Madani, Mo

From:

Laura Stillman < Istillman@flad.com>

Sent:

Thursday, February 16, 2023 3:33 PM

To:

Madani, Mo

Cc:

Jeff Zutz; Steve Jackson; Katie Henshue; Laura Stillman

Subject:

Proposed Florida Building Code Changes--Flad Architects Statement attached

Attachments:

FBC_CodeChange_021623.pdf; Florida Building Code changes & Impacts to Lee Health

Hospitals - 2-13-23.pdf

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Dear Mr. Madani,

Thank you very much for your consideration of the information found in the Flad Architects Letter attached above, regarding the proposed changes to the Florida Building Code. I have also attached the Lee Health Position Paper as we are the Architect for their new Fort Myers hospital facility in planning at this time; and have been working with our civil engineer on the analyses.

The Flad letter summarizes the impacts we foresee if the changes are implemented and the data in the Lee material provides information that supports our position.

We respectfully ask you and other members of the Commission to reconsider the proposed changes and work with all constituencies on a new plan.

Thank you again for your time, Laura Stillman

X

Laura Stillman

Principal, National Healthcare Practice Leader

[**D**] 608-232-1229 [**C**] 608-770-1320



5411 SkyCenter Drive, Ste. 220 · Tampa, FL 33607 813.830.6612 · Flad.com

February 16, 2023

Mo Madani, Technical Director Building Codes & Standards office 2601 Blair Stone Road Tallahassee, Florida 32399

Re: Flad Architects Summary of Impact of the Proposed Florida Building Code (FBC) Changes from Category 3 to Category 5 Surge Inundation Elevation

Dear Mr. Madani:

The Florida Building Code has proposed changes to the existing code that will have substantial impact on existing healthcare facilities planning and have a financial impact on any future facilities that may be planned by health systems in the State of Florida.

Specifically, the proposed change is:

2023 FLORIDA BUILDING CODE - <u>PROPOSED CHANGE FOR HOSPITALS & NURSING HOMES.</u> <u>ASCE 24</u> 449.4.2.2 Site standards. 449.4.2.2.1

The lowest floor of all new facilities shall be elevated to not lower than the base flood elevation as defined in this code, plus 2 feet, the 500-year flood elevation as defined in ASCE 24, or to the height of hurricane Category-3-5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

Commentary

Changing the base flood elevation criteria from Category 3 to Category 5, will require that new buildings and additions to existing facilities be elevated substantially, at significant added costs.

This letter includes an attachment prepared by Lee Health that anticipates the elevation impacts to their five campuses in SW Florida. (See attached, Lee Position Statement.) Their Position Statement includes data and charts that identify a base elevation increase 8 feet to 17 feet above present requirements based on the recommended code changes. This change would add significant site development cost for new and existing campuses, and functional planning issues for access, infrastructure, circulation, and space use.



Mr. Madani February 16, 2023 Page 2 of 2

The proposed changes to the current code of Cat 3, and the addition of the 500-year flood criteria will also impact inland facilities that are not presently affected by the section of the existing code. The most dramatic impact is on coastal areas as the surge inundation models often extend 5-10 miles inland from coastal areas. (See Lee Health colored map in their Position Statement.)

Review of recent hurricane experiences would indicate that present code criteria has worked effectively to mitigate surge/flood conditions of health care facilities in these zones. It would be prudent to review all data and lessons learned from Hurricane lan and carefully understand the implications of actual data.

While we are not civil engineers, we recognize this as an important change.

We urge you to consider the enormous impact the proposed changes would have on health systems and the patients and families they serve. Some additional factors for consideration are listed below:

- Interpretations by local Agencies having jurisdiction (AHJs) could make new buildings, additions and renovations more
 expensive, and/or create multiple interpretations of the proposed FBC language.
- Overall, new facilities will be more expensive and may force systems to develop property inland and not convenient to patients who need care.
- The healthcare industry has not been involved in the review of the changes.
- The code changes only affect hospitals and nursing homes, but other essential facilities (fire stations, police stations, power plants, water supply and treatment facilities and emergency operations centers must comply only with ASCE 24-05 requirements, per FBC 1612.4.

Summary

We urge you to consider the significant impact the proposed changes will have in the future and the many organizations and citizens affected. The newly adopted Supplemental Language for Sections 449.4.2.2.1 and 450.4.2.2.1 of the Florida Building Code represents an extreme view and affects different parts of the State differently, with significant implications for west, northwest and panhandle coastal hospitals.

