SECTION 2

RFQ SCOPE OF SERVICES

2.1. Purpose

The City of Miami ("City") is seeking to procure a qualified and experienced professional consulting firm to work in conjunction with City staff to identify opportunities for strengthening the City's codes, standards, and land use plans by mainstreaming considerations therein for increasing resilience to and minimizing risk from (a) flooding events including tidal, rainfall and storm surge events – and especially taking into account how sea level rise may worsen these impacts, and (b) extended power outages. These actions are critical for protecting the City's assets and infrastructure, economic viability, and its residents, especially the poor and vulnerable.

The professional services rendered shall:

a) Evaluate increased pluvial, fluvial, tidal and storm surge flooding risks that will be articulated in the updated Stormwater Master Plan and vulnerability analysis conducted to prepare the Peril of Flood Amendment for the City's Comprehensive Plan and provide recommendations to improve the resilience of both coastal and upland zones and infrastructure, as well as the existing ecosystem to mitigate the harmful impacts of sea level rise associated flooding events.

b) Incorporate and deploy a robust and inclusive stakeholder engagement strategy for input into any recommended changes to the City's applicable codes, standards, and land use plans

c) Analyze, model and provide recommendations to reduce impact of flooding events on Miami's urban/built environment.

d) Analyze, model and provide recommendations to recalibrate in applicable codes standards, and regulations for building and adapting existing structures to increase resilience to flooding events exacerbated by sea level rise including, but not limited to – elevation requirements, onsite drainage and stormwater storage/reuse requirements, first floor elevation flexibility, elevating critical equipment etc.

e) Analyze the feasibility of establishing Adaptation Action Areas, Eco-Districts or similar designated special areas

f) Modify redevelopment standards and design criteria for the City's applicable codes and standards

g) Analyze and model potential economic impacts from all recommended changes to the City's applicable codes and standards

2.2. Project Background

On April 27 2017, the Miami City Commission unanimously passed a resolution to implement the recommendations of the City of Miami Sea Level Rise Committee for advancing the City's resilience by retaining outside resources to reform the City's codes and standards, notably Miami 21, to better address the increased flooding risks associated with sea level rise – and ensuring a robust and comprehensive engagement process of all the City's stakeholders be a critical component of this work.

In 2010, the City adopted its new zoning code, Miami21. The development of the Miami 21 zoning code was guided by the tenants of new urbanism and smart growth principles, and entailed a holistic approach to land use and urban planning so that future generations can reap the benefits of well-balanced neighborhoods and rich quality of life. This award-winning form-based Code is widely celebrated for pioneering the use of zoning methods by cities that focus on form and function – and its development reflected a period of unprecedented growth and the need for the City to address historic sprawl, automobile dependency and use-segregated communities.

In addition, Miami21 was also developed to ensure: sustainability; predictability and efficiency in development, growth and planning; and, responsible environmental stewardship. For these reasons and more Miami21 is rightfully recognized as one of the best land use codes in the world. However, since its development, tremendous advancements have been realized in understanding the risks associated with climate change, and the potential impact these risks – especially sea level rise – may have on Miami's urban environment and future planning. This better grasp of climate-associated physical risks, combined with the City's current unprecedented urban renewal and anticipated continued growth, and the various socio-economic challenges that accompany these changes – makes this the ideal time and opportunity for the City to consider reforming land and building use standards to ensure a more resilient Miami for all future generations.

The City is currently experiencing an unprecedented urban renewal along with increased flood-risk due to climate change, sea level rise and aging infrastructure. The City is addressing and understanding these vulnerabilities through various measures including but not limited to: partnering with the City of Miami Beach and Miami-Dade County as Greater Miami and the Beaches under the 100 Resilient Cities initiative, pioneered by the Rockefeller foundation; retaining consulting services from the South Florida Regional Planning Council to assist in developing decision-making GIS mapping tools that will assess increased flood risks; and updating the City's Stormwater Master Plan taking sea level rise and into account.

(INCLUDE BACKGROUND on Why to include strengthening codes, requirements for supplemental power during outages.. what happened during Irma, Commission Discussions/Resolutions)

2.3 Scope of Services

A. Proposed Team

The Successful Proposer's Team shall consist of the following disciplines and be directed by Key Personnel:

- Lead Urban Planner
- Structural Engineer
- Civil Engineer
- Electrical Engineer
- Architect
- Landscape Architect
- Floodplain manager
- Stakeholder/community engagement
- Economic and financial risk modeling
- Personnel with demonstrable experience with working on form-based municipal codes.

B. Project Manager

The Successful Proposer shall designate a lead individual, referred to as the "Project Manager" to manage the Project. The Project Manager shall meet the minimum qualification requirements specified in Section 3.5 (3), Minimum Qualification Requirements.

Note: The City, acting by and through its City Manager, as further detailed in Attachment A - Professional Services Agreement, as may be amended from time to time, prior to issuance of any Notice to Proceed, or at other reasonable intervals decided by the City Manager, may elect at the City's discretion, to proceed with the Work on a phased basis.

a. Conduct extensive stakeholder engagement including but not limited to charrettes and presentations at publicly advertised meetings, community meetings and meetings with the Sea Level Rise Committee. Elaborate on extent of stakeholder engagement upon request of the City to ensure public participation.

b. Coordinate teleconferences or meetings with other agencies, municipalities, interest groups, and advisory committees to gather pertinent details on relevant opportunities.

c. Explore and elaborate on the following preliminary recommendations to improve the City's codes and standards, including but not limited to:

    a. Raising building elevation requirements or allowances for properties within a flood zone, and allowing for flexibility in adapting buildings to reduce flood-risk.

    b. Raising flood sensitive electrical/mechanical equipment.

    c. Raising sea walls and/or recommending other approaches to shoreline protection along waterfront properties, including the use of natural systems and green infrastructure where feasible.

    d. Given high water table, consider alternative uses and/or strengthening design criteria for basements and other below grade building elements in flood prone areas. Evaluate the economic impacts of the use or discontinued use of underground parking.

    e. Taking into consideration maintaining the elements of smart growth, sustainability and windstorm resilience that already exist in the City's codes and standards; explore opportunities for strengthening stormwater management best practices, drainage and flood mitigation for individual properties and neighborhood planning, including but not limited to:

        i. Further increasing permeability requirements;

        ii. Requiring stormwater catchment and reuse through landscape enhancements and other non-potable uses;

        iii. Reinstating, increasing and/or enforcing set back requirements from all waterfronts; and

        iv. Revisiting where future density increases are focused within the City.

    f. Providing resilient development incentives and flexibility, while ensuring all new development and significant renovations have current and future flood risks into account building adaptability into the design.

g. Investigate creative design opportunities for ground floor areas that may enhance the streetscape and pedestrian environment, not disrupt it.

h. Creating a checklist for Special Area Plans (SAPs), new City construction and RFPs.

The final scope of work will be crafted upon selection of a Consultant team, the City anticipates that the Scope of Work will, at a minimum, address all of the following components. The City is also open to suggestions other than those listed below that the Consultant believes would be of value in producing the recommended changes to city codes and standards for SLR resilience.

The selected firm(s) will need to be familiar with City codes and standards, building code, form-based codes specifically, restrictions, and processes throughout the project and goals established in existing codes and standards such as Miami21. All deliverables will be submitted to the City in hard copy and original electronic format (for example: Excel, AutoCAD, Word, etc.). All work produced by the consultant for this project will become property of the City of Miami, and it is expected that information pertinent to this project will be shared freely with all City employees involved in the project.

The Scope of Work includes, but is not limited to:

1) Codes and Standards Review and Evaluation Phase;
2) Development of Community Outreach, Public Input Process, and Consensus Building
3) Presentation to City Commission and Sea Level Rise Committee;

Importance is placed on effective community outreach and public input that maximizes opportunities to develop a community consensus for the proposed recommendations. The City would like to ensure that the majority of the needs identified by the community are effectively addressed. It is anticipated that minimum of four (4) community meetings (estimated eight [8] hours total) will be required in addition to other outreach efforts.

The Consultant shall address each of the following phases by describing how the firm would meet the written criteria. Include experience and examples of similar work performed and/or provide information on subcontractor's experience.

1) Code and standards Review and Evaluation Phase

This phase will include ……

2) *Development of Community Outreach, Public Input Process, and Consensus Building*

This phase embarks on the community outreach process, seeking stakeholder input and support for the modifying codes and standards for SLR resilience. This phase also solicits community comment on how the modifications should be developed to meet the needs of residents, business owners and other stakeholders. The community outreach, public input, and consensus building effort will be integral to a successful planning and development process. The recommended changes will reflect public input and community consensus as endorsed by the City and major stakeholders. Stakeholders include, but are not limited to: residents, business owners, and applicable governmental agencies. It is essential that the diverse make-up of the community is encouraged to participate, and is represented fairly in this process.

3) *Presentation to City Commission and Sea Level Rise Committee for Action*

Once the recommendations have been drafted, the Consultant will make a presentation to the City of Miami Sea Level Rise Committee and City Commission detailing the recommended changes, and the extent of community outreach and participation in developing the recommended changes.

All Work Plan deliverables shall be submitted to the City in hard copy and original electronic format (for example: Excel, AutoCAD, Word, etc.). All work produced by the Successful Proposer for this Project will become property of the City of Miami, and it is expected that information pertinent to this Project will be shared freely with all City staff involved in the Project, and made available as a public record, upon request.

C. Project Manager

The Successful Proposer shall designate a lead individual, referred to as the “Project Manager” to manage the Project. The Project Manager shall meet the minimum qualification requirements specified in Section 3.5 (3), Minimum Qualification Requirements.

Note: The City, acting by and through its City Manager, as further detailed in Attachment A - Professional Services Agreement, as may be amended from time to time, prior to issuance of any Notice to Proceed, or at other reasonable intervals decided by the City Manager, may elect at the City’s discretion, to proceed with the Work on a phased basis.

SUSTAINABILITY AND RESILIENCY

ORDINANCE NO. 2016-3993

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE LAND DEVELOPMENT REGULATIONS (LDR'S) OF THE CITY CODE, BY ESTABLISHING CHAPTER 133, ENTITLED "SUSTAINABILITY AND RESILIENCY;" ESTABLISHING REQUIREMENTS FOR GREEN BUILDING CERTIFICATION AS A REQUIREMENT DURING ZONING REVIEW OF NEW PROJECTS OVER A CERTAIN SIZE ("ELIGIBLE PROJECT(S)"); ESTABLISHING A SUSTAINABILITY FEE PROGRAM FOR PROJECTS THAT DO NOT ACHIEVE THE REQUIRED GREEN BUILDING CERTIFICATION LEVEL; AUTHORIZING PROPERTY OWNERS AND DEVELOPERS TO PAY A SUSTAINABILITY FEE, OR, IN THE ALTERNATIVE, POST A BOND, IN THE AMOUNT OF FIVE PERCENT (5%) OF THE TOTAL CONSTRUCTION COST FOR THE ELIGIBLE PROJECT(S), INTO THE CITY'S SUSTAINABILITY FUND, WHICH BOND OR FUNDS ARE REIMBURSABLE TO THE PROPERTY OWNER OR DEVELOPER PURSUANT TO THE LEVEL OF GREEN BUILDING COMPLIANCE ACHIEVED BY THE "ELIGIBLE PROJECT"; ESTABLISHING A SUSTAINABILITY AND RESILIENCY FUND FOR THE DEPOSIT OF THE SUSTAINABILITY FEES GENERATED THROUGH THE SUSTAINABILITY FEE PROGRAM, AND PROVIDING THE USES FOR WHICH THE FEES DEPOSITED IN THE SUSTAINABILITY AND RESILIENCY FUND CAN BE USED; AND REPEALING CHAPTER 100, ENTITLED "SUSTAINABILITY" AS DUPLICATIVE AND CONTRADICTORY TO THE SUSTAINABILITY AND RESILIENCY REVISIONS OF CHAPTER 133; PROVIDING FOR REVIEW; APPLICABILITY; CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, the City of Miami Beach has the authority to enact laws which promote the public health, safety and general welfare of its citizens; and

WHEREAS, greenhouse gas emissions are a contributor to sea level rise, which is a threat to public health, safety, and general welfare of the citizens of Miami Beach; and

WHEREAS, it is in the best interest of the City to promote the economic and environmental health in the City through sustainable and environmentally friendly design and construction which reduces demand for energy and reduces greenhouse gas emissions; and

WHEREAS, the United States Green Buildings Council (USGBC) has developed the Leadership in Energy and Environmental Design (LEED) rating system that is a consensus based certification program for design of sustainable buildings; and

WHEREAS, the LEED green building certification program recognizes best-in-class building strategies and practices; and

WHEREAS, the International Living Future Institute developed an international sustainable building certification program called the Living Building Challenge, encouraging the creation of Living Buildings, Landscapes and Communities in countries around the world while inspiring, educating and motivating a global audience about the need for fundamental and transformative change; and

WHEREAS, the Living Building Challenge is the built environment's most rigorous performance standard, which calls for the creation of building projects at all scales that operate as cleanly, beautifully and efficiently as nature's architecture; and

WHEREAS, LEED and Living Building Challenge certified buildings conserve materials, energy, water and other natural resources as well as provide occupants with healthier and more productive interior environments; and

WHEREAS, high performance sustainable building and development is a means of balancing economic development with the preservation of quality of life; and

WHEREAS, high performance buildings provide occupants and visitors with a healthier and more productive environment due to the use of more natural materials and this increase in worker productivity can produce enormous economic benefits, as worker salaries are historically an organization's largest expense; and

WHEREAS, it is in the City's best interest to encourage the remediation of Brownfield sites, which is further encouraged through the use of green building standards; and

WHEREAS, the City's 2025 Comprehensive Plan requires the encouragement of infill and redevelopment that is supportive of mobility alternatives, such as walking, bicycling, and the use of transit, which is further encouraged through the use of green building standards, which provide credit for features such as proximity to transit, bicycle parking and shower facilities, proximity to diverse uses, and location of building entrances; and

WHEREAS, the City's 2025 Comprehensive Plan requires open space in conjunction with every new public and private sector development project, which is further encouraged through the use of green building standards which provide credit for the inclusion of open space; and

WHEREAS, studies have indicated that green buildings have lower maintenance costs associated with lower energy consumption, which will improve the City's long-term economic well-being; and

WHEREAS, the City of Miami Beach has endorsed the Compact of Mayors pledge to reduce city-level greenhouse gas (GHG) emissions, to track progress, and to enhance resilience to climate change, in a consistent and complimentary manner to national level climate protection efforts; and

WHEREAS, to meet the requirements of the Compact of Mayor's pledge, the City needs to build and complete a community-wide GHG inventory with a breakdown of emissions for buildings and transport sectors, set a target to reduce its GHG emissions, and conduct a climate change vulnerability assessment; and

WHEREAS, green building certifications recognize that built environments provide a wide-range of GHG emissions reduction opportunities, including strategies related to building systems, transportation, water use, construction, materials, waste management, and land cover; and

WHEREAS, green building certifications strive to transform the way buildings and communities are designed, built, and operated, in order to create buildings and communities that are environmentally and socially responsible, healthy, and prosperous; and

WHEREAS, it is in the interest of the health, safety and welfare of the residents of the City to ensure sustainable construction and to ensure that the City safeguard natural resources, and ensure that efficient buildings are constructed; and

WHEREAS, Chapter 163.04, Florida Statutes is intended to encourage the development and use of renewable resources in order to conserve and protect the value of land, buildings, and resources, which is further encouraged by the use of green building standards; and

WHEREAS, the City desires to require Gold LEED standards or Living Building Challenge certification standards on construction within the City, for construction over a certain minimum size, or require the payment of a Sustainability Fee, for failing to meet those minimum standards of sustainability; and

WHEREAS, the value of the Sustainability Fee is based on the mid-range of estimated costs of achieving LEED Gold standards for a construction project; and

WHEREAS, the Sustainability Fee is not an impact fee, but rather a mechanism to ensure compliance with the green building standards; and

WHEREAS, it is the City's expectation that development will comply with the green building standards and that the Sustainability Fee be refunded to the participants; and

WHEREAS, should a development not comply with the green building standards the City will utilize the Sustainability Fee revenue to provide public improvements that increase the sustainability and resiliency of the City; and

WHEREAS, the adoption of the provisions set forth below and the repeal of Chapter 100 are necessary to accomplish the above objectives.

NOW THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. That Chapter 133, entitled "Sustainability and Resiliency," of the City Code, is created as follows:

Chapter 133 – SUSTAINABILITY AND RESILIENCY

ARTICLE I. – IN GENERAL

Sec. 133-1 – Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning, or as may be amended from time to time.

Construction means any project associated with the creation, development, or erection of any structure required to comply with this Chapter.

Enhanced storm water quality and quantity improvements means projects that augment water quality and quantity by: reducing polluted runoff; advancing groundwater recharge, soil infiltration and erosion control; and restoring habitat.

Environmental monitoring means periodic or continuous surveillance or testing to determine the level of compliance required by the Environmental Protection Agency (EPA), Florida Department of Environmental Protection (DEP), or Miami-Dade County Department of Regulatory and Environmental Resources (RER) and/or pollutant levels in various media (air, soil, water) or biota, as well as to derive knowledge from this process. Examples of environmental monitoring include, but are not limited to: water quality sampling and monitoring, groundwater testing and monitoring, and habitat monitoring.

Environmental remediation means clean-up of, or mitigation for, air, soil or water contamination for which the City is legally responsible for environmental clean-up or mitigation.

Environmental restoration means the return of an ecosystem to a close approximation of its condition prior to disturbance.

Green infrastructure means both the natural environment and engineered systems to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife. Green infrastructure uses vegetation, soils, and natural processes to manage natural resources and create healthier urban environments. Examples of green infrastructure practices include, but are not limited to: right-of-way bio-swales, green roofs, blue roofs, rain gardens, permeable pavements, infiltration planters, trees and tree boxes, rainwater harvesting systems.

Green building means generally the resource efficient design, construction, and operation of buildings by employing environmentally sensible construction practices, systems and materials.

Green building certification agency means the United States Green Building Code (USGBC) or the International Living Future Institute, as may be selected by the eligible participants.

International Living Future Institute means a non-profit organization that created an international sustainable building certification program called The Living Building Challenge. Certification types include Living Building Certification, Petals Certification and Net Zero Energy Building Certification.

LEED means an effective edition of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System for Building Design and Construction or Homes, as applicable, of the United States Green Building Council (USGBC).

Project means any construction associated with the creation, development or erection of any building required to comply with this chapter.

Scorecard means a guide provided by the green building certification agency to assist in determining the total project score and achievable credits and level of certification at the inception of a green building, as provided under this chapter.

USGBC means the United States Green Building Council.

Sec. 133-2. – Intent and Purpose.

The purpose of this chapter shall be to promote sustainable development within the City of Miami Beach by supporting resilient design and construction practices. The City's intent is to establish a certification compliance schedule that incentivizes all qualifying projects to attain at a minimum LEED Gold certification, or similar green building program recognized in this chapter. Sustainable building practices will promote the economic and environmental health of the city, and ensure that the City continues to become environmentally resilient to combat sea level rise and help curb climate change. This chapter is designed to achieve the following objectives:

a. increase energy efficiency in buildings;
b. encourage water and resource conservation;
c. reduce waste generated by construction projects;
d. reduce long-term building operating and maintenance costs;
e. improve indoor air quality and occupant health;
f. contribute to meeting state and local commitments to reduce greenhouse gas production and emissions; and
g. encourage sound urban planning principles.

ARTICLE II. – GREEN BUILDING REQUIREMENTS

Sec. 133-3. – Sustainability Requirements.

(a) Mandatory compliance with the requirements of this chapter shall be required for all applicants with building permit applications that meet the following criteria (hereinafter "eligible participants"):

(1) All new construction that proposes over 7,000 square feet of construction of a structure; or

(2) Ground floor additions (whether attached or detached) to existing structures that encompass over 10,000 square feet of additional floor area.

Sec. 133-4 Standards.

This chapter shall be administered using standards developed for and standards developed by the United States Green Building Council (USGBC) or the International Living Future Institute. All eligible participants who are certified as having satisfied all of the requirements of the green building certification agency, including but not limited to any monetary or certification requirements, are eligible for a partial or full refund of the sustainability fee identified in Section 133-7, herein based upon the level of compliance with the regulations in this chapter.

ARTICLE III. – SUSTAINABILITY FEE PROGRAM

Sec. 133-5. – Generally.

