

Resilience in the City of Fort Pierce

*Preparing our City for the
Future*



In-Progress Projects



1

Grants Division

Building Resilient Infrastructure & Communities (BRIC) Grant

- Supports local communities as we undertake hazard mitigation projects, reducing risks faced from disasters and natural hazards.
- Still in planning phases, FEMA will select up to \$520,000 of Localized Reduction Projects and \$900,000 for project scoping.

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Grants Division

Flood Mitigation Assistance (FMA)

- Includes conducting meetings, outreach, and coordination with community residents on flood mitigation activities and education.
- Conducting housing assessments for residential rehabilitation applicants to identify homes with code violations and assist in getting homes compliant and flood and storm ready (including, but not limited to, windows, roofs, and structures).
- Based on the findings of Building's proposed Floodplain Boundaries Study, the City may pursue a letter of map amendment or mitigate the hazards to reduce the risk of flooding by hardening the floodway. Suspense for the FMA grant is February 2024. The maximum award for project scoping activities is \$900,000 per sub-application, with a 25% cost share.

3

Economic Development Division

Fort Pierce Passenger Rail Station Design & Transit-Oriented Development Master Plan

Master planning for Transit-oriented development including site plan and conceptual design for a passenger rail station.



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Planning and Zoning Department

Low Impact Development

- Amendments to City Code to encourage low-impact development in respect of landscaping and stormwater design.

The Planning Department is drafting a revised Landscape Code Amendment which is proposed to incorporate:

- Bio-swales (Stormwater Treatment)
- Littoral Planting (Stormwater Treatment)
- Shade Trees in Parking Lots (Heat Island)
- Understory Planting (Bio-diversity)
- Only cost to City would be staff time

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Fort Pierce Utilities Authority

Sewer Plant Relocation

- FPUA was awarded \$15 million in grant funds from the Resilient Florida Program and \$5 million in State Appropriations toward the relocation of the wastewater treatment plant off Hutchinson Island.
- Relocation of the water reclamation facility will be off of the Indian River Lagoon, 5 miles west, to an industrial area far from neighborhoods, eliminating the risk to the Indian River Lagoon.
- New facility will provide reuse water to the cooling towers, eliminating an average of 2 MGD being withdrawn from the Floridian aquifer.
- This project also incorporates the restoration of 2.23 acres of seagrass, with potential for an additional 2.47 acres of seagrass restoration if awarded additional grant funds.

6

Fort Pierce Utilities Authority

Septic to Sewer Conversion

- FPUA is currently leveraging two grant funding sources to offer residential septic-to-sewer conversions at a total cost of \$110, compared to \$9,775 or more.
- In 2021, FPUA received \$505,000 from the EPA and FDEP to expand wastewater services and assist in offsetting the costs of septic-to-sewer conversions.
- In 2023, FPUA was awarded an additional \$364,640 in grant funds from the Indian River Lagoon National Estuary Program to further offset the costs of converting from septic-to-sewer.

7

Fort Pierce Utilities Authority

FPUA Sewer Lining

- FPUA received \$900,000 in FY22 and an additional \$900,000 in FY23, for a total of \$1.8 million in Florida grant funds to rehabilitate the sewer pipes utilizing Cured-in-Place PVC lining.
- In FY23, FPUA also launched a second sewer lining project with \$3,792,768 of federal funds to line an additional 16.20 miles of sewer pipe.

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Engineering/ Public Works Departments

Floating Docks at Jaycee Park

Replacing existing damaged docks and boat ramps with floating docks and new concrete ramps, budgeted at \$808,725.00.



Fernandina Street Drainage Improvements

Investigation of the existing conditions, including cleaning pipes, replacing drainage pipes, cleaning the baffle boxes at the intersection of Fernandina Street & Porpoise Avenue and Fernandina Street & Thumb Point, and the installation of check valves at outfalls.

Work completed will also assist with stormwater management design for the Granada Street (Porpoise to Gulfstream) roadway design.

Cost - \$107,910 CC approved June 5, 2023

Drainage Improvement Costs – TBD based on scope of work

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Building Department

Building Department Back-up Generator

- A back-up generator allows the Building Department to perform post-disaster inspections, respond to the public and other pertinent functions before power can be restored.
- A contract has already been awarded for the design.
- A contract is pending for the equipment and installation necessary for the back-up generator.
- Cost will be \$59,383.00

Proposed Projects

*Pending direction
by the City
Commission*



1

Building Department

By Statute...

