

Outlook

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LEE COUNTY PORT AUTHORITY WORKING TO KEEP THE SKIES SAFE

The Southwest Florida International Airport's (RSW) Hazardous Wildlife Remediation project is helping protect aircraft and passengers through habitat modifications intended to deter wildlife from being attracted to the airport property.

Catastrophe can strike when birds share airspace with aircraft. One example of this issue made national headlines when Flight 1549 went down in the Hudson River in 2009. For many years the Lee County Port Authority (LCPA) has been a leader among airport operators in fulfilling mandates of the Federal Aviation Administration (FAA) to ensure safety of the traveling public by reducing the risk of wildlife hazards. RSW was the first commercial airport in the nation to employ a Border collie in the airfield to act as a deterrent to birds in vicinity of the aircraft, which has proven to help reduce bird strikes. Although it is not feasible to completely eliminate risks, a comprehensive wildlife management approach helps to reduce the wildlife hazards.



Priority for wildlife deterrents are those high risk areas in the vicinity of the runway, known as the Aircraft Operations Area (AOA).

In 2009 our team conducted a Wildlife Hazard Assessment (WHA) at RSW to identify areas on airport property that promoted wildlife utilization that may interfere with aircraft. Our team developed an innovative methodology to capture and analyze wildlife data using GIS technology. We developed a formula for wildlife species or species groups representing hazard and risk using Relative Hazard Scores, as per FAA Advisory Circulars. The result showed areas of hazardous wildlife concentration classified by risk. The WHA resulted in

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PEOPLE & PROJECTS: ON THE MOVE



Gary Nychyk has rejoined our Environmental team as an Ecologist. He will provide wildlife surveys, protected species management plans, wetland jurisdictional determinations, and wetland mitigation monitoring.



Laura Brady Herrero and Andy Tilton, P.E. Johnson Engineering is pleased to announce two new members of the Board of Directors; Laura Brady Herrero, Senior Ecologist and Andy Tilton, P.E. The two will join the current board members; Lonnie Howard, P.E., Kevin Winter, P.E., Mike Dickey, P.E., Matt Howard, P.S.M., and Steve Morrison, P.E., to lead the company through the next three years.

recommended actions for reducing the identified wildlife hazards to air carrier operations, a large part of which included strategies to alter the habitats to which they are attracted.

Equipped with this data, the LCPA implemented a wildlife hazard remediation strategy. As part of the remediation strategy, our team helped evaluate high risk areas in the vicinity of the runway, areas known as the Aircraft Operations Area (AOA), as well as areas adjacent to the AOA. Beginning in 2011, we provided design, permitting, and construction oversight for a remediation project designed to convert forested habitat and marshes that existed at the end of the runway into a grassed area that could easily be mowed, thereby lessening the attractiveness for feeding and nesting by large wading birds and vultures that had been documented in the area.

One challenge during construction was the increased wildlife activity generated when excavations uncovered once hidden food sources, attracting more wildlife to the area. There was a high level of coordination between our construction observers, the contractors, and the airport staff to increase wildlife deterrent activity and maintain safe conditions for the ongoing aircraft activity during construction.

As a result of the LCPA's proactive efforts to decrease risks from hazardous wildlife activity at RSW, they were recognized by the Federal Aviation Administration (FAA) with the 2013 Carrier Airport Safety Award, which commends airports for safety programs that meet or exceed the safety requirements and standards set forth by the FAA.

Working closely with LCPA staff, our project team continues to evaluate other areas of concern within the AOA and immediate vicinity to help further minimize wildlife hazards on airport property. ■

AREA 2&3 BEFORE



AREA 2&3 AFTER



During construction our team worked closely with airport staff to increase wildlife deterrent activity and maintain safe conditions for the ongoing aircraft activity.



CAPE CORAL HOSPITAL HOSTS A PLANTING DAY

The wellness initiative that Lee Memorial Health System's Cape Coral Hospital began is producing some rewarding results. This past December, the hospital hosted an onsite planting day where students from Caloosa Elementary and Middle School planted vegetables in planter boxes located throughout the Wellness Education & Butterfly Garden. With the close proximity of the school to the hospital, students have a unique opportunity to utilize this garden as an outdoor classroom, where they learn early in life about ways to promote healthy habits.

The garden, designed by Johnson Engineering's Landscape Architecture team, provides healing therapy for patients undergoing rehabilitation, while at the same time serves as a hands-on learning environment for school students to appreciate the nutritional benefits of growing your own vegetables.

This planting day helped to launch a collaborative partnership to promote community health, wellness, and well-being. Lee Memorial Health System, Johnson Engineering, the Florida Department of Agriculture & Consumer Services, the American Heart Association, the School District of Lee County, Caloosa Elementary and Middle School, and local master gardeners, together made it possible to implement this entire project, from initial concept, to this rewarding event. ■



THE NEW VILLAGE OF ESTERO

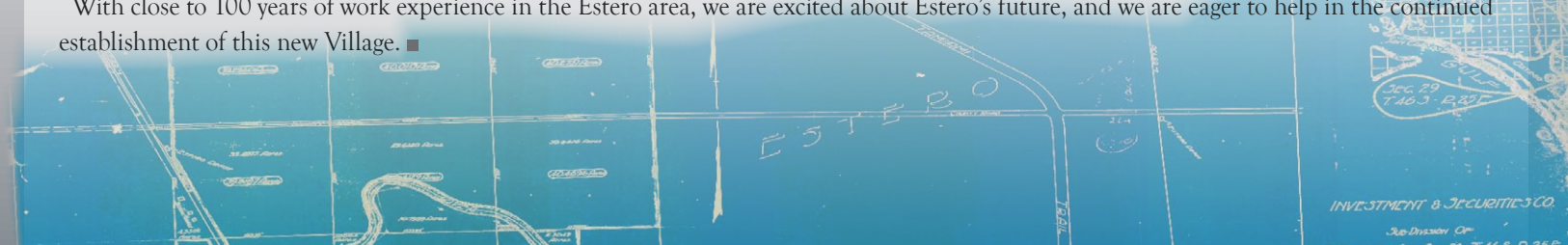
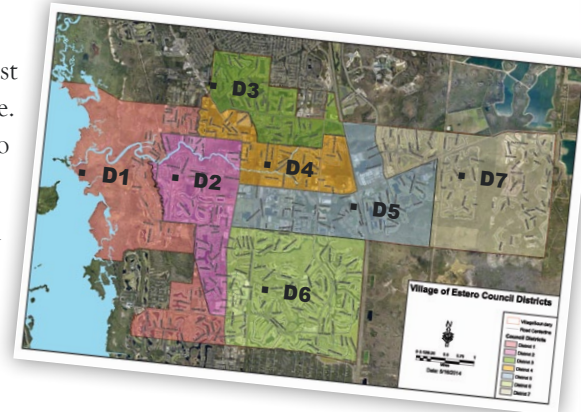
Calling Lee County home for the last 70 years, it's an exciting time for us to see Southwest Florida continue to take shape as the residents of Estero formed their own village. Considered part of unincorporated Lee County until the November 2014 election, Estero lies in southern Lee County, just south of Fort Myers and north of Bonita Springs.

The Village of Estero was subsequently established in December 2014, and voters elected a Village council to lead them through the next four years which includes: William Ribble (District 1), Howard Levitan (District 2), Donald Brown (District 3), Katy Errington (District 4), Jim Boesch (District 5), Nicholas Batos (District 6), and Jim Wilson (District 7). After their swearing in on March 17, 2015, the Council's first order of business was electing Mayor Nicholas Batos and Vice-Mayor Howard Levitan.

Our company has a rich history with the Estero area. Our crews have performed land surveys in Estero since the late 1940's and our historical archive has maps and survey records dating back to the 1920's. In addition, we have provided hundreds of boundary and topographic surveys within the Village of Estero, including providing surveys for the Koreshan Unity in the 1950's, and the boundary survey of Koreshan State Historic Site in 1962. In 1963, our surveyors provided the original boundary survey of Chapel Ridge, which later became known as West Bay Club. From the 1960's to today, our team has managed the planning, design, permitting, and environmental monitoring activities for West Bay Club, including the stormwater management system, potable water and sanitary sewer extension, entitlement from permitting agencies, coordination of construction staking, construction observation, and contract administration.

Today we continue to work with many of the communities within the Village of Estero. Our site development team can be found helping with the design and permitting of Coastal Village, lake bank restoration for Lighthouse Bay at The Brooks, and are just getting the final permits for construction for the Courtyards of Estero. Our water resources team has permitted many sites throughout Estero, including working with Lee County Utilities on Corkscrew Wellfield and provided a preliminary reclaimed water evaluation for Pelican's Nest. They have also worked within Shadow Wood Preserve, Breckenridge, Wildcat Run, and The Brooks to provide water level, flow, and water quality monitoring. We have worked as the Engineer of Record for a few Estero Community Development Districts, and have also provided NPDES related permitting work. In 2005, our team formed a collaborative partnership with Bonita Bay and FDEP, to monitor long term stormwater Best Management Practice effectiveness in Southwest Florida. The results were published in the Spring 2013 Florida Scientists Journal.

With close to 100 years of work experience in the Estero area, we are excited about Estero's future, and we are eager to help in the continued establishment of this new Village. ■



Outlook

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THE FLORIDA GREEN BOOK

The Florida Greenbook is a manual of uniform minimum standards for design, construction, and maintenance for streets and highways. This manual is intended for use on all public roads that are not part of the State Highway System, or non-FDOT controlled roads.

The Florida Greenbook Advisory Committee meets annually to review and update design standards. This year's meeting was recently held on March 26-27 in Tampa. Once the committee makes recommended changes, they have to go through rule making at the State level. The lengthy process results in new adopted rules, usually no more often than two years. The last official version of the manual is dated 2011, with the 2013 version approaching final approval in the next few months. There have been no challenges to the items in the 2013 version, so while it is not yet official, it is still very good guidance.

The 2013 version has a new Chapter 20: Drainage, which brings together in one place guidance for project design dependent on roadway type. In addition to the new chapter, there are also updates of definitions and updates to chapters on Geometric Design, Pavement Design and Construction, Rail-Highway Grade Crossings, Pedestrian Facilities, Maintenance and Resurfacing, Public Transit, and Traditional Neighborhood Design.

The link to the Greenbook page is <http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.shtm>. If you are not already registered for updates to the FDOT publications including the Greenbook use the following link to register: <http://www2.dot.state.fl.us/contactmanagement>.

For more information, contact our Director of Water Resources, Andy Tilton, P.E., who serves on the Florida Greenbook Advisory Committee, at 863.612.4055 or atilton@johnsoneng.com. ■