A Sustainability Fee will be assessed for all eligible participants. The calculation of the fee, provisions for refunding all or portions of the fee, its purpose, and eligible uses are detailed within this article.

Sec. 133-6. – Sustainability Fee Calculation.

(a) In order to obtain a Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO), or Certificate of Completion (CC), whichever comes first, the eligible participant must first post a Sustainability Fee payment bond or issue full payment of the Sustainability Fee to the City. The Sustainability Fee shall be valued at five percent (5%) of the total construction valuation of the building permit. However, the eligible participant may be entitled to a refund or partial refund, of the bond, or payment of the Sustainability Fee, based upon achieving the program certification levels in the compliance schedule below:

Certification Compliance Schedule

Level of Certification Achieved	Sustainability Fee Reimbursement to Participant for meeting certain Green Building certification levels
Failure to obtain Certification	0% refund of bond or payment of Sustainability fee
LEED Certified	50% refund of bond or payment of Sustainability Fee
LEED Silver Certified	66% refund of bond or payment of Sustainability Fee
LEED Gold Certified or International Living Future Institute Petals or Net Zero Energy Certified	100% refund of bond or payment of Sustainability Fee
LEED Platinum Certified or International Living Future Institute Living Building Challenge Certified	100% refund of bond or payment of Sustainability Fee

If the proof of green building certification is provided prior to the obtaining a TCO, CO, or CC, the "Sustainability Fee" shall be in the full amount identified above, minus the refund for the level of green building certification achieved identified in the Certification Compliance Schedule.

(b) The Sustainability Fee shall be valuated upon the eligible participant's submittal at time of application for Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO) or

Certificate of Completion (CC), whichever comes first, upon review by the planning department during zoning review of the certificate. The Sustainability Fee bond or full payment shall be provided by participant prior to obtaining a Temporary Certificate of Occupancy (TCO), Certificate of occupancy (CO) or Certificate of Completion, whichever comes first.

(c) Refund of the Sustainability Fee or bond to the eligible participant may occur as provided for in subsection (a), above, provided the eligible participant complies with the certification compliance schedule within the timeframe identified in in Section 133-7(b).

(d) The entirety of the Sustainability Fee shall be forfeited to the City based upon Participant's failure achieve the applicable green building certification levels identified 133-6(a) within the timeframe identified in Section 133-7(b).

Sec. 133-7 – Review Procedures.

(a) Prior to obtaining a Temporary Certificate of Occupancy, Certificate of Occupancy (CO) or Certificate of Completion (CC), whichever comes first, the qualifying projects shall post a bond with the City, or in the alternative, provide a payment to the City, in the amount of the "Sustainability Fee" identified in Section 133-6(a).

(b) Within one year from the receipt of a Certificate of Occupancy (CO) or Certificate of Completion (CC), the owner shall submit proof of green building certification for the development from the green building certification agency.

(1) The bond or payment provided, or percentage thereof, shall be refunded to program participants that have achieved a level of green building certification identified in the Certification Compliance Schedule in Section 133-6.

(2) The Planning Director may approve, upon the request of the eligible participant, a one-time one (1) year extension, provided proof that the green building certification agency's review remains pending to determine final certification.

(c) Building permit applications for a green building project submitted or resubmitted for review shall be given priority review over projects that are not green building projects by the City's departments reviewing such applications.

(d) All building inspections requested for green building projects shall be given priority over projects that are not green building projects.

Sec. 133-8 - Deposit of funds; account.

(a) The City has established a Sustainability and Resiliency Fund. The revenue generated through the Sustainability Fee Program shall be deposited in the Sustainability and Resiliency Fund.

(1) Interest earned under the account shall be used solely for the purposes specified for funds of such account.

(2) Sustainability fees deposited and credited to the Sustainability and Resiliency Fund account, and credited to the eligible participant, pursuant to 133-7, shall be identified, within the City's Sustainability and Resiliency Fund.

(3) Appropriation of deposited funds in the Sustainability and Resiliency Fund shall not be permitted until the applicable refund period, established in Section 133-7(b), for those funds has lapsed.

(4) Should the eligible participant provide a bond, rather than pay the sustainability fee, then, the City shall safeguard the bond, to ensure compliance with this Chapter. The City shall return the bond, or make a claim for a portion of the bond, depending on the eligible participant's compliance with Section 133-7(b) and 133-6(a).

(b) Earned fees in the Sustainability and Resiliency Fund shall be utilized to provide public improvements that increase the sustainability and resiliency of the City. Expenditures from these funds shall require prior City Commission approval. Prior to any expenditure, the City Manager shall provide a recommendation to the City Commission.

(c) Such improvements that increase the resiliency of the City may include:

(1) Environmental restoration projects;

(2) Environmental remediation projects;

(3) Environmental monitoring;

(4) Green infrastructure;

(5) Enhanced storm water quality and quantity improvements; and/or

(6) Sustainability planning efforts.

SECTION 2. That Chapter 100, entitled "Sustainability," of the City Code of Ordinances, is hereby amended as follows:

Chapter 100 - ~~Sustainability~~ Reserved

Sec. 100-1. – 100-27. Reserved

~~**ARTICLE I. - GREEN BUILDING ORDINANCE**~~

~~**Sec. 100-1. - Definitions.**~~

~~The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning, or as may be amended from time to time.~~

~~Building means any structure having a roof supported by columns or walls for the shelter or enclosure of persons or property and includes the word structure and includes any part thereof.~~

~~City means City of Miami Beach.~~

~~Construction means any project associated with the creation, development, or erection of any building eligible for the program.~~

~~Current means the standard in place at the time a program participant submits a project application form with the city.~~

~~Green building means a building whose design, construction and operation promote the preservation of resources and environmentally sensitive construction practices, systems and materials. In making the determination of whether a structure is a green building, the city shall rely on the review, evaluation and registration, certificate and/or verification of the design by U.S. Green Building Council, or other recognized green building rating system approved by resolution of the city commission, subject to the requirements of this chapter.~~

~~Green building program means the program outlined in this chapter for obtaining incentives for green buildings and developments.~~

~~Green development means the use of sustainable building and development planning methods utilized in a way that result in minimum impact on natural resources, energy consumption, use of water, use of raw materials and waste generation, thereby affording inhabitants a potentially higher quality of life.~~

~~LEED means Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council, or other recognized green building rating system approved by resolution of the city commission.~~

~~Participant means private property owners.~~

~~Private means property not owned by the city or any of its related agencies.~~

~~Program means the city's green building program.~~

~~Program certification means the final designation awarded to a person participant for satisfying all requirements associated with the program for a particular project.~~

~~Program participant means any person or entity seeking program certification for a particular project.~~

~~Project means any construction associated with the creation, development, or erection of any building eligible for the program.~~

~~Project application form means the form submitted to the city indicating that a program participant is interested in participating in the program for a particular project.~~

~~Structure means anything constructed or erected, the use of which requires permanent location on the ground. Among other things, structures include buildings or any parts thereof, walls, fences, parking garages, parking lots, signs and screen enclosures.~~

~~Sub-program means any area of construction covered by the program.~~

~~Substantial renovation means a renovation at a cost exceeding 50 percent of the value of the building as determined by the building official.~~

~~Sustainable construction means the process of environmentally sensitive, resource efficient site selection, preparation, design, construction, and operation of buildings.~~

~~Any word not defined herein shall be construed as provided in section 114-1 of this Code, or in the Florida Building Code, if provided therein, and if in conflict, the most restrictive shall apply.~~

~~Sec. 100-2. - Purpose and intent.~~

~~The purpose of this chapter is to establish and promote programs and procedures that will help the city become a more sustainable community. This program shall define and establish new environmental goals and standards for a LEED certification-based green building program with incentives. This program will promote economic and environmental health in the city, through sustainable and environmentally friendly design and construction.~~

~~Sec. 100-3. - Government leadership.~~

~~To demonstrate the city's commitment to a green building program, the city shall comply with the green building program established in this article for all government buildings when new construction as provided for in this chapter occurs.~~

~~Sec. 100-4. - Designation of responsibility for administration and implementation.~~

~~The program shall be administered by the city manager or designee, who shall be responsible for:~~

~~(a) Funding administration of the city's green building program through annual funds budgeted and appropriated by the city commission;~~

~~(b) Marketing the program to the community by any reasonably effective means, including but not limited to, press releases, television advertising, or advertising in electronic or print mailers;~~

~~(c) Developing any appropriate or necessary application procedures, including but not limited to, the program application form;~~

~~(d) Writing policies and procedures for staff implementation of the green building program;~~

~~(e) Providing and implementing an incentive award as herein provided to any program participant who has committed to and/or successfully satisfied the requirements associated with that program; and~~

~~(f) Resolving disputes that may arise from implementing the program.~~

~~Sec. 100-5. - Green building program applicability.~~

~~This program shall be voluntary for all private buildings involving new construction or substantial renovation. This program shall be mandatory for city-owned buildings involving new construction and the architectural plans for which were commenced after July 1, 2008.~~

~~Sec. 100-6. - Green building standards.~~

~~In addition to the Florida Building Code's minimum standards, the program shall be administered using the then current standards developed by the U.S. Green Building Council ("USGBC"). These standards shall apply to each sub-program as follows:~~

~~(a) New buildings: The program participant shall satisfy all of the requirements associated with the then current USGBC LEED SILVER certification for new construction or derived USGBC LEED rating system (e.g., LEED for schools, LEED for health care) program; and~~

~~(b) Renovation of existing buildings: The program participant shall satisfy all of the requirements associated with the then current USGBC LEED SILVER certification for existing buildings, maintenance and operations, or derived USGBC LEED rating system (e.g., LEED for schools, LEED for health care) program.~~

~~If there is a conflict between the USGBC standards and the Florida Building Code ("FBC") or Florida Fire Prevention Code ("FFPC"), the FBC and FFPC take precedence.~~

~~Sec. 100-7. - Incentives and bond requirements.~~

~~(a) The program shall consist of the following incentives designed to reward owners for green building.~~

~~(1) Building permit applications for a green building project submitted or resubmitted for review shall be given priority review over projects that are not green building projects by the city's departments reviewing such applications;~~

~~(2) All building inspections requested for green building projects shall be given priority over projects that are not green building projects; and~~

~~(3) Subject to, and within the limits of, funds appropriated annually by resolution of the city commission for the purposes set forth herein, owners or developers of green buildings shall receive a refund of the actual application and review fees for green building program certification and an amount not greater than one percent of the value of the construction, or alternatively 20 percent of the annual allocation, whichever is less, within 180 days of proof of certification by USGBC being submitted in writing to the city. The actual amount of financial incentives to which the applicant might qualify for shall be estimated at the time of issuance of the building permit for the quality project, and held in reserve. The final financial incentives shall be calculated at the time of LEED certification.~~

~~(b) In addition to the foregoing, the city shall provide the following marketing incentives:~~

~~(1) Allowing a plaque not to exceed two square feet to be attached to the building designating a project under the program, subject to the review and approval of the city manager or designee and the planning department; such plaque shall be treated as a governmental information sign exempt from permitting but subject to other regulations, as provided in subsection 138-4(1), city Code;~~

~~(2) The inclusion of program participants on a city webpage dedicated to the program;~~

~~(3) Press releases; and~~

~~(4) An award called the "Green Building Award" to be awarded annually to one program participant in each sub-program (e.g., new construction and renovation).~~

~~(c) Prior to filing an application for a building permit, or any award of incentives, the participant shall register their intent with the USGBC for LEED certification and obtain in writing a~~

~~proposed checklist of certification points that may be attainable for the project. The participant shall then be required to attend a pre-application meeting with the city manager or designee for the purposed credits for certification and incentives. The checklist and certification details shall be confirmed in writing by the applicant to the city manager or designee, on form established by the city, and through a covenant, recorded in the public records, form approved by the city attorney, between the property owner and the city that the proposed manner of compliance with LEED certification as provided by the program guidelines, policies and procedures will be incorporated into the development and maintained unless released by the city as provided for in the covenant. The participant will provide a performance bond or other security, in a form approved by the city attorney, as follows:~~

~~(1) The bond or security shall be in an amount equal to one percent of the value of the proposed construction as determined by the building official;~~

~~(2) The bond or security shall be submitted at the time of filing of any application for review of the project by a city board or department, if the applicant seeks any of the incentives provided in subparagraph (a) above;~~

~~(3) This bond or security shall be subject to call by the city 180 days from issuance of the certificate of occupancy or certificate of completion, whichever occurs first, if LEED certification has not been achieved by that time. Reasonable extensions of time may be granted by the city manager or designee;~~

~~(4) The applicant may request that up to 75 percent of the bond or security be released to the applicant for the purpose of completing improvements necessary for LEED certification, if a good faith effort toward completion is shown, and reasonable assurance provided on the success of plans to complete the LEED certification process, and a failure to complete the improvements is proven to the city manager or designee was no fault of the property owner, or for other good cause shown;~~

~~(5) If the applicant takes advantage of any of the incentives provided for herein, and fails to complete LEED certification as committed to, then the city manager or designee, in his or her sole discretion, shall deem such bond or security forfeited to the city as a contribution to the funding of the city's green building program, designated to fund the LEED program objectives as provided for herein, or any other lawful governmental purpose identified by the city commission; and~~

~~(6) If the project receives LEED certification prior to the expiration of the 180-day period for above, or extensions of time granted by the manager or designee, and the bond has not been forfeited as provided above, then the bond may be released following submittal to the city of written proof of LEED certification by the USGBC.~~

~~Sec. 100-8. - Certification.~~

~~The project shall be subject to certification by a qualified independent third party who has been trained and certified as a LEED green building certifier. For the purpose of this section of the program, "third party" means any person or entity authorized according to the requirements of the standards in this article for a particular project.~~

~~Sec. 100-9. - Education and training.~~

~~(a) The city shall conduct or participate in at least one free training workshop per year in Miami Beach for the purpose of educating potential or current program participants about the program.~~

~~(b) The city shall encourage not less than two members each of the building, planning department and public works staff to attend at least eight hours of green building training a year.~~

~~Sec. 100-10. - Index and report.~~

~~The city manager shall semi-annually analyze and report to the city commission on the satisfaction of the green building program's goals and objectives as outlined in this article.~~

~~Sec. 100-11. - Program review.~~

~~(a) Staff review. The city shall provide for a review of the program to determine the need for changes in the program to increase its effectiveness.~~

~~(b) Frequency. The program shall be subject to review one year after the effective date of this chapter and thereafter at a frequency of not less than once per year.~~

~~(c) Purpose. The purpose of reviewing the program includes, but is not limited to, updating program standards and incentives, recommending program or marketing changes, reviewing suggestions made by program participants, and annually awarding the green building awards of the program.~~

~~Secs. 100-12—100-20. - Reserved.~~

~~ARTICLE II. - ENERGY ECONOMIC DEVELOPMENT ZONE PILOT PROGRAM~~

~~Sec. 100-21. - Purpose.~~

~~The energy economic development zone pilot program was created in 2009, pursuant to F.S. § 377.809, to help communities such as the City of Miami Beach cultivate green economic development, encourage renewable electric energy generation, and manufacture products that contribute to energy conservation and green jobs. The City of Miami Beach is a high-density urban city, which has implemented many sustainability and energy efficiency initiatives. The energy economic development zone pilot program provides the city with additional resources and support to continue implementation of the city's sustainability plan, and it is in the best interest of the city and its citizens to participate in the pilot program.~~

~~Sec. 100-22. - Definitions.~~

~~The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning, or as may be amended from time to time.~~

~~City commission means the Miami Beach City Commission.~~

~~Clean technology sector business means a business that produces products, services, and processes that harness renewable materials and energy sources, dramatically reduce the use of natural resources, and cut or eliminate emissions and wastes.~~

~~Green business means a business that is managed to minimize adverse environmental impacts regardless of the product or services the business offers or a business that has been designated as a Green Business by Miami-Dade County's Green Business Certification.~~

~~Green lodging establishment means a hotel that has been designated as a green lodging establishment by the Florida Department of Environmental Protection.~~

~~LEED means the Leadership in Environmental and Energy Design program administered by the United States Green Building Council.~~

~~Sec. 100-23. - Energy economic development zone boundaries.~~

~~The energy economic development zone shall be comprised of the entirety of the City of Miami Beach.~~

~~Sec. 100-24. - Eligibility criteria.~~

~~In order for a business within the City of Miami Beach to be eligible to apply for an energy economic development zone incentive, it must satisfy the following criteria:~~

~~(a) The business is located within the boundaries of the energy economic development zone, as defined in section 100-23; and~~

~~(b) The business is either a clean technology sector business or a green business, as both are defined in section 100-22, and meets or exceeds the energy efficiency standards set forth in section 100-25; or~~

~~(c) The business is LEED certified; or~~

~~(d) The business is a green lodging establishment, as defined in section 100-22.~~

~~Sec. 100-25. - Energy efficiency standards.~~

~~A business within the City of Miami Beach applying for an energy economic development zone incentive must meet one of the following standards:~~

~~(a) The business must achieve an Energy Star Rating of 50 or higher in each of the buildings that are the subject of the energy economic development zone application, and attach to the application a report from the Energy Star Portfolio Manager Program verifying the Energy Star Rating; or~~

~~(b) The business must achieve the energy efficiency standards of one of the following programs:~~

~~(i) The green lodging program administered by the Florida Department of Environmental Protection; or~~

~~(ii) The Leadership in Environmental and Energy Design Program, administered by the U.S. Green Building Council.~~

~~(iii) The Green Business Certification Program, administered by Miami-Dade County.~~

~~Sec. 100-26. - Program guidelines.~~

~~The city commission may adopt, by resolution, its own energy economic development zone program guidelines, which may include, among other provisions, prioritization of the eligibility criteria; allocation of incentives based on eligibility criteria; and the process for application review and incentive approval, including, but not limited to, a competitive selection process. The~~

~~sustainability committee shall review the city's proposed energy economic development zone program guidelines no later than six months from the date of adoption of this article, and at least annually thereafter throughout the duration of the program, to determine if any revisions should be recommended to the city commission. If the city commission does not adopt the initial guidelines by July 1, 2012, then the city shall implement the program as provided pursuant to the state's guidelines.~~

~~Sec. 100-27. - Program administration.~~

~~The energy economic development zone program and the incentives provided by the State of Florida to businesses participating in the program will be reviewed and administered by the city's economic development division.~~

SECTION 3. REVIEW.

A progress report shall be presented to the City Commission within fifteen (15) months of the effective date of this Ordinance in order to review the success of the regulations contained within. The review shall at a minimum address the following:

1. The effectiveness of the sustainability requirements to reduce demand for energy and greenhouse gas emissions in Miami Beach. .

2. The effectiveness of the Sustainability Fee at encouraging sustainable development.

3. The effectiveness of review procedures.

SECTION 4. APPLICABILITY.

This Ordinance shall not apply to developments that have an approved Order from the Board of Adjustment, Design Review Board, Historic Preservation Board, or Planning Board issued prior to the effective date of this Ordinance, developments that have submitted a complete application for hearing before the Board of Adjustment, Design Review Board, Historic Preservation Board, or Planning Board prior to the effective date of this Ordinance, or that have been issued a building permit process number prior to the effective date of this Ordinance.

SECTION 5. REPEALER.

All ordinances or parts of ordinances and all section and parts of sections in conflict herewith be and the same are hereby repealed.

SECTION 6. CODIFICATION.

It is the intention of the City Commission, and it is hereby ordained that the provisions of this ordinance shall become and be made part of the Code of the City of Miami Beach as amended; that the sections of this ordinance may be renumbered or reentered to accomplish such intention; and that the word "ordinance" may be changed to "section" or other appropriate word.

SECTION 7. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 8. EFFECTIVE DATE.

This Ordinance shall take effect on April 1, 2016 following adoption.

PASSED and **ADOPTED** this 10 day of February, 2016.

Philip Levine, Mayor

ATTEST:

2/12/16

Rafael E. Granado, City Clerk

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

City Attorney 2-11-2016 Date

First Reading:
Second Reading:

First Reading: January 13, 2016
Second Reading: February 10, 2016

Verified by:
Thomas R. Mooney, AICP
Planning Director

Underscore denotes new language
~~Strikethrough~~ denotes deleted language

(Sponsored by Commissioner Micky Steinberg)

T:\AGENDA\2016\February\Planning\Sustainability and Resiliency Ordinance - SECOND Reading ORD - Adopted.docx

Condensed Title:

An Ordinance establishing Chapter 133 in the Land Development Regulations of the City Code entitled "Sustainability and Resiliency;" authorizing property owners and developers to pay a Sustainability Fee or post a bond, in the amount of five percent (5%) of the total construction cost into the City's Sustainability Fund, which is reimbursable pursuant to the level of Green Building compliance achieved; establishing a Sustainability and Resiliency Fund for the deposit of the sustainability fees; and repealing Chapter 100, entitled "Sustainability."

