BY JIM BENNETTE

A New Copper Top

On Google Maps, this landmark is called Holbrook Tower Windmill, though most locals call it the Hyannisport Lighthouse, or even the "Salt Shaker." But it's actually a former water tower, built in 1907 to supply water to the nearby Holbrook Cottage, a private home perched on the village waterfront. When the sunlight reflects off its new copper roof, it's easy to understand why visitors to Cape Cod's Hyannisport, Mass., might misidentify this structure.

We installed that roof last year as part of a major renovation of the tower itself. Once, the tower was equipped with a 14,000-gallon cypress water tank on the top level and an area for coal storage in the base, but it had been converted to an artist's studio in the 1980s. When the current owners purchased the property in 2012, they had plans to renovate the tower along with the house and carriage barn, a project that picked up steam in 2020. I became involved after the general contractor—E.B. Norris—removed the tapered octagonal roof and trucked it off-site to rebuild the roof framing and install new sheathing **(1)**.

We were fortunate to be able to do most of the copper work off-site too, starting by covering the new sheathing with Carlisle WIP 300HT, a high-temperature, self-adhering roofing underlayment suitable for use under metal roofs. Next, we installed a copper drip edge that we had fabricated around the perimeter of the roof, sealing the drip edge to the underlayment with Zip System flashing tape applied over the drip-edge flange **(2)**.

We fabricated the drip edge from cold-rolled 20-ounce sheet copper from Revere Copper Products, the same material we used for the tapered roof panels. Following the project architect's specifications, we joined the panels together and to the drip edge and hips with flat-lock seams, using as few soldered joints as possible **(3)**.

Because the octagonal roof needed to be lifted back into place on top of the tower with a crane, the carpenters omitted sheathing from the very top of the roof so that the riggers could attach the crane's cable directly to the rafters. They also fabricated a separate bell-shaped finial to match the original out of solid pressure-treated lumber that we clad with soldered copper panels. The finial has a hole bored through the center for a solid copper lightning rod, which is attached to a braided copper wire that extends all the way down through the structure to a rod driven into the ground **(4)**.

After the riggers lifted the roof into place and carpenters reattached it to the 60-foot tower, we installed the final course of sheathing, membrane, and copper roofing, working from an aerial lift **(5)**. Finally, we installed the finial, carefully soldering it in place so that the new roof would withstand another 100 years of getting hammered by coastal wind, rain, and sun **(6)**.

Jim Bennette owns and operates J Bennette Roofing Inc., in Sagamore Beach, Mass.


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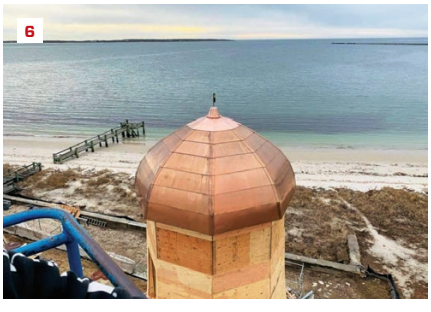
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Photos by Jim Bennette and Tim O'Neill