

RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, ACCEPTING THE RECOMMENDATION OF THE PUBLIC SAFETY AND NEIGHBORHOOD QUALITY OF LIFE COMMITTEE AT ITS MAY 23, 2023 MEETING, AND AUTHORIZING THE ADMINISTRATION TO PROCEED WITH A 3D PRINTED "LIVING" SEAWALL PILOT PROJECT.

WHEREAS, at the May 4, 2022 City Commission meeting, Commissioner Steven Meiner sponsored a referral to the Public Safety and Neighborhood Quality of Life Committee (the "Committee") to discuss the feasibility of 3D printed "living" seawalls; and

WHEREAS, at its January 11, 2023 meeting, the PSNQLC discussed the item at length, and recommended for Public Works Department to explore the feasibility of incorporating a Seawall Pilot Project (the "Pilot Project"), which would replace traditional concrete panels used in seawall construction with 3D printed concrete seawalls; and

WHEREAS, at the May 23, 2023 PSNQLC meeting, Public Works Department presented to the Committee information on a 3D panel option that is planned to be produced by a Miami-Dade County based manufacturer; and

WHEREAS, a seawall pilot project which incorporates 3D panels is expected to have a similar cost and a similar construction installation method as constructing the seawall with the traditional pre-cast concrete panels specified in the City's Public Works Manual; and

WHEREAS, the 3D panels can be used to meet the City's requirement of the top of cap seawall elevation of +5.7 feet (NAVD) and meet all applicable requirements of the Florida Building Code; and

WHEREAS, compared to a traditional seawall project, the project timeline for 3D panels is expected to be 3 to 9 months longer due to permitting; and

WHEREAS, by incorporating designs with shapes and textures that mimic coral reefs and mangroves, 3D printed seawall panels serve to promote biodiversity by supporting a wider range of marine life and contribute to shoreline resilience; and

WHEREAS, based on the potential benefits of 3D printed panels for seawall construction, the Committee adopted a motion to proceed with the Pilot Project, as recommended by the Public Works Department.

NOW, THEREFORE, BE IT DULY RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby accept the recommendation of the Public Safety and Neighborhood

Quality of Life Committee at its May 23, 2023 meeting, and authorize the Administration to proceed with a 3D printed "living" Seawall Pilot Project.

PASSED AND ADOPTED this ____ day of _____, 2023.

ATTEST:

Dan Gelber, Mayor

Rafael E. Granado, City Clerk

(sponsored by Commissioner Steven Meiner)

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

Rafael E. Granado 6/21/2023
RG City Attorney *RG* Date