Key Intended Outcome Supported:

Increase satisfaction with neighborhood character. Increase satisfaction with development and growth management across the City.

Supporting Data (Surveys, Environmental Scan, etc 48% of residential respondents and 55% of businesses rate the effort put forth by the City to regulate development is "about the right amount."

Item Summary/Recommendation:

SECOND READING – PUBLIC HEARING

The subject Ordinance would encourage the development of Sustainable Buildings by requiring eligible projects to pay a Sustainability Fee or post a bond in the amount of 5% of total construction costs. The funds would be deposited into the "Sustainability and Resiliency Fund." Within a year, with a possible six (6) month extension, of obtaining a Certificate of Occupancy or Certificate of Completion, the applicant may apply for a refund of all or a portion of the fee contingent on the level of Green Building Certification achieved.

On July 29, 2015, the Land Use and Development Committee recommended in favor of the ordinance and that the City Commission refer the attached Ordinance Amendment to the Planning Board. On September 2, 2015, the City Commission referred the item to the Planning Board (Item C4E).

On January 13, 2016, the City Commission: 1) accepted the recommendation of the Land Use and Development Committee via separate motion; 2) approved the attached Ordinance at First Reading; and 3) scheduled a Second Reading Public Hearing for February 10, 2016.

The Administration recommends that the City Commission adopt the Ordinance.

Advisory Board Recommendation:

On December 15, 2015, the Planning Board reviewed the proposed ordinance and endorsed it with a favorable recommendation (Vote of 7-0). Due to a change in the Title, the matter must be re-noticed for final Planning Board action and transmittal. The Planning Board ratified its recommendation after a public hearing on January 26, 2016 and transmitted the item to the City Commission with a favorable recommendation, inclusive four modifications that were suggested by staff (Vote of 7-0)

Financial Information:

Source of Funds:		Amount	Account
	1		
	2		
	3		
OBPI	Total		

Financial Impact Summary:

In accordance with Charter section 5.02, which requires that the "City of Miami Beach shall consider the long-term economic impact (at least 5 years) of proposed legislative actions," this shall confirm that the City Administration evaluated the long-term economic impact (at least 5 years) of this proposed legislative action, and determined that there will be no measurable impact on the City's budget.

City Clerk's Office Legislative Tracking:

Thomas Mooney

Sign-Offs:

Department Director	Assistant City Manager	City Manager

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MIAMIBEACH

AGENDA ITEM RSA

DATE 2-10-16

MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMISSION MEMORANDUM

TO: Mayor Philip Levine and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: February 10, 2016 **SECOND READING – PUBLIC HEARING**

SUBJECT: **Ordinance Amendment – Sustainability and Resiliency**

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE LAND DEVELOPMENT REGULATIONS (LDR'S) OF THE CITY CODE, BY ESTABLISHING CHAPTER 133, ENTITLED "SUSTAINABILITY AND RESILIENCY;" ESTABLISHING REQUIREMENTS FOR GREEN BUILDING CERTIFICATION AS A REQUIREMENT DURING ZONING REVIEW OF NEW PROJECTS OVER A CERTAIN SIZE ("ELIGIBLE PROJECT(S)"); ESTABLISHING A SUSTAINABILITY FEE PROGRAM FOR PROJECTS THAT DO NOT ACHIEVE THE REQUIRED GREEN BUILDING CERTIFICATION LEVEL; AUTHORIZING PROPERTY OWNERS AND DEVELOPERS TO PAY A SUSTAINABILITY FEE, OR, IN THE ALTERNATIVE, POST A BOND, IN THE AMOUNT OF FIVE PERCENT (5%) OF THE TOTAL CONSTRUCTION COST FOR THE ELIGIBLE PROJECT(S), INTO THE CITY'S SUSTAINABILITY FUND, WHICH BOND OR FUNDS ARE REIMBURSABLE TO THE PROPERTY OWNER OR DEVELOPER PURSUANT TO THE LEVEL OF GREEN BUILDING COMPLIANCE ACHIEVED BY THE "ELIGIBLE PROJECT"; ESTABLISHING A SUSTAINABILITY AND RESILIENCY FUND FOR THE DEPOSIT OF THE SUSTAINABILITY FEES GENERATED THROUGH THE SUSTAINABILITY FEE PROGRAM, AND PROVIDING THE USES FOR WHICH THE FEES DEPOSITED IN THE SUSTAINABILITY AND RESILIENCY FUND CAN BE USED; AND REPEALING CHAPTER 100, ENTITLED "SUSTAINABILITY" AS DUPLICATIVE AND CONTRADICTORY TO THE SUSTAINABILITY AND RESILIENCY REVISIONS OF CHAPTER 133; PROVIDING FOR REVIEW; APPLICABILITY; CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

ADMINISTRATION RECOMMENDATION

The Administration recommends that the City Commission adopt the ordinance with modifications.

BACKGROUND

On April 15, 2015, at the request of Commissioner Micky Steinberg, the City Commission referred an item to the Sustainability and Resiliency Committee, regarding the provision of renewable energy sources in new construction projects (Item C4G). On May 6, 2015, at the request of Commissioner Micky Steinberg, the City Commission referred the item to the Land Use and

Development Committee (Item C4H).

On June 24, 2015, the Sustainability and Resiliency Committee discussed the item and continued it to the July 22, 2015 meeting. On July 22, 2015, the Sustainability and Resiliency Committee discussed the item and recommended in favor of the item with a modification that LEED requirements apply to large scale single-family residences, as well as commercial new construction. Staff was also directed to research the average square footage of a single-family residence to determine the appropriate threshold.

On June 17, 2015, the Land Use and Development Committee continued the item to the July 29, 2015 meeting. On July 29, 2015, the Land Use and Development Committee recommended that the City Commission refer the attached Ordinance Amendment to the Planning Board, with a modification that the applicable square footage be reduced to 7,000 square feet. The Land Use Committee also requested that focus groups be convened for additional input, prior to the matter being considered by the Planning Board.

On September 2, 2015, the City Commission referred the item to the Planning Board (Item C4E).

On November 4, 2015, upon the recommendation on the Land Use and Development Committee, a focus group meeting was held with developers and other affected parties to discuss the impact of the proposed Ordinance amendment on development in the City.

On October 27, 2015, the Planning Board continued the item (File No. 2290) to the November 24, 2015 meeting. On November 24, 2015, the Planning Board continued the item to the December 15, 2015 meeting.

On December 15, 2015, the Planning Board withdrew File No. 2290A and replaced it with File No. 2290B, in order to incorporate an updated title for the proposed Ordinance amendment. The Planning Board then discussed File No. 2290B, provided a tentative favorable recommendation, and continued the item to January 26, 2016 for final ratification of the recommendation.

On January 13, 2016, the City Commission 1) accepted the recommendation of the Land Use and Development Committee via separate motion; 2) approved the attached Ordinance at First Reading; and 3) scheduled a Second Reading Public Hearing for February 10, 2016.

ANALYSIS

According to the U.S. Environmental Protection Agency (EPA), existing buildings are one of the biggest contributors to environmental pollution in the U.S., accounting for 40 percent of total energy use, 72 percent electricity consumption, 39 percent of the carbon dioxide emissions, and 13 percent of total water consumption.

The U.S. Green Building Council (USGBC) has developed Leadership in Energy and Environmental Design (LEED) green building rating system to address design and construction activities to improve energy efficiency and sustainability of residential and commercial buildings. LEED certified buildings save money and resources and have a positive impact on the health of occupants, while promoting renewable, clean energy.

Additionally, the International Living Future Institute developed an international sustainable building certification program called the Living Building Challenge. The Living Building Challenge is the built environment's most rigorous performance standard, which calls for the creation of building projects at all scales that operate as cleanly, beautifully and efficiently as nature's architecture.

Staff has developed a draft ordinance, establishing regulations and procedures that will help the city become more resilient and strongly encourage green building. Green Building Certification promotes efficient design, construction, operation, maintenance and deconstruction of buildings and site development. The green building provisions are designed to achieve the following objectives:

(1) Increase energy efficiency in buildings;

(2) Encourage water and resource conservation;

(3) Reduce waste generated by construction projects;

(4) Reduce long-term building operating and maintenance costs;

(5) Improve indoor air quality and occupant health;

(6) Contribute to meeting state and local commitments to reduce greenhouse gas production and emissions; and

(7) Encourage sound urban planning principles.

There were concerns regarding the impact of this program on single-family residential properties. An analysis of the single family homes that have been approved by the Design Review Board or have an approved building permit over the six months prior to September indicates that the average size of new homes is expected to be 6,452 square feet; the median size is 5,165 square feet; and the top 25% of homes are larger than 7,186 square feet. It is suggested that larger homes, which will have the greatest environmental impact, be built to Green Building standards in order to mitigate their impact. As a result, the proposed ordinance proposes applies to the following types of development:

(1) All new construction that proposes over 7,000 square feet of construction of a structure; or

(2) Ground floor additions (whether attached or detached) to existing structures that encompass over 10,000 square feet of additional floor area.

<u>Sustainability Fee Program</u>
In order to achieve green building standards, the proposed ordinance requires the payment of a Sustainability Fee for eligible buildings prior to obtaining a Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO), or Certificate of Completion (CC). This fee is set as a five (5%) percent of the construction valuation. The proposed fee is based on research that indicates that this is the average cost of achieving LEED Gold Certification. The proposed ordinance then provides for refunds of the fee based upon the level of green building certification achieved. The level of the refund is detailed in the following table:

Certification Compliance Schedule

Level of Certification Achieved	Sustainability Fee Reimbursement to Participant for meeting certain Green Building certification levels
Failure to obtain Certification	0% refund of bond or payment of Sustainability fee
LEED Certified	50% refund of bond or payment of Sustainability Fee
LEED Silver Certified	66% refund of bond or payment of Sustainability Fee
LEED Gold Certified or International Living Future Institute Petals or Net Zero Energy Certified	100% refund of bond or payment of Sustainability Fee
LEED Platinum Certified or International Living Future Institute Living Building Challenge Certified	100% refund of bond or payment of Sustainability Fee

The level of the refund is based upon the estimated cost of achieving the indicated LEED green building certification levels. The participant is required to obtain green building certification within a year of obtaining a Certificate of Occupancy (CO) or Certificate of Completion (CC), with the possibility of a one year extension, in order to obtain the refund.

The base Living Building Challenge certification provides for a very high level of sustainable practices that are equivalent, if not more stringent than LEED Gold Certification. Because the Living Building Challenge provides no equivalent standard to LEED Silver or LEED Certified, no refund is indicated for the Green Building Challenge at those levels.

Sustainability and Resiliency Fund

The fees collected as part of this program will be used to establish a Sustainability and Resiliency Fund. These funds will be used to include improvements that increase the resiliency of the City such as:

(1) Environmental restoration projects;

(2) Environmental remediation projects;

(3) Environmental monitoring;

(4) Green infrastructure;

(5) Enhanced storm water quality and quantity improvements; and/or

(6) Sustainability planning efforts.

The Sustainability and Resiliency Fund could therefore be used to fund resiliency projects such as living shorelines, water quality monitoring, soil remediation, and establishing alternative forms of energy. It could also be used to supplement resiliency elements of existing capital improvement

projects including incorporating bioswales and urban trees into existing street scape projects, water conservation irrigation systems, and enhanced water quality elements into future storm water and greywater projects.

Review
The proposed ordinance would require that within 15 months of the effective date of the Ordinance a progress report be submitted to the City Commission to review the success on the regulations. Such review at minimum shall address the following:

(1) Whether the sustainability requirements sufficiently respond to the climate of Miami Beach;

(2) The effectiveness of the Sustainability Fee; and

(3) The effectiveness of the review procedures.

PLANNING BOARD REVIEW
On December 15, 2015, the Planning Board reviewed the proposed ordinance and endorsed it with a favorable recommendation. Due to a change in the Title, the matter was re-noticed for final Planning Board action and transmittal. The Planning Board ratified its recommendation after a public hearing on January 26, 2016 and transmitted the item to the City Commission with a favorable recommendation, inclusive four modifications that were suggested by staff. The modifications are identified in the update section of the memorandum.

FISCAL IMPACT
In accordance with Charter Section 5.02, which requires that the "City of Miami Beach shall consider the long term economic impact (at least five years) of proposed legislative actions," this shall confirm that the City Administration City Administration evaluated the long term economic impact (at least five years) of this proposed legislative action. The proposed ordinance is not expected to have a negative fiscal impact upon the City.

UPDATE
At first reading approval of the proposed ordinance on January 13, 2016, the City Commission requested that staff research the cost and timeframes associated with the review for green building certification. The USGBC's current fee for LEED Certification standard review of a building that is less than 50,000 square feet, excluding parking, is approximately $3,150 for USGBC members. The current fee for buildings over 50,000 square feet, excluding parking, is $0.045 per square foot, in addition to a $900 registration fee. Therefore, a 100,000 square foot building could expect a fee of $5,400 from the USGBC. There may be additional costs should the applicant wish to hire a green building consultant; however, many architects are already certified by green building agencies and are able to design sustainable and resilient buildings without the need for additional consultants. The standard review time for plans is 20 to 25 business days; however, the applicant may request an expedited review of 10 to 12 business days for an additional $10,000.

As it relates to the overall cost to the overall project, the implementation of LEED standards can vary widely, depending upon the credits sought. In addition, the cost of achieving certain credits can vary depending on the size of the building, location, and uses provided. Research indicates that the overall estimated cost of achieving LEED Gold certification varies between 0.3 and five percent above the cost of a project that did not seek any certification.

Additional research was performed regarding the credits that will be available to developers in the City. By virtue of the walkable, mixed-use nature of Miami Beach and existing zoning, building,

plumbing, and stormwater requirements, many developers will find that they will automatically be eligible for 15 to 16 credits out of the 60 required credits (25 to 27 percent) along with several of the prerequisites necessary to achieve LEED Gold Certification.

Finally, the Commission also requested that local green building certification options be identified. Since the City does not have the authority to amend the Florida Building Code, such an option would involve an amendment to the Land Development Regulations. The City could adopt standards similar to those used by the USGBC; however, the City's departments involved in land development presently do not have the expertise necessary should such an option be desired. This includes experts in energy modeling, energy optimization, refrigerant management, indoor/outdoor water efficiency, product and raw material sourcing, building material reuse, and indoor air quality. Additional staff would also be necessary for environmental site assessment and remediation. In addition, as technology is constantly changing, there would be a need for continuing education and updating of the adopted standards.

Proposed Modifications

Additional feedback was sought out from developers and green building consultants in regards to the impacts of the proposed ordinance. Based on the feedback, the following modifications are suggested to the proposed ordinance, which were transmitted to the City Commission with a favorable recommendation by the Planning Board:

(1) **Modify the definition of "LEED" from the "most recent" edition to an "effective" edition.** This modification will ensure that there are no discrepancies when a new version of LEED standards is released and a prior version is still active.

(2) **Clarify the titles for the International Living Future Institute certifications in the Certification Compliance Schedule.** This modification corrects the names for the certification types available from the International Future Living Institute.

(3) **Modify when the Sustainability Fee is due from prior to obtaining "Building Permit" to prior to obtaining "Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO) or Certificate of Completion (CC), whichever comes first."** Subsequent to discussions with stakeholders, it became apparent that obtaining financing for the Sustainability Fee prior to obtaining a building permit may prove difficult, as several financial institutions do not release funds until a building permit is issued. The proposed modification addresses that concern. In addition, it may be possible for green building certification to be obtained prior to the TCO, CO or CC application, allowing for the possibility that collection of a Sustainability Fee not be necessary or that the fee be reduced based on the level of compliance achieved.

(4) **Increase the length of the extension of refund period from six months to one year.** This modification is recommended in case there any unforeseen events in the construction process that may extend the certification timeframe.

CONCLUSION

The Administration recommends that the City Commission adopt the ordinance with the following amendments:

(1) **Modify the definition of "LEED" from the "most recent" edition to an "effective" edition, as follows:**

Sec. 133-1 – Definitions.

* * *

LEED means ~~the most recent~~ an effective edition of the Leadership in Energy and Environmental Design (LEED) Green Building Rating System for Building Design and Construction or Homes, as applicable, of the United States Green Building Council (USGBC).

(2) **Clarify the titles for the International Living Future Institute certifications in the Certification Compliance Schedule, as follows:**

Sec. 133-6. – Sustainability Fee Calculation.

* * *

Certification Compliance Schedule

Level of Certification Achieved	Sustainability Fee Reimbursement to Participant for meeting certain Green Building certification levels
Failure to obtain Certification	0% refund of bond or payment of Sustainability fee
LEED Certified	50% refund of bond or payment of Sustainability Fee
LEED Silver Certified	66% refund of bond or payment of Sustainability Fee
LEED Gold Certified or ~~Living Building Challenge Certified~~ International Living Future Institute Petals or Net Zero Energy Certified	100% refund of bond or payment of Sustainability Fee
LEED Platinum Certified or International Living Future Institute Living Building Challenge Certified	100% refund of bond or payment of Sustainability Fee

(3) **Modify when the Sustainability Fee is due from prior to obtaining "Building Permit" to prior to obtaining "Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO) or Certificate of Completion (CC), whichever comes first," as follows:**

Sec. 133-6. – Sustainability Fee Calculation.

(a) In order to obtain a ~~building permit~~ Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO), or Certificate of Completion (CC), whichever comes first, the eligible participant must first post a Sustainability Fee payment bond or issue full payment of the Sustainability Fee to the City. The Sustainability Fee shall be valued at five percent (5%) of the total construction valuation of the building permit. However, the eligible participant may be entitled to a refund or partial refund, of the bond, or payment of the Sustainability Fee, based upon achieving the program certification levels in the compliance schedule below:

* * *

If the proof of green building certification is provided prior to the obtaining a CC or CO,

the "Sustainability Fee" shall be in the full amount identified above, minus the refund for the level of green building certification achieved identified in the Certification Compliance Schedule.

(b) The Sustainability Fee shall be valuated upon the eligible participant's submittal at time of application for ~~building permit~~ Temporary Certificate of Occupancy (TCO), Certificate of Occupancy (CO) or Certificate of Completion (CC), whichever comes first, upon review by the planning department during zoning review of the ~~permit~~ certificate. The Sustainability Fee bond or full payment shall be provided by participant prior to obtaining a Temporary Certificate of Occupancy (TCO), Certificate of occupancy (CO) or Certificate of Completion, whichever comes first. ~~building permit~~.

* * *

Sec. 133-7 – Review Procedures.

(a) Prior to obtaining a ~~building permit~~ Temporary Certificate of Occupancy, Certificate of Occupancy (CO) or Certificate of Completion (CC), whichever comes first, the qualifying projects shall post a bond with the City, or in the alternative, provide a payment to the City, in the amount of the "Sustainability Fee" identified in Section 133-6(a).

(4) **Increase the length of the extension of refund period from six months to one year, as follows:**

Sec. 133-7 – Review Procedures.

* * *

(2) The Planning Director may approve, upon the request of the eligible participant, a one-time ~~six (6) month~~ one (1) year extension, provided proof that the green building certification agency's review remains pending to determine final certification.

