

#16-0662

TO: Honorable Mayor & Members of the

Fort Lauderdale City Commission

FROM: Lee R. Feldman, ICMA-CM, City Manager

DATE: June 21, 2016

TITLE: Ordinance Amending Unified Land Development Regulations (ULDR),

Section 47-19.3 Boat slips, docks, boat davits, hoists and similar mooring structures. Establishing construction standards for seawalls and similar

structures. - Case T16001

Recommendation

It is recommended that the City Commission adopt an ordinance to amend Section 47-19.3 *Boat slips, docks, boat davits, hoists and similar mooring structures* to establish construction standards that ensure that seawalls and similar structures contribute to coastal resilience and mitigate the effects of tidal flooding and sea level rise.

Previous City Commission Action:

At the June 7, 2016 City Commission meeting the City Commission approved the draft amendment on first reading (CAM #16-0602).

Background

Under the City's existing ordinance, seawalls may be built to a maximum height (5.5 feet NGVD29¹ which is equivalent to 3.9 feet NAVD88²). In 2014, the Marine Advisory Board requested that this maximum be increased to allow for future sea level rise. The ordinance was reviewed and it was determined that seawalls built to the maximum allowable height were adequate to address average high tides plus more extreme seasonal tides while still providing additional height above the water line for future sea level rise expected to occur within the 30-50 year lifespan of a seawall constructed today. Since the majority of new seawalls were being constructed to the maximum allowable elevation, no change was made to the ordinance.

¹ National Geodetic Vertical Datum of 1929

² North American Vertical Datum of 1988

In late September and early October, 2015, the City experienced unprecedented flooding during the seasonal King tides. King tides generally occur in the fall when the alignment of the sun, moon and earth generate higher than average tides. Local weather conditions including onshore winds, rising sea levels, and extreme precipitation can combine to exacerbate flooding risks, especially in low-lying coastal areas.

At the October 6, 2015 Conference meeting, the Commission discussed concerns with the flooding and its relationship to seawalls, noting that the extreme tides in September 2015 suggested that the maximum seawall elevation may not be adequate. Staff provided a review of the topic at the November 3, 2015 Conference meeting (CAM 15-1391). At that time, the Commission requested that the City revise the seawall ordinance (ULDR Sec. 47-19.3) to set a minimum seawall elevation requirement.

Staff received additional input from the Marine Advisory Board on February 25, 2016, attending the Council of Civic Associations meeting on March 8, 2016 to introduce the topic, and presented to the Board of Adjustment on March 9, 2016. Feedback generally supported the need to modify the ordinance.

A team including Public Works, Sustainable Development, Parks and Recreation, and the City Attorney's Office reviewed the major issues surrounding seawalls. These included:

- Seawalls and similar structures contribute to coastal resilience when constructed in a manner that is substantially impermeable and meet a minimum height standard that effectively addresses existing tidal flooding and future sea level rise for the expected lifetime of the seawall or structure;
- Seawalls elevation requirements need to be set and the structures constructed in a manner that does not create drainage issues on the adjacent properties;
- Currently, major repairs of the seawall may result in a significant investment without a resulting elevation in height;
- A standard minimum and maximum elevation for seawall construction should be set to prevent a substantial visual discontinuity with their neighbors;
- Seawalls with defects need to be repaired in a timely manner to reduce tidal flooding impacts on adjacent properties and public Rights-of-Way; and
- Properties with low lying seawalls or lacking seawalls can be the source of tidal waters flooding adjacent properties or public Rights-of-Way.

A public discussion draft of the ordinance was developed. It was reviewed by a variety of stakeholders in April (Exhibit 1). In addition to the stakeholder and public meetings, input was received by email and through a web-based comment board, the NextDoor

forum. In response, comments were incorporated into a revised proposed draft ordinance which was presented to the Commission at Conference on May 3 (CAM 16-0515).

Subsequent to the Conference meeting, this revised Commission Consideration draft was further vetted through additional stakeholder meetings (Exhibit 1).

Additional comments received in May were included as refinements to the final draft ordinance (Exhibit 2) brought before the Planning and Zoning Board (PZB).

The key modifications to the existing ordinance include:

- 1. Adds definitions for seawall, North American Vertical Datum (NAVD88) and rip rap;
- 2. Sets a minimum seawall elevation at 3.9 feet NAVD88 (current allowable maximum);
- 3. Recommends design of new seawalls for future height adjustment up to 5.0 feet NAVD88;
- 4. Sets an allowable maximum height of the seawall based on a property's base flood elevation and provides a waiver option for properties with a finished floor less than 3.9 feet NAVD88;
- 5. Requires seawall reconstruction to the minimum elevation if the substantial repair threshold is triggered;
- 6. Requires maintaining seawalls in good repair and sets a timeline of 365 days for completion of repairs if cited;
- 7. Requires owners to prevent tidal waters entering their property from impacting others and sets a timeline of 365 days for remedy if cited;
- 8. Allows fixed docks to extend 10 inches above the adjacent seawall; and
- 9. Allows for floating docks and requires them to be permitted and permanently attached.

On May 18, 2016, PZB, also in its capacity of Local Planning Agency, reviewed the proposed ULDR amendment for consistency with the Fort Lauderdale Comprehensive Plan and recommended approval of the ULDR amendment by a vote of 5-1. To review the PZB staff report and minutes, please refer to Exhibit 3 and 4.

As sea level continues to rise, higher seawalls have the potential to improve community resilience and substantially alleviate short term flooding caused by King tides and reduce impacts from storm surge. The proposed ordinance supports climate adaptation policies in the City of Fort Lauderdale Comprehensive Plan and the resilient City vision described in Fast Forward Fort Lauderdale 2035.

Resource Impact

There is no fiscal impact associated with this action.

Strategic Connections

This item is a *Commission Annual Action Plan* priority related to the Stormwater Management Plan.

This item is a *Press Play Fort Lauderdale Strategic Plan 2018* initiative, included within the Neighborhood Enhancement Cylinder of Excellence, specifically advancing:

- Goal 2: Be a sustainable and resilient community.
- Objective 2: Reduce flooding and adapt to sea level rise.

This item advances the Fast Forward Fort Lauderdale 2035 Vision Plan: We Are Ready.

Attachments

Exhibit 1 - List of Stakeholder Meetings

Exhibit 2 – Proposed Ordinance (ULDR Sec. 47-19.3)

Exhibit 3 – PZB Staff Report Case Number: T16001

Exhibit 4 – PZB Meeting Minutes

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