



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

October 5, 2018

Mr. Steve Foge, Engineer
Humiston & Moore Engineers
5679 Strand Court
Naples, Florida 34110

Re: Barefoot Beach, Collier County

Dear Mr. Foge,

The Division's coastal engineering staff have completed a review of your document – *Barefoot Beach Survey & Analysis, July 2018*. The analysis is very comprehensive and we agree with the data and computations for the northern segment of beach in Collier County extending between the Department of Environmental Protection reference monuments R1 and R9.

The shoreline change and volumetric comparisons for this segment of Barefoot Beach since the year 2000 reveal a shoreline that exhibits long term stability with fluctuations in erosion and recovery due to the impact of coastal storms. To assist in determining whether this shoreline segment should be recommended to be designated critically eroded, we used the 2017 post-Irma profile data and ran the CCCLa model for a 25-year return interval storm tide event. In the attachment, the results of these computations are plotted on aerial photography for the shoreline segment between R1 and R9. As shown, the erosion of a 25-year storm does not impact the existing development in this area.

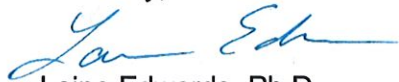
Given the general shoreline stability and the lack of threat from the erosion of a 25-year storm, this segment of shoreline does not currently meet the definition of critical erosion, which is –

Critically eroded area is a segment of the shoreline where natural processes or human activity have caused or contributed to erosion and recession of the beach or dune system to such a degree that upland development, recreational interests, wildlife habitat, or important cultural resources are threatened or lost. Critically eroded areas may also include peripheral segments or gaps between identified critically eroded areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects.

Mr. Steve Forge
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At this time, the Department staff does not recommend designating this shoreline as critically eroded. Should you have any questions regarding this determination, please feel free to contact Mr. Ralph Clark, P.E., at 850-245-7583.