Condominium buildings 3 stories or more in height are required to have a milestone inspection by December 31st of the year it reaches 30 years of age, and every 10 years thereafter.

We may adopt an Ordinance...

based on the proximity to salt water that milestone inspections are required by December 31st of the year it reaches 25 years of age and every 10 years thereafter.

Specifies when repairs must commence following completion of a phase 2 report. If no Ordinance is adopted, they have 365 days to commence.

Additional Drainage Improvements

- Citywide Stormwater Master Plan (SWMP) update including a vulnerability assessment - \$701,315 Applied for a Resilient Florida Grant
- Make improvements such as additional check valve installations, drainage infrastructure replacements and new drainage installations.

3

Building /Marina / Public Works Departments

Floodproofing of City-owned Structures within the Floodplain

Phased over years:

- Little Jim
- Bathroom Buildings
- Marina Buildings
- Fort Pierce Police Dept.

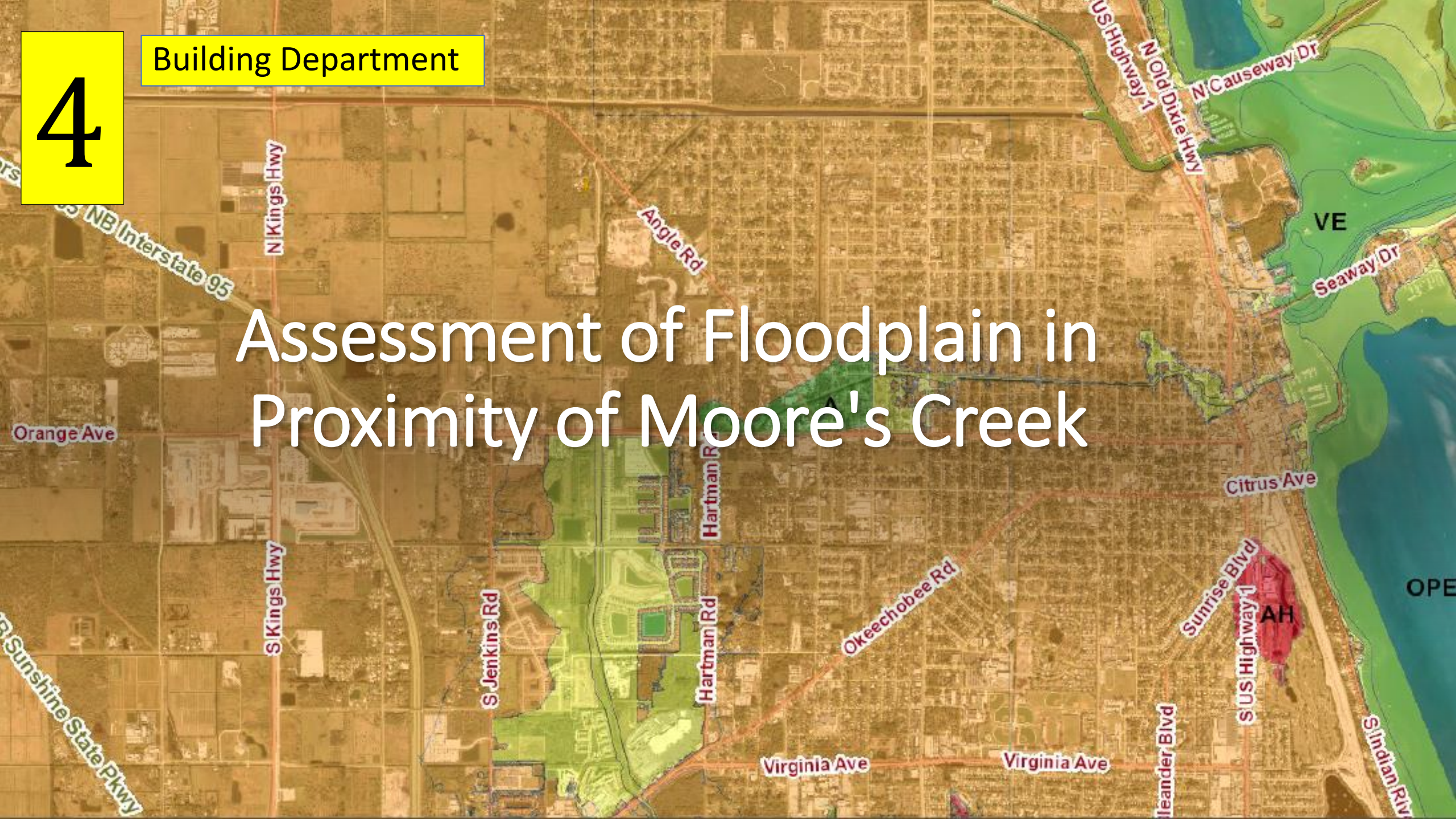
Requirements can be made part of lease agreements.

