

Cayuga Lake, New York

Lake Source Cooling



Project: Cornell's, Cayuga Lake, Source Cooling.
Owner: Cornell University
Application: 63" DR20 Cooling Water Intake Piping
Engineers: Gryphon International Engineering Services Inc.
Contractor: Stolt Comex Seaway Inc.



Cornell University is situated on the southern shores of deep, cool Cayuga Lake. When the campus' conventional air conditioning system was ready for replacement, Cornell decided to draw the 39°F water from a 250 foot depth. The cool water intake design utilized 10,400 feet of large diameter 63 inch (1600 mm) Sclairpipe. The pipe was manufactured to stand the test of time, with a wall thickness greater than 3 inches. The 58-foot lengths of pipe were butt fused on shore, forming 2,000 foot continuous leak-free pipeline sections. These prefabricated sections were then flanged together and, with the aid of concrete ballast weights, sunk into position on the lake bottom.

The entire cooling loop was completed and installed in 1999 and became fully operational in August 2000.