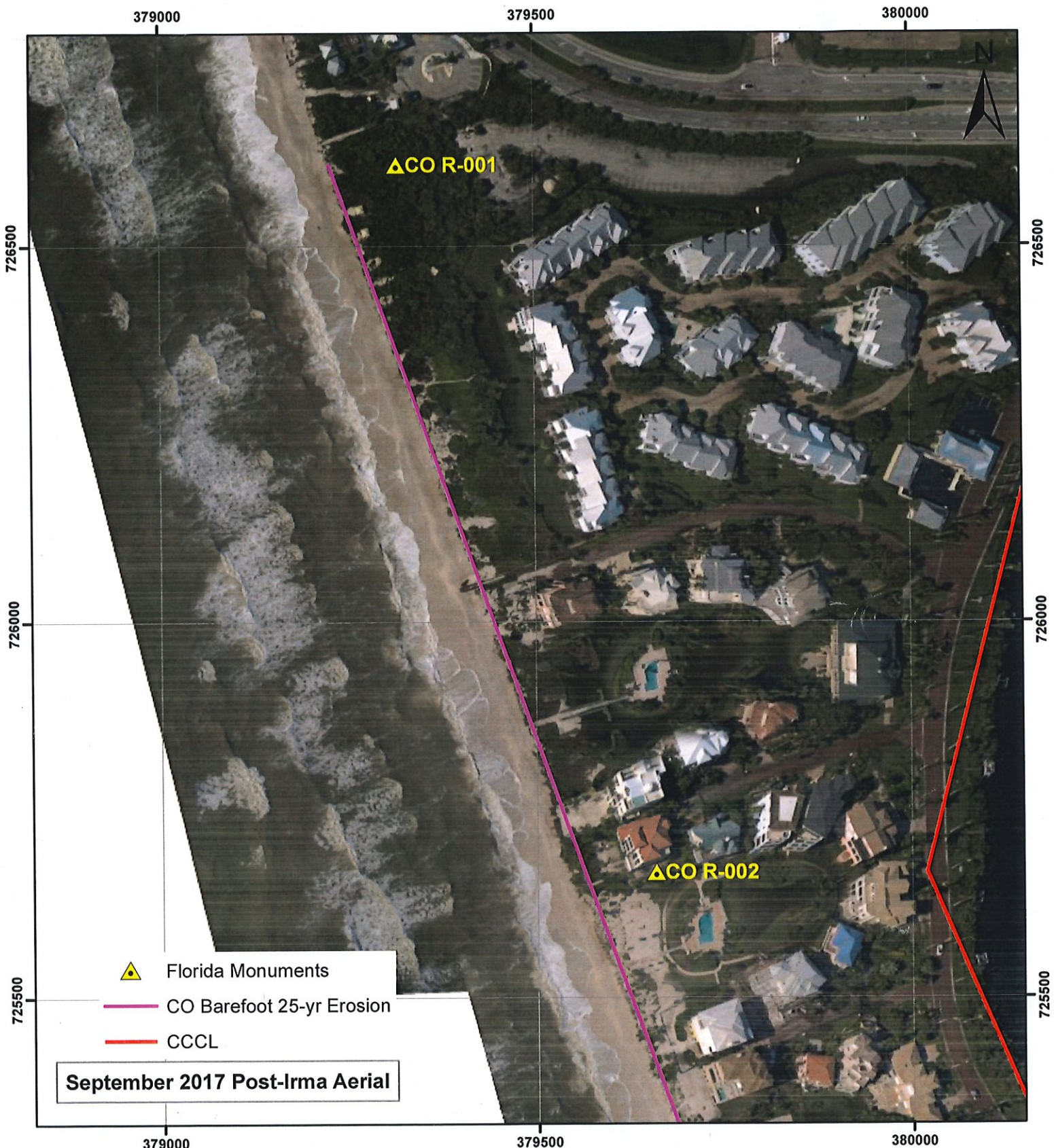
Sincerely,



Laine Edwards, Ph.D.
Deputy Director
Division of Water Resource Management

LE/rc

cc: Gary McAplin, Collier County
Bob Brantly, FDEP
Ralph Clark, FDEP



COLLIER Post-Irma LIDAR Survey

Drawn By: Mike Manausa
FOR ILLUSTRATION ONLY

Date: 9/7/2018



Engineering, Hydrology, and Geology Program
Division of Water Resource Management
Department of Environmental Protection
2600 Blair Stone Road, MS 3595
Tallahassee, FL 32399-2400

Horizontal Coordinate System: State Plane Florida East
NAD83-HARN feet
Vertical Coordinate System: NAVD-88 feet





