US Army Corps of Engineers ® New England District





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For More Information:

Write:

Park Manager U.S. Army Corps of Engineers Cape Cod Canal Field Office P.O. Box 1555 Buzzards Bay, MA 02532-1555

Phone:

Cape Cod Canal Field Office (508) 759-4431 Cape Cod Canal Visitor Center (508) 833-9678

Web site:

www.nae.usace.army.mil/recreati/ccc/ccchome.htm



Pole #260: Radar Tower

The primary mission at the Cape Cod Canal is to ensure safe movement of vessels through the waterway. The Corps of Engineers utilizes a Centralized Marine Traffic Control (MTC) System to help accomplish this task.

The radar tower here is part of the fully integrated system that includes radar and camera surveillance, VHF radio communications and wind, air and water temperature and tidal current sensors. The conical shaped disks that you see are microwave dishes used to transmit the information.

An alert team of marine traffic controllers monitor the MTC on a 24-hour basis.



Pole #290: Stephen. R. Jones

On June 28th 1942, while on route from Virginia to Boston, the *Stephen.R. Jones* struck ground on the northern bank of the Canal. The 354-foot ship carrying coal, sank to the Canal's bottom at this location.

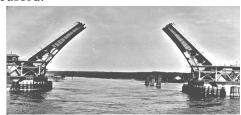
During World War II, the Canal was an important navigation route for U.S. Navy ships. The sinking of the *Jones* made the Canal impassable. An immediate resolution to this problem was needed. It was determined that dynamite was the best means to remove the submerged ship.

On July 4th 1942, people gathered along the Canal to watch a special kind of fireworks display. They watched as the first charges of dynamite were placed upon the sunken ship. Work to remove the wreck began with a bang! After 28 days of explosions the Canal was once again fully operational.



Pole #340: Old Bourne Bridge Abutment

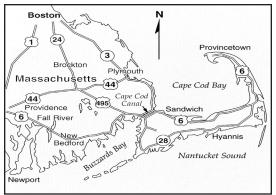
The large concrete wall is the the old Bourne Bridge abutment, built by Belmont in 1911. The Canal's original bridges were drawbridges, which were raised for passing ships. The Bourne Bridge had trolley tracks, providing service from Monument Beach to New Bedford.



The bridges over the Canal were completed in 1935. They replaced the older drawbridges to accommodate the improvements, such as the widening of the Canal, made in the 1930s. The older bridges only provided an opening of 140 feet for vessels to pass. Today's bridges provide a horizontal vessel clearance of 480 feet.

It was the time of the Great Depression. The reconstruction efforts along the Canal provided much needed jobs. More than 700 people were hired to work on the bridges.

The total length of the Bourne Bridge is 2,384 feet making it almost 1,000 ft longer than the Sagamore Bridge.



Pole #355: Aptucxet Trading Post

Before the Canal's existence, the Manamet River flowed through much of this isthmus. Located at this point along the river, was the first trading post established outside of the Plymouth Colony (1627). The Post provided a place for Wampanoag Indians and Dutch settlers (from NY) to trade with the Pilgrims. Miles Standish of Plymouth Colony recoginized the importance of this route to trade, and was the first known to propose a Canal through this isthmus. Today, The Bourne Historical Society operates the Aptucxet Trading Post as a museum.



Pole #375: The Vertical Lift Railroad Bridge

The Railroad Bridge, completed in 1935, replaced the original railroad bridge over the Canal. The original had two tracks and lifted to one-side (north side) using a single counterweight.

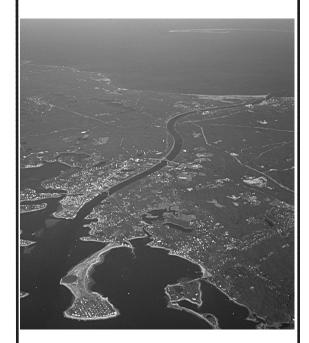
With a center span of 544 feet, the current railroad bridge was the largest vertical lift bridge in the world when constructed. It is still one of the longest today. The bridge is operated by Bay Colony Railroad, and is owned by the Army Corps of Engineers. Its usage has varied over the years. Today, its primary use is to haul trash off-Cape daily to a waste to energy facility in Rochester, MA.

Four, 200 hp engines are used to raise and lower the bridge. As the 2,200 ton center span is lowered, 1,100 ton counterweight blocks rise in each tower.



Purpose of the Cape Cod Canal

The primary purpose of the Cape Cod Canal is to provide a safe navigation channel for vessels seeking the shorter and safer Canal route through the isthmus of Cape Cod. On average, the Canal saves 135 miles of open sea travel out and around the Cape Cod peninsula. Since 1928 the U.S. Army Corps of Engineers has operated the waterway toll free to vessels adequately powered for canal passage.



The Corp's Mission

The U.S. Army Corps of Engineers is a world wide organization that provides engineering services and construction support for a wide variety of military and civil projects.

The Corp's civil mission is to develop and manage the country's water resources. Its projects reduce flood damage, improve harbors and navigation channels, protect stream banks and shorelines, generate hydroelectric power, and preserve and safeguard the environment.