JLM/SMT/TRM/ESW/FCT/RAM

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MIAMIBEACH

CITY OF MIAMI BEACH
NOTICE OF PUBLIC HEARINGS

February 10, 2016

NOTICE IS HEREBY given that the following public hearings will be held by the Mayor and City Commissioners of the City of Miami Beach, Florida, in the Commission Chambers, Third Floor, City Hall, 1700 Convention Center Drive, Miami Beach, Florida, on **February 10, 2016,** at the times listed, or as soon thereafter as the matter can be heard:

10:00 a.m.
An Ordinance Amending The Land Development Regulations (LDRs) Of The City Code, By Establishing Chapter 133, Entitled "Sustainability And Resiliency;" Establishing Requirements For Green Building Certification As A Requirement During Zoning Review Of New Projects Over A Certain Size ("Eligible Project(s)"); Establishing A Sustainability Fee Program For Projects That Do Not Achieve The Required Green Building Certification Level; Authorizing Property Owners And Developers To Pay A Sustainability Fee, Or, In The Alternative, Post A Bond, In The Amount Of Five Percent (5%) Of The Total Construction Cost For The Eligible Project(s), Into The City's Sustainability Fund, Which Bond Or Funds Are Reimbursable To The Property Owner Or Developer Pursuant To The Level Of Green Building Compliance Achieved By The "Eligible Project"; Establishing A Sustainability And Resiliency Fund For The Deposit Of The Sustainability Fees Generated Through The Sustainability Fee Program, And Providing The Uses For Which The Fees Deposited In The Sustainability And Resiliency Fund Can Be Used; And Repealing Chapter 100, Entitled "Sustainability" As Duplicative And Contradictory To The Sustainability And Resiliency Revisions Of Chapter 133; Providing For Review; Applicability; Codification; Repealer; Severability; And An Effective Date. *Inquiries may be directed to the Planning Department at 305.673.7550.*

10:05 a.m.
An Ordinance Amending Chapter 130 "Off Street Parking," Article IV, "Off-Street Loading," By Modifying The Requirements For Calculating And Providing Required Loading Spaces For Existing Buildings, Changes In Use And New Construction, Including Enclosed Structures Used For The Storage And Parking Of Vehicles; Providing For Repealer; Severability; Codification; And An Effective Date. *Inquiries may be directed to the Planning Department at 305.673.7550.*

10:10 a.m.
An Ordinance Amending Chapter 30 Of The Miami Beach City Code, Entitled "Code Enforcement," By Amending Article II, Entitled "Special Master," By Amending Section 30-37, Entitled "Terms Of Office; Compensation"; By Amending The Compensation Of The Special Master(s); Providing For Codification, Repealer, Severability, And An Effective Date. *Inquiries may be directed to the Office of the City Attorney at 305.673.7470.*

10:15 a.m.
An Ordinance Amending Chapter 78 Of The Code Of The City Of Miami Beach, Entitled "Personnel," By Amending Article I, Entitled "In General," By Amending Section 78-2, Entitled "Reserved," To Codify Requirements For Criminal History Record Checks For Certain Municipal Employees, Appointees, Contractors, Employees Of Contractors, And Vendors, In Accordance With State Law; Providing For Repealer, Severability, Codification, And An Effective Date. *Inquiries may be directed to the Human Resources Department at 305.673.7524.*

10:20 a.m.
An Ordinance Amending Chapter 2 Of The Miami Beach City Code Entitled "Administration," By Amending Article IV Entitled "Officers And Employees," By Amending Section 2-191 Entitled "Enumeration Of Organizational Units," By Creating The Environment And Sustainability Department; And Providing For Severability; Repealing All Ordinances In Conflict Therewith; And Providing For An Effective Date. *Inquiries may be directed to the Human Resources Department at 305.673.7524.*

10:25 a.m. First Reading, Public Hearing
An Ordinance Amending Subpart A - General Ordinances, Chapter 6 "Alcoholic Beverages" Of The Code Of The City Of Miami Beach, By Amending Article I, "General Provisions," To Consolidate All Provisions Relating To Alcohol Regulation In One Chapter Of The City Code By Relocating Certain Alcoholic Beverage Establishment Regulations From Chapter 142 And Placing Those Provisions In Chapter 6; Providing For Hours Of Operation; Location And Use Restrictions; Patron Age Restrictions; Minimum Seats And Hotel Rooms Requirements; By Amending Article II, "Conduct," By Modifying And Creating Definitions; Providing For Repealer; Severability; Codification; Exceptions; And An Effective Date. *Inquiries may be directed to the Planning Department at 305.673.7550.*

10:26 a.m. First Reading Public Hearing
An Ordinance Amending Chapter 142 "Zoning Districts And Regulations;" Article II, "District Regulations," Division 3, "Residential Multifamily Districts" Division 4, "CD-1 Commercial, Low Intensity District" Division 5, "CD-2 Commercial, Medium Intensity District" Division 6, "CD-3 Commercial, High Intensity District" Division 7, "CCC Civic And Convention Center District" Division 8, "GC Golf Course District" Division 9, "GU Government Use District" Division 10, "HD Hospital District" Division 11, "I-1 Light Industrial District" Division 12, "MR Marine Recreation District;" Division 13, "MXE Mixed Use Entertainment District;" Division 16, "WD-1 Waterway District" Division 17, "WD-2 Waterway District" Division 18, "PS Performance Standard District," Division 20 "TC North Beach Town Center Districts," To Delineate All Alcoholic Beverage Establishments As Related Main Permitted, Conditional, And Prohibited Uses By Zoning District; Modifying Chapter 142, Article IV, "Supplementary District Regulations" Division 2, "Accessory Uses," Article V, "Specialized Use Regulations," To Delete Division 4, And Section 142-1301, Entitled "Permitted Districts; Striking Alcohol Regulations Relating To Hours Of Operation, Minimum Seat And Hotel Rooms From Chapter 142 "Zoning Districts And Regulations," Article II "District Regulations;" And Modifying Chapter 142, Article V "Special Use Regulations," At Division 4 "Alcoholic Beverages," By Striking Sections 142-1302 And 142-1303; Providing For Repealer; Severability; Codification; Exceptions; And An Effective Date. *Inquiries may be directed to the Planning Department at 305.673.7550.*

10:30 a.m.
A Resolution Adopting The Third Amendment To The Capital Budget For Fiscal Year 2015/16. *Inquiries may be directed to the Budget & Performance Improvement Department at 305.673.7510.*

Dr. Stanley Sutnick Citizen's Forum – Pursuant to Resolution No. 2013-28440, the times for the Dr. Stanley Sutnick Citizen's Forum are **8:30 a.m.** and **1:00 p.m.**, or as soon as possible thereafter. Approximately thirty minutes will be allocated to each session, with individuals being limited to no more than three minutes or for a period established by the Mayor. No appointment or advance notification is needed in order to speak to the Commission during this Forum.

INTERESTED PARTIES are invited to appear at this meeting, or be represented by an agent, or to express their views in writing addressed to the City Commission, c/o the City Clerk, 1700 Convention Center Drive, 1st Floor, City Hall, Miami Beach, Florida 33139. Copies of these items are available for public inspection during normal business hours in the Office of the City Clerk, 1700 Convention Center Drive, 1st Floor, City Hall, Miami Beach, Florida 33139. This meeting, or any item herein, may be continued, and under such circumstances, additional legal notice need not be provided.

Pursuant to Section 286.0105, Fla. Stat., the City hereby advises the public that if a person decides to appeal any decision made by the City Commission with respect to any matter considered at its meeting or its hearing, such person must ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals not otherwise allowed by law.

To request this material in alternate format, sign language interpreter (five-day notice required), information on access for persons with disabilities, and/or any accommodation to review any document or participate in any City-sponsored proceedings, call 305.604.2489 and select 1 for English or 2 for Spanish, then option 6; TTY users may call via 711 (Florida Relay Service).

Rafael E. Granado, City Clerk
City of Miami Beach

Ad 1125

RESOLUTION NO. 2016-29454

A RESOLUTION AMENDING THE CITY'S 2011 CDM-SMITH STORMWATER (MANAGEMENT) MASTER PLAN (2011 SWMP) TO INCORPORATE THE CITY'S CONSULTANT, AECOM'S, RECOMMENDATIONS RELATING TO DEFINING "FUTURE GRADE," AND "FUTURE CROWN OF THE ROAD;" FURTHER MODIFYING SECTIONS 2.5.3, ENTITLED "PROPOSED LEVEL OF SERVICE (LOS), AND 9.2.5 ENTITLED "SEAWALL HEIGHTS," OF THE 2011 SWMP, TO INCLUDE MODIFICATIONS TO THE LEVEL OF SERVICE FOR CONSTRUCTION OF ROADS, STORMWATER SYSTEMS, AND DEVELOPMENT TO REDUCE THE RISK OF FLOODING; A COPY OF WHICH IS ATTACHED HERETO AS EXHIBIT 1.

WHEREAS, the City's Stormwater (Management) Master Plan (2011 SWMP) is intended to be a guide for improving the City's stormwater management system performance for the next 20 years, with considerations of potential sea level rise over 20-years of stormwater infrastructure and a 50-year planning horizon for seawall heights; and

WHEREAS, the City adopted Resolution 2012-28068 on November 14, 2012, adopting the 2011 SWMP; and

WHEREAS, the City adopted Resolution 2014-28499 on February 12, 2014, which approved the recommendation of The Flooding Mitigation Committee to amend the 2011 SWMP by modifying the design criteria for the tailwater elevation from 0.5 Ft-NAVD to 2.7 Ft-NAVD for all tidal boundary conditions; and

WHEREAS, the City adopted Resolution 2014-28684 on July 23, 2014 which accepted the recommendation of the Flooding Mitigation Committee to amend the 2011 SWMP for minimum seawall elevation from 3.2 feet NAVD to 5.7 feet NAVD, however the 5.7 NAVD elevation for seawalls shall not apply to minor seawall repairs less than $300 per linear foot at "2014 Consumer Price Index (CPI)"; and

WHEREAS, on December 17, 2014, the City Commission approved the revised standard seawall height at 3.2 NAVD with a caveat of an additional cap of 2 feet; and

WHEREAS, on July 21, 2015, the Mayor's Blue Ribbon Panel on Flooding and Sea Level Rise recommend that the seawall cap on all new private construction and all public seawall construction be changed from 3.2 feet NAVD to 5.7 feet NAVD throughout the City; however, on existing private seawalls that are being replaced/repaired not associated with new building construction, a minimum 4.0 NAVD elevation shall apply with the structural design to accommodate a seawall height extension to a minimum 5.7 NAVD; and

WHEREAS, on May 11, 2016, the City Commission adopted Ordinance 2016-

4009 which amended Chapter 54 – "Floods", by establishing a minimum and maximum freeboard (minimum one foot / maximum five feet) above base flood elevation (FIRM BFE = not less than 6.44 NAVD) for all properties and amend the Land Development regulations pertaining to the calculation of building height, and establish minimum elevations of required yards in single family districts; and

WHEREAS, on May 11, 2016, the City Commission adopted Ordinance 2016-4010, amended Chapter 118, of the Land Development Regulations relating to defining "future grade" and "future crown of the road;" and

WHEREAS, the modifications to Chapter 54 and Chapter 118 were provided an effective date of June 8, 2016, so that these terms would be provided a definition and criteria in the 2011 SWMP, and the attached Addendum 1 to the 2011 SWMP, incorporates the definitions and changes to the 2011 SWMP to effectuate the new definitions for "future crown of the road" and "future grade."

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission amend the City's 2011 CDM-Smith Stormwater (Management) Master Plan (2011 SWMP) to incorporate the City's consultant, AECOM's, recommendations relating to defining "future grade," and "future crown of the road;" further modifying sections 2.5.3, entitled "Proposed Level Of Service (LOS), and 9.2.5 entitled "Seawall Heights," of the 2011 SWMP, to include modifications to the level of service for construction of roads, stormwater systems, and development to reduce the risk of flooding; a copy of which is attached hereto as Exhibit 1.

PASSED and **ADOPTED this** 8 day of June, 2016.

ATTEST:

Philip Levine, Mayor

6/13/16

Rafael E. Granado, City Clerk

MIAMI BEACH INCORPORATED MARCH 26TH 1915

APPROVED AS TO FORM & LANGUAGE & FOR EXECUTION

City Attorney

6/1/16

Date

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Condensed Title:

A Resolution Amending The City's 2011 Stormwater Management Master Plan To Incorporate Modifications To The Standards For The Construction Of New Roads, Stormwater Systems, And Developments; Which Standards Would Incorporate Higher Elevations In Order To Reduce The Risk Of Flooding; And Defining "Future Grade" And Minimum Required Seawall Heights; And Which Documents Are Attached Hereto As Composite Exhibit A.

Key Intended Outcome Supported:

Ensure reliable stormwater management and resiliency against flooding by implementing select short and long-term solutions including addressing sea-level rise.

Item Summary/Recommendation:

The City adopted the 2011 Stormwater Management Master Plan (SWMMP) by Resolution 2012-28068. This plan is intended to be a guide for improving the City's stormwater management system performance for a 20 year planning horizon, with considerations of potential sea level rise over 20 years for stormwater infrastructure and 50 years for seawall heights.

Periodically, due to updated climate projections, it is important to update the SWMMP to stay current and viable. The modifications proposed include provisions for new development to include roadway elevation, levels of service for roads, precipitation design rates and distribution, seawall elevations, and minimum future grade elevations.

These items have been presented to the Mayor's Blue Ribbon Panel on Flooding and Sea Level Rise on several occasions.

The SWMMP needs to be amended to incorporate modifications to the standards for the construction of new roads, stormwater systems, and developments; which standards would incorporate higher elevations in order to reduce the risk of flooding; redefine the level of service and design storm; and define minimum "future grade" and seawall heights; and which documents are attached hereto as Exhibit A. The Public Works Manual will also be amended to provide construction details referencing the SWMMP.

THE ADMINISTRATION RECOMMENDS ADOPTING THE RESOLUTION.

Advisory Board Recommendation:

Financial Information:

Source of Funds:		Amount	Account	Approved
	1			
	2			
	3			
OBPI	Total			

Financial Impact Summary:

City Clerk's Office Legislative Tracking:

Eric Carpenter, Public Works X6012

Sign-Offs:

Asst. Department Director	Assistant City Manager/DPW	City Manager
JJF	ETC 90	JLM

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MIAMIBEACH

Agenda Item R7S
Date 6-8-16

MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMISSION MEMORANDUM

TO: Mayor Philip Levine and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: June 8, 2016

SUBJECT: **A RESOLUTION AMENDING THE CITY'S 2011 STORMWATER MANAGEMENT MASTER PLAN TO INCORPORATE MODIFICATIONS TO THE STANDARDS FOR THE CONSTRUCTION OF NEW ROADS, STORMWATER SYSTEMS, AND DEVELOPMENTS; WHICH STANDARDS WOULD INCORPORATE HIGHER ELEVATIONS IN ORDER TO REDUCE THE RISK OF FLOODING; AND DEFINING "FUTURE GRADE" AND MINIMUM REQUIRED SEAWALL HEIGHTS; AND WHICH DOCUMENTS ARE ATTACHED HERETO AS COMPOSITE EXHIBIT A.**

BACKGROUND

The City adopted the 2011 Stormwater Management Master Plan (SWMMP) by Resolution 2012-28068. This plan is intended to be a guide for improving the City's stormwater management system performance for a 20 year planning horizon, with considerations of potential sea level rise over 20 years for stormwater infrastructure and 50 years for seawall heights.

Periodically, due to updated climate projections, it is important to update the SWMMP to stay current and viable. The modifications proposed include provisions for new development to include roadway elevation, levels of service for roads, precipitation design rates and distribution, seawall elevations, and minimum future grade elevations.

These items have been presented to the Mayor's Blue Ribbon Panel on Flooding and Sea Level Rise on several occasions.

On February 12, 2014, the City adopted Resolution 2014-28499, which approved the recommendation of The Flooding Mitigation Committee to amend the SWMMP so as to modify the design criteria for a "tailwater elevation" be increased from 0.5 Ft-NAVD to 2.7 Ft-NAVD for all tidal boundary conditions;

On July 21, 2015, the Mayor's Blue Ribbon Panel on Flooding and Sea Level Rise recommend that the seawall cap on all new private construction and all public seawall construction be changed from 3.2 feet NAVD to 5.7 feet NAVD throughout the City; provided, however, that for properties with existing private seawalls that are being replaced/repaired not associated with new building construction, the Panel recommended applying a minimum 4.0 NAVD elevation, as

long as the structural design to accommodate a seawall height extension to a minimum 5.7 NAVD

On May 11, 2016, the Mayor and City Commission adopted Ordinances 2016-4009, relating to amending Chapter 54 of the City Code entitled "Floods" to define City of Miami Beach Freeboard, and modify how grade elevation and height are defined due to flooding and climate change.

Also on May 11, 2016, the Mayor and City Commission adopted Ordinance 2016-4010, relating to amending Chapter 118, of the Land Development Code, to incorporate the same Freeboard definitions, and procedures for how to determine grade elevation and height as a result of flooding and climate change.

The SWMMP needs to be amended to incorporate modifications to the standards for the construction of new roads, stormwater systems, and developments; which standards would incorporate higher elevations in order to reduce the risk of flooding; redefine the level of service and design storm; and define minimum "future grade" and seawall heights; and which documents are attached hereto as Exhibit A. The Public Works Manual will also be amended to provide construction details referencing the SWMMP.

CONCLUSION

The Administration recommends that the Mayor and City Commission of the City of Miami Beach, Florida accept the recommendation of the City Manager to amend the 2011 Stormwater Management Master Plan.

Attachment – Exhibit A

JLM/ETC/JJF/BAM/WRB

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EXHIBIT A

AECOM recommended changes to the 2011 CDM-Smith Stormwater Master Plan (2011 SWMP)

- Modify Section 2.5.3 Proposed Level of Service to include, *"Future crown of road and back of sidewalk elevations shall be 3.7 feet, NAVD, unless exempt due to hardship as determined by the Director of Public Works."*

- Modify Section 2.5.3 Proposed Level of Service to include, *"For land development purposes, the future grade shall be 3.7 feet NAVD minimum."*

- Modify Section 2.5.3 Proposed Level of Service to state, *"The stormwater level of service for roadways such that the crown of road is not overtopped during the 5 year / 24 hour design storm event with the following parameters:*
    - *South Florida Water Management District nomograph with 1.25 safety factor.*
    - *The rainfall distribution shall be the SCS Type III.*
    - *The Unit Hydrograph peaking factor shall be 150."*

- Modify Section 2.5.3 Proposed Level of Service to state, *"New construction or substantial reconstruction on private property shall retain stormwater runoff from the 5 year / 24 hour design storm of 7.5 inches of rainfall."*

- Modify Section 9.2.5 Seawall Heights to state, *"All new seawalls on private construction and all seawalls constructed on public projects shall have a minimum elevation of 5.7 feet, NAVD, however, on existing private seawalls that are being replaced/repaired not associated with new building construction, a minimum 4.0 NAVD elevation shall apply with the structural design to accommodate a seawall height extension to a minimum 5.7 NAVD."*

EXHIBIT A

ADDENDUM 1 TO THE CITY OF MIAMI BEACH STORMWATER (MANAGEMENT) MASTER PLAN FINAL REPORT

The City of Miami Beach's consultant, AECOM, has recommended modifications to the 2011 CDM Smith Stormwater (Management) Master Plan Final Report (2011 SWMP) in order to ensure the resiliency of the City, which recommendations are incorporated into the 2011 SWMP, as Addendum 1.

The following amendments to the following sections of the 2011 SWMP are hereby amended and incorporated by reference into the 2011 SWMP, as follows:

* * *

2.5.3 Proposed Level of Service (LOS)

As shown, CDM evaluated design storm events and joint tidal event periods to evaluate stormwater system performance and the project needs and costs to achieve various levels of service. The various evaluations for LOS indicated a point of diminishing returns at the 2 to 3 year storm event level.

Therefore, the City and CDM formulated options to best protect public safety and property with available funding. The 5-year, 24-hour ~~(5.9 inches of rainfall)~~ design storm of 7.5 inches of rainfall was also investigated due to current LOS standards. As an example, a 5 year LOS in the Flamingo Park Lummus Avenue project area would cost approximately $80 million, and the City available budget for this project area is approximately $35 million.

Based on the supplied information herein, the City should determine whether an adjustment in the design storm is prudent as it relates to the future evaluation of LOS.

"*Future crown of road*" and "*future back of sidewalk elevations*" shall be 3.7 feet, NAVD, unless exempt due to hardship as determined by the Director of Public Works.

For land development purposes, "*future grade*" shall be a minimum of 3.7 feet NAVD.

The stormwater level of service for roadways such that the "*future crown of road*" is not overtopped (flooded) during the 5 year / 24 hour design storm event shall be constructed utilizing the the following parameters:

- South Florida Water Management District nomograph with 1.25 safety factor.
- The rainfall distribution shall be the SCS Type III.
- The Unit Hydrograph peaking factor shall be 150.

EXHIBIT A

New construction or substantial reconstruction on private property shall retain stormwater runoff from the 5 year / 24 hour design storm of 7.5 inches of rainfall.

* * *

9.2.5 Seawall Heights

This section provides recommendations regarding the influence of sea-level on seawall elevations. Condition assessment and solutions for rehabilitating the City's extensive network of seawalls was not included as part of the scope of the SWMP. In 2003, a preliminary inspection report on seawalls was produced by another consultant. This investigation identified the structural integrity of approximately 99 seawall sites throughout the City. That study did not include any recommendation of modifications to the seawalls to address sea-level rise considerations. The following are additional considerations related to seawall heights.