Florida Monuments



CO Barefoot 25-yr Erosion



CCCL

September 2017 Post-Irma Aerial

COLLIER Post-Irma LIDAR Survey

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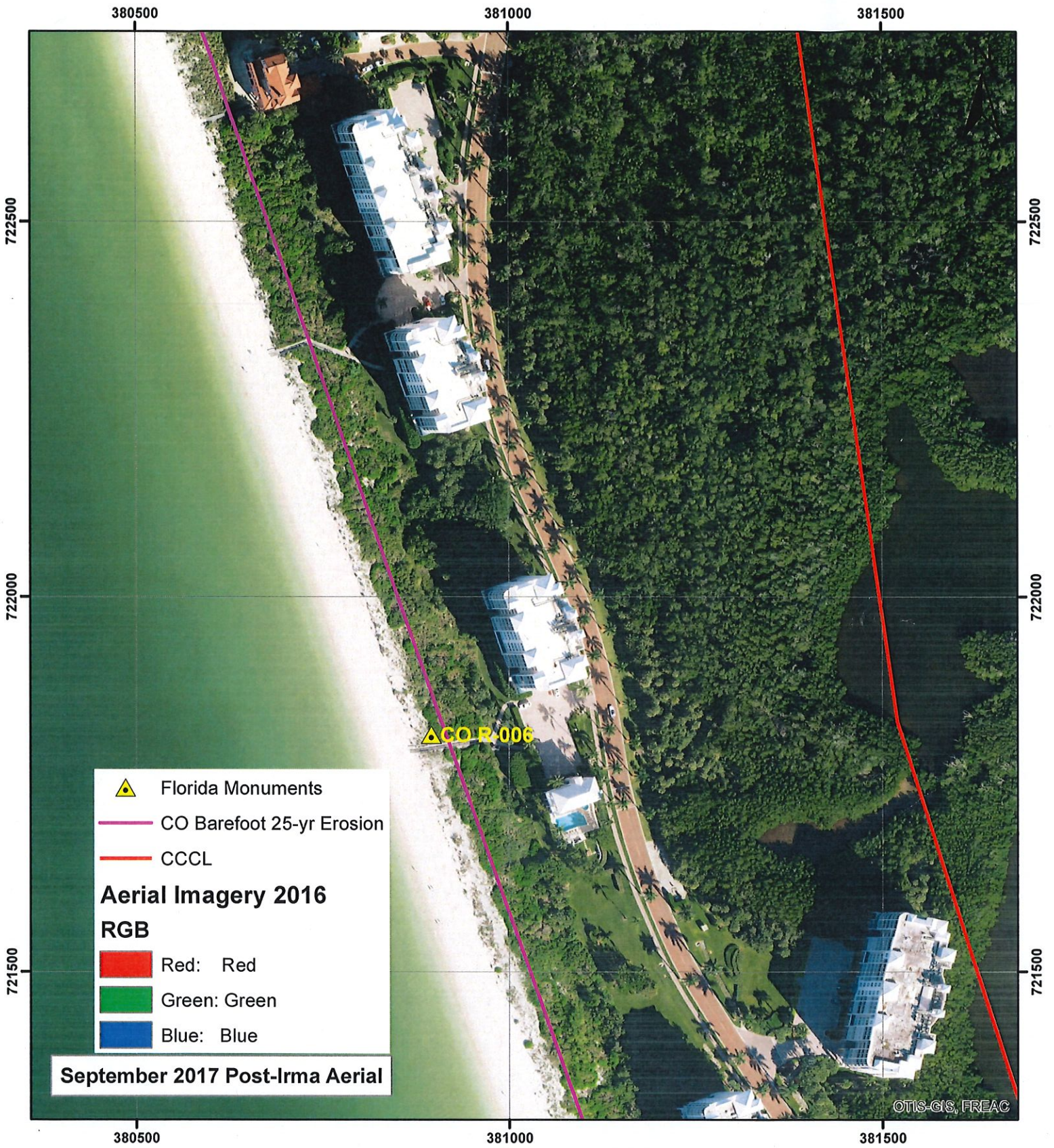
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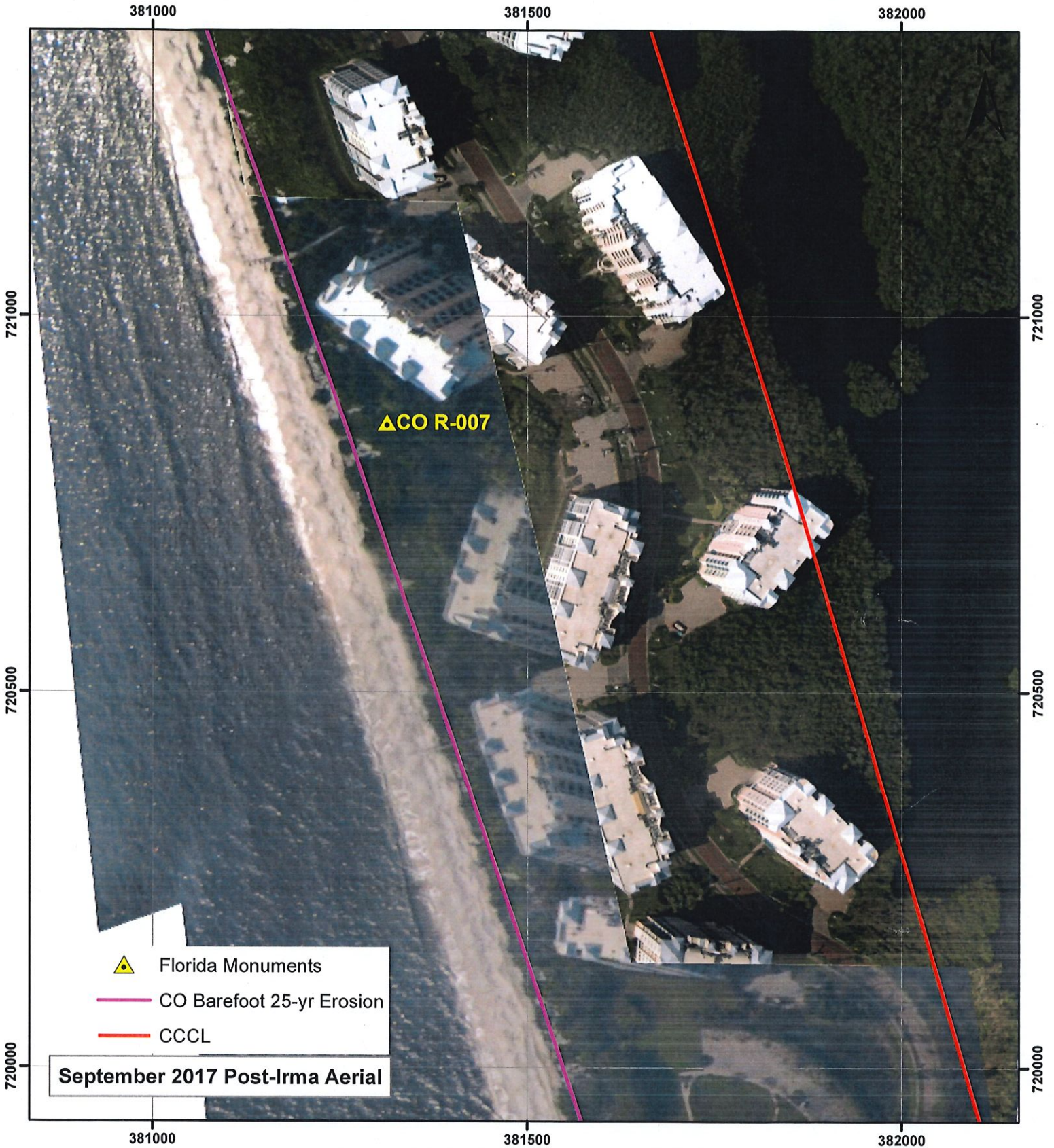
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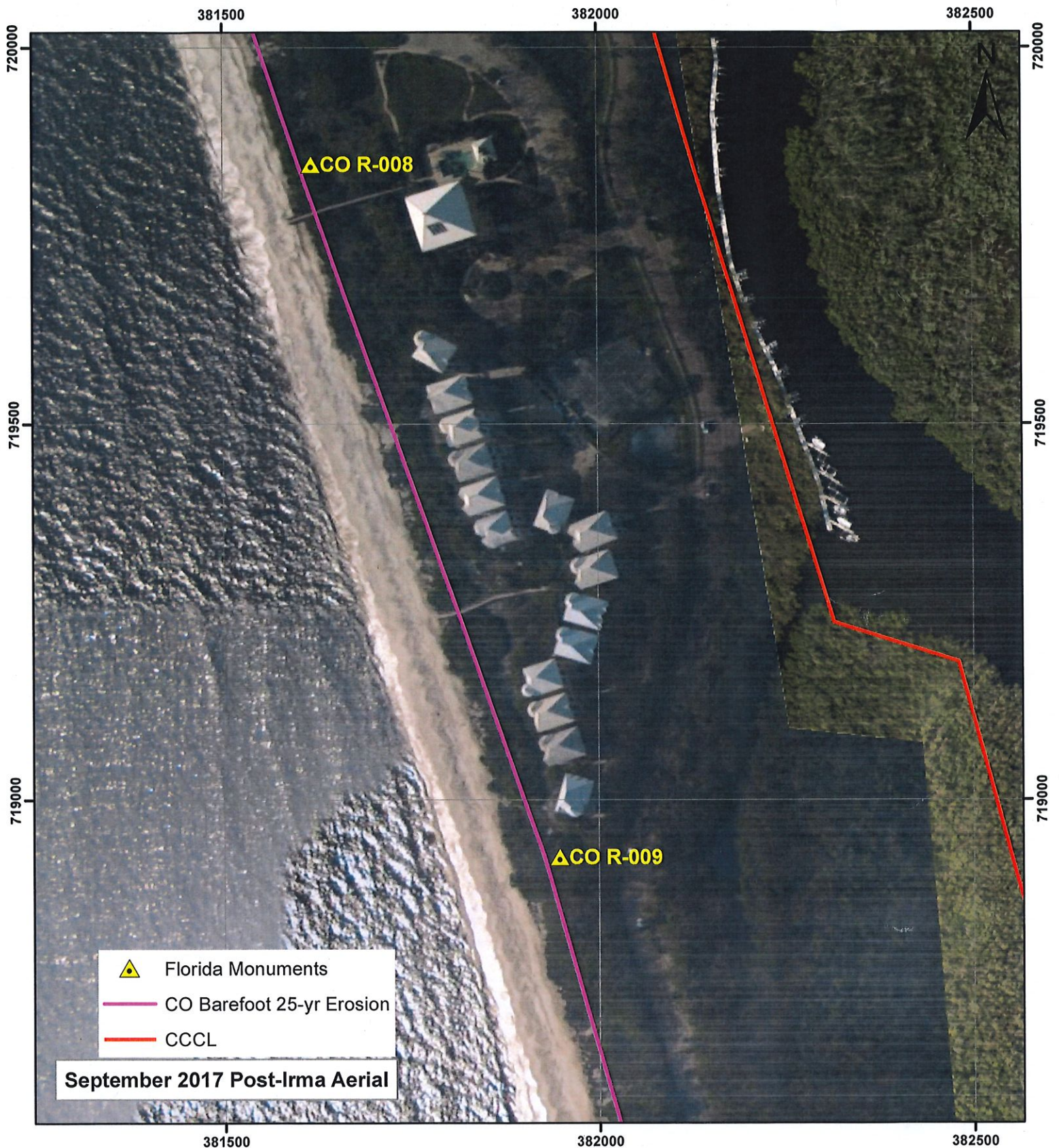
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