



COMMISSION MEMORANDUM

TO: Mayor Dan Gelber and Members of the City Commission

FROM: Jimmy L. Morales, City Manager

DATE: December 11, 2019

SUBJECT: MEETING OF THE SUSTAINABILITY AND RESILIENCY COMMITTEE (SRC)
ON WEDNESDAY, OCTOBER 23, 2019

A meeting of the Sustainability and Resiliency Committee was held on Wednesday, October 23, 2019 in the City Hall Commission Chamber. Commissioners in attendance: Commissioner Mark Samuelian, Commissioner John Elizabeth Aleman, Commissioner Joy Malakoff, Commissioner Micky Steinberg, and Commissioner Ricky Arriola. Members of the administration and the public were also in attendance.

1. REVIEW OF RESILIENCE STRATEGY WORKPLAN - PLANNED AND IN PROGRESS RESILIENCY PROJECTS

Pierre De Agostini, Palm, Hibiscus, Star Island Homeowner Association President, addressed the committee. Mr. De Agostini stated the Palm and Hibiscus Islands are still experiencing issues with the roadway project related to delays to undergrounding and harmonization.

Commissioner Mark Samuelian explained the Committee has been putting a focus on resolving issues with neighborhood improvement projects, including Palm and Hibiscus Islands. The Committee welcomed Commissioner Eileen Higgins, Miami-Dade County District 5 Commissioner, and Lee Hefty, Miami-Dade County Environmental Resources Management department (DERM) Director, to discuss solutions for quickly moving the project forward.

Mr. Carpenter addressed the Committee and provided an update on the Palm and Hibiscus Island project.

ACTION: The administration to develop an action plan to continue the project's progress.

Members of the public provided feedback.

ACTION: City staff to provide an overview for each stage of construction of the West Avenue project at the December 18, 2019 SRC meeting.

Commissioner Samuelian asked for an update on the Indian Creek landscaping project. Rodney Knowles, Greenspace Management Division Director, stated Greenspace Management engaged with Craven Thompson & Associates, Inc, landscape architects, to help devise a plan to restore landscaping that was removed to construct the seawall.

Members of the public addressed the Committee.

Commissioner Aleman and Commissioner Samuelian stated support for concept that provided as much space as possible for the pathway.

Commissioner Aleman asked if the landscaping palette has been selected. Mr. Knowles stated about 95% of the landscaping palette will be native species and some non-native species to provide color. Commissioner Aleman requested for the palette to be completely Florida friendly, if applicable.

MOTION: The Indian Creek landscaping project proposal to be taken to full Commission. Approved by acclamation.

Nelson Perez-Jacome, City Engineer, introduced Hazen and Sawyer, contractors for the city's water and sewer master plan. Nandita Ahuja, Hazen and Sawyer, presented the water system master plan. Katie Snyder, Hazen and Sawyer, presented the sewer system master plan.

Commissioner Samuelian stated there are intersecting needs of water and sewer with stormwater and the administration needs to consider how these can come together as part of the Jacobs Engineering task order.

Mr. Coley stated when the project has been finalized, city staff will be ready to recommend a financing plan to the Finance and Citywide Projects Committee.

ACTION: Commissioner Samuelian recommended referring the water and sewer system master plan to the Finance and Citywide Projects Committee to think through funding and impact on operating cost.

2. SUSTAINABILITY COMMITTEE UPDATE

ACTION: Continued to the December 18, 2019 Sustainability and Resiliency Committee meeting.

3. DISCUSSION ON ARTIFICIAL REEFS

Commissioner Ricky Arriola stated that he visited the University of Miami Rosenstiel School of Marine and Atmospheric Science campus to tour the ULINK program team's facility and learned how their research on how artificial reefs protect shorelines from beach erosion, wave action, and storm surge.

Flavia Tonioli, Sustainability Manager, introduced the ULINK team. Dr. Brian Haus, professor and chair of the University of Miami's Department of Ocean Sciences, presented this item. He stated the use of artificial reefs for storm surge resilience comes from the reduction of wave impact on the shoreline from daily and extreme storm events.

