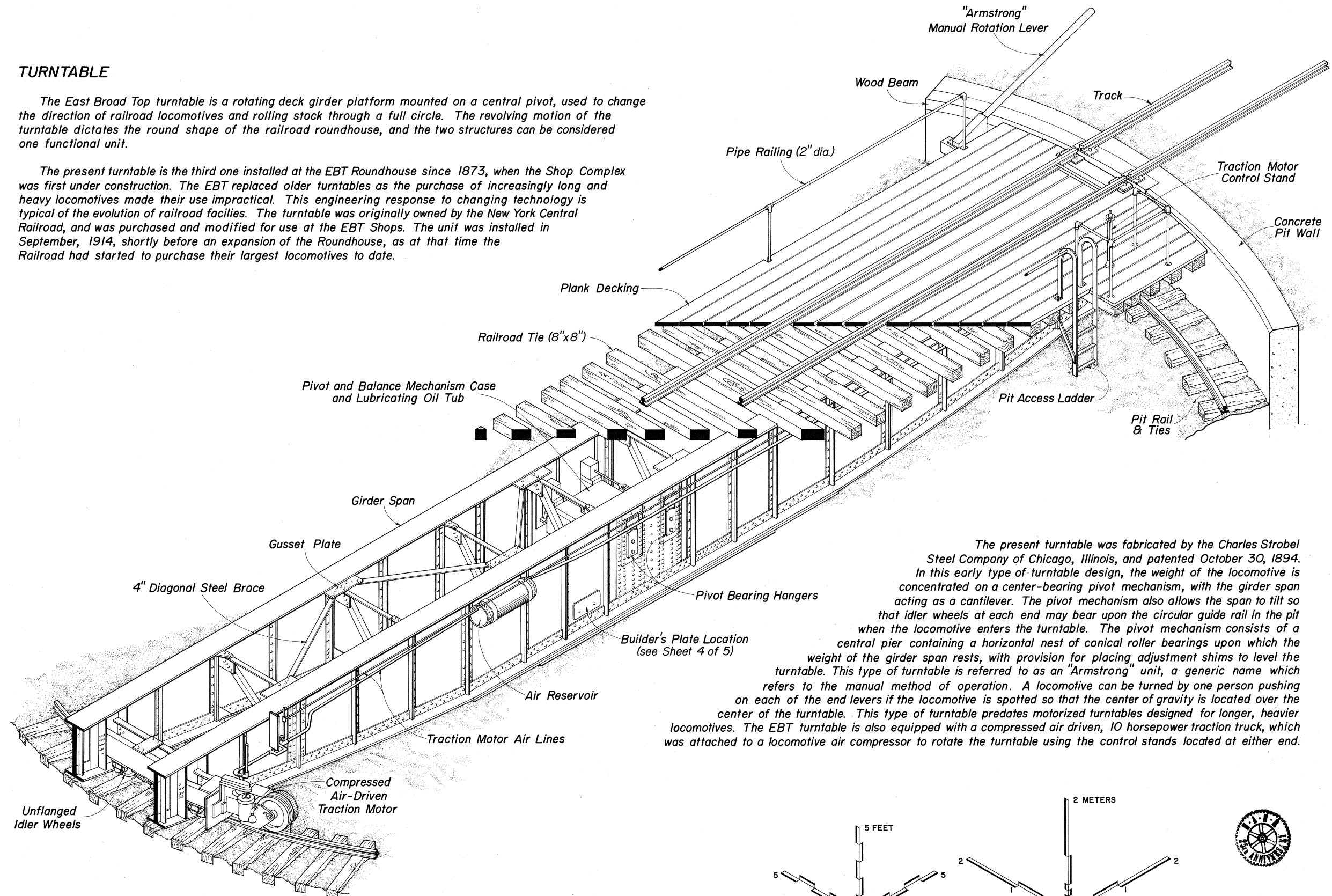


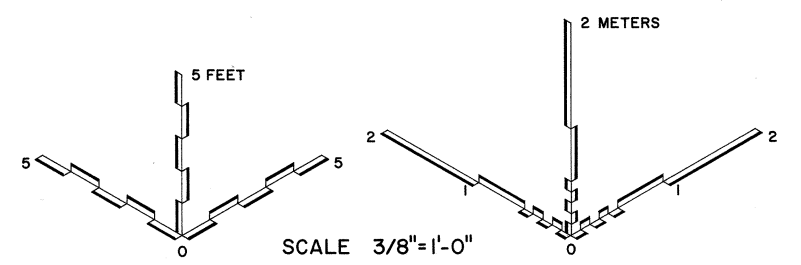
TURNTABLE

The East Broad Top turntable is a rotating deck girder platform mounted on a central pivot, used to change the direction of railroad locomotives and rolling stock through a full circle. The revolving motion of the turntable dictates the round shape of the railroad roundhouse, and the two structures can be considered one functional unit.

The present turntable is the third one installed at the EBT Roundhouse since 1873, when the Shop Complex was first under construction. The EBT replaced older turntables as the purchase of increasingly long and heavy locomotives made their use impractical. This engineering response to changing technology is typical of the evolution of railroad facilities. The turntable was originally owned by the New York Central Railroad, and was purchased and modified for use at the EBT Shops. The unit was installed in September, 1914, shortly before an expansion of the Roundhouse, as at that time the Railroad had started to purchase their largest locomotives to date.



The present turntable was fabricated by the Charles Strobel Steel Company of Chicago, Illinois, and patented October 30, 1894. In this early type of turntable design, the weight of the locomotive is concentrated on a center-bearing pivot mechanism, with the girder span acting as a cantilever. The pivot mechanism also allows the span to tilt so that idler wheels at each end may bear upon the circular guide rail in the pit when the locomotive enters the turntable. The pivot mechanism consists of a central pier containing a horizontal nest of conical roller bearings upon which the weight of the girder span rests, with provision for placing adjustment shims to level the turntable. This type of turntable is referred to as an "Armstrong" unit, a generic name which refers to the manual method of operation. A locomotive can be turned by one person pushing on each of the end levers if the locomotive is spotted so that the center of gravity is located over the center of the turntable. This type of turntable predates motorized turntables designed for longer, heavier locomotives. The EBT turntable is also equipped with a compressed air driven, 10 horsepower traction truck, which was attached to a locomotive air compressor to rotate the turntable using the control stands located at either end.



TURNTABLE
ISOMETRIC

DELINEATED BY: SUSAN RYAN, ISABEL YANG, THOMAS M. BEHRENS, 1994
 SOUTHWESTERN PENNSYLVANIA RECORDING PROJECT
 NATIONAL PARK SERVICE
 UNITED STATES DEPARTMENT OF THE INTERIOR
 EAST BROAD TOP RAILROAD & COAL CO. ROUNDHOUSE c.1894
 PA. STATE ROUTE 994 (MEADOW STREET) WEST OF U.S. ROUTE 522
 HUNTINGDON COUNTY PENNSYLVANIA
 HISTORIC AMERICAN ENGINEERING RECORD
 SHEET 5 of 5
 PA-127-B
 IF REPRODUCED, PLEASE CREDIT: HISTORIC AMERICAN ENGINEERING RECORD, NATIONAL PARK SERVICE, NAME OF DELINEATOR, DATE OF THE DRAWING