Seawall Height Consideration No. 1

As part of the City's consideration of long-term sea-level rise, a comprehensive inventory of City and private seawalls within the City of Miami Beach should be performed. The inventory should include survey of top (i.e., cap) of the seawall and condition assessment of its structural integrity.

Seawall Height Consideration No. 2

Seawall height design standards should be consulted with coastal engineers and planners in accordance with procedures normally utilized in this specialty discipline (i.e., coastal storm surge estimation). ~~A preliminary consideration is the establishment of a minimum seawall elevation. Based on FEMA and USACE guidance and discussions with USGS and CSI during the development of the SWMP, the establishment of a minimum seawall height of 1foot above the 1-year tidal stillwater (1.0 + 2.2 ft NAVO = 3.2 ft NAVO) elevation is recommended. This level should be evaluated in coordination sea-level rise projections.~~ All new seawalls for private construction and all seawalls constructed on public projects (after June 8, 2016) shall have a minimum elevation of 5.7 feet, NAVD, provided, however, for existing private seawalls that are being replaced/repaired not associated with new building construction, a minimum 4.0 NAVD elevation shall apply with the structural design to accommodate a seawall height extension to a minimum of 5.7 NAVD.

* * *

FREEBOARD

ORDINANCE NO. 2016-4009

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING SUBPART A – GENERAL ORDINANCES, OF THE CITY CODE, BY AMENDING CHAPTER 54 "FLOODS" AT SECTION 54-35, "DEFINITIONS," BY AMENDING THE DEFINITIONS FOR BASE FLOOD ELEVATION, CROWN OF ROAD, AND FREEBOARD, AND BY CREATING DEFINITIONS FOR CENTERLINE OF ROADWAY, CRITICAL FACILITY, FUTURE CROWN OF ROAD, MINIMUM FREEBOARD, MAXIMUM FREEBOARD, GREEN INFRASTRUCTURE, LOW IMPACT DEVELOPMENT (LID), AND SURFACE STORMWATER SHALLOW CONVEYANCE; BY AMENDING SECTION 54-45, "PERMIT PROCEDURES," TO REQUIRE A STORMWATER MANAGEMENT PLAN; BY AMENDING SECTION 54-47, "GENERAL STANDARDS," TO PROHIBIT SEPTIC SEWAGE SYSTEMS, AND INCLUDE REQUIREMENTS FOR STORAGE OF HAZARDOUS MATERIALS; BY AMENDING SECTION 54-48, "SPECIFIC STANDARDS," TO CLARIFY THE MINIMUM ELEVATION OF THE LOWEST FINISHED FLOOR FOR RESIDENTIAL AND NON-RESIDENTIAL CONSTRUCTION, AND REQUIRING A MINIMUM ELEVATION FOR GARAGE ENTRANCES; BY AMENDING SECTION 54-51, "STANDARDS FOR COASTAL HIGH HAZARD AREAS (V-ZONES)," TO CLARIFY THE MINIMUM ELEVATION OF THE LOWEST FLOOR OF ALL NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS; PROVIDING CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, sea level rise and flooding is an ongoing concern of the City; and

WHEREAS, low lying infrastructure including buildings must also elevate in order to reduce risk or maintain low risk from potential flood damage; and

WHEREAS, it is appropriate to establish minimum freeboard requirements for residential and commercial structures to provide additional levels of protection to maintain consistency with U.S. Federal and state guidance, and

WHEREAS, these regulations will accomplish these goals and ensure that the public health, safety and welfare will be preserved.

NOW THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. Section 54-35, "Definitions," is amended as follows:

* * *

Base Flood Elevation means ~~the water-surface elevation associated with the base flood~~ .the regulatory elevation associated with building elevation, flood-proofing, protection of building systems and utilities and other flood protection provisions as identified in current FEMA Flood Insurance Rate Map (FIRM) panels. This elevation shall not be less than 8.0 ft. NGVD (6.44 ft. NAVD) in the City of Miami Beach.

* * *

~~Crown of road (*cCenter line*)~~ of roadway means a line running parallel with the ~~highway~~ roadway right-of-way which is half the distance between the extreme edges of the official right-of-way width as shown on a map approved by the department of the public works.

* * *

Critical facility means a facility designated as an essential facility including, but not limited to: hospitals, fire, rescue, ambulance and police stations and emergency vehicle garages, emergency shelters, designated emergency preparedness, communications, and operation centers and other facilities required for emergency response, power generating stations and other public utility facilities required in an emergency ancillary structures (including, but not limited to, communication towers, fuel storage tanks, cooling towers, electrical substation structure, fire water storage tanks, or other structures housing or supporting water, or other fire-suppression material or equipment, water storage facilities and pump structures required to maintain water pressure for fire suppression building and other structures (including, but not limited to facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing extremely hazardous materials.

Crown of road means the highest elevation of the roadway at a specific cross section.

Crown of road, future means the highest elevation of the crown of road as described in the adopted Miami Beach Stormwater Master Plan, located at exhibit X.

* * *

Freeboard means the additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management. Freeboard tends to compensate for many unknown factors, such as wave action, blockage of bridge or culvert openings, and hydrological effect of urbanization of the watershed, which could contribute to flood heights greater than the heights calculated for a selected frequency flood and floodway conditions. All new construction and substantial improvements to existing construction shall meet the minimum freeboard requirement, and may exceed the minimum freeboard requirement up to the maximum freeboard without such height counting against the maximum height for construction in the applicable zoning district

Freeboard, minimum equals one (1) foot.

Freeboard, maximum equals five (5') feet.

* * *

Green Infrastructure means natural vegetation, landscape design and engineered techniques that retain, absorb, and often cleanse stormwater runoff.

* * *

Low-Impact development (LID) means techniques that mimic natural processes to manage stormwater, and are frequently cheaper and more attractive than traditional stormwater management techniques.

* * *

Surface stormwater shallow conveyance means vegetated swales, permeable pavement, rain gardens, and rainwater/stormwater capture and infiltration devices.

* * *

SECTION 2. Section 54-45, "Permit Procedures," is amended as follows:

Application for a development permit shall be made to the building director or his/her designee on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimension, and elevations of the area in questions, existing and proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application stage:

* * *

(f) A stormwater management plan and site drainage calculations, for new constructions and substantial improvement, shall be prepared by a Florida licensed engineer in accordance with the ~~Public Works Department Manual and Procedures~~ CDM Smith 2011 Stormwater Plan, to demonstrate that adequate surface drainage shall be provided and surface run-off water shall be diverted to a storm conveyance or other approved point of collection, in accordance with Florida Building Code Sections 1804 and R401.3. The site shall be graded in manner to drain surface water away from foundation walls in accordance with Florida Building Code Sections 1804 and R401.3. All site drainage for new construction shall be designed and constructed in such a manner as to provide runoff rates, volume and pollutant loads not exceeding predevelopment conditions and prevent flooding adjacent properties.

* * *

SECTION 3. Section 54-47, "General Standards," is hereby amended as follows:

In all areas of special flood hazard, all development sites, including new construction and substantial improvements, shall be reasonably safe from flooding and meet the following provisions:

* * *

(16) Installation of new septic swage systems is prohibited in the City of Miami Beach Special Hazard Area.

(17) Hazardous materials shall be stored indoors in the City of Miami Beach Special Flood Hazard Area and shall be elevated no lower than Base Flood Elevation plus minimum freeboard.

* * *

SECTION 4. Section 54-48, "Specific Standards," is hereby amended as follows:

In areas mapped as "Zone X" (shaded and unshaded) on the City of Miami Beach Flood Insurance Rate Map (FIRM), all new construction and substantial improvement of any buildings (including manufactured homes) shall construct the lowest floor at an elevation of at least one foot above the highest adjacent grade or above the crown of the nearest street, whichever is higher.

In all A-zones where base flood elevation data have been provided (zones AE, A1-30, A (with base flood elevation), and AH), as set forth in section 54-37, the following provisions, in addition to those set forth in sections 54-47 54-47 and 54-49 54-49, shall apply:

(1) *Residential construction.*

(a) All new construction and substantial improvement of any residential building (including manufactured homes) shall have the lowest finished floor including electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities, including duct work elevated to no lower than the base flood elevation plus minimum freeboard. Should solid foundation perimeter walls be used to elevate a structure, there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic forces in accordance with standards of subsection 54-48(3).

The following shall apply for single family residential garage structures:

When constructed as part of a detached or attached garage structure to the main home, garages shall be constructed no lower than adjusted grade, as defined in Section 114.1. Further, the overall height and structural composition of the first floor garage structure shall be designed and built to accommodate a future raised floor slab to meet the height of base flood elevation plus minimum freeboard, subject to the height limitations provided in Section 142-105.

When constructed under the main home, the associated driveway shall be sloped upward from the public right of way to a minimum elevation of adjusted grade, as defined in Section 114.1, and then may slope downward to a lower garage elevation.

The following shall apply to multifamily residential garage structures:

Access drives to garage structures shall be sloped upward from the public right of way to a minimum elevation of adjusted grade, as defined in Section 114.1, and then may slope downward to a lower garage elevation. Further, the overall height and structural composition of the first floor garage structure shall be designed and built to accommodate a future raised floor slab to meet the height of base flood elevation plus minimum freeboard.

(b) The lowest floor of an addition to the nonsubstantial improvement of a residential structure shall be elevated to no lower than the existing lowest finished floor elevation.

(2) *Nonresidential construction.*

(a) All new construction and substantial improvement of any commercial, industrial, or nonresidential building (including manufactured homes) shall have the lowest floor, including basement, electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities, including duct work, elevated to no lower than the base flood elevation plus minimum freeboard. All buildings located in A-zones may be floodproofed, in lieu of being elevated, provided that all areas of the building components, together with attendant utilities and sanitary facilities, below the base flood elevation, plus ~~one foot~~ minimum freeboard are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied using the FEMA floodproofing certificate. Such certification along with the corresponding engineering data, and the operational and maintenance plans shall be provided to the floodplain administrator.

(b) The lowest floor of an addition to the nonsubstantial improvement of a commercial structure shall be elevated to no lower than the existing lowest finished floor elevation.

(c) All new construction and substantial improvements to critical facilities shall have the lowest floor, including electrical, heating, ventilation, plumbing, air conditioning equipment, cable, telephone, and other service facilities including duct work, elevated to no lower than the base flood elevation plus two (2) feet.

* * *

(4) *Standards for manufactured homes and recreational vehicles.*

(a) All manufactured homes that are placed, or substantially improved within ~~a~~zones A1-30, AH, and AE, on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, the lowest floor be elevated on a permanent foundation to no lower than the base flood elevation, plus freeboard and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

* * *

SECTION 5. Section 54-51. "Standards for coastal high hazard areas (V-zones),"is amended as follows:

* * *

Located within areas of special flood hazard established in section 54-37 are coastal high hazard areas, designated as zones V1-V30, VE, or V (with BFE). The following provisions shall apply:

(2) All new construction and substantial improvements in zones V1-V30, VE, and V (with BFE) shall be elevated on pilings or columns so that:

(a) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to no lower than the base flood elevation, plus freeboard, whether or not the structure contains a basement; and

* * *

(c) For all structures located seaward of the coastal construction control line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements of the habitable structures, as defined in Florida Building Code Section 3109, shall be elevated to the 100-year flood elevation established by the Florida Department of Environmental Protection, plus freeboard or the base flood elevation, plus freeboard, whichever is the higher.

* * *

(11) For all structures located seaward of the coastal construction control line (CCCL), the bottom of the lowest horizontal structural member of the lowest floor of all new construction and substantial improvements of the habitable structures, as defined in Florida Building Code Section 3109, shall be elevated to the flood elevation established by the Florida Department of Environmental Protection, plus freeboard or the base flood elevation, plus freeboard, whichever is higher. All non-elevation design requirements subsections 54-51(2) through (10) shall apply.

* * *

SECTION 6. CODIFICATION.

It is the intention of the Mayor and City Commission of the City of Miami Beach, and it is hereby ordained that the provisions of this ordinance shall become and be made part of the Code of the City of Miami Beach, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section", "article", or other appropriate word.

SECTION 7. REPEALER.

All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

SECTION 8. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 9. EXCEPTIONS.

This ordinance shall not apply to anyone who filed a completed application package for Board of Adjustment, Historic Preservation Board or Design Review Board Approval with the Planning Department on or before June 8, 2016; or anyone who obtained a Building Permit Process Number from the Building Department on or before June 8, 2016.

SECTION 10. EFFECTIVE DATE.

This Ordinance shall take effect on June 8, 2016.

PASSED AND ADOPTED this 11 day of May, 2016.

Philip Levine, Mayor

ATTEST:

5/16/16

Rafael E. Granado, City Clerk

MIAMI BEACH INCORPORATED MARCH 26TH 1915

APPROVED AS TO FORM AND LANGUAGE AND FOR EXECUTION

City Attorney Date 5/12/16

First Reading: April 13, 2016
Second Reading: May 11, 2016

Verified By: _____
Thomas R. Mooney, AICP
Planning Director

Underline = new language
~~Strikethrough~~ = deleted language

[Sponsored by Commissioner Joy Malakoff]

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COMMISSION ITEM SUMMARY

Condensed Title:

An ordinance amending Chapter 54 of the City Code as it pertains to freeboard and minimum finished floor elevations, and an ordinance amending the Land Development Regulations of the City Code as it pertains to building height, base flood elevation, grade and yard elevation requirements.Keep to one line

Key Intended Outcome Supported:

Increase satisfaction with neighborhood character. Increase satisfaction with development and growth management across the City.

Supporting Data (Surveys, Environmental Scan, etc 48% of residential respondents and 55% of businesses rate the effort put forth by the City to regulate development is "about the right amount."

Item Summary/Recommendation:

SECOND READING – PUBLIC HEARING

The first ordinance would amend Chapter 54, "Floods", by establishing a minimum and maximum freeboard above base flood elevation for all properties and the second ordinance would amend the Land Development regulations pertaining to the calculation of building height, and establish minimum elevations of required yards in single family districts.

On January 20, 2016, the Land Use and Development Committee recommended that the City Commission refer the proposed ordinances to the Planning Board. On February 10, 2016, the City Commission referred the subject ordinance amendments (Item C4C) to the Planning Board.

On April 13, 2016, the City Commission 1) accepted the recommendation of the Land Use and Development Committee via separate motion; and 2) approved the attached Ordinances at First Reading and set a Second Reading Public Hearing for May 11, 2016.

The Administration recommends that the City Commission adopt the ordinances.

Advisory Board Recommendation:

On March 22, 2016, the Planning Board transmitted the proposed ordinance with modifications to the City Commission with a favorable recommendation (vote 6 to 0).

Financial Information:

Source of Funds:		Amount	Account
	1		
	2		
	3		
OBPI	Total		

Financial Impact Summary:

In accordance with Charter section 5.02, which requires that the "City of Miami Beach shall consider the long-term economic impact (at least five years) of proposed legislative actions," this shall confirm that the City Administration evaluated the long-term economic impact (at least five years) of this proposed legislative action, and determined that there will be no measurable impact on the City's budget.

City Clerk's Office Legislative Tracking:

Thomas Mooney

Sign-Offs:

Department Director	Assistant City Manager	City Manager
	NW for SMT	JM

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MIAMIBEACH

AGENDA ITEM RSA

DATE 5-11-16

MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, www.miamibeachfl.gov

COMMISSION MEMORANDUM

TO: Mayor Philip Levine and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: May 11, 2016 **SECOND READING – PUBLIC HEARING**

SUBJECT: **Freeboard height and minimum finished floor elevations.**

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING SUBPART A – GENERAL ORDINANCES, OF THE CITY CODE, BY AMENDING CHAPTER 54 "FLOODS" AT SECTION 54-35, "DEFINITIONS," BY AMENDING THE DEFINITIONS FOR BASE FLOOD ELEVATION, CROWN OF ROAD, AND FREEBOARD, AND TO ESTABLISH DEFINITIONS FOR CENTERLINE OF ROADWAY, FUTURE CROWN OF ROAD, MINIMUM FREEBOARD, MAXIMUM FREEBOARD, GREEN INFRASTRUCTURE, LOW IMPACT DEVELOPMENT (LID), AND SURFACE STORMWATER SHALLOW CONVEYANCE; AND BY AMENDING SECTION 54-47, "GENERAL STANDARDS" BY REQUIRING A STORMWATER MANAGEMENT PLAN; AND BY AMENDING SECTION 54-48, "SPECIFIC STANDARDS" BY CLARIFYING THE MINIMUM ELEVATION OF THE LOWEST FINISHED FLOOR FOR RESIDENTIAL AND NON-RESIDENTIAL CONSTRUCTION AND REQUIRING A MINIMUM ELEVATION FOR GARAGE ENTRANCES; AND BY AMENDING SECTION 54-51, "STANDARDS FOR COASTAL HIGH HAZARD AREAS (V-ZONES)," BY CLARIFYING THE MINIMUM ELEVATION OF THE LOWEST FLOOR OF ALL NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS; PROVIDING CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

Building height, base flood elevation, grade and yard elevation requirements.

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE CITY'S LAND DEVELOPMENT REGULATIONS, BY AMENDING CHAPTER 114, "GENERAL PROVISIONS," AT SECTION 114-1, "DEFINITIONS," BY AMENDING THE DEFINITIONS FOR GRADE, FUTURE ADJUSTED GRADE, AND BUILDING HEIGHT, AND TO ESTABLISH BY REFERENCE TO CHAPTER 54-35 DEFINITIONS FOR BASE FLOOD ELEVATION, CROWN OF ROAD, FUTURE CROWN OF ROAD, FREEBOARD, MINIMUM FREEBOARD, MAXIMUM FREEBOARD, GREEN INFRASTRUCTURE, FUTURE ADJUSTED GRADE, AND SURFACE STORMWATER SHALLOW CONVEYANCE; BY AMENDING CHAPTER 142, "ZONING DISTRICTS AND REGULATIONS," DIVISION 2, "RS-1, RS-

2, RS-3, RS-4 SINGLE-FAMILY RESIDENTIAL DISTRICTS," BY AMENDING AND CLARIFYING THE MAXIMUM ELEVATION WITHIN A REQUIRED YARD AND PROVIDING A MINIMUM ELEVATION REQUIREMENT FOR NEW CONSTRUCTION, AND AMENDING HOW MAXIMUM BUILDING HEIGHT IS CALCULATED; PROVIDING CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

ADMINISTRATION RECOMMENDATION

The Administration recommends that the City Commission adopt the ordinances. These ordinances are based on recommendations developed by stormwater and flooding consultant AECOM and vetted by the Mayor's Blue Ribbon Panel on Sea Level Rise and city staff. The ordinances will not only reduce our risk to sea level rise and flooding, but also will protect against storm surge as referenced in the summary chart herein. Furthermore, these recommendations protect and enhance our economic resiliency in light of forth coming insurance reform, the upcoming FEMA flood map requirements and to improve our Community Rating System (CRS) score that affects private property insurance.

BACKGROUND

On October 14, 2015, at the request of Commissioner Malakoff, the City Commission referred a discussion item regarding amendments to the City Code to improve the City's resiliency to sea level rise, flooding and natural disasters to the Land Use and Development Committee (Item C4D). On January 20, 2016 the Land Use Committee discussed the items and recommended that the attached Ordinance Amendments be referred to the Planning Board.

On February 10, 2016 the City Commission referred the proposed Ordinance Amendments (Item C4D) to the Planning Board for review and recommendation. Commissioner Joy Malakoff is the sponsor of the proposed Ordinances.

ANALYSIS

There are two related ordinance amendments attached. The first ordinance amends chapter 54, "Floods,", and the second ordinance amends the Land Development Regulations, including references to chapter 54. The following is a list of terms, along with their common definitions, which are used throughout this analysis:

Freeboard means the additional height between the minimum finished floor elevation and the *base flood elevation*. Freeboard tends to compensate for many unknown factors, such as wave action, stormwater conveyance impediments such as blockage of bridge or culvert openings, and other factors, which could contribute to greater flood heights.

Base Flood Elevation means the regulatory elevation associated with building elevation, flood-proofing, protection of building systems and utilities and other flood protection provisions as identified in current FEMA FIRM panels. Currently within the City of Miami Beach, this elevation ranges between 7 to 10 feet *NGVD*.

FEMA – **Federal Emergency Management Agency**. FEMA is an agency of Homeland Security, with the stated mission to "support our citizens and first responders to ensure that as a

nation we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from and mitigate all hazards."

