Creating the Riverhead Archway: A Public Art Project

By Spirit Ironworks, Inc.

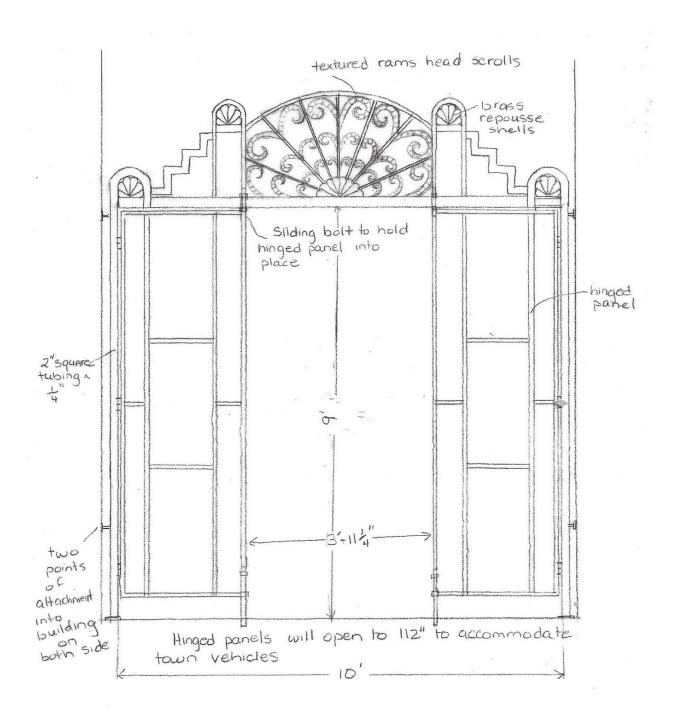


We were approached by the Town of Riverhead Alternate Transportation Committee to design and build a decorative archway and gate for a busy alleyway located on Main Street. This project was sponsored by the Cornell University Cooperative Extension of Suffolk County. The goal of this project was to block off the alleyway to automobile traffic while promoting a visually interesting downtown environment that encourages pedestrian traffic.





Our design team, led by
Rachel Miller, was inspired by
the Art Deco façade of the
Suffolk Theater. This historic
venue was designed in the
1930s by acclaimed architect
R. Thomas Short. We were
particularly drawn to the
design of the building's
pediment. We chose to
incorporate a fan shaped grille
consisting of scrollwork and
repoussé scallop shells.



Here is a composite hand rendering of the final design that was chosen by the committee. The lower portion was hinged to allow town vehicles to enter and exit the alleyway for snow clearing and maintenance work.





(Click on photo to view video)

The horizontal bar was hot forged in a 100 ton screw press to give it a corrugated texture that referenced the tile work on the pediment. This is one of the many unique capabilities possessed by Spirit Ironworks. Our company is able to work outside of the common "cut and paste" fabrication methods that have become the industry norm.





Here is a close up of the hand forged cane bolts and latch pulls that were built for the arch. These are typical of the level of detail that goes into our projects. The reason for forging our own hardware was twofold; there was little hardware available that was sufficiently robust for public use. Furthermore, the little that was available was not in keeping with the overall spirit of the design and would have been unattractive.

Here, one of our smiths is wrapping a "ram's horn" scroll around a custom made scroll making tool. Even with the aid of this mechanism, the hammer and anvil are required to make the scroll "just right".







While our smiths were hard at work, one of our fabricators had laid out a full sized CAD drawing of the archway. This drawing was generated in house by our design team and was accurate enough to work directly off of. This allowed our fabricator to work efficiently without any second guessing. In the in interest of productivity, some of the flat elements were CNC waterjet cut and welded into the archway frame.





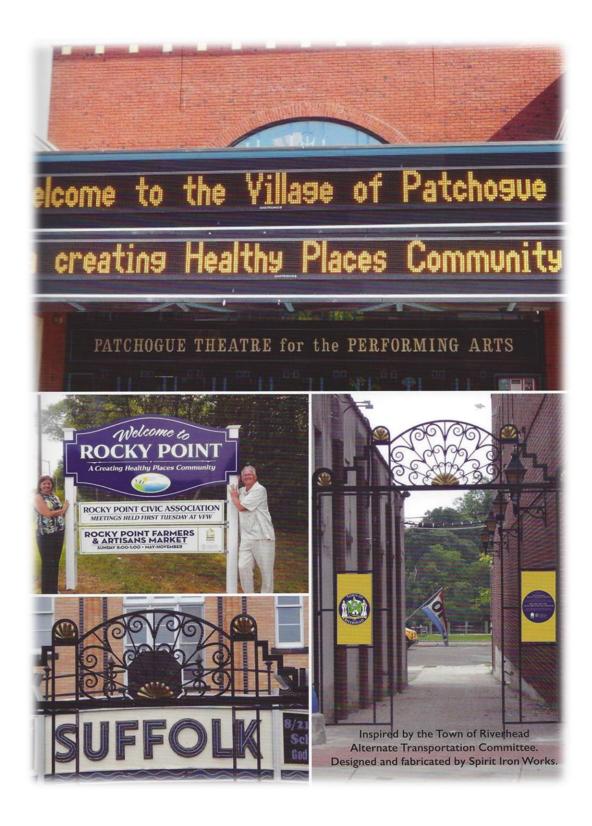
Once the scrollwork was forged, it was trimmed and fit into the grille. At this time, our metalsmith began work on the repoussé scallop shells. The first step was to hand hammer veins into the blank. The areas between the veins were then embossed to give the shell body and depth. Repoussé is an ancient technique dating back thousands of years to the very beginnings of metalwork. Many examples of this craft are found in the tombs of kings and pharos. The modern proclivity for clean lines and machine made surfaces have ejected this craft from its once lofty seat in architectural metalwork.





Here is an image illustrating the progression of the repoussé from featureless blank to finished piece. Shown in this image are the various tools used to form the scallop shell. Most of these tools were made in house specifically for this type of work. These finished scallop shells were then carefully attached to the archway in such a way to conceal the fasteners.





The Cornell Cooperative Extension of Suffolk County and the Town of Riverhead were delighted with the final product stating that the archway was a magnificent addition to downtown Riverhead.



Here we see the finished archway in all of its glory for the people of Riverhead to enjoy for many years to come! We at Spirit Ironwork, Inc. are proud to have lent our talents to such an interesting project and we hope you like it too!