Report on SNEC-SIA Tour of Sites in Chelsea, MA, April 15, 2005

The tour included the factory of Chelsea Clock Company; offices and maintenance garage of Massport’s Tobin Bridge; and several buildings on the old U.S. Naval Hospital grounds in Chelsea, Massachusetts. From research I’ve done on architect-engineer Alexander Parris and a survey of industrial sites in Chelsea I completed some years ago for the Massachusetts Historical Commission, I found some neat places in Chelsea and have wanted to show people a few highlights ever since. Since my survey, one site – Strahan wallpaper company – has folded and several other buildings have been demolished. It seemed that this tour had to happen now or never, so I organized it.

First stop, Chelsea Clock Co., which manufactures a variety of styles of clocks and barometers today, but its most famous product is and has been the analog, manual ship’s bell striking clock. The company still occupies a factory at 284 Everett Ave. in Chelsea, which Joseph Eastman built in 1896 after Chelsea businessmen persuaded him to move his clock-making from Roxbury (original building still standing, plus a 1942 extension and smaller additions). Eastman quickly failed, and the following year, under Charles Pearson, Chelsea Clock Company was organized. There was a market at the time for novel sorts of clocks, and Chelsea Clock Co. was the first to introduce one that struck ship’s bells. This happened after Eastman lost the company; nevertheless, one chronicler of the firm suggests that his clock designs, along the with factory, “marked the
physical and technical beginnings of the Chelsea Clock Company.” But it “was the business talent of Charles H. Pearson” that sustained the new company. Over the years, the company made a great variety of clocks, and timing and measuring devices. Its manual time-only clocks were widely used on ships and by the federal government. The company has only a small staff today compared to past times and repairs as well as manufactures clocks. A website with information about the company’s history (and source of the quote above) is http://www.chelseaclockmuseum.com/index.html

On our tour, we first saw how brass cases of the clocks were made. A worker fed rough-form clock cases into an automatic milling machine, which ground the brass to the size required. Next we saw a room filled with ancient-looking machines that made tiny clock parts. In the face-making department, the faces for the high-end ship’s bell clocks were made to exacting standards. A worker demonstrated how a face was silvered and showed us what was considered a defect, which was practically invisible to a layperson. All these operations took place on the ground floor; parts were transported by a dumbwaiter to the assembly rooms on an upper floor. There we saw workers assembling new clocks and repairing old ones. We met a woman who specializes in putting together ship’s bell clock movements who has been working for the company for over 50 years. The next stop on our tour was the Tobin Memorial Bridge. Spanning between Boston (Charlestown) and Chelsea and carrying Route 1, the bridge opened in 1950. The main structure is a cantilevered truss, 1,525 feet long. The part crossing the Mystic River includes an 800’ uninterrupted center span. Its two decks, each with three travel lanes, are stacked one above the other, the northbound deck on the bottom and southbound on the top.

First we visited the bridge’s maintenance facility, which is located near the Chelsea end of the bridge. It is here that the trucks and equipment workers use to inspect and maintain are stored.
The most notable thing about these trucks is their enormous size. One truck had a bucket on an articulated arm that could maneuver inspectors so they could see under the bridge deck.

Next we crossed the bridge to the Boston side and snaked our way to a parking lot under an approach to the bridge. Here we took the elevator to the bridge offices. Yes, the administrative offices are in the air, hanging from the upper deck, underneath the toll plazas. The bridge manager presented a slide show about the bridge and its history. Originally called the Mystic River Bridge, it was built by an independent authority and financed by revenue bonds, which are paid off with tolls. Charles A. Maguire & Assoc. of Boston and J. E. Grenier Co. of Baltimore designed the bridge. The slim (36’ wide road width), double-decker design was chosen to reduce the amount of land that had to be acquired and the number of people displaced. As it was, many homes were taken; many of these were actually moved to other lots in the city. After the slide show, we went to the upper deck to see the toll plaza and a counting room, where the income from this veritable cash machine is briefly stored.

One memorable story we heard was about a meeting some of the Tobin Bridge staff had with colleagues in San Francisco. During the meeting, the San Francisco people became alarmed; “did you feel that?” they demanded to know. The Tobin people, so accustomed to vibration in the offices on the bridge, hadn’t noticed an earthquake.

The last stop on our tour was the old Naval Hospital grounds in Chelsea. Between 1832 and 1836, the U.S. Navy built a hospital for enlisted personnel on a hill surrounded by the Mystic River and Island End River. Alexander Parris was the architect of the hospital (it is the large building in the center of the picture of the Tobin Bridge). Later, a marine hospital (for civilian seamen) was built further up the hill; over the years, a large hospital complex developed. In 1940, the marine hospital moved to a new location, and finally, in 1974, Chelsea Naval Hospital closed. The site, now called Admiral’s Hill, has been extensively redeveloped for residential use.

Fortunately, several significant buildings survived, and we visited these. Part of the hospital grounds, along Island End River, had been used by the Navy to store ordnance, and three historic ordnance buildings are still standing there. One is Alexander Parris’s 1834-37 magazine (see my article on Parris in the last SIA NEC Newsletter, vol. 26 no. 1, 2005). The owner would not allow us inside to view the vaulted ceiling. But the friendly owner to two adjacent, roughly contemporaneous buildings did let us in; one of these has a groin vaulted ceiling.

Our group continued the tour on foot, passing Parris’s Naval Hospital, which has been converted to residential condos, and then bushwhacked our way up a hill to the 1855-57 marine hospital. Designed by Ammi Young, then Supervising Architect of the Treasury Department, this building is fireproof, and the floors throughout the building are made of iron beams and shallow brick arches. We were able to see the arches in a condo,
which a friendly resident let us in. The building has a fine cast iron arcade on its south side, and an ugly Mansard roof that was added in the 1860s.

The buildings at the old Naval Hospital grounds can be seen from the outside and are worth a stop when you are next in Chelsea.

Sara Wermiel

Interior of Alexander Parris’s powder magazine: granite post supporting ribs and shallow domed vaults. Photo by S. Wermiel