FIRM – **Flood Insurance Rate Map**. This is the official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

NGVD and ***NAVD*** are reference surface vertical *datums* (a fixed starting point) used to ensure that all elevation records are properly related. The current national datum is the **National Geodetic Vertical Datum (NGVD)** of 1929, which is expressed in relation to mean sea level, or the **North American Vertical Datum (NAVD)** of 1988. **NGVD 29** used a simple model of gravity based on latitude to calculate the approximate sea level and did not take into account other variations. Thus, the elevation difference for points across the country does change between NGVD and NAVD. In order to convert between the two datums in Miami Beach, 1.56 is added to an elevation that is expressed as NAVD. For example, 5.0 feet NAVD = 6.56 feet NGVD. Although NAVD is a more updated standard, NGVD is still more widely used, thus both reference datums are included in this analysis.

LID - ***Low-Impact Development*** techniques mimic natural processes to manage stormwater, and are frequently cheaper and more attractive than traditional stormwater management techniques.

Southeast Florida Regional Climate Change Compact Unified Sea Level Rise Projections from 1992 to 2100. The projection highlights three planning horizons:

1. Short term, by 2030, sea level is projected to rise 6 to 10 inches above 1992 mean sea level,
2. Medium term, by 2060, sea level is projected to rise 14 to 34 inches above 1992 mean sea level,
3. Long term, by 2100, sea level is projected to rise 31 to 81 inches above 1992 mean sea level.

The Miami Beach City Commission adopted these projections for planning purposes on March 9, 2016.

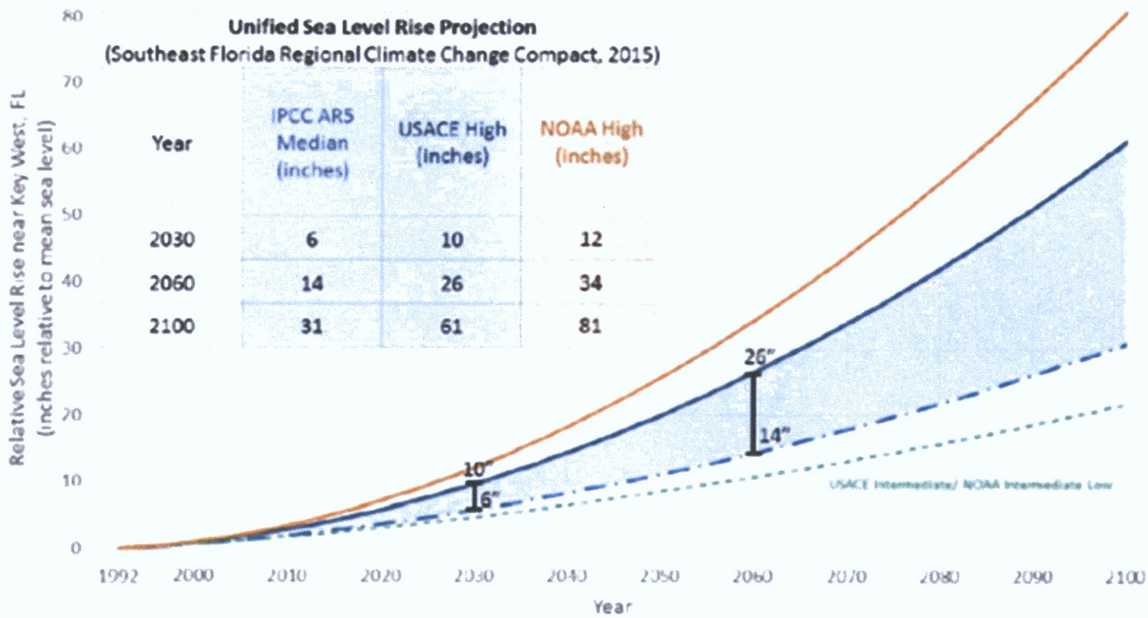

Figure 1: Unified Sea Level Rise Projection. These projections are referenced to mean sea level at the Key West tide gauge. The projection includes three global curves adapted for regional application: the median of the IPCC AR5 RCP8.5 scenario as the lowest boundary (blue dashed curve), the USACE High curve as the upper boundary for the short term for use until 2060 (solid blue line), and the NOAA High curve as the uppermost boundary for medium and long term use (orange solid curve). The incorporated table lists the projection values at years 2030, 2060 and 2100. The USACE Intermediate or NOAA Intermediate Low curve is displayed on the figure for reference (green dashed curve). This scenario would require significant reductions in greenhouse gas emissions in order to be plausible and does not reflect current emissions trends.

AECOM is the consultant for the development of the City's Comprehensive Resiliency Program.

AECOM's recommendations have been incorporated into the proposed ordinances. The following is a summary of the proposed legislation:

Minimum Base Flood Elevation:
Limited areas of the City are depicted on the current FEMA FIRM panels as having a base flood elevation of 7.0 feet NGVD. Although the designation of base flood elevations are based on coastal inundation modeling by FEMA, further research and modeling as part of the ongoing City of Miami Beach Flood Mitigation Study indicates that during a large storm event, this area will be faced with similar flood risks as the surrounding areas currently mapped with a base flood elevation of 8.0 feet NGVD.

Therefore, to provide adequate protection of properties within this zone, it is recommended that the City adopt a minimum base flood elevation of 8.0 feet NGVD. This will affect major renovation and new construction projects, requiring a one foot higher finish floor elevation. However, it should be noted that this ordinance is intended to apply only to design and permitting requirements in the City and is not intended to be used as an insurance rate tool. The adopted FEMA FIRM panels will continue to be used for this purpose.

New FEMA FIRM panels will be available as soon as 2018-19 based on revised coastal modeling, providing updated base flood elevations for the entire City. Once these FEMA maps

are adopted by the City, this section of the code may require additional revisions.

Building Freeboard

As sea levels and storm severity continue to increase, low lying infrastructure including buildings must also elevate in order to reduce risk or maintain low risk from potential flood damage. Consistent with U.S. Federal and State guidance, these code changes provide the basic level of protection for buildings through minimal freeboard requirements. This nominal change in new building finish floor elevation requirements will provide additional levels of protection, potentially reduce insurance premiums and enhance the City's current NFIP CRS (National Flood Insurance Program Community Rating System) status, which can have benefits to all residents and business owners in the City.

As proposed, a minimum freeboard of one (1) foot, and a maximum freeboard of five (5) feet would be established at this time. Building heights would be measured from the base flood elevation plus the actual freeboard provided, which would be between the minimum (1') and maximum (5') freeboard.

In order to account for the future raising of streets and sidewalks for commercial properties, the measurement of building height is also proposed to be modified. Commercial properties often have zero or minimal setbacks, and it is preferable from a business perspective and urban design standpoint to have such commercial uses located at the same level as the sidewalk. In order to accommodate the future raising of streets and sidewalks, additional height will have to be built into projects today, so that the building can be modified with a future raised floor slab to meet the future raised public sidewalk. As proposed, for projects that are designed to accommodate a future raised slab to meet the future sidewalk level, building height would be measured from the base flood elevation plus the provided freeboard. Currently, height for commercial properties that are located predominately at the sidewalk level, are measured from the minimum first floor elevation.

Seawall Elevation and Design (included for reference)

The City of Miami Beach is surrounded by water and protected from erosion and damage from wave action by seawalls. Since much of the island was built out over 50 years ago, many of these sea walls are at a low elevation reducing their effectiveness as the first line of defense against wave energy. For this reason, elevating this critical means of protection for the City is paramount to incorporating resilience.

Understanding the unintended consequences to view sheds from low lying homes, it is recognized that not all sea walls can be built to the ideal elevation of 5.7 feet NAVD at this time. For this reason and to continue protecting properties within the City, private sea walls are recommended to be elevated to an elevation of at least 4.0 feet NAVD, offering additional levels of protection with minimal adverse impacts to view sheds.

In addition to the increase in elevation for private sea walls, the design of the new/renovated walls shall also incorporate a more robust design including larger footer, rebar, width, etc. enabling a retrofit to elevation 5.7 feet NAVD with minimal effort such as with a height extension and new cap. As proposed, all new public sea walls would be constructed to a minimum elevation of 5.7 feet NAVD. Any private sea walls impacted by public right-of-way projects involving City funds would also be constructed to the minimum elevation of 5.7 feet NAVD

consistent with public sea walls.

Specifically, the Public Works Manual, Section A.2 "General Requirements – Sea Wall Elevation", is proposed to be amended as follows:

> 5) The minimum ~~height~~ top of wall elevation required ~~requirement~~ when replacing/repairing a public seawall is ~~3.2~~ 5.7 ft. NAVD (7.26 ft. NGVD).
>
> 5a) The minimum top of wall elevation required when replacing/repairing a private seawall is 4.0 ft. (NAVD 88), unless part of right-of-way project. However, the seawall structural design shall accommodate a future retrofit for a seawall height extension up to a minimum elevation of 5.7 ft. NAVD (7.26 ft. NGVD).
>
> 9) When existing seawalls are disturbed as part of a right-of-way project they must be raised to a minimum elevation of 5.7 ft. NAVD. *(no change)*

Minimum Residential Lot Grade:

Recently, the City Commission amended the requirements for raising yards within Single Family Districts as an adaptation measure to address the effects of sea level rise. Within single family districts, the maximum elevation of a required front yard and side yards facing a street is limited to no higher than the greater of 'adjusted grade', which is the midpoint between the base floor elevation (BFE) and 'sidewalk grade', or 30 inches above 'sidewalk grade'. Grade is the sidewalk elevation at the center of the property. For example, if grade is 4 feet NGVD, and the base flood elevation (BFE) is 8 feet NGVD, then adjusted grade is 6 feet NGVD. Since the 'adjusted grade' is only 24 inches above 'grade', in this instance the maximum elevation of a required yard could be raised to 30 inches above grade or 6 feet 6 inches NGVD.

As part of its overall review, AECOM has recommended that if the elevation of required yards is less than elevation 2.5 feet NAVD, then required yards may be elevated to 5.0 feet NAVD. While the previous amendments reflect improvements in addressing concerns over sea level rise, there needs to be better agreement between the Land Development Regulations (LDR's) and the Miami Beach Stormwater Management Master Plan (SMP). The adopted SMP calls for the raising of the minimum crowns of roadways in various parts of the City to approximately 5.26 feet NGVD (3.7 feet NAVD). In order to improve consistency between the SMP and LDR's, the proposed ordinance establishes a definition for the 'future crown of the road', where the SMP is referenced. It also establishes a 'future adjusted grade' which is the midpoint elevation between the future crown of the road and the base flood elevation (BFE).

In order to accommodate the raising of the roadways and public sidewalks, the proposed ordinance would require that all required yards be raised to a minimum elevation of 5 feet NAVD (6.56 feet NGVD), with the exception of driveways, private walkways, grade transition areas, surface Stormwater shallow conveyance and LID features and areas where landscaping is to be preserved. However, it would still require that fences within front yards and side yards facing a street be measured from the existing 'sidewalk grade'. This will allow for better transitions between the public right of way and private property as the Stormwater Master Plan is implemented over time.

SUMMARY

These recommendations were developed by stormwater and flooding consultant AECOM and vetted by the Mayor's Blue Ribbon Panel on Sea Level Rise and city staff. The proposals contained in the subject ordinances will not only reduce the city's risk to sea level rise and flooding, but also will protect against storm surge as referenced in the summary chart. Furthermore, these recommendations protect and enhance our economic resiliency in light of forth coming insurance reform, the upcoming FEMA flood map requirements and to improve our Community Rating System (CRS) score that affects private property insurance. These requirements will be reviewed periodically against the best available science, in order to adjust and to continue adapting.

The following chart provides a comparison of the primary changes proposed, as described above:

LDR Code / City Policy	Requirement	Policy Elevation (NAVD) ft.	Level of Protection from SLR & 2.0 ft. King Tide (ft.)	Equivalent Storm Surge Protection	Equivalent Storm Surge (return period)	Risk Reduction from Increasing Flood Insurance Costs	Risk Reduction from 1-ft increase in BFE from FIRM update
Base Flood Elevation (BFE) (based on low elevation) actual BFE varies							
Existing	5.44 Feet NAVD (7 Feet NGVD)	5.44	3.44	Cat. 1	25-yr storm	no	no
Proposed	6.44 Feet NAVD (8 Feet NGVD)	6.44	4.44	Cat. 1	50-yr storm	for properties at risk in 7 ft BFE zone	for properties at risk in 7 ft BFE zone
Freeboard (comm. & res.) *varies with BFE elevation (based on proposed min.)							
Existing	BFE + 0 ft	6.44	4.44	Cat. 1	50-yr storm	for properties at risk in 7 ft BFE zone	for properties at risk in 7 ft BFE zone

Proposed	+1 ft.	7.44	5.44	Cat. 1	100-yr storm	only until increase in BFE occurs	only until increase in BFE occurs
	+2 ft.	8.44	6.44	Cat. 2	100-yr storm	yes, some cost reduction	yes, some cost reduction
	+3 ft.	9.44	7.44	Cat. 2	100-yr storm	yes, max. cost reduction	yes, some cost reduction
Freeboard (comm. & res.) *varies with BFE elevation (based on proposed min.) [CONTINUED]							
Proposed [CONT.]	+4 ft.	10.44	8.44	Cat. 3	100-yr storm	yes	yes, max. cost reduction
	+5 ft.	11.44	9.44	Cat. 4	100-yr storm	yes	yes
Freeboard (critical infrastructure)							
Existing (critical infra)	+2 ft.	8.44	6.44	Cat. 2	100-yr storm	yes, some cost reduction	yes, some cost reduction
Proposed (critical infra)	+3 ft.	9.44	7.44	Cat. 3	100-yr storm	yes, max. cost reduction	yes, some cost reduction
Seawall Elevation (Private)							
Existing	3.2 FT NAVD (4.76 FT NGVD)	3.2	1.2	Cat. 0	2-year storm	n/a	n/a
Proposed (interim)	4.0 FT NAVD (5.56 FT NGVD)	4	2	Cat. 0	5-yr storm	n/a	n/a
Proposed	5.7 FT NAVD (7.26 FT NGVD)	5.7	3.7	Cat. 1	50-yr storm	n/a	n/a
Seawall Elevation (Public)							
Existing	3.2 FT NAVD (4.76 FT NGVD)	3.2	1.2	Cat. 0	2-year storm	n/a	n/a

Proposed	5.7 FT NAVD (7.26 FT NGVD)	5.7	3.7	Cat. 1	50-yr storm	n/a	n/a
Minimum required yard elevation (existing lot elev. varies)							
Existing	avg. of sidewalk and BFE	varies					
Proposed	5.0 Feet NAVD (6.56 Feet NGVD)	5	3	Cat. 1	25-yr storm	n/a	n/a

PLANNING BOARD REVIEW

On March 22, 2016, the Planning Board transmitted the proposed ordinances to the City Commission with a favorable recommendation, including two notable changes. As recommended by the Mayor's Blue Ribbon Panel on Flooding and Sea Level Rise, the Planning Board recommended increasing the maximum freeboard from three (3') feet to five (5') feet above the base flood elevation. ,The Board also recommended that single family homes which are individually designated as historic structures, or are classified as 'contributing' buildings in a local historic district, be exempt from the minimum yard elevation requirements. These recommendations have been incorporated into the text of the attached ordinances and denoted with a double underline. The issue of how to address sea level rise in historic districts is being further reviewed by staff and by the Mayor's Blue Ribbon Panel on Sea Level Rise.

FINANCIAL IMPACT

In accordance with Charter Section 5.02, which requires that the "City of Miami Beach shall consider the long term economic impact (at least five years) of proposed legislative actions," this shall confirm that the City Administration City Administration evaluated the long term economic impact (at least five years) of this proposed legislative action. The proposed Ordinance is not expected to have a negative fiscal impact upon the City.

UPDATE

On April 13, 2016, the subject ordinances were approved at First Reading and a Second Reading Public Hearing was set for May 11, 2016. The Commission also requested that guidelines be included for the regulation of raising front yards, in order to ensure a more gradual transition from the sidewalk level to the higher yard elevation requirements.

The ordinance for Chapter 142 has been modified to account for this transition by limiting the height of retaining walls constructed within four (4') feet of the front and sideyard facing the street property lines, to no more than 30 inches above the existing adjacent sidewalk or grade elevation. Beyond that point, retaining walls would also be limited to 30 inches above the adjacent grade, and yard slopes would be limited to no more than 11% (5:1, horizontal:vertical). These requirements would ensure that higher yards transition in a stepped or terraced manner down to the lower sidewalk level, and not overwhelm adjacent older homes.

As a point of reference, most single family home lots in the City are less than 30" below the new minimum yard elevation of 5.0 Feet NAVD (6.56 feet NGVD), thus a retaining wall of less than 30" would be required in order to raise most yards up to the new minimum standard. This new standard would only apply to new home construction, and substantial improvements to existing structures. Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during a one-year period, in which the cumulative cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement.

Additionally, retaining walls will be required to be finished with stucco, stone, or other high quality materials, as well as satisfy the applicable design criteria in Section 142-105. In this regard, there may be instances where the interior sidewalls abut an existing property with dense landscaping and/or hedges, so the specific material and stepping of the walls can be evaluated on a case by case basis.

RECOMMENDATION

The Administration recommends that the City Commission adopt the ordinances.

JLM/SMT/TRM/MAB

T:\AGENDA\2016\May\Planning\Height Freeboard Grade and Yard Elevations - Second Reading MEM REVISED FINAL.docx

MIAMIBEACH

CITY OF MIAMI BEACH
NOTICE OF PUBLIC HEARINGS
MAY 11, 2016

NOTICE IS HEREBY given that public hearings will be held by the Mayor and City Commissioners of the City of Miami Beach, Florida, in the Commission Chamber, 3rd Floor, City Hall, 1700 Convention Center Drive, Miami Beach, Florida, on **Wednesday, May 11, 2016**, at the times listed, or as soon thereafter as the matter can be heard, to consider:

10:00 a.m.
A Resolution Adopting The Fourth Amendment To The General Fund, Enterprise Fund, Internal Service Fund And Special Revenue Fund Budgets For Fiscal Year (FY) 2015/16. *This Resolution is being heard pursuant to §166.041 F.S. Inquiries may be directed to the Budget & Performance Improvement Department at 305.673.7510.*

10:01 a.m.
A Resolution Adopting The Fifth Amendment To The Capital Budget For Fiscal Year (FY) 2015/16. *This Resolution is being heard pursuant to §166.041 F.S. Inquiries may be directed to the Budget & Performance Improvement Department at 305.673.7510.*

10:05 a.m.
An Ordinance Amending Subpart A - General Ordinances, Of The City Code, By Amending Chapter 54 "Floods" At Section 54-35, "Definitions," By Amending The Definitions For Base Flood Elevation, Crown Of Road, And Freeboard, And By Creating Definitions For Centerline Of Roadway, Critical Facility, Future Crown Of Road, Minimum Freeboard, Maximum Freeboard, Green Infrastructure, Low Impact Development (LID), And Surface Stormwater Shallow Conveyance; By Amending Section 54-45, "Permit Procedures," To Require A Stormwater Management Plan; By Amending Section 54-47, "General Standards," To Prohibit Septic Sewage Systems, And Include Requirements For Storage Of Hazardous Materials; By Amending Section 54-48, "Specific Standards," To Clarify The Minimum Elevation Of The Lowest Finished Floor For Residential And Non-Residential Construction, And Requiring A Minimum Elevation For Garage Entrances; By Amending Section 54-51, "Standards For Coastal High Hazard Areas (V-Zones)," To Clarify The Minimum Elevation Of The Lowest Floor Of All New Construction And Substantial Improvements; Providing Codification; Repealer; Severability; And An Effective Date. *This Ordinance is being heard pursuant to Section 2.05 of the City Charter and §166.041 F.S. Inquiries may be directed to the Planning Department at 305.673.7550.*

10:06 a.m.
An Ordinance Amending The City's Land Development Regulations, By Amending Chapter 114, "General Provisions," At Section 114-1, "Definitions," By Amending The Definitions For Grade, Future Adjusted Grade, And Building Height, And To Establish By Reference To Chapter 54-35 Definitions For Base Flood Elevation, Crown Of Road, Future Crown Of Road, Freeboard, Minimum Freeboard, Maximum Freeboard, Green Infrastructure, Future Adjusted Grade, And Surface Stormwater Shallow Conveyance; By Amending Chapter 142, "Zoning Districts And Regulations," Division 2, "RS-1, RS-2, RS-3, RS-4 Single-Family Residential Districts," By Amending And Clarifying The Maximum Elevation Within A Required Yard And Providing A Minimum Elevation Requirement For New Construction, And Amending How Maximum Building Height Is Calculated; Providing Codification; Repealer; Severability; And An Effective Date. *This Ordinance is being heard pursuant to Section 118-164 of the City's Land Development Code. Inquiries may be directed to the Planning Department at 305.673.7550.*

10:10 a.m.
An Ordinance Amending Chapter 118, Entitled "Administration And Review Procedures," Article I Entitled "In General" At Section 118-5, Entitled "Unity Of Title; Covenant In Lieu Thereof;" Chapter 114, Entitled "General Provisions," At Section 114-4, Entitled "Compliance With Regulations Required;" And Chapter 142, Entitled "Zoning Districts And Regulations," Article II Entitled "District Regulations," Division 1, Entitled "Generally," At Section 142-73, Entitled "Interpretation Of District Boundaries;" In Order To Clarify Procedures For The Movement Of FAR Within Unified Development Sites With Differing Zoning Districts; Providing For Enforcement And Penalties; And Providing For Repealer, Codification, Severability, And An Effective Date. *This Ordinance is being heard pursuant to Section 2.05 of the City Charter and §166.041 F.S. Inquiries may be directed to the Planning Department at 305.673.7550.*

10:15 a.m.
An Ordinance Amending Chapter 2 Of The Code Of The City Of Miami Beach, Entitled "Administration," Article VI, "Procurement," Division 3, "Contract Procedures," By Creating Section 2-376, Entitled "Fair Chance Requirement For City Contractors," And Amending Chapter 62, "Human Relations," By Creating Article V, To Be Entitled The "Fair Chance Ordinance," To Provide Regulations Regarding The Consideration By The City And By City Contractors Of The Criminal History Of Applicants For Employment, And To Provide Limiting Provisions; And Providing For Repealer, Severability, Codification, And An Effective Date. *This Ordinance is being heard pursuant to Section 2.05 of the City Charter and §166.041 F.S. Inquiries may be directed to the Office of the City Attorney at 305.673.7470; the Human Resources Department at 305.673.7524, and/or the Procurement Department at 305.673.7490.*

INTERESTED PARTIES are invited to appear at this meeting, or be represented by an agent, or to express their views in writing addressed to the City Commission, c/o the City Clerk, 1700 Convention Center Drive, 1st Floor, City Hall, Miami Beach, Florida 33139. These items are available for public inspection during normal business hours in the Office of the City Clerk, 1700 Convention Center Drive, 1st Floor, City Hall, Miami Beach, Florida 33139. This meeting, or any item herein, may be continued, and under such circumstances, additional legal notice need not be provided.