The new language will have costly and challenging impacts on additions to existing healthcare facilities, existing master planned hospitals, facilities currently in planning and future facilities, including high costs to build where served populations reside today.

Sincerely,

Laura Stillman

Principal, National Healthcare Practice Leader

Stillment



Impacts Proposed Changes to the 2023 Florida Building Code on Lee Health Hospitals and other Hospitals

Lee Health Position Statement

- 1. The proposed changes will have substantial impacts on our existing facilities and substantial financial implications on future facilities.
- 2. We believe the proposed changes respecting flood elevations are unreasonable and unnecessary.
- 3. We believe it is unreasonable to place hospitals at a higher flood elevation standard than other essential facilities as defined in ASCE 24, when the communities they serve and Lee Health depend on these other essential facilities for basic essential services, such as fire and rescue, EMTs, electrical power, water, and sewer.
- 4. We believe that current Section 449.1.1 of the Florida Building Code could be interpreted by local jurisdictions to mean than any hospital addition, whether a "substantial Improvement', or not, as well as outpatient facilities need to meet the proposed changes to the flood elevation criteria.
- 5. We believe the current code language respecting flood elevations, which is the greater of ASCE 24 or CAT 3 SLOSH model elevation, is sufficient for hospitals and provide the following as illustrative examples of our stance:

Hurricane Ian experience at Health Park Medical Center Campus:

Hurricane Ian was 2 mph short of a CAT 5 hurricane and was the storm that many experts feared respecting storm surge, which was between 12 and 14 feet on Ft. Myers Beach. While the barrier islands sustained substantial and devastating damage, the lowest floor elevation at Health Park Medical Center, which is approximately 4 miles inland from the coast, is 8.82 feet above sea level. Water never entered in the building, but there was flooding in the parking lot. When Golisano Children's Hospital was added adjacent and attached to Health Park Medical Center in 2014 it met the current building code (CAT 3 model) floor elevation 18.6' above sea level making its lowest clinical floor elevation height of 23.8 ft. more than sufficient for storm surge even on Ft. Myers Beach. Under the proposed change an addition would need to be at 29.1 ft. above sea level, which is basically the 3rd floor of the existing Health Park hospital.

Impact on recently constructed facility:

Lee Health's newest facility, Lee Health Coconut Point, in Estero, FL was completed in 2020. It was designed and constructed to exceed the CAT 3 SLOSH model elevation of 19.0 ft. as required by the current code. The first phase of Lee Health Coconut Point was designed as an outpatient surgery center and Free-Standing Emergency Department with a Central Energy Plant planned to provide power to support a future bed tower that adds licensed hospital beds. If that future expansion must comply with the new Building Code changes, the new building and a new energy plant will need to be constructed at 30.5 feet above sea level, thus rendering the existing Central Energy Plant, which was planned to serve the hospital, useless. AAs with Health Park Medical Center, the current finished floor elevation of Lee Health Coconut Point, which is approximately 4 miles inland, would have been more than sufficient for the storm surge experience on Lover's Key just south of Ft. Myers Beach.

Impact on Campus & Hospital currently being Designed:

Lee Health is currently in the design phase of a new hospital and campus on a site which is 13 miles from the coast and 5 miles from the Caloosahatchee River and has an elevation of 20 ft. above sea level. We have been planning it to exceed by 2.5 ft. the current CAT 3 SLOSH model as required by the Building Code of 21 ft. The proposed change to the CAT 5 SLOSH model would require an elevation of 28.8 ft. thus requiring an addition 5 ft. of fill material, which is approximately \$5 million in additional costs.

Impacts on existing Cape Coral Hospital:

Cape Coral Hospital located 1.5 miles from the Caloosahatchee River, 11 miles inland from Pine Island Sound, and 14 miles from the coast line has a finished floor elevation of 11.81 ft. above sea level. Under the proposed CAT 5 SLOSH model the first floor of any future tower addition to this facility would have to be 27 ft. above sea level, which is the equivalent of the existing 2nd floor of this facility, and a new Energy Plant would need to be constructed. Under the current CAT 3 SLOSH model requirement a tower addition would be required to be at 14.6 ft. above sea level, and the existing Energy Plant would suffice if flood-proofed.

