

Designing a New York State Department of Health Site Plan for MBL Engineering

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Extended Abstract

The Black River Bay Campground, located in Dexter, New York, founded in 1985, is a waterfront campground with approximately 125 sites along the Black River. It is also one of many areas affected by the flooding in the Spring of 2017 due to high water levels in Lake Ontario and the St. Lawrence River. As a result, the NYS Department of Health (DOH) has taken a course of action to maintain safety by inspecting water systems in the affected area. These extreme conditions require engineering intervention to properly prevent, design, and repair damages. After an inspection on September 26, 2017, DOH mandated to monitor and upgrade Black River Bay Campground's water usage and septic systems, and to provide an updated site plan showing three decades of expansion.

Black River Bay Campground hired MBL Engineering of Sandy Creek, New York, to inspect, design, and remediate the deficiencies addressed by the DOH. As engineering interns of MBL Engineering, we are providing and designing a DOH Campground site plan, by utilizing LIDAR, Google image mapping, surveys from 1982 and 1985, Solidworks, AutoCad, and newly gathered field data. The main process undertaken in this research is to encourage retention in the engineering field. As engineering interns, our takeaways will be discussed. These include reducing client expenses, initiating collaborated relationships in the community, and an enhanced preparedness for engineering consulting.