Pursuant to Section 286.0105, Fla. Stat., the City hereby advises the public that if a person decides to appeal any decision made by the City Commission with respect to any matter considered at its meeting or its hearing, such person must ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals not otherwise allowed by law.

To request this material in alternate format, sign language interpreter (five-day notice required), information on access for persons with disabilities, and/or any accommodation to review any document or participate in any City-sponsored proceedings, call 305.604.2489 and select 1 for English or 2 for Spanish, then option 6; TTY users may call via 711 (Florida Relay Service).

Rafael E. Granado, City Clerk
City of Miami Beach

Ad No. 1152

DEVELOPMENT REGULATIONS – GRADE ELEVATIONS AND HEIGHT

ORDINANCE NO. 2016-4010

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE CITY'S LAND DEVELOPMENT REGULATIONS, BY AMENDING CHAPTER 114, "GENERAL PROVISIONS," AT SECTION 114-1, "DEFINITIONS," BY AMENDING THE DEFINITIONS FOR GRADE, FUTURE ADJUSTED GRADE, AND BUILDING HEIGHT, AND TO ESTABLISH BY REFERENCE TO CHAPTER 54-35 DEFINITIONS FOR BASE FLOOD ELEVATION, CROWN OF ROAD, FUTURE CROWN OF ROAD, FREEBOARD, MINIMUM FREEBOARD, MAXIMUM FREEBOARD, GREEN INFRASTRUCTURE, FUTURE ADJUSTED GRADE, AND SURFACE STORMWATER SHALLOW CONVEYANCE; BY AMENDING CHAPTER 142, "ZONING DISTRICTS AND REGULATIONS," DIVISION 2, "RS-1, RS-2, RS-3, RS-4 SINGLE-FAMILY RESIDENTIAL DISTRICTS," BY AMENDING AND CLARIFYING THE MAXIMUM ELEVATION WITHIN A REQUIRED YARD AND PROVIDING A MINIMUM ELEVATION REQUIREMENT FOR NEW CONSTRUCTION, AND AMENDING HOW MAXIMUM BUILDING HEIGHT IS CALCULATED; PROVIDING CODIFICATION; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, sea level rise and flooding is an ongoing concern of the City; and

WHEREAS, the City hired AECOM to produce a report relating to Enhancing Resiliency and to Review the City of Miami Beach's code of ordinances and regulations to assist the City in enhancing sustainability and resiliency in the face of climate change and increased flooding events; and

WHEREAS, the FEMA FIRM panels indicate a base flood elevation in certain areas of the City of 7.0 feet NGVD, and AECOM indicates that a large storm event would create a flood risk situation even at a flood elevation of 8.0 feet NGVD; and

WHEREAS, due to the foregoing, it is within the police powers of the City, for the health, safety and welfare of the City of Miami Beach, that existing low-lying infrastructure and future construction projects for structures, including buildings, be elevated in order to reduce risk or maintain low risk from potential flood damage; and

WHEREAS, in 2015, as one of the City's efforts to combat flooding and sea level rise, the City has previously implemented increased height requirements for sea walls in order to more fully protect the City and its residents from flooding; and

WHEREAS, the City is also implementing "freeboard," the additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management, which factor is to be utilized in future construction projects in developing first floor elevations, in order to protect the structures from flooding events; and

WHEREAS, it is appropriate consistent with the "freeboard" amendments to the Code, and the desire to develop enhanced stormwater retention procedures for all properties, as well as the implemented increased heights of sea walls, the Administration recommends amending to amend the maximum elevation requirements within required yards of single family districts to eliminate or mitigate any conflict with the City's efforts corresponding legislation enacted to address sea level rise and flood mitigation measures; and

WHEREAS, the regulation of grade elevations in single family districts is necessary in order to ensure compatible development within the built character of the single-family neighborhoods of the City; and

WHEREAS, these regulations will accomplish these goals and ensure that the public health, safety and welfare will be preserved in the City.

NOW THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. Section 114-1, "Definitions", is amended as follows:

* * *

Base flood elevation, for the City of Miami Beach shall be as defined in Section 54-35.

* * *

Crown of road, shall be as defined in Section 54-35.

Crown of road, future, shall be as defined in Section 54-35.

* * *

Freeboard shall be as defined in Section 54-35.

Freeboard, mimimum shall be as defined in Section 54-35.

Freeboard, maximum shall be as defined in Section 54-35.

* * *

Green Infrastructure shall be as defined in Section 54-35.

* * *

Grade means the city sidewalk elevation at the centerline of the front of the property. If there is no sidewalk, the elevation of the crown of the road at the centerline of the front of the property shall be used. ~~*the public works director shall establish the city sidewalk elevations.*~~

Grade, adjusted means the midpoint elevation between grade and the minimum required flood elevation for a lot or lots.

* * *

Grade, future adjusted, means the midpoint elevation between the future crown of the road as defined in the ~~Public Works Manual~~ CDM Smith Stormwater Plan, and the base flood elevation plus minimum freeboard for a lot or lots.

* * *

Height of building means the vertical distance from the lowest floor according to the following, as applicable:

(a) When the minimum finished floor elevation is located between grade and base flood elevation plus *freeboard*, height shall be measured from the minimum finished floor elevation to the highest point of the roof;

~~(b) When enclosed commercial or residential space is located at or below grade, height shall be measured from grade to the highest point to the roof;~~

~~(c)~~(b) When the minimum finished floor elevation is located above the base flood elevation plus *freeboard*, height shall be measured from the base flood elevation plus freeboard.

The highest point of a roof is as follows:

1. The highest point of a flat roof;
2. The deck line of a mansard roof;
3. The average height between eaves and ridge for gable hip and gambrel roofs; or
4. The average height between high and low points for a shed roof.

(c) As all rights-of-way have not yet been elevated, for commercial properties, height shall be measured from the base flood elevation, plus *freeboard*, provided that the height of the first floor shall be tall enough to allow the first floor to eventually be elevated to base flood elevation, plus minimum freeboard, once the adjacent right of way is elevated as provided under the City's Public Works Manual.

* * *

Surface stormwater shallow conveyance shall be as defined in Section 54-35.

* * *

SECTION 2. Section 142-105, "Development regulations and area requirements", is amended as follows:

* * *

(b) The development regulations for the RS-1, RS-2, RS-3, RS-4 single-family residential districts are as follows:

(1) Lot area, lot width, lot coverage, unit size, and building height requirements. The lot area, lot width, lot coverage, and building height requirements for the RS-1, RS-2, RS-3, RS-4 single-family residential districts are as follows:

Zoning District	Minimum Lot Area (square	Minimum Lot Width (feet)*	Maximum Lot Coverage for a 2-story Home (%	Maximum Unit Size (% of Lot	Maximum Building Height, which shall not exceed two stories above the ~~minimum~~ base flood elevation, plus freeboard in all

	feet)		of lot area)**	Area)	districts***
RS-1	30,000	100	30%	50%	28 feet - flat roofs. 31 feet - sloped roofs.
RS-2	18,000	75	30%	50%	
RS-3	10,000	50 - Oceanfront lots. 60 - All others	30%	50%	24 feet - flat roofs. 27 feet - sloped roofs. May be increased up to 28 feet for flat roofs and 31 feet for sloped roofs when approved by the DRB or HPB, in accordance with the applicable design review or appropriateness criteria.
RS-4	6,000	50	30%	50%	24 feet - flat roofs. 27 feet- sloped roofs.
		*Except those lots fronting on a cul-de-sac or circular street as defined in lot width	**Single story homes shall follow the requirements of section 142-105(b)(4)b.		*** Height shall be measured from the ~~minimum~~ required base flood elevation for the lot, plus freeboard, measured to the top of the structural slab for a flat roof and to the mid-point of the slope for a sloped roof. Single story homes shall follow the requirements of section 142-105(b)(4)b

(2) *Maximum number of stories.* The maximum number of stories shall not exceed two above the ~~minimum~~ base flood elevation, plus *freeboard*.

* * *

(4) Unit size requirements.

* * *

d. Non-air conditioned space located below minimum flood elevation, plus freeboard. Notwithstanding the above, for those properties located in the RS-1, RS-2, RS-3, RS-4 single-family residential districts, where the first habitable floor is ~~required to be~~ located six feet or more above existing grade in order to meet minimum flood elevation requirements, including freeboard, the following shall apply:

1. The height of the area under the main structure may have a maximum floor to ceiling clearance of seven feet six inches from ~~grade~~ the lowest level slab

provided. ~~Except that in the event that the minimum flood elevation requires the underside of the slab of the first habitable floor to exceed seven feet six inches from grade, such slab shall not exceed the minimum flood elevation as measured from grade.~~

2. Up to, but not exceeding, 600 square feet of segregated parking garage area may be permitted under the main structure.

3. The area under the first habitable floor of the main structure shall consist of non-air conditioned space.~~, which is at least 50 percent open.~~ Such area shall not be subdivided into different rooms, with the exception of the parking garage area, and required stairs and/or elevators.

4. The parking garage area and the ~~open~~, non-air-conditioned floor space located directly below the first habitable floor, shall not count in the unit size calculations.~~, provided it remains open in perpetuity.~~

* * *

(8) *Exterior building and lot standards.* The following shall apply to all buildings and properties in the RS-1, RS-2, RS-3, RS-4 single-family residential districts:

a. Exterior bars on entryways, doors and windows shall be prohibited on front and side elevations, which face a street or right-of-way.

b. *Minimum yard elevation requirements.*

1. The minimum elevation of a required yard shall be no less than five (5) feet NAVD (6.56 feet NGVD), with the exception of driveways, walkways, transition areas, green infrastructure (e.g., vegetated swales, permeable pavement, rain gardens, and rainwater/stormwater capture and infiltration devices), and areas where existing landscaping is to be preserved, which may have a lower elevation. When in conflict with the maximum elevation requirements as outlined in paragraph c. below, the minimum elevation requirements shall still apply.

2. *Exemptions.* The minimum yard elevation requirements shall not apply to properties containing single family homes individually designated as historic structures, or to properties with single-family homes designated as 'contributing' within a local historic district.

~~b~~c. *Maximum yard elevation requirements*. The maximum elevation of a required yard shall be in accordance with the following, however in no instance shall the elevation of a required yard, exceed the minimum flood elevation, plus freeboard:

1. *Front Yard.* The maximum elevation within a required front yard shall not exceed adjusted grade, ~~or~~ 30 inches above grade, or future adjusted grade, whichever is greater. In this instance the maximum height of any fence(s) or wall(s) in the required front yard, constructed in compliance with Section 142-1132 (h), "*Allowable encroachments within required yards*", shall be measured from existing grade.

2. *Interior Side Yards* (located between the front setback line and rear property line).The maximum elevation shall not exceed adjusted grade, or 30 inches above grade, whichever is greater, except:

   a. When the average grade of an adjacent lot along the abutting side yard is equal or greater than adjusted grade, the maximum elevation within the required side yard shall not exceed 30 inches above adjusted grade.

   b. When abutting a vacant property, the maximum elevation within the required side yard shall not exceed 30 inches above adjusted grade.

   c.. Notwithstanding the above, when abutting property owners have jointly agreed to a higher elevation, both side yards may be elevated to the same higher elevation through the submission of concurrent building permits, not to exceed the minimum required flood elevation. In this instance the maximum height of any fences or walls along the adjoining property lines, constructed in accordance with Section 142-1132 (h), *Allowable encroachments within required yards*, shall be measured from the new average grade of the required side yards.

3. *Side Yard Facing a Street.* The maximum elevation within a required side yard facing a street shall not exceed adjusted grade ~~or~~ 30 inches above grade, or future adjusted grade, whichever is greater. In this instance the maximum height of any fence(s) or wall(s) in the required side yard facing a street, constructed in compliance with Section 142-1132 (h), "*Allowable encroachments within required yards*", shall be measured from existing grade.

4. *Rear Yard.* The maximum elevation for a required rear yard, (not including portions located within a required sideyard or sideyard facing the street), shall be calculated according to the following:

   a. *Waterfront. The maximum elevation shall not exceed the ~~minimum required~~ base flood elevation, plus freeboard.*

   b. *Non-waterfront.* The maximum elevation shall not exceed adjusted grade, or 30 inches above grade, whichever is greater, except:

   i. When the average grade of an adjacent lot along the abutting rear yard is equal or greater than adjusted grade, the maximum elevation within the required rear yard shall not exceed 30 inches above adjusted grade.

   ii. When abutting a vacant property, the maximum elevation within the required rear yard shall not exceed 30 inches above adjusted grade.

   iii. Notwithstanding the above, when abutting property owners have jointly agreed to a higher elevation, both rear yards may be elevated to the same higher elevation through the submission of concurrent building permits, not to exceed the minimum required flood elevation. In this instance the maximum height of any fences or walls along the adjoining property lines, constructed in accordance with Section 142-1132 (h), *Allowable encroachments within required yards*, shall be measured from the new average grade of the required rear yards.

5. *Stormwater retention*. In all instances where the existing elevation of a site is modified, a site shall be designed with adequate infrastructure to retain all stormwater on site in accordance with all applicable state and local regulations.

6. *Retaining wall and yard slope requirements*. Within the required front yard and within the required sideyard facing a street the following shall apply:

   1. Within the first four (4) feet of the property line, the maximum height of retaining walls shall not exceed 30 inches above existing sidewalk elevation, or existing adjacent grade if no sidewalk is present.

   2. When setback a minimum of four (4) feet from the property line, the maximum height of retaining walls shall not exceed 30 inches above adjacent grade.

   3. Retaining walls shall be finished with stucco, stone, or other high quality materials, in accordance with the applicable design review or appropriateness criteria of Section 142-105.

   3. The maximum slope of the required front and sideyard facing a street shall not exceed 11% (5:1 horizontal:vertical).

SECTION 4. CODIFICATION.

It is the intention of the Mayor and City Commission of the City of Miami Beach, and it is hereby ordained that the provisions of this ordinance shall become and be made part of the Code of the City of Miami Beach, Florida. The sections of this ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section", "article", or other appropriate word.

SECTION 5. REPEALER.

All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

SECTION 6. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 7. EXCEPTIONS.

This ordinance shall not apply to anyone who filed a completed application package for Board of Adjustment, Historic Preservation Board or Design Review Board Approval with the Planning Department on or before June 8, 2016; or anyone who obtained a Building Permit Process Number from the Building Department on or before June 8, 2016.

SECTION 8. EFFECTIVE DATE.

This Ordinance shall take effect on June 8, 2016.

PASSED AND ADOPTED this 11 day of May, 2016.

Philip Levine, Mayor

ATTEST:

5/16/16

Rafael E. Granado, City Clerk

APPROVED AS TO FORM
AND LANGUAGE
AND FOR EXECUTION

5/12/16

City Attorney Date

First Reading: April 13, 2016
Second Reading: May 11, 2016

Verified By: _____
Thomas R. Mooney, AICP
Planning Director

Underline = new language
~~Strikethrough~~ = deleted language

[Sponsored by Commissioner Joy Malakoff]

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COMPREHENSIVE PLAN – PERIL OF FLOOD

ORDINANCE NO. 2016-4027

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE COMPREHENSIVE PLAN PURSUANT TO THE PROCEDURES IN SECTION 163.3184(3), FLORIDA STATUTES, BY MODIFYING CHAPTER 1, FUTURE LAND USE ELEMENT, TO ENCOURAGE THE USE OF LANDSCAPING TECHNIQUES THAT ENHANCE STORMWATER MANAGEMENT AND TO MODIFY THE LEVEL OF SERVICE FOR STORM SEWER CAPACITY; CHAPTER 5, INFRASTRUCTURE ELEMENT, TO REQUIRE THAT THE LAND DEVELOPMENT REGULATIONS INCLUDE A FREEBOARD REQUIREMENT FOR NEW CONSTRUCTION, TO MODIFY THE LEVEL OF SERVICE FOR DRAINAGE FACILITIES DESIGN STORM STANDARD, AND TO INCORPORATE THE USE OF STORMWATER STORAGE AND INFILTRATION IN INFRASTRUCTURE REPLACEMENT ACTIVITIES; CHAPTER 6, CONSERVATION/ COASTAL ZONE MANAGEMENT ELEMENT TO ENCOURAGE THE USE OF HIGHLY WATER-ABSORBENT NATIVE PLANTS AND TO DESIGNATE THE CITY OF MIAMI BEACH AS AN ADAPTATION ACTION AREA (AAA) PURSUANT TO SECTION 163.3177(6)(g)(10), FLORIDA STATUTES; CHAPTER 8, INTERGOVERNMENTAL COORDINATION ELEMENT, TO REQUIRE COORDINATION BETWEEN AGENCIES ADDRESSING ISSUES RELATED TO SEA LEVEL RISE AND CLIMATE CHANGE; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN; TRANSMITTAL; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

WHEREAS, In 2011, the Florida Legislature passed the Community Planning Act, allowing local governments the option of planning for coastal hazards and the potential impacts of sea level rise within the Comprehensive Plan through the designation of Adaptation Action Areas; and

WHEREAS, On July 1, 2014, the City hired AECOM as a Flood Mitigation Consultant, to perform an analysis of City regulations and practices that can be improved or established in order to mitigate the impacts of anticipated sea level rise; and

WHEREAS, In 2015 the Florida Legislature adopted Senate Bill 1094, "Peril of Flood," requiring the inclusion of development and redevelopment strategies that reduce flood risks in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea level rise within Comprehensive Plan Coastal Management elements; and

WHEREAS, On March 15, 2016 the City of Miami Beach Mayor's Blue Ribbon Panel on Seal Level Rise, the Panel endorsed the proposed amendments to the City's Comprehensive Plan, as recommended by AECOM; and

WHEREAS, The City of Miami Beach Planning Board, which serves as the local planning agency, transmitted the amendments to the City Commission with a favorable recommendation; and

WHEREAS, the City Commission held a duly noticed public hearing, at which time it voted to transmit the text amendments for review by state, regional and local agencies as required by law; and

WHEREAS, the City Commission after careful consideration of this matter deems it advisable and in the best interest of the general welfare of the City of Miami Beach and its inhabitants to amend the 2025 Comprehensive Plan as hereinafter set forth; and

WHEREAS, the amendment set forth below is necessary to accomplish all of the above objectives.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA:

SECTION 1. The following amendment to the City's 2025 Comprehensive Plan Future Land Use Element is hereby adopted:

FUTURE LAND USE ELEMENT

* * *

Policy 3.6

Maximize unpaved landscape to allow for more stormwater infiltration. Encourage planting of vegetation that is highly water absorbent, can withstand the marine environment, and the impacts of tropical storm winds. Encourage development measures that include innovative climate adaption and mitigation designs with creative co-benefits where possible, through the Land Development Regulations and regulations related to the "Care and Maintenance of Trees and Plants" within the City Code of Ordinances.