Impacts on existing Gulf Coast Medical Center:

Gulf Coast Medical Center located 3 miles from the Caloosahatchee River and 6.5 miles from the coast line has a finished floor elevation of 16.9 ft. above sea level and the Energy Plant is at 20.9 ft. Under the proposed a CAT 5 SLOSH model the first floor of any future tower addition to this facility would have to be 30 ft. above sea level, which is the equivalent of the existing 2nd floor of this facility, and a new Energy Plant would need to be constructed. Under the current CAT 3 SLOSH model requirement a tower addition would be required to be at 18.7 ft. above sea level and the existing Energy Plant would suffice with expansion and no flood-proofing.

Lee Health's

ASK

Lee Health asks that the proposed changes for Hospitals and Nursing Homes not be enacted leaving the Building Code unchanged leaving the current elevation criteria of CAT 3 SLOSH model remain as is, and

though we believe the CAT 5 SLOSH model elevation requirement is unreasonable for Hospitals and Nursing Homes, we don't think it unreasonable to expect that all "Essential Facilities" as defined in ASCE 24 and the Florida Building Code be required to meet the same elevation criteria of Hospitals and Nursing Homes of CAT 3 SLOSH model, in lieu of the lower ASCE 24 elevation criteria.

Current Florida Building Code Storm Surge Requirements for Hospitals and all Essential Facilities

Hospitals (applicable sections):

449.1.1

All newly licensed hospitals, including conversions of existing buildings or newly constructed hospitals, all hospital outpatient facilities and hospital owned or leased mobile and transportable units unless exempted by Chapter 395.0163, Florida Statutes or modified by Chapter 59A-3 Florida Administrative Code, and all additions, alterations or renovations to an existing licensed hospital shall comply with all applicable requirements of this code and the minimum standards of design, construction and specified minimum essential utilities and facilities of this section and shall have plans reviewed and construction surveyed by the state agency authorized to do so by Chapter 553.80(1)(c), Florida Statutes to assure compliance with all applicable requirements of this code.

449.4.2.2.1

Except as permitted by Section 1612 of this code, the lowest floor of all new facilities shall be elevated to the **base flood elevation** as defined in Section 1612 of this code, **plus 2 feet**, <u>or</u> to the height of hurricane **Category 3** (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (**SLOSH**) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

All other Essential Facilities:

1612.4 Design and construction.

The design and construction of buildings and structures located in flood hazard areas, including coastal high hazard areas and Coastal A Zones, shall be in accordance with Chapter 5 of ASCE 7 and with **ASCE 24**.

1612.4.1 Modification of ASCE 24.

Table 6-1 and Section 6.2.1 in ASCE 24 shall be modified as follows:

- 1. The title of Table 6.1 shall be "Minimum Elevation of Floodproofing, Relative to Base Flood Elevation (BFE) or Design Flood Elevation (DFE), in Coastal A Zones and in Other Flood Hazard Areas that are not High Risk Flood Hazard Areas."
- 2. Section 6.2.1 shall be modified to permit dry floodproofing in Coastal A Zones, as follows: "Dry floodproofing of nonresidential structures and nonresidential areas of mixed-use structures shall not be allowed unless such structures are located outside of High Risk Flood Hazard areas and Coastal High Hazard Areas. Dry floodproofing shall be permitted in Coastal A Zones provided wave loads and the potential for erosion and local scour are accounted for in the design. Dry floodproofing of residential structures or residential areas of mixed-use structures shall not be permitted."

Proposed Florida Building Code Storm Surge Requirements for Hospitals and all Essential Facilities

CHANGES FOR HOSPITALS & NURSING HOMES

449.4.2.2 Site standards.

449.4.2.2.1

The lowest floor of all new facilities shall be elevated to not lower than the base flood elevation as defined in this code, plus 2 feet, the 500 year flood elevation as defined in ASCE 24, or to the height of hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS), whichever is higher.

CHANGES FOR ALL OTHER ESSENTIAL FACILITIES

No Change from current Florida Building Code Language to meet ASCE 24.

Definitions in the Florida Building Code:

ESSENTIAL FACILITIES. Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes.