Canal Bike Hike

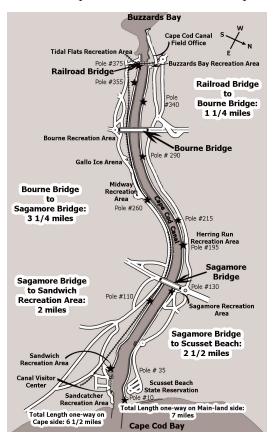
The U.S. Army Corps of Engineers welcomes you to the Cape Cod Canal. You're invited to exercise your body and mind as you journey along the waterway. Discover the Canal's unique history and features while you bike, skate, or walk along the service roads on either side.

Take this guide with you to explore the various points of interest along your way. Whether you're on the North (mainland) side or the South (Cape) side, traveling East towards Cape Cod Bay or West towards Buzzards Bay, biking all or part of the service road, this guide will serve as an informative companion.

Where do I stop?

Look for pole numbers. These are numbers that are posted on the navigational lighting poles that run the entire length of the service roads. The numbers start on the east end near Cape Cod Bay and increase as you head west towards Buzzards Bay. This guide may be used no matter where you start, just match up the points of interest with the pole numbers.

• Numbered poles are about 500 feet apart



Safety First!

In order to ensure the safety of yourself and other visitors when bicycling or in-line skating along the Canal's service roads there a few things to keep in mind:

- Always wear the recommended safety equipment, and be sure it fits properly
- Go slow
- Stay to the right side of the road
- When passing slower moving traffic, make sure to announce that you are about to pass on the left side
- Winds on the Canal can be strong at times. Be careful not to tire yourself out
- Drink plenty of water, and rest often
- When stopping, move to side of the road
- Be safe, respect others, and have fun!

Points of Interest



Pole #10: Scusset Beach Breakwater

In May of 1909, The Boston, Cape Cod & New York Canal Company, owned by August Belmont, with Chief Engineer William Parsons, began work on the Cape Cod Canal. Large boulders were placed at the east end of the Canal to help control sediment build up across the Canal's eastern entrance.

This marked the first phase of the Canal's creation. The first one-ton chunk of granite brought in from Maine, was placed in forty feet of water on June 19, 1909. The final length of the breakwater is 3,000 feet, and it weighs about 325,000 tons.



Pole #35 East Mooring and East Boat Basin:

In stormy or foggy weather, ships that need to wait for improving weather conditions will use the wooden pilings called dolphins at the mooring basin.

The East Boat Basin or what is now known as Sandwich Marina, provides a variety of services for both commercial and recreational boaters. The facilities at Sandwich Marina include a boat ramp, a fuel dock, and boat slips for commercial and recreational vessels. It is also the home for one of the most lucrative commercial fishing fleets on the east coast.

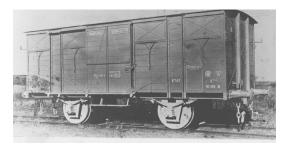
To the west of the marina is the Canal Electric Plant. The privately owned and operated power plant generates most of its electricity by burning crude oil. It is also capable of burning natural gas from pipes that run under the Canal. It is not uncommon to see a large tanker docked at the plant unloading oil. Power generated by the plant is used by many homes and businesses around Massachusetts.



Pole #110: Old Sagamore Bridge Abutment and Keith Car Works Co.

The Keith Car Works
Manufacturing Corporation was once the largest employer on Cape Cod. At their peak the company employed up to 1400 people and their factory buildings stretched for about 1 mile. Keith Car Company began making sleds which were towed by horses, and later patented and produced the 40-8 boxcar design used by trains.

Keith Car Company manufactured products at their Sagamore location from the mid 1800's until 1928. The last Keith Car Co. building was removed in the 1930s when the Canal was widened.



The concrete wall with an A-framed house on it is the last remaining piece of the original Sagamore Bridge, in use from 1913 to 1935. The other abutment cannot be seen because it was removed when improvements were made to the Canal after the Government purchased it in 1928.

Pole #130: Sagamore Bridge

The Sagamore Bridge and Bourne Bridges are similar in many ways. They were built between the years 1933-1935. Their elevated design was chosen to replace Belmont's drawbridges as a way to improve the movement of vehicle and vessel traffic.

They have a vertical clearance of 135 feet and a horizontal clearance of 480 feet for vessels traveling under them. The only difference between the two highway bridges today is that the Sagamore Bridge is shorter, with a total length of 1,408 feet.

Pole #195: The Herring Run

River Herring make their spring migration up the Herring River into Great Herring Pond in Plymouth to lay their eggs each year. Unlike other species of fish, adult herring return to the ocean after spawning. Juveniles enter the ocean at the end of the summer. Herring are an important part of the ocean food web and they also play an important role in the economy. They are used for all kinds of products from fertilizer to food.

The Corps of Engineers built the run in 1936 in order to restore herring populations that were cut off from their spawning grounds by Belmont's Canal.



Pole #215: Digging in the Dry

Progress building the Canal was slowed when huge 100-ton boulders were found throughout this area. In order to make up for lost time, the Chief Engineer Parsons recommended utilizing steam shovels and railed dump cars to dig in this dry section, in addition to the dredges that were already digging from either end.

Just to the east of pole 235 is the location where Belmont ceremoniously mixed the waters of Cape Cod and Buzzards Bays on April 29, 1914. This was where the last earthen dike separating the two bays was located. Belmont stated "May the meeting of these waters bring happiness and prosperity to our country and save some of the misery which the waters of the Cape have caused in the past." Then Belmont and Parsons shook hands, removed a shovelful of earth and allowed the waters from each bay to meet for the first time.