* * *

Policy 6.2

Land Development Regulations pertaining to concurrency management shall be amended to reflect Ch. ~~9J-5.0055 FAC~~ 163.3180, Florida Statutes and this policy. No development permit shall be issued unless the public facilities necessitated by the project (in order to meet level of service standards specified in the Policies of the Transportation, Recreation, Public Schools and Infrastructure Elements, and the Water Supply Plan) will be in place concurrent with the impacts of the development or the permit is conditional to assure that they will be in place, but no later than the issuance of a certificate of occupancy or its functional equivalent. The requirement that no development permit shall be issued unless public facilities necessitated by the project are in place concurrent with the impacts of development shall be effective immediately:

Acceptable Level of Service Standards for public facilities in the City of Miami Beach are:

* * *

d. Storm Sewer Capacity – One-in-~~five~~ ten-year storm event.

SECTION 2. The following amendment to the City's 2025 Comprehensive Plan Infrastructure Element is hereby adopted:

INFRASTRUCTURE: SANITARY SEWER, SOLID WASTE, DRAINAGE AND POTABLE WATER

* * *

Policy 2.4

Incorporate stormwater storage and infiltration into all infrastructure replacement activities.

* * *

Policy 4.1

Continue site plan review for new construction with the requirement that the minimum first floor elevation for ~~living quarters~~ habitable space in residential and commercial buildings be at least at the ~~minimum~~ City of Miami Beach Freeboard, as adopted in the Code of the City of Miami Beach, above the minimum FEMA requirement, to allow for maximum protection during flood conditions and from sea level rise.

* * *

Policy 5.1

The following City-wide Level of Service Standards shall be used as the basis for determining the availability of facility capacity for residential uses; the systems shall be able to provide/accommodate at least the minimums specified:

* * *

Drainage Facilities	Design Storm Standard per ~~25-year frequency, 24-hour duration; see rainfall intensity curve zone 10, DOT Drainage Manual~~ Storm Water Master Plan as updated from time to time.

SECTION 3. The following amendment to the City's 2025 Comprehensive Plan Conservation/Coastal Zone Management Element is hereby adopted:

CONSERVATION/COASTAL ZONE MANAGEMENT

* * *

Policy 2.12

Salt tolerant landscaping and highly water-absorbent, native or Florida friendly plants shall continue to be given preference over ~~traditional~~ other planting materials in the plant materials list used in the administration of the landscape section of the Land Development Regulations and the design review process.

* * *

Objective 13:

Increase the City's resiliency to the impacts of climate change and rising sea levels by developing and implementing adaptation strategies and measures in order to protect human life, natural systems and resources and adapt public infrastructure, services, and public and private property.

Policy 13.1:

Based on evolving rising seas data and associated vulnerabilities, to allow for flexible adjustments, preserve future strategic adaptation implementation options to maintain maximum resiliency in response to new risks and vulnerabilities. The City will take advantage of new emerging data and technological opportunities. The City's basis for measuring sea level rise shall be as per the Southeast Florida Regional Climate Action Plan, as may be revised from time-to-time by the Southeast Florida Regional Climate Change Compact.

Policy 13.2:

The City will identify public investments and infrastructure at risk to sea level rise and other climate related impacts. The City will assess the vulnerability to public facilities and services, including but not limited to water and wastewater facilities, stormwater systems, roads, bridges, governmental buildings, hospitals, transit infrastructure and other assets.

Evaluation Measure: Collaborating with regional partners, City shall identify public investments, infrastructure and assets at risk from rising sea levels by 2018. Thereafter, this assessment will be performed every five (5) years.

Policy 13.3:

As per Section 163.3164(1) and Section 163.3177(6)(g)(10), Florida Statutes, an Adaptation Action Area (AAA) is an optional designation within the coastal management element of a local government's comprehensive plan which identifies one or more areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure and adaptation planning.

The entire City is hereby designated an AAA, as all areas meet considerations for AAA designation, which include the following:

a. Areas which experience tidal flooding, storm surge, or both;
b. Areas which have an hydrological connection to coastal waters;
c. Locations which are within areas designated as evacuation zones for storm surge; and
d. Other areas impacted by stormwater/flood control issues.

Policy 13.4:

The City will develop and implement adaptation strategies for areas vulnerable to coastal flooding, tidal events, storm surge, flash floods, stormwater runoff, salt water intrusion and other impacts related to climate change or exacerbated by sea level rise, with the intent to increase the community's comprehensive adaptability and resiliency capacities.

The City will include areas, which experience tidal flooding, storm surge, or both as the first priority for the development and implementation of adaption strategies. Other areas will be included as the second priority for the development and implementation of adaptation strategies.

Policy 13.5:

Adaptation strategies may apply to the following:

a. Public infrastructure planning, siting, construction, replacement, operation and maintenance;
b. Emergency management;
c. Stormwater management;
d. Land development regulations;
e. Building codes;
f. Comprehensive planning; and
g. Other functions.

Policy 13.6:

AAAs adaptation strategy options include:

a. Protection: Strategies that involve "hard" and "soft" structurally defensive measures to mitigate impacts of rising seas in order to decrease vulnerability while allowing structures and infrastructure to remain unaltered. Two examples are shoreline armoring and beach renourishment. Protection strategies may be targeted for areas of a community that are location-dependent and cannot be

significantly altered or relocated, such as areas of historical significance, or water-dependent uses.

b. Accommodation: Strategies that do not act as a barrier, but rather alter the design through measures such as elevation or stormwater improvements, to allow the structure of infrastructure system to stay intact. Rather than preventing flooding or inundation, these strategies aim to reduce potential risks.

c. Management Strategies: Strategies that involve the actual removal of existing development, their possible relocation to other areas, and/or prevention of further development in high-risk areas.

d. Avoidance: Strategies that involve ensuring development does not take place in areas subject to coastal hazards associated with sea level rise or where the risk is low at present but will increase over time.

e. Other options.

Policy 13.7:

The City shall pursue funding sources for the implementation of AAA associated adaptation strategies including the following:

a. Federal and State grants and technical expertise assistance (in-kind)
b. Local Stormwater Utility Fees and CIP (Capital Improvement Plan) prioritization
c. Public/Private Partnerships
d. Other sources

Policy 13.8:

The City shall integrate AAAs into existing and future City processes and city-wide plans and documents which may include:

a. Strategic Plan;
b. Sustainability Plan;
c. Resiliency Plan;
d. Stormwater Master Plan;
e. Emergency Management Plan;
f. Land Development Regulations;
g. Capital Improvement Plan;
h. Local Mitigation Strategy; ~~and~~
i. Agreements with Public or Private Utility and Infrastructure Providers;
j. Agreements with Public Health Providers;
k. Interlocal Agreements with Other Government Agencies; and
l. Other processes, plans and documents.

Policy 13.9:

The City shall align and be consistent with, to the extent possible, relevant and current national, state, and regional adaptation strategy documents such as the Miami-Dade

County GreenPrint, Southeast Florida Regional Climate Action Plan, and The President's Climate Action Plan as well as other regional strategic plans, disaster mitigation plans, water management plans, transportation/transit plans, and climate change plans.

Policy 13.10:

The City shall participate in, when appropriate, coordinated governmental, non-governmental and other appropriate agencies' proposed application requests for funding adaptation implementation projects.

Policy 13.11:

The City shall collaborate and coordinate with appropriate local, regional, state, and national governmental agencies, to the extent possible, toward the implementation of AAA adaptation strategies and to identify risks, vulnerabilities and opportunities associated with coastal hazards and the impacts from sea level rise.

SECTION 4. The following amendment to the City's 2025 Comprehensive Plan Intergovernmental Coordination Element is hereby adopted:

INTERGOVERNMENTAL COORDINATION ELEMENT

* * *

Policy 1.10

The City will collaborate and coordinate with appropriate local, regional, state, and national governmental agencies, to the extent possible, toward the implementation of Adaptation Action Areas adaptation strategies and to identify risks, vulnerabilities and opportunities associated with coastal hazards and the impacts from sea level rise and participate in, when appropriate, coordinated governmental, non-governmental and other appropriate agencies' proposed application requests for funding adaptation implementation projects.

SECTION 5. REPEALER.

All Ordinances or parts of Ordinances in conflict herewith be and the same are hereby repealed.

SECTION 6. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 7. CODIFICATION.

It is the intention of the City Commission that this Ordinance be entered into the Comprehensive Plan, and it is hereby ordained that the sections of this Ordinance may be renumbered or relettered to accomplish such intention; and that the word "ordinance" may be changed to "section" or other appropriate word. The Exhibits to this Ordinance shall not be codified, but shall be kept on file with this Ordinance in the City Clerk's Office.

SECTION 8. TRANSMITTAL.

The Planning Director is hereby directed to transmit this ordinance to the appropriate state, regional and county agencies as required by applicable law.

SECTION 9. EFFECTIVE DATE.

This ordinance shall take effect 31 days after the state land planning agency notifies the City that the plan amendment package is complete pursuant to Section 163.3184(3), Florida Statutes.

PASSED and ADOPTED this 14 day of September 2016.

MAYOR

ATTEST:

9/22/16

CITY CLERK

MIAMI BEACH INCORPORATED MARCH 26TH

APPROVED AS TO FORM
AND LANGUAGE
AND FOR EXECUTION

for 9/16/16

City Attorney Date

First Reading/Transmittal: July 13, 2016
Second Reading/Adoption: September 14, 2016

Verified By:

Thomas R. Mooney, AICP
Planning Director

Underline = new language
~~Strikethrough~~ = deleted language

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MIAMIBEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Jimmy L. Morales, City Manager
DATE: September 14, 2016

10:25 a.m. Second Reading Public Hearing

SUBJECT: COMPREHENSIVE PLAN – PERIL OF FLOOD:
AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING THE COMPREHENSIVE PLAN PURSUANT TO THE PROCEDURES IN SECTION 163.3184(3), FLORIDA STATUTES, BY MODIFYING CHAPTER 1, FUTURE LAND USE ELEMENT, TO ENCOURAGE THE USE OF LANDSCAPING TECHNIQUES THAT ENHANCE STORMWATER MANAGEMENT AND TO MODIFY THE LEVEL OF SERVICE FOR STORM SEWER CAPACITY; CHAPTER 5, INFRASTRUCTURE ELEMENT, TO REQUIRE THAT THE LAND DEVELOPMENT REGULATIONS INCLUDE A FREEBOARD REQUIREMENT FOR NEW CONSTRUCTION, TO MODIFY THE LEVEL OF SERVICE FOR DRAINAGE FACILITIES DESIGN STORM STANDARD, AND TO INCORPORATE THE USE OF STORMWATER STORAGE AND INFILTRATION IN INFRASTRUCTURE REPLACEMENT ACTIVITIES; CHAPTER 6, CONSERVATION/COASTAL ZONE MANAGEMENT ELEMENT TO ENCOURAGE THE USE OF HIGHLY WATER-ABSORBENT NATIVE PLANTS AND TO DESIGNATE THE CITY OF MIAMI BEACH AS AN ADAPTATION ACTION AREA (AAA) PURSUANT TO SECTION 163.3177(6)(G)(10), FLORIDA STATUTES; CHAPTER 8, INTERGOVERNMENTAL COORDINATION ELEMENT, TO REQUIRE COORDINATION BETWEEN AGENCIES ADDRESSING ISSUES RELATED TO SEA LEVEL RISE AND CLIMATE CHANGE; PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN; TRANSMITTAL; REPEALER; SEVERABILITY; AND AN EFFECTIVE DATE.

RECOMMENDATION

The Administration recommends that the City Commission adopt the Ordinance.

ANALYSIS

On July 1, 2014, the City hired AECOM as a Flood Mitigation Consultant, to perform an analysis of City regulations and practices that can be improved or established in order to mitigate the impacts of anticipated sea level rise.

On April 24, 2015, the Florida Legislature approved Senate Bill 1094, entitled "Peril of Flood," requiring the inclusion of development and redevelopment strategies that reduce flood risks in coastal areas which result from high-tide events, storm surge, flash floods, stormwater runoff,

and the related impacts of sea level rise within Comprehensive Plan Coastal Management elements.

At the March 15, 2016 meeting of the Mayors Blue Ribbon Panel on Seal Level Rise, the Panel endorsed the proposed amendments to the City's Comprehensive Plan, as recommended by AECOM. On April 13, 2016, the City Commission referred to the proposed Comprehensive Plan amendment to the Land Use and Development Committee (Item C4L). The item was simultaneously referred to the Planning Board. Commissioner Malakoff is sponsoring the proposed amendment.

On April 20, 2016, the Land Use and Development Committee discussed the item and continued it to May 18, 2016. On May 18, 2016, the Land Use and Development Committee recommended that the Planning Board transmit the proposed amendment to the City Commission with a favorable recommendation.

Since mid-2014, the administration has been working with AECOM to prepare climate adaptation plans and strategies as a result of sea level rise. A major component of this analysis has been to review the City's 2025 Comprehensive Plan and to propose amendments that will reduce the City's risks related to sea level rise. AECOM is recommending several amendments to improve storm sewer and drainage levels of service, including the use of landscaping techniques to enhance storm water management and incorporating minimum freeboard requirements into the Land Development Regulations.

In 2015, the Florida Legislature adopted Senate Bill 1094, entitled "Peril of Flood", which requires the Coastal Management elements of local government Comprehensive Plans to include regulations related to the mitigation and reduction of flood risks in coastal areas. The requirements of the Bill include the following:

> *1. Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.*
>
> *2. Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.*
>
> *3. Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in this state.*

Additionally, in 2011 the Florida Legislature passed the Community Planning Act (CPA), which amended Section 163.3177, Florida Statutes, which allows local governments the option of planning for coastal hazards and the potential impacts of sea level rise within the Comprehensive Plan. This provided local governments with the option of designating Adaptation Action Areas (AAA). The designation is for areas that experience coastal flooding and that are vulnerable to the related impacts of rising sea levels, with the purpose of prioritizing funding for infrastructure and adaptation planning.

Local governments that adopt an adaptation action area are able to incorporate policies within the coastal management element of their comprehensive plan to improve resilience to coastal flooding. Criteria for AAA designation includes: areas below, at, or near mean higher high water; areas which have a hydrological connection to coastal waters; or areas designated as evacuation zones for storm surge. Since the entire City meets designation criteria, it is recommended that the entire City be designated an AAA.

In order to improve the City's ability to mitigate the impacts of sea level rise and comply with Senate Bill 1094, the proposed amendment would affect the following elements of the Miami Beach 2025 Comprehensive Plan:

- **Future Land Use Element**
  - o Amend Policy 3.6 to encourage the use of landscaping techniques that enhance stormwater management

  - o Amend Policy 6.2 to modify the level of service for storm sewer capacity to be consistent with the City's Storm Water Master Plan.

- **Infrastructure Element**
  - o Amend Policy 2.4 to require the incorporation of stormwater storage and infiltration into infrastructure replacement activities.

  - o Amend Policy 4.1 to require that the Land Development Regulations include a freeboard requirement that requires the raising of ground floors in new construction to reduce losses due to flooding.

  - o Amend Policy 5.1 to modify the level of service for the drainage facilities design storm standard.

- **Conservation/Coastal Zone Management Element**
  - o Amend Policy 2.12 to encourage the use of highly water-absorbent native and Florida friendly plants.

  - o Establish Objective 13 to designate the City of Miami Beach as an AAA pursuant to section 163.3177(6)(g)(10), Florida Statutes and establish resiliency strategies.

- **Intergovernmental Coordination Element**
  - o Establish Policy 1.10 to require collaboration and coordination with local, regional, state, and national government agencies for the implementation of AAA strategy options.

COMPREHENSIVE PLANNING PROCESS

This application is for text amendment to the Compressive Plan. Under Section 163.3184(2), F.S., this amendment will follow the expedited state review process for adoption of comprehensive plan amendments. In this process the Planning Board serves in its capacity of the Local Planning Agency (LPA), when providing its recommendation to the City Commission. It is anticipated that the plan amendment would follow the timeline below:

Date	Process Step
4/13/2016	***CC Referral to LUDC and Planning Board***
5/18/2016	***LUDC Hearing***
6/28/2016	***Planning Board (LPA) Hearing***
7/13/2016	***CC Transmittal Hearing***
7/14/2016	Transmit to State
7/22/2016	Notice from State of Complete Transmittal
8/19/2016	Review Agency Comments Due
9/14/2016	***CC Adoption Hearing***
9/15/2016	Submit Adoption Package to Review Agencies
9/20/2016	Notice from State of Complete Submittal
10/21/2016	Appeal Period Ends

PLANNING BOARD REVIEW

On June 28, 2016, the Planning Board (by a 4-0 vote), which serves as the City's Local Planning Agency pursuant to Chapter 163, Florida Statutes, transmitted the proposed ordinance amendment to the City Commission with a favorable recommendation.

UPDATE/SUMMARY

The subject ordinance was approved at First Reading on July 13, 2016. The Administration transmitted the amendment to the State Land Planning Agency and required review agencies pursuant to the Section 163.3184(2), F.S. Comments from the review agencies are due by August 19, 2016. As of the writing of this memorandum, the following comments have been provided by the review agencies:

- *Florida Department of Education* – On July 25, 2016, the Department found that the amendment did not appear to adversely impact public education facilities and provided no comment.

- *South Florida Regional Council* – On August 8, 2016, the Council found that the proposed amendment was generally consistent with the Strategic Regional Policy Plan for South Florida and provided no additional comment.

- *South Florida Water Management District* – On August 17, 2016, the District found that there appears to be no regionally significant water resource issues, as a result of the amendment.

- *Florida Department of Economic Opportunity* – On August 19, 2016, the Department, which serves as the State Land Planning Agency, identified no comments related to important state resources and facilities that would be adversely impacted by the amendment. However, the Department offered technical assistance suggestions which would help strengthen the Comprehensive Plan and help ensure consistency with Chapter 163. The comments generally include:

  1. *Future Land Use Element Policy 3.6 – direct where such encouragement would be applied (e.g. local development review processes).*

2. Conservation/Coastal Zone Management Element Policy 13.1 – consider periodically revisiting the City's basis for measuring sea level rise, specifying the appropriate period, or timeframe within this policy.

3. Conservation/Coastal Zone Management Element Policy 13.4 – consider incorporating some means of prioritization for different areas within the Adaptation Action Area.

4. Conservation/Coastal Zone Management Element Policy 13.5 – consider adopting strategies that apply to public and private community infrastructure that may not be within the City's management control (e.g. sanitary sewage facilities).

In response to the technical assistance suggestions that were provided by the Florida Department of Economic of Opportunity, slight revisions have been included in the proposed Amendment. However, in regards to comment 2, it is recommended that the City utilize the unified sea level rise measurements provide by the South Florida Regional Climate Change Compact to ensure consistency with the rest of the region. Additionally, the Compact may revise projections as new technology and information becomes available, which may not occur on a fixed schedule; therefore it is recommended that a timeframe not be incorporated in order to allow the City to utilize the latest information as it becomes available.

CONCLUSION

The Administration recommends that the City Commission adopt the Ordinance.

FINANCIAL INFORMATION

In accordance with Charter Section 5.02, which requires that the "City of Miami Beach shall consider the long term economic impact (at least 5 years) of proposed legislative actions," this shall confirm that the City Administration City Administration evaluated the long term economic impact (at least 5 years) of this proposed legislative action. The proposed Ordinance is not expected to have a negative fiscal impact upon the City.

Legislative Tracking

Planning

Sponsor

Commissioner Joy Malakoff

ATTACHMENTS:

Description

- 2nd Reading Ordinance - Form Approved