SUBSTANTIAL IMPROVEMENT. For the purpose of determining compliance with the flood provisions of this code, any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure, before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the code official and that is the minimum necessary to ensure safe living conditions; or
- 2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

American Society of Civil Engineers' - ASCE 24-05

Requires that Building Classification Type IV buildings meet the following:

A Zones – BFE + 2 ft. or DFE, whichever is greater
Costal A & V Zones (parallel to wave action) – BFE + 1ft or DFE, whichever is greater
Costal A & V Zones (perpendicular to wave action) – BFE + 2ft or DFE, whichever is
greater

BFE – Base Flood Elevation – 100 year flood elevation (1% change of flooding) DFE – Design Flood Elevation – Community designated flood elevation (Could be higher than BFE)

Classification IV defined as:

Buildings and other structures designated as essential facilities, including but not limited to:

- Group I-2 occupancies having surgery or emergency treatment facilities.
- Fire, rescue, ambulance and police stations and emergency vehicle garages.
- Designated earthquake, hurricane or other emergency shelters.
- Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.
- Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures.
- Buildings and other structures containing quantities of highly toxic materials that:
 - Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the Florida Fire Prevention Code; and
 - o Are sufficient to pose a threat to the public if released.b
- Aviation control towers, air traffic control centers and emergency aircraft hangars.
- Buildings and other structures having critical national defense functions.
- Water storage facilities and pump structures required to maintain water pressure for fire suppression.

According to the ASCE 24 the following are "Essential Facilities", which matches Florida Building Code Chapter 16 in Table 1604.5 - RISK CATEGORY IV OF BUILDINGS AND OTHER STRUCTURES:

Hospitals
Nursing Homes
Fire Stations
Rescue & Ambulance Storage Facilities
Police Stations
Schools designated as shelters
Power Plants
Water Supply & Treatment plants
Emergency Operations Centers

The table below synthesizes the previous pages to clearly show the impacts of the proposed changes in the 2023 Florida Building Code on Lee Health's hospitals.

Differential between Lee Health Hospitals & all other Essential Facilities on the same site under new proposed changes to the Florida Building Code		7.8 ft. higher	16.0 ft. higher	16.3 ft. higher	17.1 ft. higher	13.0 ft. higher	13.5 ft. higher
Proposed Requirement for Hospitals	Cat 5 SLOSH (Hospitals & Substantial Additions)	28.8 ft.	27.0 ft.	28.3 ft.	29.1 ft.	30.0 ft.	30.5 ft.
Current Requirement for hospitals	The higher of Cat 3 SLOSH or ASCE 24 + 2 ff. (All hospitals)	21.0 ft.	14.6 ft.	15.9 ft.	18.6 ft.	18.7 ft.	19.0 ft.
Current & future Requirement for all Essential Facilities	ASCE 24 - BFE + 2 ff. (All oher "Essential Facilities" as defined in ASCE 24 on same site)	21.0 ft.	11.0 ft.	12.0 ft.	12.0 ft.	17.0 ft.	17.0 ft.
Current BFE (100 year flood elevation - 1% chance of flooding)		19.0 ft.	9.0 ft.	No BFE @ 10.0 ft.	10.0 ft.	15.0 ft.	15.0 ft.
Current Lowest Occupied Bldg. Elevation		23.5 ft. proposed	11.81 ft.	11.30 ff.	8.82 ff.	16.94 ft.	19.25 ft.
All elevations are in feet above sea level (NAVD88)		New Campus	ссн	ГМН	HPMC	GCMC	LHCP

ASCE 24-05 defines the following as Essential Facilities:

Hospitals

Nursing Homes

Fire Stations

Rescue & Ambulance Storage Facilities

Police Stations

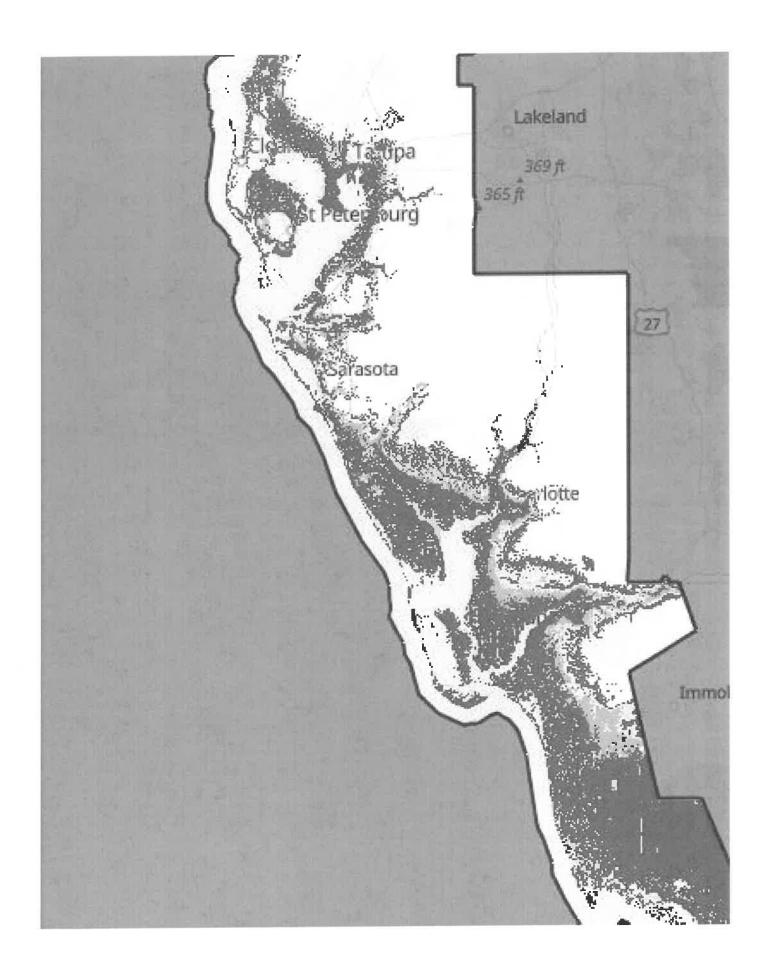
Schools designated as shelters

Power Plants

Water Supply & Treatment plants

Emergency Operations Centers

In addition, the following page shows the current Category 5 SLOSH Surge Risk model found on the National Hurricane Web site from Marco Island to Tarpon Springs. (Note: Red indicates greater than 9 feet above ground, organge is 6-9 ft above ground, yellow is 3-6 feet above ground, and blue is less than 3 ft above ground)





February 8, 2023

Mr. David Kistel Vice President, Chief Facilities Executive Lee Health 4211 Metro Pkwy. Suite 200 Fort Myers, FL 33916

Dear Mr. Kistel,

As discussed, and requested in the past, there are proposed changes in the Florida Building Code (FBC) that will affect hospitals if approved. In particular, FBC Section 449.4.2.2.1, states "The lowest finished floor of all construction of new facilities and additions, substantial improvements to, or restoration of substantial damage to existing facilities, and their support utilities shall be located at or above the highest of the following elevations:"

- 1. Two feet above the base flood elevation as defined in 8th Edition FBC.
- 2. The height of a hurricane Category 5 (Saffir-Simpson scale) surge inundation elevation, as described by the Sea, Lake, and Overland Surge (SLOSH) from Hurricanes model developed by the Federal Emergency Management Agency (FEMA), United States Army Corps of Engineers (USACE), and the National Weather Service (NWS)
- 3. The design flood elevation as defined in 8th Edition FBC.
- 4. The 500-year flood elevation (elevation with a .2% chance of being equaled or exceeded in any given year) as described in ASCE 24.

Below is a Comparison Table, based on location with the relevant information for comparison to determine the most restrictive scenario for the Finished Floor Elevation (FFE). As you are aware, the Children's Hospital, Coconut Point and Gulf Coast Medical Facility were constructed to the SLOSH Category 3 criteria. I cannot speak to the design elevations for the other facilities that are constructed to date other than reviewing South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) information or survey information Johnson Engineering has completed at the Facilities in the past.

