

Fall 2017 Baldwin Trophy Winner

Tom Oxnard's Charles River Drawbridge



I model a freelanced version of the Boston and Maine RR from Boston north. One of my expansions was from Boston across a waterway into the Boston Yard. I initially made this a two track bridge over a river with a rural scene on both banks. At some point in the future my intent was to model the Charles River and its Draw Bridge with Signal Tower A to define the scene and location.

I started the project by going to Boston and taking a few dozen photographs of the Draw Bridge #1 over the Charles River where you can get very close to it. I also found several photos of it on the internet. It is a bascule bridge built in 1931. I used a Walther's bascule bridge kit and the NMRA gauge to determine the dimensions, and then drew accurate plans for construction.

I used parts from the Walther's bridge to build the sides of the "leaf". Each side is a different length. This is a complex structure made of solid box girders, large I-beams that were scratch built, and larger and smaller laced girders from Central Valley Model Works. At every step I would need to study my many photographs to see how it all fit together.

The large cement counterweight and the "quadrants" are made from .020" Styrene. The base structure supports all the weight of the bridge. Each "quadrant" rests and rolls on two large I-beams made from .040" Styrene. The power cables are made from one 22 gauge solid copper wire for stiffness and three 30 gauge coated wires.

The bridge sits on large cement piers made from Styrene tube, and many wooden piers made from 3/16 inch dowels. Everything below the high tide line has sawdust glued on to represent some sea weed. This was then painted GN Empire Green.

To complete the scene on the layout I made the river from Envirotex and added stone wall abutments and a scratch built Signal Tower A. Construction article in Railroad Model Craftsman, Sept 2018, page 38.