

Joanna Furnace Complex Documentation and Reconstruction



Joanna Furnace and Engine House in ca. 1920. (Hay Creek Valley Historical Association)



Joanna Furnace and Engine House in 1997. (Eric Elmer)

Background

The Hay Creek Valley Historical Association's (HCVHA) mission is the stabilization and restoration of the 1898 Joanna Furnace. In 1979 the Bethlehem Steel Corporation deeded the historic nineteenth-century charcoal blast furnace, located in Robeson Township, Berks County, Pennsylvania, to the organization. Since that time, HCVHA's activities have included archaeological site investigations and the stabilization of the furnace and other extant structures. To assist in these efforts, the organization is developing a master plan for the restoration and/or reconstruction of the site to its late-nineteenth-century appearance. To accomplish this end, the HCVHA needed documentation of the furnace and the remaining outlying buildings to the highest level of Historic American Building Survey (HABS)/ Historic American Engineering Record (HAER) standards.

Scope

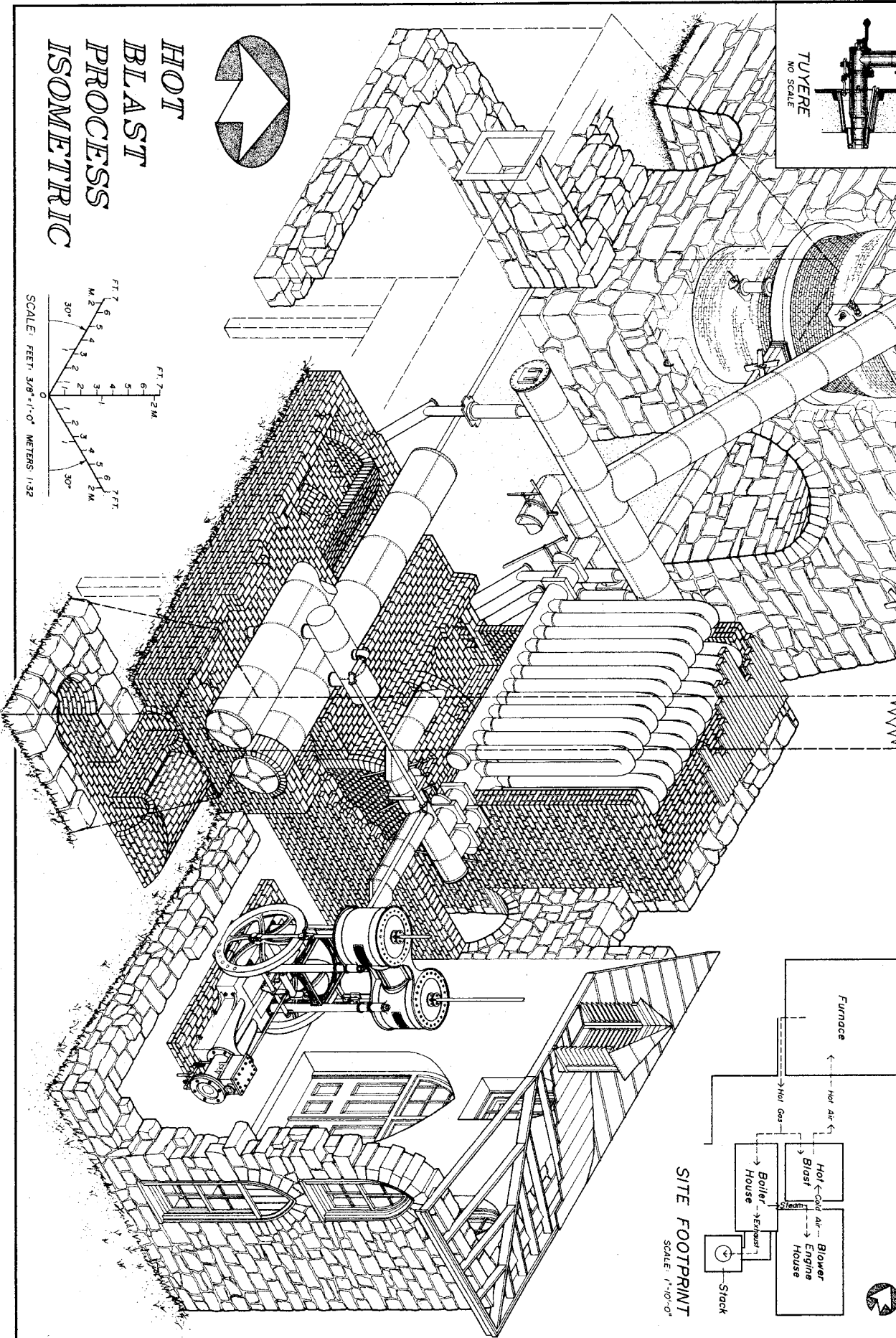
In a multi-year project, the Institute for the History of Technology and Industrial Archaeology documented the Joanna Furnace and its outlying buildings with archival-quality drawings.

Results

The Institute produced a nine-drawing set of Joanna Furnace, including a site map; furnace plan, elevations, and sections; an isometric of the furnace's tie-rod system; site sections; and isometrics of hot blast and furnace-charging operations. The HCVHA is making use of the drawings for grant applications, restorations, reconstruction, on-site interpretation, and in its publications.

Principal Investigator: Lee R. Maddex

Isometric drawing showing the Joanna Furnace and its hot blast stove, boilers, and blowing engine c. 1898. (Delineated by Eric Elmer and Paul Boxley)



**HOT
BLAST
PROCESS
ISOMETRIC**