Cost estimates to be determined

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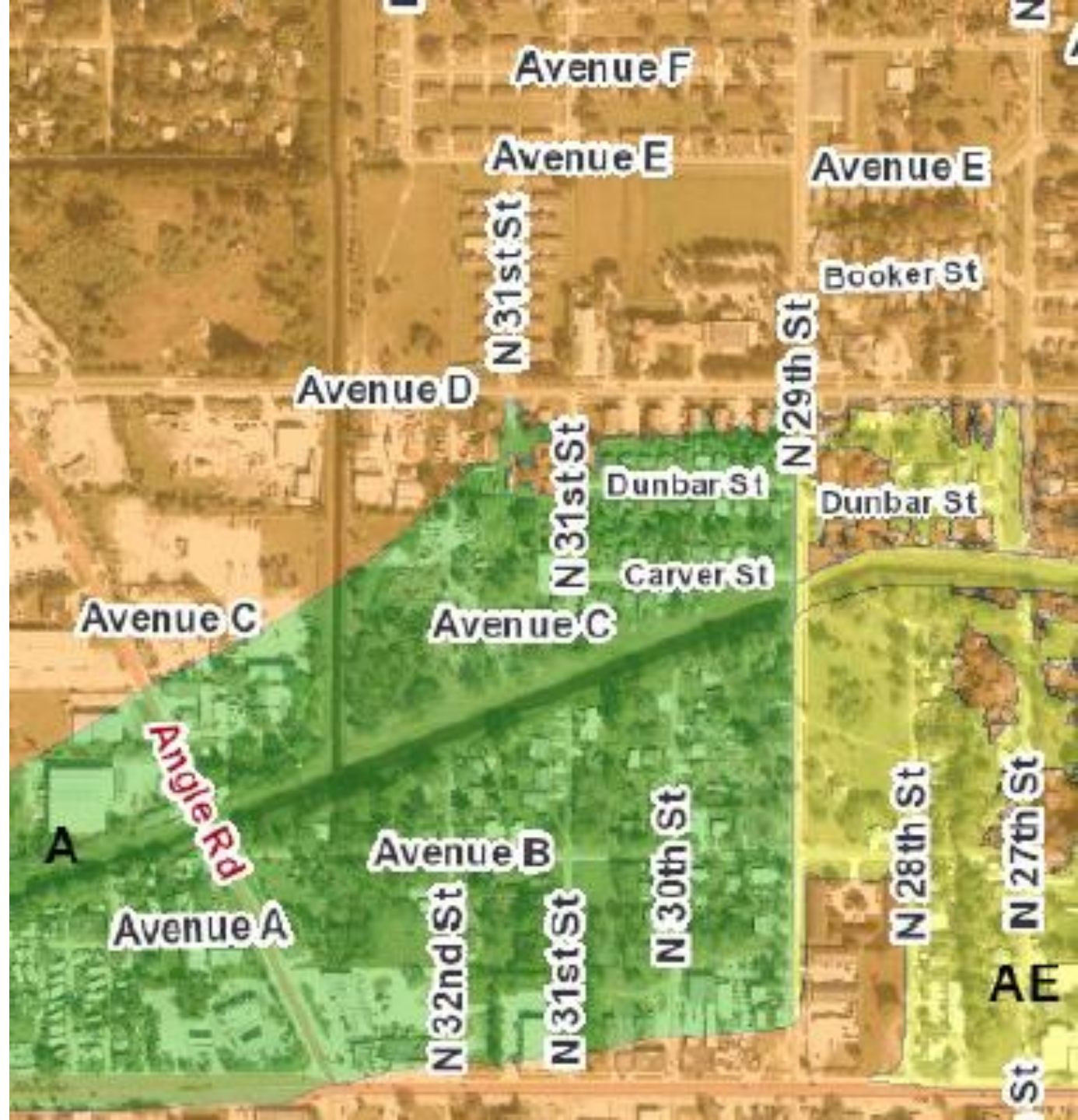
Building Department

