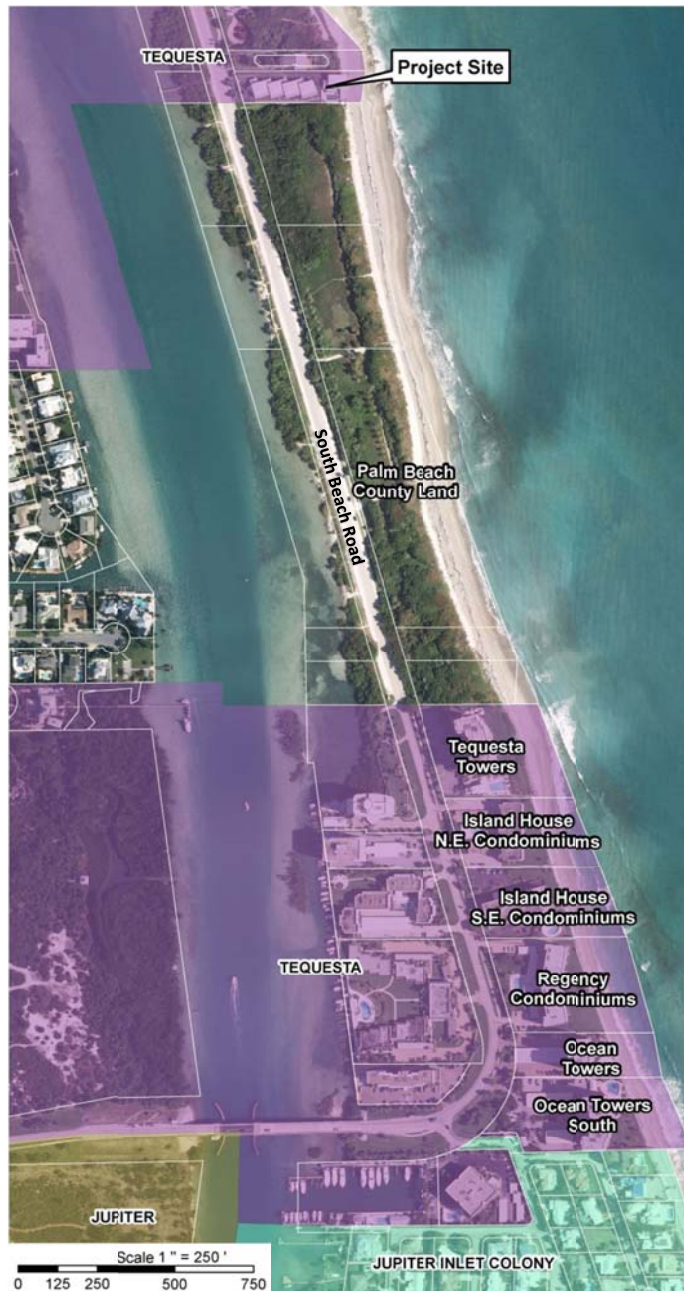




Village of Tequesta Barrier Island Existing Development Drainage Study

During the Site Plan Review process for the Blowing Rocks Condominium Project, a variance has been requested regarding the Village of Tequesta's Chapter 74 Article IV requirement for developments to retain 95% of the 25 year – 24 hour storm event on site. The need for the variance was based upon numerous discussions with Village Staff and the Village's Engineering Consultant, (Spencer Schroeder, P.E. of Mock Roos & Associates) and resulted in a consensus that meeting this requirement would be a hardship and unique to this development compared to neighboring developments with similar circumstances and site characteristics on the barrier island, which were not believed to be in conformance with the above mentioned requirement.

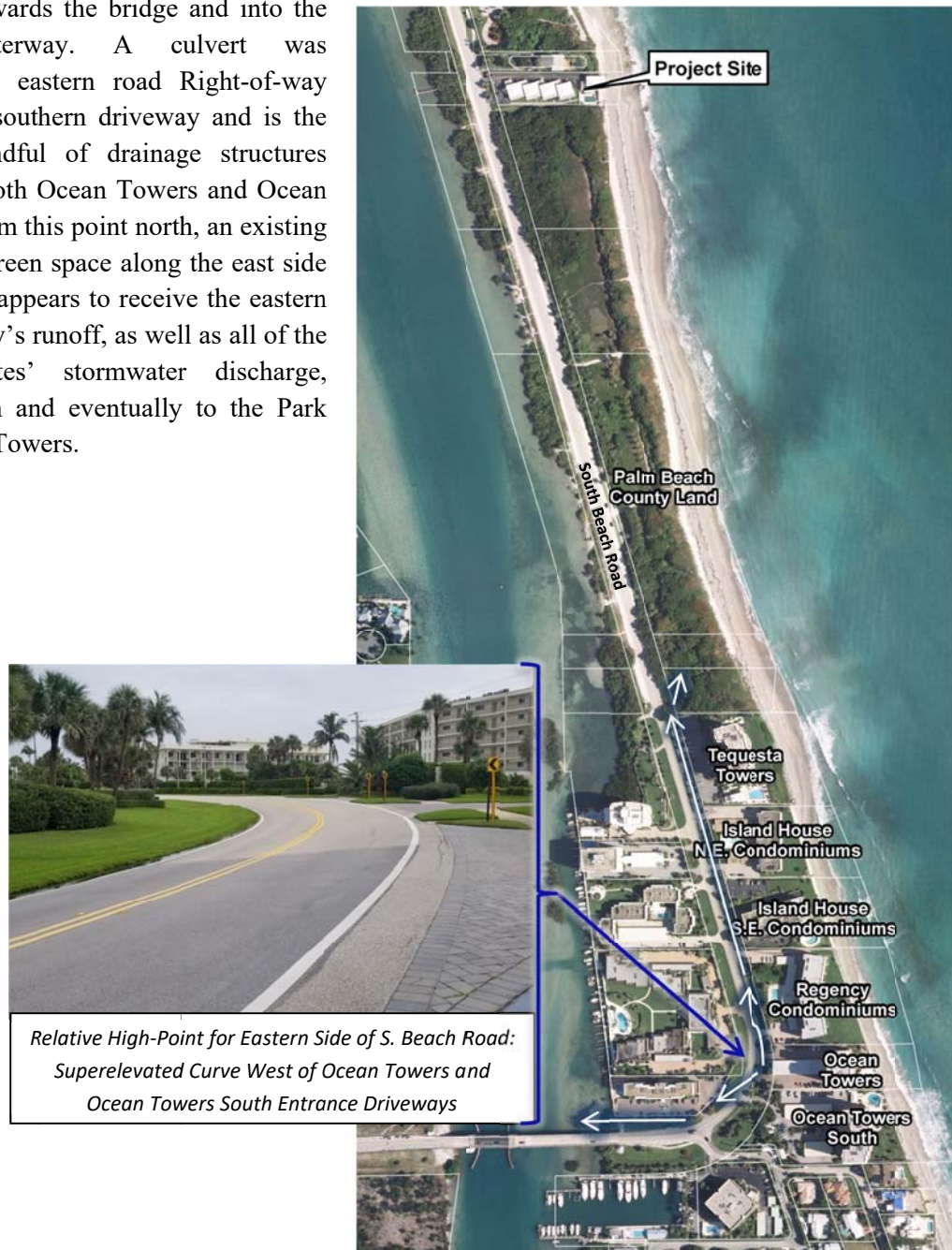


Towards confirming the belief that the similar neighboring developments are not in conformance with this requirement, an on-site drainage system assessment was performed for six separate condominiums within the Village of Tequesta limits, south of the Blowing Rocks Condominium site to determine if they were developed in conformance with the Village's retention requirements as indicated above. The six condominiums reviewed were (in order North-to-South): Tequesta Towers, Island House Northeast, Island House Southeast, Regency Condominiums, Ocean Towers, and Ocean Towers South.

Similar to the Blowing Rocks Condominium building location, these condominiums are all on the east side of South Beach Road. The field review of each developed site included identification of any on-site storm drainage retention systems, as well as the manner in which the sites' independent drainage systems discharge to adjacent right-of-ways and/or drainage systems.

A critical observation common to all six developments, was that no site had visible stormwater detention or retention areas in any significant form. No dry detention areas, ponds or surface water areas, depressed landscaped areas that could retain additional stormwater, or any evidence of subterranean stormwater storage that would meaningfully contribute to the retention of on-site stormwater caused by a 25 year storm were observed. All six drainage systems discharge to S. Beach Road's Right-of-way whether via minimal private drainage systems that overflow or "bubble-up" discharging into S. Beach Road's Right-of-way, by direct overland flow, or a combination of both.

A superelevated curve in front of Ocean Towers and Ocean Towers South serves as a relative high-point for the existing surface slope of S. Beach Road. The roadway and ground drains to the southwest from this high-point towards the bridge and into the Intracoastal Waterway. A culvert was discovered in the eastern road Right-of-way under Regency's southern driveway and is the outfall for a handful of drainage structures observed within both Ocean Towers and Ocean Towers South. From this point north, an existing swale within the green space along the east side of S. Beach Road appears to receive the eastern half of the roadway's runoff, as well as all of the Condominium sites' stormwater discharge, which flows north and eventually to the Park north of Tequesta Towers.



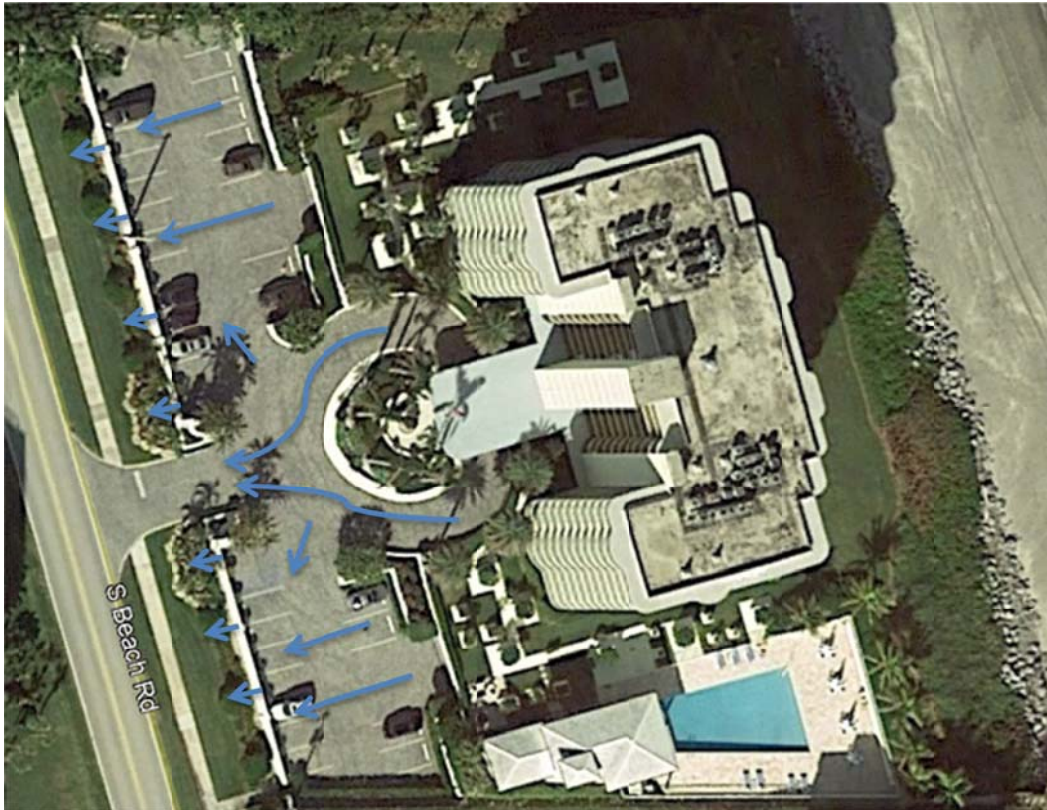
In conclusion, all six investigated Barrier Island Condominiums that are south of the Blowing Rocks Condominium site and are within the Village of Tequesta, were developed with comparable site circumstances, yet do not conform with the Chapter 74, Article IV Village Code requirement to retain 95% of a 25 year – 24 hour storm event. As summarized above, and further illustrated in the following six site drainage exhibits, each Condominium currently discharges directly to the S. Beach Road Right-of-way, which ultimately drains to either the Intracoastal Waterway or the Atlantic Ocean by way of overland flow.

As this is both the manner in which the six developed Condominium sites discharge, and the existing Blowing Rocks Condominium site drains prior to development, we see no definitive reason as to why a variance for relief from the aforementioned retention requirement would not be appropriate. Furthermore, we have not been presented with, nor see any evidence that granting this variance would be injurious to any residents of the Village, especially considering the proposed discharge reduction and water quality improvements that would be incorporated in the Blowing Rocks Condominium stormwater design.

The following exhibits generally illustrate the overall drainage system for each of the six Condominium Developments. The Appendix that follows provides various photographs of the Condominiums' site characteristics and drainage systems for further reference.

Tequesta Towers

Overland surface flow to S. Beach Road Right-of-way, as well as piped connections from floor drains to “Bubble-up” structures in S. Beach Road swale.



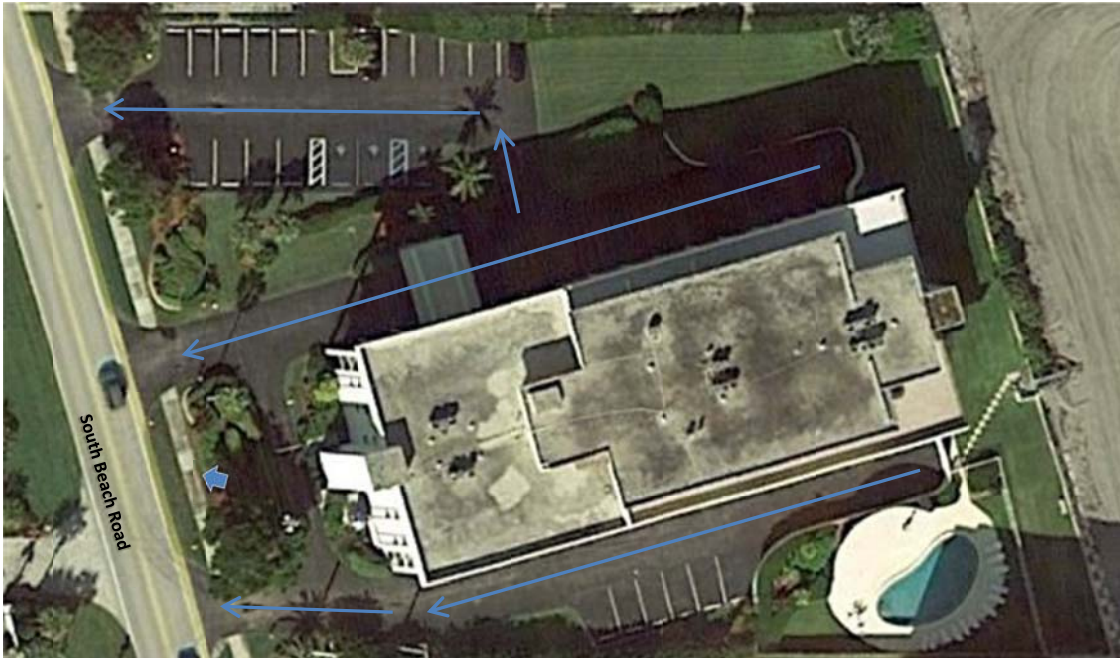
Island House Northeast

Overland surface flow, as well as single “Bubble-up” structure in landscaping discharge into swale in S. Beach Road Right-of-way. Culverts under driveways maintain stormwater flow to North within swale.



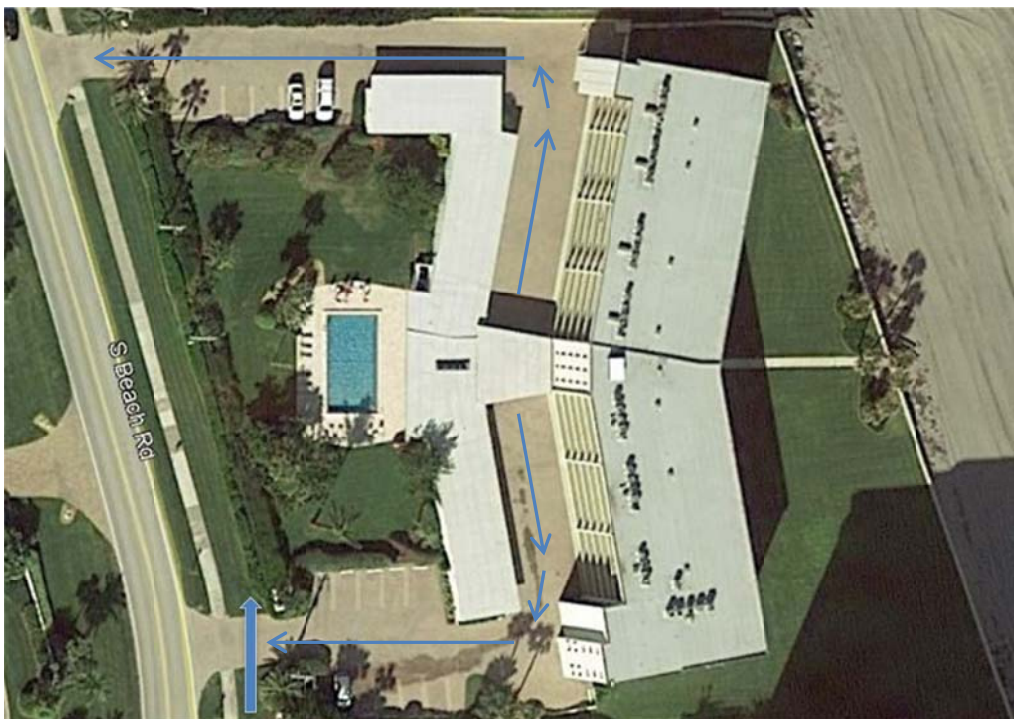
Island House Southeast

Overland surface flow, as well as single “Bubble-up” structure in landscaping discharge into swale in S. Beach Road Right-of-way.



Regency

Overland surface flow to swale in S. Beach Road Right-of-way. Culvert under Southern driveway is the outfall into swale within S. Beach Road Right-of-way for two Condominiums' Drainage systems to the South.



Ocean Towers

Overland surface flow to drainage structures located in center of driveways. Drainage system is connected to culvert from the South which outfalls to the North into swale within S. Beach Road Right-of-way.



Ocean Towers South

Overland surface flow to drainage structures within property. Drainage system connects to culvert to North which outfalls further North into swale within S. Beach Road Right-of-way.



Prepared by:

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Keshavarz & Associates, Inc.

Appendix

Tequesta Towers



Island House Northeast



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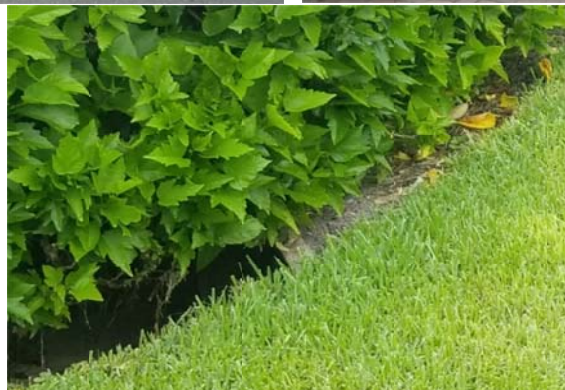
Island House Southeast



Regency



Culvert Outfall
Under Driveway:



Ocean Towers



Ocean Towers South