Commissioner Arriola asked for an estimate of how much the city's beach renourishment project cost. Elizabeth Wheaton reported that the current beach renourishment project is estimated to cost between 15.3 to 15.9 million dollars. Commissioner Arriola asked to explain the difficulty the city is having on obtaining sand. Ms. Wheaton reported offshore sand sources that was used in the past is now restricted and the current beach renourishment project will be trucking in sand from Central Florida. She stated this method is much more expensive than other forms of renourishment, therefore, other opportunities to reduce the erosional rates will help to reduce the cost of future renourishment. Commissioner Joy Malakoff asked if foreign sand can be used. Ms.

Wheaton stated foreign sand cannot be used for federal projects. Dr. Haus stated deploying additional protective structures offshore can enhance the lifespan of beach renourishment projects.

Jane Carrick, Research Associate at University of Miami's Lirman Benthic Ecology and Coral Restoration Laboratory, reported that restoration nursery grown corals with stress hardening abilities that will potentially be more resilient to climate threats, will be placed on top of the hard structures.

Ms. Tonioli stated city staff is working with environmental agencies to obtain permits and identify the most feasible areas on Miami Beach to implement the program.

Dr. Haus stated funding for the \$20,000 build out pilot deployment has been secured. However, funding is being sought out for an additional \$20,000 for the full deployment of the additional two different design structures.

Commissioner Samuelian, Commissioner Malakoff, and Commissioner Arriola approved implementing the artificial reefs pilot program.

Members of the public addressed the Committee.

ACTION: City staff to collaborate with the ULINK team for permitting and artificial reef implementation.

4. DISCUSSION REGARDING TERMINATING THE CITY'S CONTRACT WITH COCA-COLA

ACTION: Item deferred to the December 18, 2019 Committee meeting.

5. DISCUSSION ON THE CITY PARTNERING WITH FPL REVOLUTION PROGRAM TO EXPAND EV-CHARGING STATIONS IN MIAMI BEACH

Ms. Tonioli presented this item. She stated the City Attorney's Office is working on the agreement sent by Florida Power & Light to be focused on electric vehicles (EV) for the city's fleet specifically.

Commissioner Malakoff asked if the charging stations will be installed at no charge to the city and if the city is responsible to pay for the electrical bill. Dominic Versailles, FPL development team representative stated that is correct.

Commissioner Samuelian asked what is needed to launch this program for the city's fleet. Ms. Tonioli stated once an agreement has been agreed between the two parties, the item can be taken to the full commission. Raphael Paz, Deputy City Attorney, stated once the commission approves of the program, the City's Attorney Office will expedite the finalization of the agreement.

MOTION: Staff to move forward with taking the item to full commission. By acclamation.

6. DISCUSS THE CURRENT STATUS OF THE CITY'S TRANSITION PLAN FOR GAS BLOWERS

Commissioner Samuelian asked what the state of transition plan is with the city and outside contractors with gas blowers, the hours of operation of the city's gas blower usage, and what can be done regarding the use of gas blowers by the private sector. Commissioner Samuelian presented a video sent to him by a resident of city sanitation staff using gas blowers at 6:50 AM.

Mr. Knowles stated Greenspace Management has converted 80-90% of their inventory to battery operated leaf blowers.

Commissioner Samuelian asked when will the city no longer have gas-operated leaf blowers in inventory. Mr. Knowles stated Greenspace Management has enough battery-operated leaf blowers in stock where they do not have to use gas-operated leaf blowers on a daily basis. Darrell Caldwell, Sanitation Director, stated the gas-operated leaf blowers are being maintained and replacement for each could be in 3-4 years.

Commissioner Samuelian asked when the contracts will be updated so there are no additional gas-operated leaf blowers being used. Mr. Knowles stated by the second quarter of 2020, all contractors working on city owned property will solely be using battery-operated leaf blowers.

