

INDIAN RIVER COUNTY, FLORIDA

M E M O R A N D U M

TO: Jason E. Brown; County Administrator
DEPARTMENT HEAD CONCURRENCE:

THROUGH: Phil Matson, AICP; Community Development Director

FROM: Scott McAdam, Building Official

DATE: December 14, 2020

SUBJECT: 2020 Indian River County Amended Wind Speed Maps

It is requested that the data herein presented be given formal consideration by the Board of County Commissioners at its regular meeting of January 5, 2021.

DESCRIPTION & CONDITIONS:

The Florida Building Codes (FBC) are updated on a 3-year cycle. The effective date of the new 2020 7th Edition Florida Building Codes is midnight December 31, 2020.

As part of the new 7th Edition of the FBC the state Wind Speed maps, Figures 1609.3(1)-(3) have been altered to now include one additional map, Figures 1609.3(1)-(4).

According to the Florida Statutes and Florida Building Codes, the exact location of wind speed lines shall be established by local ordinance, using recognized physical landmarks such as major roads, canals, rivers, and lake shores, wherever possible.

Under the current FBC “6th Edition (2017) FBC,” basic wind speed or the ultimate design wind speed for the development of wind loads are now determined from one of three maps (Risk Category I, Risk Category II, and Risk Category III and IV) depending upon the Risk Category of the structure being designed.

Changes in the 2020 7th Edition FBC related to wind load design (wind speed lines) will add a new fourth figure/map with increased wind speeds, which will only affect the ultimate design wind speed for use in the design of Risk Category IV essential/critical buildings and structures (i.e. fire stations, emergency treatment, emergency shelters, power generating plants, aviation control towers, national defense facilities), which shall be obtained from Figure 1609.3(3). The ultimate design wind speed for use in the design of Risk Categories I, II and III shall remain the same. For Risk Category IV the 2020 7th edition FBC is adopting the 3,000 Year (Risk Cat IV) Map in ASCE 7-16.

RECOMMENDATION:

Staff recommends that the Board of County Commissioners adopt the proposed ordinance amending Section 401.07 of the Code of Indian River County, approving the amended Wind Speed Maps Exhibits 1 and 2 (The Indian River County Wind Borne Debris Region and Basic Wind Speed map).

ATTACHMENTS:

1. Current – Exhibit 1 “Indian River County Wind Speed Map Risk Categories 1-4”
2. New – Exhibit 1 "Indian River County Wind Speeds Risk Categories 1 thru 3 Map"
3. New - Exhibit 2 “Indian River County Wind Speeds Risk Category 4 Map.”
4. Proposed Ordinance