



2009 Award Winners

Outstanding Stewardship

Lower Cape Fear Hospice – 114 Physicians Dr. (Wilmington)

Lower Cape Fear Hospice & Life Care Center designed and built a 22,000 square foot administrative facility designed to serve the organization's staffing and functional needs through the next 10 years. The applicant felt strongly about minimizing the impact of the new building on the surrounding environment, and they became very interested in implementing sustainable building practices. The construction of this project was completed in February 2009, and the agency moved into the building in March of 2009. The project was LEED certified at the gold level – the first new construction to achieve that level east of I-95. They are very excited about the project and hope to lead the way for other buildings in the area to incorporate these techniques in future projects.

Deep Point Marina – 1301 Ferry Road Southport, NC (Brunswick County)

Located on a 76 acre tract on the Cape Fear River, Deep Point Marina is the site of the new ferry terminal and center of operations for Bald Head Island Limited, LLC. The developer went above and beyond conventional construction standards to preserve the coastal character of the site. The project features innovative LID stormwater techniques that include utilization of the existing grade and the use of 27 infiltration basins and trenches. By minimizing grading and incorporating numerous infiltration basins, much of the native vegetation was able to be preserved with little irrigation. The ferry terminal itself is predominately open air minimizing the space needed to be climate controlled. An advanced lighting plan was implemented with computer controlled energy efficient measures to automatically dim at appropriate times to minimize power needs.

Significant Achievement

City of Wilmington Street Sweeper Complex – 1114 South 17th St. (Wilmington)

The new street sweeper facility, located in Downtown Wilmington, was designed as a demonstration of the importance and efficiency capabilities of green technology. The new facility, located at 17th and Marsteller, is a site that was already owned by the City and from which previous operations had been moved. The building was designed by John Sawyer Architects, and was built by Waldkirch and Saunders Company, both based in Wilmington, North Carolina. The building is designed for zero net energy consumption with two types of solar panels: Solar water panels generate radiant floor heat for the vehicle storage portion of the facility, and photovoltaic panels generate electricity so that dependence on purchased electricity can be minimized. Other techniques have been established including: natural ventilation and daylighting, artificial lighting on occupancy sensors, and a stormwater management system. But, perhaps most importantly, this is the first commitment by the City to incorporate green building elements as a primary objective of the project design and leads the way for establishing benchmarks for future projects.

Brunswick Forest (Phases 1,2,3,5 and 6) – US Highway 17 Leland, NC (Brunswick County)

This large mixed-use development is situated on nearly 5,000 acres of former timberland. Rather than constructing the site to low density stormwater standards, the developer took the initiative to design the development to the more environmentally friendly high density standard. Over 50% of the project is designated open space half of which is protected wetland. Residential lot boundaries are not platted into wetland areas, rather a buffer strip stands between the properties minimizing wetland impacts. The project features a significant amount of pedestrian amenities including an elevated footpath through a large wetland area for habitat viewing and education.

Masonboro Lodge – 4032 Masonboro Loop Rd., (Wilmington)

Masonboro Lodge is located at the corner of Masonboro Loop Road and Navaho Trail. The developer worked with City of Wilmington Planning Staff to design a mixed use project that compliments the surrounding property uses. The site has been developed with interconnected bioretention areas to retain stormwater runoff on the site. In addition, a pervious concrete parking lot and sidewalk along Navaho Trail limits the impervious surface area to 25%. One of the most notable characteristics of this site is a 33" oak tree. The building wraps around the western side of the oak with careful consideration of the tree's drip line and root system. The developer was recognized in 2009 by the City of Wilmington Tree Commission with a Tree Preservation and Landscape Award for design appropriate to the site.

Special Recognition

10 Dock Street (Fortuna Residence) – 10 Dock Street Wilmington, NC (Wilmington)

This project entails the construction of a green roof on a single family residence in downtown Wilmington. The 2,000 square foot vegetated roof consists of an impermeable membrane with a crushed slate media which facilitates the large number of various plantings. Because of its high absorption rate, there is very little water runoff and the need for irrigation is minimal. The green roof also reduces heating and cooling loads on the building by adding mass and thermal resistance value and by evaporative cooling. Durability of the roof is also enhanced with a projected 20 to 40 year additional lifespan when compared to conventional roof construction.

Butler Residence – 223 Helene (New Hanover County)

Jennifer and Tony Butler strove to build a home that was 1) “green on the inside and green on the outside,” 2) Energy-star rated, and 3) didn’t break their piggy bank.” Under the professional guidance of B + O Design Studio, they modified a house plan to fit their needs and maximize the natural features of the site. They hired Mid-Atlantic Custom Homes to build their house using the “Nature’s Envelope” concept which allows you to preserve as much of the existing landscape as possible. *They used many “green” building materials and processes that included engineered wood for supporting walls and floor trusses, Icynene open cell foam insulation, super efficient 16 SEER HVAC system with humidity controlling programmable thermostats, a sealed and insulated crawlspace, energy efficient windows and doors, solartubes to provide natural daylight, solar hot water heating system, hardi board siding, Energy-Star appliances, light fixtures and ceiling fans, CFL lights in all possible fixtures, low-flow faucets and toilets, bamboo floors, carpeting made of recycled plastic, native plants, and rain barrels.* Their home surpassed Energy Star’s annual energy cost requirements by 32.6%, with 5+ stars, and emits 36% less CO2 than the Energy Star reference house.

Brunswick Nature Park – River Road (US 133) Winnabow, NC (Brunswick County)

Located on a 900 acre tract bordering Town Creek, Brunswick Nature Park is a proposed public passive recreation park. Phase I of the project, which is nearly complete, consists of picnic areas, hiking/biking/equestrian trails, a fishing pier and a canoe/kayak launch dock. Strict riparian buffers and conservation easements on the site limit specific uses within the park to ensure protection of its natural amenities. Proposed amenities in future phases of the project include a regional environmental education center, boardwalks through environmentally sensitive areas, viewing platforms/overlooks and expanded trails and access roads.

Ridgefield – Middlesound Loop Road (New Hanover County)

Ridgefield at Middle Sound will transform a 30.71 acre tract into a low environmental impact (LID) and a low density traditional neighborhood. Ridgefield is located along Middle Sound Loop Road (#3210) in New Hanover County. Originally, Ridgefield was permitted as a High Density project, with a proposed impervious coverage of 38%. The developer, John Galarde, was hesitant to pursue the former plan that included clear cutting the forest and regrading the site and decided to redesign using LID techniques. The redesign resulted in reduction in impervious coverage to below 25%, by reducing road widths from 36 ft. to 22 ft., removing a cul-de-sac, and reducing the on-lot impervious coverage. Beyond LID stormwater practices, Green Building practices will be promoted throughout the development, natural areas will be preserved, and passive recreation will be available with walks and trails that connect the community with the adjacent neighborhood conservation preserve. The applicant believed the re-design of Ridgefield at Middle Sound, is a noteworthy example of good stewardship and smart design.