Comparison Table

LOCATION	EXIST. FFE	500-YR STORM EVENT	SLOSH CAT 3 ELEV.	SLOSH CAT 5 ELEV.	DELTA: EXIST. FFE TO CAT 5
FORT MYERS HOSPITAL					
Building	23.5'	22.8'	Dry	28.8'	5.5'
CEP	24.5'		15.9'	28.3'	4.5'
LEE MEMORIAL HOSPITAL					
Building	11.30'	16.3	15.9'	28.3'	17'
CEP	15.30'		15.9'	28.3'	13'

HEALTHPARK MEDICAL					
FACILITY/GOLISANO'S CHILDRENS HOSPITAL					
Building	8.82'	15.5'	18.6'	29.1'	20.28
CEP	10.82'		18.6'	29.1	18.28'
CAPE CORAL MEDICAL FACILITY					
Building	11.81'	13.0°	14.6'	27.0'	15.19'
CEP	11.81'		14.6	27.0'	15.91'
GULF COAST MEDICAL FACILITY					
Building	16.9'	16.5'	18.7°	30.0°	13.1'
CEP	20.9'		18.7'	30.0°	9.1'
COCONUT POINT MEDICAL FACILITY					
Building	19.25'	16.0'	19.0'	30.5	11.25'
CEP	19.25		19.0'	30.5'	11.25

Note: Elevations are referenced to North American Vertical Datum of 1988 (NAVD88)

Attached to this letter are the SLOSH models provided by Lee County Emergency Management on February 6, 2023.

The 500-yr peak storm events were calculated based on past SFWMD ERP information or the 0.2% Annual Chance Flood Hazard, or the areas of 1.0% annual change flood with average depth less than one foot or with drainage areas of less than one square mile.

In reviewing the Comparison Table above, the SLOSH Category 5 storm event is the most restrictive elevation and would prevail if the proposed FBC revisions are approved in January, 2024.

Please review and let us know if you have any questions or if we can be of further assistance.

Dana Nume, P.E.

Respectfully

CC: Eric Anderson LH
Laura Stillman – FLAD
Mathew Grant - FLAD

#20225050





Project:

Fort Myers Hospital

Strap #:

Approximate Lat/Long:

Latitude: 26.603562 | Longitude: -81.823085

Owner / Address:

Lee Health Memorial System

Lee Health Colonial Campus

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone D

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)		
TS	DRY		
CAT 1	DRY		
CAT 2	DRY		
CAT 3	DRY		
CAT 4	23.6		
CAT 5	28.8		

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide





Project:

Lee Memorial Hospital

• Strap #:

Approximate Lat/Long:

Latitude: 26.627967 | Longitude: -81.874187

Owner / Address:

Lee Memorial Health System 2776 Cleveland Avenue Fort Myers, FL 33901

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone B

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)
TS	DRY
CAT 1	DRY
CAT 2	DRY
CAT 3	15.9
CAT 4	23.1
CAT 5	28.3

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide





Project: Golisano Children's Hospital

Strap #:

Approximate Lat/Long: Latitude: 26.507287 | Longitude: -81.913014

Owner / Address: Lee Memorial Health System

9981 HealthPark Drive Fort Myers, FL 33908

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone A

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)
TS	6.2
CAT 1	8.2
CAT 2	14.2
CAT 3	18.6
CAT 4	24.7
CAT 5	29.1

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide





Project: Cape Coral Hospital

Strap #:

Approximate Lat/Long: Latitude: 26.638883 | Longitude: -81.942229

Owner / Address: Lee Memorial Health System

609 Del Prado Blvd S Cape Coral, FL 33990

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone B

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)
TS	DRY
CAT 1	DRY
CAT 2	DRY
CAT 3	14.6
CAT 4	22.0
CAT 5	27.0

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide





Project:

Gulf Coast Medical Center

Strap #:

Approximate Lat/Long:

Latitude: 26.543736 | Longitude: -81.849989

Owner / Address:

Lee Memorial Health System

13685 Doctors Way Fort Myers, FL 33912

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone C

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)
TS	DRY
CAT 1	DRY
CAT 2	DRY
CAT 3	18.7
CAT 4	25.4
CAT 5	30.0

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide





Project: Coconut Point Medical Center

• Strap #:

Approximate Lat/Long: Latitude: 26.395843 | Longitude: -81.806981

Owner / Address: Lee Memorial Health System

23450 Via Coconut Point

Estero, FL 33928

Hurricane Surge Evacuation Zone: This property is located in a Storm Surge Zone B

Surge Height Information

Cyclone Category	Land-falling Surge Height (Feet Above Sea Level NAV)
TS	DRY
CAT 1	DRY
CAT 2	14.1
CAT 3	19.0
CAT 4	25.9
CAT 5	30.5

Data Source: SLOSH Display Version 1.79 (1/24/2019)

South Florida Basin

Land-falling MOM at High Tide