Commissioner Samuelian asked if it was a policy violation for city staff to use gas-operated leaf blowers at 6:50 AM. Mr. Caldwell explained he predicts that this was this particular work crew's first stop of the day given the location, so it was not a policy violation.

Commissioner Arriola asked what the decibel level difference is between gas-operated and battery-operated leaf blowers. Mr. Knowles stated the noise level is not significant between the two and it would be difficult for someone who is not familiar with the equipment to differentiate between gas-operated and battery-operated leaf blowers simply by the noise level.

Commissioner Samuelian asked if city employees can begin use of leaf blower at a later time. Jay Fink, Public Works Assistant Director, stated they can look into limiting the use of power equipment prior to 8:00 AM in residential areas.

Member of the public addressed the Committee.

ACTION: Greenspace Management and Sanitation to research and bring back to the December 18, 2019 SRC meeting the best path to accelerate the city's inventory transition from gas-operated to battery-operated leaf blowers and to change staff start time in residential areas.

7. DISCUSSION REFERRING A TASK TO THE CITY MANAGER'S READY TEAM: IN ORDER TO BOTH OPTIMIZE PUBLIC ENGAGEMENT AND FACILITATE TIMELY COMPLETION OF PROJECTS

Tonya Daniels, Marketing and Communications Director, presented this item. Ms. Daniels stated once the public engagement plan has been finalized, it will be incorporated with the external communications plan that was approved by the full commission

Commissioner Aleman stated this item came out of trying to prevent revisiting decisions that had already been made.

Commissioner Aleman stated she hopes the deliverable will show a standard work plan with all the tollgates the residents can have input so they can see they are going to be proactively engaged by the city every step of the way until the project is completed.

Susanne Torriente, Assistant City Manager, stated the city should be clear on stating the purpose and goal of a meeting. Ms. Torriente stated the city is hosting the first Resilient 305 lunch and learn on November 15, 2019 and she will be working with Ms. Daniels on an update on the rise guide and how to better communicate throughout all the different projects and PIOs across Miami-Dade County.

Member of the public addressed the Committee.

ACTION: No further action taken.

8. DISCUSS THE PUMP STATIONS PLUMES ON WEST AVENUE

ACTION: Item was moved to item 1: Review of Resilience Strategy Workplan - Planned and in Progress Resiliency Projects. To be continued to the December 18, 2019 Sustainability and Resiliency Committee meeting.

9. DISCUSS HAVING THE CITY PURSUE MITIGATION PROJECT FUNDING FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Judy Hoanshelt, Grants Management Division Director, presented this item. Ms. Hoanshelt provided an update on the status of federal and state funding for the mitigation project. The city has two federal funding available through the U.S. Department of Housing and Urban Development (HUD). The statewide \$633 million federal funding will be managed through the Florida Department of Economic Opportunity (DEO). HUD has already appropriated the funds and published in the federal register the guidelines. The state of Florida needs to complete a mitigation action plan and submit it to HUD by February 2020. Grants Management is working with the legislative federal and state consultants on getting the city's projects in the state's action plan.

The second federal funding will be provided by the Federal Emergency Management Agency (FEMA). Grants Management will submit applications for technical assistances to begin larger projects. City staff is working closely with Ms. Torriente and other city departments to develop a list of projects to provide funding for once it is received.

Commissioner Samuelian asked if Grants Management needs any assistance from the commission. Ms. Hoanshelt stated currently their goal is to get all the key projects into the DEO's action plan. Once they are in the action plan and approved by HUD, city staff can suggest the projects.

ACTION: Judy Hoanshelt to come back to the SRC with an update once the state's action plan has been posted.

10. DISCUSSION REGARDING THE FREQUENCY OF WATER TESTING IN MIAMI BEACH

ACTION: Item deferred to the December 18, 2019 Sustainability and Resiliency Committee meeting.

