



Coastal Land Design, PLLC

Civil Engineering/Landscape Architecture

Hwy 421 Industrial Park

Client:

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Began: Dec. 2007 Completed: Nov. 2010

The Hwy 421 Industrial Park is a 13.84 acre site located off of N.C. Highway 421 in New Hanover County. Most recently a 67,804 square foot warehouse and office space was completed. CLD prepared the site plan and landscape design plan for review and approval by the New Hanover County Zoning department. This project also required engineering for a County and State stormwater permit, County erosion and sedimentation control permit and an NCDOT driveway permit. CLD prepared the necessary construction plans and performed periodic site inspections for the final engineer's certifications.

This project was a high density site and as with most high density sites in the coastal Carolinas, stormwater design was a driving factor. This project used one on-site stormwater pond to meet both NCDENR's and New Hanover County's stormwater requirements. In order to meet New Hanover County's pre-post requirements, the bleed-down orifice was designed to drain down the first 1.5" of rainfall within two (2) to five (5) days. The riser elevation satisfied both NCDENR storage volume requirement as well as New Hanover County's pre-post requirement for the 25 year storm event. The emergency spillway passed the 100 year storm event solely through the spillway as per New Hanover County regulations. CLD was able to achieve these design requirements through an innovative outlet structure design. With strategically placed weirs within the outlet control structure this extremely high density site meets all Pre-Post development requirements.

