

MIAMI BEACH

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

COMMISSION MEMORANDUM

TO: Mayor Dan Gelber and Members of the City Commission

cc: Rafael E. Granado, City Clerk

FROM: Jimmy L. Morales, City Manager

DATE: October 17, 2018

SUBJECT: **West Avenue Resilience Accelerator**

BACKGROUND

The Resilience Accelerator is a partnership between 100 Resilient Cities and the Center for Resilient Cities & Landscapes at Columbia University. The Rockefeller Foundation has funded this program with a \$3.7 million grant to connect the diverse challenges of a global network of cities to the expertise of the world's top schools of planning and design. While this is a competitive grant program, Greater Miami & the Beaches was chosen to directly participate due to the regions vulnerability to climate change and its leadership in climate change adaptation and mitigation efforts. Miami Beach's West Avenue Neighborhood Improvement Project was selected as one of five projects in South Florida to keep the project moving forward, while integrating a more holistic resiliency approach.

West Avenue is one of the lowest lying areas in the City with elevations as low as 1.7 NAVD. Without the deployment of temporary pumps, segments of the neighborhood flood regularly during intense rain events and king tides. Concurrent to the Florida Department of Transportation's renovation of Alton Road, the city constructed Phase I of the West Avenue Project making utility and roadway improvements along West Avenue, north of Lincoln Road and south of 8th Street. Phase I also included raising 10th Street, 14th Street and 17th Street and adding pump stations at these street ends. Phase II includes upgrading the project to city standards and harmonizing Phases I and II.

On March 22, 2017, the Mayor and City Commission awarded for design/build services to Ric-Man Construction Florida, Inc., for the following:

1. West Avenue Improvements Phase II - South of 14th Street with the guaranteed maximum price of \$13,113,590, with 10% contingency.
2. West Avenue Improvements Phase II - North of 14th Street with the guaranteed maximum price of \$30,243,063, with 10% contingency.

Ric-Man Construction Florida, Inc. has completed approximately 60% of the design. As part of the Resiliency Accelerator, representatives from Columbia University, 100RC, and city staff met with representatives from the West Avenue Neighborhood Association and North of Fifth Neighborhood Association to gather feedback on the proposed design to build consensus on moving an updated design forward.

On August 6, 7, and 8, 2018 Columbia University and the city's Chief Resiliency Officer brought together multi-disciplinary expertise to provide guidance on urban design, innovative engineering solutions, and stakeholder engagement. The workshop focused on strategy and design based on current and future environmental challenges, while taking into consideration of benefits and costs. Over the course of the three day workshop, the team identified appropriate enhancements based on the project's lifecycle, existing and future site challenges, and feedback from the local community. The City brought together the design build team headed by Ric-Man Construction Florida; internal staff from City Manager's Office, CIP, Environment & Sustainability, Fire, Parking, Planning, Public Works, and Transportation Departments; and, local experts in engineering, architecture and urban design.

ANALYSIS

The purpose of the West Avenue Project is to upgrade aging infrastructure and mitigate the impact of sea level rise. The purpose of the Resiliency Accelerator was to test and evaluate elements of the West Avenue Project to develop with modifications that enhance the projects resiliency and build community consensus, while remaining fiscally responsible.

The community has expressed the following concerns with this design:

- Road elevation
- Road harmonization with private properties
- Turning lanes vs. roadway medians
- Pedestrian and bicycle prioritization
- Enhanced walkability
- Enhanced tree canopy
- Water quality
- Baywalk connectivity
- Construction phasing

During the Accelerator processes, the team worked through these concerns and other concerns brought forth by both the community and discussed how to modify the project to address these concerns.

Change Order Recommendations

Based on the Accelerator, the following items are recommended to be included in the change order that will be submitted in November:

1. Converting the water main and sanitary sewer connections from the rear to the front of lot.
2. Updating the design criteria for storm protection from a 5 year to a 10 year storm event.

3. Installing permanent generators at 5th Street, 6th Street, 10th Street, 14th Street, Bay Road, Lincoln Road, and 17th Street. Permanent generators will provide redundancy during power outages. The location of the generators will be coordinated with the Planning and the Environment & Sustainability Departments to ensure an enhanced street end design.
4. Resurfacing Alton Court alleyway from 8th to 16th Street.
5. Re-surfacing, milling and striping West Avenue between 6th Street to 8th Street.
6. In the event that the proposed Alton Gateway Project in the 500-700 blocks of Alton Road and West Avenue does not materialize, the installation of a concrete sidewalk along North side of 6th Street between West Avenue and Alton Road.
7. Revise the West Avenue typical section between 8th Street and 14th Street to enhance tree canopy and provide a wider sidewalk on the east side of the road. The typical section will reflect the following:
 - a. 2-5.5' wide bike lanes one on either side of the road.)
 - b. 2-10 wide lanes one northbound and one southbound vehicular travel lane and 1-10 foot two way center lane.
 - c. 5' ADA sidewalk and 4' planter on the west side of Alton
 - d. 16' Rambla Sidewalk with enhanced tree canopy and landscaping
8. Updating all street ends, including 10th Street, 14th Street, 16th Terrace, and 16th Court, Lincoln Road, Bay Road north of Lincoln Road and Lincoln Court to accommodate more tree canopy, wider sidewalks where possible, and pavers to provide an enhanced pedestrian experience and connectivity to the baywalk, as well as the removal of a limited number of on-street parking spaces on 10th Street that were created on a temporary basis
9. Protection of all specimen trees defined by the City Code shall be protected throughout construction. The landscape designer and the contractor will work with the Urban Forester to ensure specimen trees are protected during construction to minimize the impacts to mature tree canopy.

Project Elements to Remain

The project elements to remain in the project include the following:

- 3.7' NAVD Road Elevation
- Three continuous vehicular travel lanes

Roadway Elevation & Harmonization

The roadway elevation will dictate the location of the underground utilities and the harmonization between the public and private property. Currently, the design criteria in the West Avenue Project calls for a minimum road crown elevation of 3.7' NAVD. During the Accelerator, the team challenged this standard by looking at projected sea levels and ground water risks; harmonization impacts, different engineering solutions; the life span of the asset; and the environmental regulatory requirements. It was determined, that based on all these factors raising the road to an elevation of 3.7' NAVD is the best option. The next step once the change order is approved, is for the design/build team to meet individually with each property in the corridor to discuss harmonization. Harmonization will be unique to each property and designed to meet site-specific conditions.

Vehicular Travel Lanes

The project has 70 feet of right-of-way space. The current design criteria call for 36.5 feet of ROW space to be dedicated to vehicles and 33.5 for pedestrians, bicycles and greenspace. In order to utilize more of the public ROW for pedestrians, the Accelerator proposed reducing the travel lane widths and eliminating parking south of 14th Street to provide more space for pedestrians and greenspace. The Accelerator calls for the pedestrian space to be maximized, the new proposed criteria calls for 40 feet of ROW be dedicated to bikes, pedestrians and greenspace, and only 30 feet be dedicated to vehicles.

The team evaluated the potential of adding center medians along the corridor. However, based on safety needs along the corridor, location of required turn lanes, location of building entrances and exits, and maintenance of traffic flow it is not recommended to add center medians. Rather, the preferred approach is to focus on enhancing the pedestrian and bicycle experience where possible along West Avenue and at the bay front and Collins Canal street ends.

I want to recognize and thank 100RC and Columbia University for the opportunity to participate in this exercise at no cost to the city. I also want to thank and recognize the multidisciplinary staff team that dedicated three full days and countless hours of meetings and site visits over the last few months. I realize that these are important and difficult decisions, but I am confident that by working together in good faith (city elected officials, city staff, residents and our consultants) we will achieve our goals. I am also confident that this integrated planning approach to our infrastructure investments, as recommended by ULI, will build a vibrant and resilient Miami Beach of the future.

FISCAL IMPACT STATEMENT

The above recommendations will be submitted to the contractor to develop a change order to their existing contract. The monetary amount will be submitted to the Mayor and City Commission on November 14 for consideration.

CONCLUSION

This is submitted to the Mayor and City Commission for discussion.

Attachment A: Proposed Typical Street Section 8th Street to 14th Street

Attachment B: Conceptual Plan for Streetend Parks

SMT/ETC/ESW/RC/DM/SB/TM