Assessment of Floodplain in Proximity of Moore's Creek

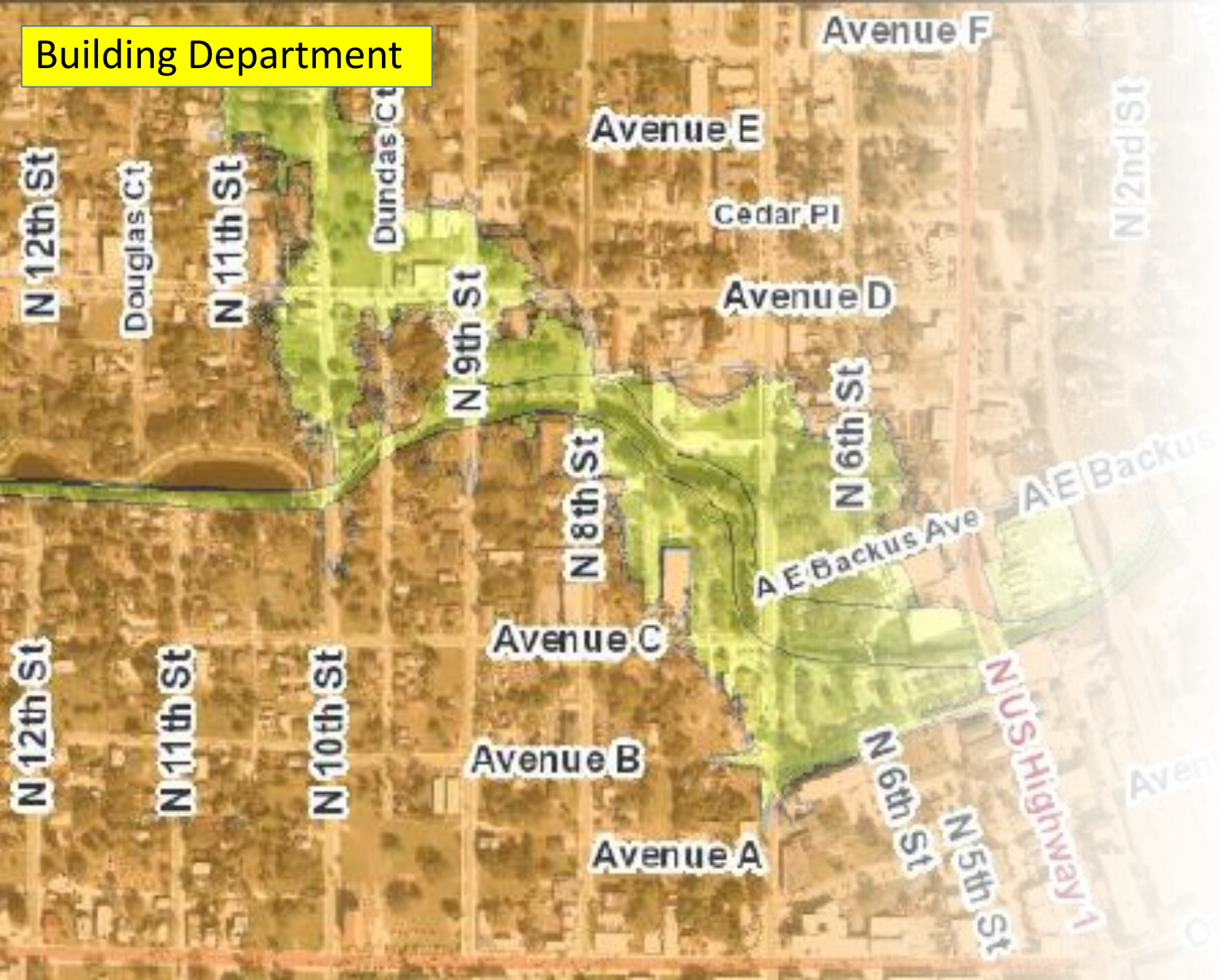


Building Department

- Enter into contract (cost to be determined) to perform a localized study to update hydrologic and hydraulic modeling, mapping, and refinement of approximate Zone A floodplain boundaries.
- Determination if an area of the city should truly remain in the floodplain.



