

# **HOBBS, UPCHURCH & ASSOCIATES, P.A.**



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## ***Leith Creek Wastewater Treatment Plant*** ***Laurinburg, North Carolina***

In 1996 HUA studied the Leith Creek WWTP sludge disposal problems and recommended operational changes and needed facilities upgrades. The existing facility was unable to properly store sludge for the required length of time to meet the EPA 503 requirements prior to land application of their Class B sludge. The existing sludge digester was undersized and the sludge drying beds were inadequate to dewater the sludge during wet weather. The study evaluated the feasibility of utilizing additional sludge drying beds with third party contractor land application, contractor land application of liquid sludge, spray irrigation of sludge on adjacent property to the WWTP by WWTP personnel, and mechanical dewatering of sludge with belt presses, storage on sludge drying beds and third party contractor application of dried sludge.

The recommended plan was to improve sludge storage and digestion capability and then land apply the sludge via third party contract to permitted land at the Laurinburg Maxton Airport. The facility infiltration/inflow problems caused the sludge stored within the treatment system to be discharged violating permit limits. HUA analyzed infiltration/inflow of collection system to identified flow sources and recommended lift station upgrades and equalization facilities for the Leith Creek wastewater treatment plant. The improvements also included new grit removal facilities, new aerated sludge digestion facilities with centrifugal blowers, and permitting of the selected land application option. The construction of the improvements were completed and placed into operation in 1997.