces not ventilated:
f. Note any concealed spaces opened for inspection:
11. Areas of Other Concerns:

ELECTRICAL SAFETY INSPECTION REPORT FORM

lnspection Firm or Individual Name:_____

Address:_____

Telephone Number:_____

lnspection Commenced Date:_____lnspection Completed Date:_____

_____ No Repairs Required

_____ Repairs are required as outlined in the attached inspection report

_____ Immediate Repairs Needed, restricted use

_____ Building Safe

_____ Building Unsafe

Licensed Professional,
Engineer/Architect Name: _____

License Number: _____

I am qualified to practice in the discipline in which I am hereby signing. I affirm that I do not have an affiliation or other financial interest in the subject building(s).

SEAL

Signature_____Date:_____

This report has been based upon the minimum inspection guidelines for building safety inspection developed by the Palm Beach County League of Cities Building Officials Subcommittee To the best of my knowledge and ability, this report represents an accurate appraisal of the present condition of the electrical system, based upon careful evaluation of observed conditions, to the extent reasonably possible

DESCRIPTION OF STRUCTURE:

a. Name on Title:

b. Street Address:

c. Legal Description:

d. Owner's Name:

e. Owner's Mailing Address:

f. Folio Number of Property on which Building is Located:

g. Building Code Occupancy Classification:

h. Present Use:

i. General Description, Type ofConstruction: Square Footage: Number of Stories:

j. Special Features:

k. Additional Comments:

MINIMUM GUIDELINES ANO INFORMATION FOR RECERTIFICATION OF ELECTRICAL SYSTEMS OF TWENTY-FIVE (25) YEAR STRUCTURES

1. ELECTRIC SERVICE:

1. Size: Amperage ☐ Fuses ☐ Breakers ☐

2. Phase: Three Phase ☐ Single Phase ☐ Needs Repair ☐

3. Condition: Good ☐ Fair ☐

4. Service Disconnects were exercised /cycled Y or N

Thermal Imaging Summary: (attach report as appendix to this form)

Additional Comments:

2. ELECTRIC ROOMS, METER ROOMS TRANSFORMER LOCATIONS:

1. Clearances: Good ☐ Fair ☐ Requires Correction ☐

Thermal Imaging Summary: (attach report as appendix to this form)

Additional Comments:

3. WIREWAYS:

Location: Good ☐ Requires Repair ☐

Taps and Fill: Good ☐ Requires Repair ☐

Thermal Imaging Summary: (attach report as appendix to this form)

Additional Comments:

4. ELECTRICAL PANELS:

Location:	Good	☐	Needs Repair	☐
1. Panel #( )	Good	☐	Needs Repair	☐
2. Panel #( )	Good	☐	Needs Repair	☐
3. Panel #( )	Good	☐	Needs Repair	☐
4. Panel #( )	Good	☐	Needs Repair	☐

Thermal Imaging Summary: (attach report as appendix to this form)

Additional Comments:

5. BRANCH CIRCUITS:

1. Identified:	Yes	☐	Must be identified	☐	
2. Conductors:	Good	☐	Deteriorated	☐	Must be replaced ☐

Comments:

6. MAIN SERVICE GROUND AND GROUNDING ELECTRODE:

Good ☐ Repairs Required ☐

Comments:

7. GROUNDING OF EQUIPMENT:

Good ☐ Repairs Required ☐

Comments:

8. SERVICE CONDUITS/RACEWAYS (AND SUPPORTS):

Good ☐ Repairs Required ☐

Comments:

9. SERVICE CONDUCTOR AND CABLES:

Good ☐ Repairs Required ☐

Comments:

10. TYPES OF WIRING METHODS:

Conduit Raceways:	Good	☐	Repairs Required	☐
Conduit PVC:	Good	☐	Repairs Required	☐
NM Cable:	Good	☐	Repairs Required	☐
BX Cable:	Good	☐	Repairs Required	☐

11. FEEDER CONDUCTORS:

Good ☐ Repairs Required ☐

Comments:

12. EMERGENCY LIGHTING:

Good ☐ Repairs Required ☐

Comments:

13. BUILDING EGRESS ILLUMINATION:

Good ☐ Repairs Required ☐

Comments:

NOTE pertaining to the following Items # 14, 15, 16 and 17:

Florida Statute and the scope of this document does not allow for testing of built in fire protection systems such as fire alarms and fire sprinkler systems by anyone other than properly licensed fire system contractors. These systems are required to be inspected, tested and maintained on a frequency determined by the licensing authority and as directed within the Florida Fire Prevention Code, or by local jurisdiction amendments. The compliance for ITM of these systems is under the scope and authority of the local fire official. This inspection/survey shall include a visual verification that systems have been maintained by evidence of proper documentation on site and will serve as a good check and balance that the complete building life safety system has been maintained. The inspection may also document the visual presence of emergency lighting, exit lighting and egress pathway illumination. If any concerns are presented from these observations the report shall be submitted to the local building official who shall consult with the local fire official for remedial action.

14. FIRE ALARM SYSTEM:

Good ☐ Repairs Required ☐

Comments:

15. SMOKE DETECTORS:

Good ☐ Repairs Required ☐

Comments:

16. EXIT LIGHTS:

Good ☐ Repairs Required ☐

Comments:

17. EMERGENCY GENERATOR:

Good ☐ Repairs Required ☐

Comments:

Load Bank Test Summary (attach report as appendix to this form):

18. WIRING IN OPEN OR UNDER COVER PARKING GARAGE AREAS:

Good ☐ Repairs Required ☐

Comments:

19. OPEN OR UNDERCOVER PARKING GARAGE AREAS AND EGRESS ILLUMINATION:

Good ☐ Repairs Required ☐

Comments:

20. SWIMMING POOL WIRING:

Good ☐ Repairs Required ☐

Comments:

21. WIRING TO MECHANICAL EQUIPMENT:

Good ☐ Repairs Required ☐

Comments:

22. ADDITIONAL COMMENTS: