



Lower Cape Fear Stewardship Development Award Winners

Outstanding Recognition

Cape Fear Community College Union Station – Wilmington, NC



The Union Station project doesn't just provide much-needed classroom space for the Cape Fear Community College, it also transforms a once primarily paved and neglected site into an outdoor haven for people and wildlife alike. The site is almost three acres in size and is in the former location of the Atlantic Coast Railroad rail bed.

CFCC desired a seamless, safe, pedestrian friendly link from the student parking deck to the Union Station building. The program elements for the landscape included the following:

1. The desire to maintain as much of the historical character as possible,
2. Maintain a strong historical connection to the old land use,
3. A 2000 seat amphitheater/classroom,
4. Outdoor gathering places,
5. A new connection from Second Street to the new garage,
6. A new pedestrian bridge along North Second Street, and
7. A pedestrian link from the Parking Deck to Union Station.

In order to minimize the amount of rain water flowing into the Cape Fear River, a majority of the pedestrian pavement is pervious pavement with an 18" crushed rock storage base. North Carolina granite curb has been used to secure the pervious pavers for longevity. All old brick and salvage granite was re-used to create a ruin wall, repair old walls, create retaining walls and build terrace planting walls by the amphitheater.

The rainwater from the Parking Deck is routed to an underground storage area and slowly percolates into the soil rather than being piped to a storm drain. Water from the Union Station building is directed to an underground cistern and that water is used to irrigate the lawn area by the amphitheater. All plant material is drought resistant and primarily indigenous to the area so requires little or no irrigation.

The revitalization of the landscape on this site in the downtown Wilmington Central Business District to create a safe, environmentally sensitive, sustainable environment that will be used for generations to come is a testament to CFCC's commitment to its students and the community in which it serves.

River Bluffs – Castle Hayne, NC



The River Bluffs community is based on the preservative and pragmatic vision of managing partner and Wilmington native, Burrows G. Smith. The 313-acre development is located on the banks of the beautiful Northeast Cape Fear River in New Hanover County. It is a vibrant, low impact and energy efficient coastal community in the making with a developer committed to producing an end product that truly balances economic development with natural resource protection.

One third of the development is devoted to green spaces, trails and parks. Similar consideration for the existing natural resources is given to individual lots. Each home site is vetted to preserve trees and natural

hydrology to the highest degree feasible. Lot level stormwater will be treated by permeable pavement, rainwater cisterns and downspouts that either drain into an infiltration pipe system or are disconnected from driveways. All homes will be built using old energy efficient designs from the past, such as wide front porches and long overhangs. Additionally, all eight builder team members have agreed to help recycle all building scrap debris from their home building sites.

The areas that would have housed conventional stormwater ponds, now serve as open space parks and wildlife corridors while also doubling as infiltration areas. Green spaces and transportation systems are interlinked in River Bluffs. Streets without curb and gutters will be sloped to drain into green spaces for infiltration.

Trails weaving through parks and housing clusters will give access to amenities in the community. This guides residents to centralized meeting areas like Davis Square, which will feature a post office, fitness center, playground, general store, café and pool. Both the general store and café will feature food from the on-location 10 acre organic farm. The farm will also have additional plots available for residents wanting to grow their own food.

Phase 1 of River Bluffs has been certified as a Low Impact Development (LID) by New Hanover County and State regulatory agencies. River Bluffs is a model LID and energy efficient walkable coastal community. Every effort has been made to incorporate the natural terrain into the finished product.

Significant Achievement

Old Topsail High School – Hampstead, NC



Old Topsail High School is an adaptive re-use project for an iconic Pender County building transforming a vacant historic yet run down school into a new home for a wide variety of Pender County functions. Though structurally sound and ideally located, the school had become an example of blight and disinvestment, and the building earned a spot on the Historic Wilmington Foundation's 2011 list of Most Threatened Places in the region. Saved from demolition and finding renewed life as a county building, the old school will be restored as an active hub of community activity.

With the belief that re-use is the ultimate form of recycling, the primary strategy for sustainability was adaptive re-use of the existing building. In addition to preserving a community landmark and revitalizing an abandoned space for renewed productivity, salvaging the building diverted a substantial amount of construction waste from county landfills. Environmental hazards were removed and water conservation strategies were employed to minimize water use for the facility.

In order to protect local waterways and wetlands adjacent to the property, a complete site renovation plan included a new system for stormwater control and treatment. The site design minimized impacts from construction and ongoing building uses with a new onsite infiltration basin. The new site landscape plan also ensured that any existing native vegetation which were removed were replaced in-kind.

Prior to the site's redevelopment, the neglected building was abandoned and unproductive. No environmental natural systems existed on the site and the stormwater drained directly into the local watershed. The revitalization of the building and site serve as a catalyst for re-energizing the neighborhood and returns the facility to a state of productivity and activity for locals. The re-use respects the history of the treasured building, while giving it a new future of service to the county.

Hackney Dental Office – Wilmington, NC



Hackney Dental Office was a vacant three quarter acre tract of land considered to be an infill site in which developed properties surround the location. The site had many constraints including a unique trapezoidal shape, residential properties adjacent to the site and existing natural features within the interior of the site. The natural features included a large drainage channel traversing the center of the site which drains to the headwaters of Howe Creek, a classified "Shell fishing Area-Outstanding Resource Water" and two 404 wetland areas which further restricted the buildable footprint.

All existing 404 wetlands were preserved and the large channel bisecting the site which had to be crossed was impacted as minimally as possible. By

installing a short amount of oversized pipe allowing for bury of the invert, the natural channel bottom continues through the pipe. This allows for a natural habitat for the wildlife within the channel to move freely in and out of the pipe structure.

The owner also authorized the installation of sidewalk through the site and provided a public pedestrian easement instead of installing next to the road which would have impacted the existing wetlands. Narrow driveway aisles, pervious pavement, wood decking for sidewalks and infiltration basins were used to minimize stormwater runoff from the site.

The owners of Hackney Dental office worked closely with the architect and engineer to design a residential looking office structure that would provide a smooth transition from the residential properties on the south and the large scale office building to the north while also minimizing impact to the natural features of the site.

Westgate Nature Park – Leland, NC



With the first phase completed, Westgate Nature Park offers exciting passive recreation opportunities and magnificent access to the largest contiguous open space preservation and environmental education effort in the Town of Leland. The site's scenic cypress swamps, water lily pond, wooded wetlands, pine forests and bottomland hardwoods offer initial and future phases of Westgate Nature Park huge passive recreating and programming potential that cannot be replicated anywhere else in town.

Phase 1 of the park provided a trail head, 0.3 mile multi-use trail, events lawn, nature-inspired playground and picnic area. Because of previous clearing on part of the 3.35 acre uplands, the Town set out to re-vegetate this part of the project with native and adaptive species in order to promote the nature education theme of the park, promote plant and wildlife diversity, and give a richly textured backdrop to the park's main entrance.

Educational signage provides teaching tools for plant and wildlife identification, bird watching and stormwater and native vegetation education in the swale and re-vegetated landscape buffer areas. By incorporating topics ranging from the importance of proper pet waste disposal to riparian buffers and wetland corridor preservation, the Town furthers its environmental education goal of teaching the park user how this part of Leland relates to the larger world around us and why it is important to protect the land.

The wetland preservation corridor created by Westgate Nature Park and adjacent conservation land provides a buffer between rapidly developing land and several Brunswick River tributaries. Because of the important geographic and ecological role of these sites, the Leland Parks, Recreation and Open Space Plan recommends a trail system linking all of this land as a way to meet surveyed facility needs while preserving this valuable open space. This park begins that trail system. Future plans will continue these trails to connect with the future Leland Greenway, which will one day run to the Brunswick Nature Park, a previous award winner.

Stewardship Champion Award

The Stewardship Champion Award recognizes exceptional individuals and organizations that have exemplified extraordinary vision, innovation, leadership and action for the environment in the Cape Fear Region.

LS3P

LS3P has been a leader in sustainable design since long before the phrase was popular. LS3P's legacy in eastern North Carolina dates back to 1922 when Leslie N. Boney founded Boney Architects. Widely respected for its design of durable, thoughtfully designed schools, the firm had already made a significant positive impact on the Greater Wilmington area with such projects as the renovation of historic Thalian Hall. LS3P continues to thrive with the design of highly visible projects such as the renovations to the USS North Carolina Battleship, the Wilmington Children's Museum, and the Wilmington Convention Center.

Long an advocate for sustainable strategies, LS3P has been awarded numerous recognitions from the Lower Cape Fear Stewardship Development Coalition for significant achievement and outstanding stewardship. Honored projects include the adaptive re-use of Old Topsail High School as the New Pender County Eastern Annex Building; Live Oak Bank Headquarters; Lower Cape Fear Hospice of Brunswick; Cape Fear Community College Union Station; the Wilmington Convention Center; Autumn Hall; and the Monteith Office Building. In addition to being an award-winning adaptive re-use design, the Monteith Office Building was the first LEED Gold certified project in New Hanover County, and is one of the most environmentally conscious and efficient buildings in the city.

To complement this noteworthy list of LEED-Certified, LCFS award-winning projects, LS3P has completed over a dozen other recent LEED certified healthcare, education, and commercial buildings in the area. Two major commercial projects, Live Oak Bank and IKA Works, both won recent AIA NC design awards, creating modern, inspiring workplaces that are encouraging job growth in the Wilmington area. Live Oak also won top honors for New Commercial Construction projects at the 2014 Wilmington Real Estate Summit and Awards, and most recently, a 2015 Wood Design Award.