Building Department



- Based on the finding, we may pursue a letter of Map Amendment with FEMA; or,
- Mitigate the hazards to reduce the risk of flooding by hardening the floodway.

Comprehensive Seawall Strategy

Develop a Comprehensive Seawall Strategy:

- Implemented as future prevention for property damaged from natural disaster.
- Vulnerability assessment to establish standard.
- Incorporated into new construction.
- Incorporate adoption for existing properties.
- City leads by example by constructing sea walls on its own properties.

Identify Funding Sources:

- Possible impact fee reduction for seawall installation.
- Possible tax deferral for seawall installation.
- Possible funding by special assessment.

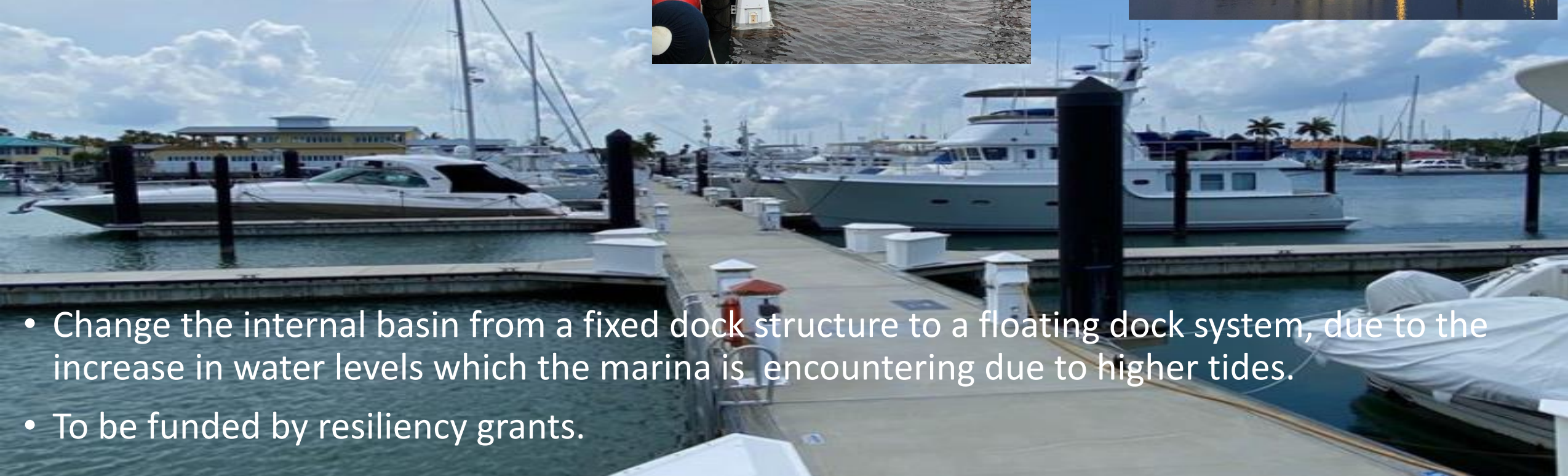
Reconnecting Communities & Neighborhoods (RCN) Program

- The intent is to plan and design the pedestrian crossing at Avenue A and U.S. 1. Essentially reconnecting Fort Pierce residents with downtown Fort Pierce and the waterfront district.
- Maximum Community Planning \$2,000,000. There are no matching requirements as the City identifies as a disadvantaged community under Equity and Justice40.

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Marina

Marina Dock Expansion Plan



- Change the internal basin from a fixed dock structure to a floating dock system, due to the increase in water levels which the marina is encountering due to higher tides.
- To be funded by resiliency grants.