

APPENDIX E

SAFFIR-SIMPSON HURRICANE SCALE

CATEGORY ONE HURRICANE -- WEAK

Winds: 75-95 mph (65-82 kt) at standard anemometer elevations. Damage is primarily to shrubbery, trees, foliage, and unanchored mobile homes. No real damage occurs to building structures. Some damage to poorly constructed signs.

Storm surge: Nominally is 4-5 ft (1.2-1.5 m) above normal. Low-lying coastal roads are inundated; minor pier damage occurs; some small craft in exposed anchorages break moorings.

CATEGORY TWO HURRICANE -- MODERATE

Winds: 96-110 mph (83-95 kt) at standard anemometer elevations. Considerable damage is done to shrubbery and tree foliage, some trees are blown down. Major structural damage occurs to exposed mobile homes. Extensive damage to poorly constructed signs. Some damage is done to roofing material, windows, and doors; no major damage to building structures.

Storm surge: Nominally is 6-8 ft (1.8-2.4 m) above normal. Coastal roads and low-lying escape routes inland are cut by rising water 2-4 hours before arrival of center. Considerable pier damage occurs; marinas are flooded. Small craft in unprotected anchorages break moorings. Evacuation of some shoreline residences and low-lying island areas is required.

CATEGORY THREE HURRICANE -- STRONG

Winds: 111-130 mph (96-113 kt) at standard anemometer elevations. Damage occurs to shrubbery and trees: foliage is blown off trees; large trees are blown down. Practically all poorly constructed signs are blown down; some roofing material damage occurs; some window and door damage occurs; and some structural damage occurs to small residences and utility buildings. Mobile homes are destroyed. There is a minor amount of curtainwall failure.

Storm Surge: Nominally is 9-12 ft (2.7-3.7 m) above normal. Serious flooding occurs at the coast with many smaller structures near the coast destroyed. Larger structures are damaged by battering of floating debris. Low-lying escape routes inland are cut by rising water 3-5 hours before the center arrives. Terrain continuously lower than 5 ft (1.5 m) above sea level may be flooded inland 8 mi (12.9 km) or more. Evacuation of low lying residences within several blocks of the shoreline may be required.

CATEGORY FOUR HURRICANE -- VERY STRONG

Winds: 131-155 mph (114-135 kt) at standard anemometer elevations. Shrubs and trees are blown down; all signs are down. Extensive roofing material damage occurs; extensive window and door damage occurs; complete failure of roof structures occurs on many small residences; and complete destruction of mobile homes occurs. Some curtainwalls experience failure.

Storm Surge: Nominally is 13-18 ft (3.9-5.5 m) above normal. Terrain continuously lower than 10 ft (3 m) above sea level may be flooded inland as far as 6 mi (9.7 km). Major damage occurs to lower floors of structures near the shore due to flooding and battering action. Low-lying escape routes inland may be cut by rising water 3-5 hours before the storm center arrives. Major erosion of beach areas occurs. Massive evacuation of all residences within 500 yds (457 m) of the shoreline may be required and of single-story residences within 2 mi (3.2 km) of the shoreline.

CATEGORY FIVE HURRICANE -- DEVASTATING

Winds: Greater than 155 mph (135 kt) at standard anemometer elevations. Shrubs and trees are down; roofing damage is considerable; all signs are down. Very severe and extensive window and door damage occurs. Complete failure of roof structures occurs on many residences and industrial buildings. Extensive glass failures occur; some complete buildings fail; small buildings are overturned and blown over or away; and complete destruction of mobile homes occurs.

Storm Surge: Height is nominally greater than 18 ft (5.5 m) above normal. Major damage occurs to lower floors of all structures located less than 15 ft (4.6m) above sea level and within 500 yd (457 m) of the shoreline. Low-lying escape routes inland are cut by rising water 3-5 hours before the storm center arrives. Massive evacuations of residential areas situated on low ground within 5-10 mi (8-16 km) of the shoreline may be required.