11. DISCUSSION ON THE GRAND JURY REPORT REGARDING HEALTH OF BISCAYNE BAY WITH FOCUS ON HARD DEBRIS AND AN UPDATE ON WHAT THE CITY OF AVENTURA IS DOING IN RESPONSE

Commissioner Samuelian stated the Grand Jury published a report on the health of Biscayne Bay and the report called out some activity the city of Aventura is doing relating to screening storm drain grates and he would like to explore an opportunity to have a similar program for the city of Miami Beach.

Mr. Coley presented this item. He stated the city had a similar pilot program where different inlets were installed on Ocean Drive a few years ago. During afternoon thunderstorms, the wind would

blow debris out of the park, into the streets, and clog up the drains, causing flooding in the streets and sidewalk cafes. The city proceeded to remove them.

Commissioner Samuelian asked if the pilot program was installed in other locations and if those fared better than the ones installed on Ocean Drive. Mr. Coley stated there was one grate installed on Meridian Avenue prior to the Ocean Drive pilot program and did not have the same challenges as Ocean Drive.

Commissioner Samuelian stated the item is attempting to minimize anything getting into the storm drain system, to reduce any cost by preventing it at the front end of the system, and to reduce nutrients from getting into the system.

Commissioner Samuelian stated one vendor has reported they will install the grates at no cost to the city. Commissioner Samuelian requested for the administration to meet with this vendor and consider having another grate pilot program and returning to the Sustainability and Resiliency Committee with a recommendation.

ACTION: Public Works to meet with the vendor regarding the pilot program and locations to implement it and return to the SRC with recommendations.

12. DISCUSSION ON REQUIRING ALL COMMERCIAL LANDSCAPERS WORKING ON MIAMI BEACH TO ABIDE BY FLORIDA FRIENDLY LANDSCAPING STANDARDS

ACTION: Item deferred.

13. DISCUSSION ON REPURPOSING OUR GOLF COURSES FOR THE FUTURE

ACTION: Item Deferred.

14. DISCUSSION PERTAINING TO AMENDMENTS TO THE CITY CODE REGARDING POTENTIAL REQUIREMENTS FOR HIGHER ELEVATION FOR NEW COMMERCIAL CONSTRUCTION THAT IS VULNERABLE TO FLOODING

ACTION: Item Deferred.

15. DISCUSSION TO REVIEW THE PALM HIBISCUS ROAD ELEVATION EXPERIENCE

ACTION: Item Deferred.

16. DISCUSSION ON CITY OF MIAMI BEACH STORMWATER, SANITARY SEWER, AND WATER INFRASTRUCTURE BEST MANAGEMENT PRACTICES

ACTION: Item Deferred

17. DISCUSSION REGARDING HOW GREEN INFRASTRUCTURE INCLUDING LIVING OR HYBRID SHORELINES CAN COMPLEMENT GREY INFRASTRUCTURE IN OUR CLIMATE ADAPTION ON-GOING WORK

ACTION: Item Deferred

18. DISCUSSION REGARDING PRIVATE SEAWALLS

ACTION: Item Deferred

19. DISCUSS THE MOTION MADE BY THE SUSTAINABILITY COMMITTEE TO MAKE THE REDUCTION OF CO2 EMISSIONS A PRIMARY FOCUS ON THE FLEET ASSESSMENT

ACTION: Item Deferred.

20. DISCUSSION ON REQUIRING ALL NEW CITY VEHICLES PURCHASED AFTER 2020 TO BE 100% ELECTRIC (EXCEPT EMERGENCY VEHICLES)

ACTION: Item Deferred.

21. DISCUSS THE STATUS AND IMPLICATIONS OF THE ACTION ITEMS ASSOCIATED WITH ONGOING WATER QUALITY COORDINATION WITH MIAMI-DADE COUNTY

ACTION: Item Deferred.

22. DISCUSS UPDATES TO THE CITY CODE REFERENCING TURLE NESTING

ACTION: Item Deferred.

23. DISCUSS ARKUP'S LUXURY HOUSEBOATS AND THEIR EFFECTS ON BISCAYNE BAY AND THE QUALITY OF LIFE OF SURROUNDING RESIDENTS

ACTION: Item Deferred.