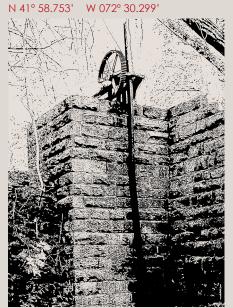
# 1. Raceway Gates



This enormous dam once held back the Scantic to supply power to a dozen mill buildings along its raceway and canal. The raceway section of the dam begins here and flows about half a mile downstream.

The harmon

#### 2. Sluice Gate and Dam



In 1843 Augustus Hazard bought a controlling share of Allen Loomis's powder mills in Hazardville. Loomis along with several workers, left and established the Enfield Powder Company here in Scitico. Five years later, Hazard would buy out Loomis again and add this facility to the Hazard Powder Company.

On top of the dam is an old gate mechanism which opened a single sluice that was used when the river was high. In the active days of the mill, the river flowed over this dam.

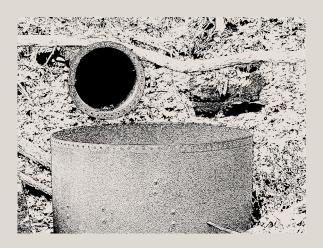
# 3a. Dam Profile



A cross section of the dam can be observed near the river. The dam is constructed of concrete and large stones. It is thick at the bottom and tapers to be more narrow at the top. This was to withstand the variable pressure of the water depth. Deeper water exerts more pressure on the structure, therefore, more strength was needed at the bottom of the dam.



#### 6. Press Mill



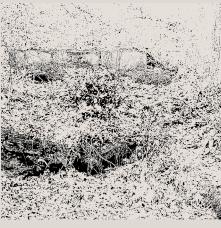
This is the remains of the turbine housing and foundation of the Press Mill. The Press Mill was used to remove the water from the powder mix. The presses were operated with hydraulic powered presses. They created large cakes of black powder called press cake.

## 7. Rolling Mill One



Mixing was done in a Rolling Mill also called the Wheel Mill. These mills had two large vertical rolling mill stones or cast iron wheels placed on top of a arge bed plate with a trough around it. These arge wheels would turn in a circle around the bed, crushing and mixing the ngredients together under their great weight. These were used for larger amounts of powder (over three hundred pounds). Little is left of the Rolling Mills in Scitico. Look for foundation stones near the beginning of the canal.

#### 8. Rolling Mill Two



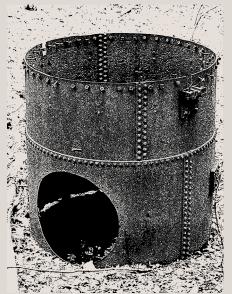
The Rolling Mills in Scitico exploded several times. The first was in 1853 and killed William Murry. John Burns was killed when both Rolling Mills exploded in 1857. In 1868, Frank Richardson met his demise in one of these rolling mills.

#### 3b. Dam in the River



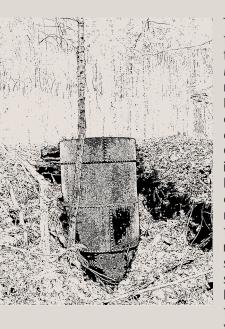
Large pieces of the dam are scattered within the river and along both banks. The dam once spanned this area of the river and channeled the water into the raceway or over the spill way of the dam.

#### 4. Glazing Mill



This is the remains of the turbine housing and foundation of the Glazing Mill. For high quality powders, like sporting powder, it would go through a process called glazing. It was put into a barrel for a number of hours and rotated. The rotation would create heat further drying the powder. Graphite was added to the mixture which made the powder more water resistant. It also gave the powder a glossy sheen, and this identified it to the customer as a high quality powder.

#### 5. Graining Mill Turbine Housing



This is the remains of the turbine housing and foundation of the Graining Mill. After the powder was made into cakes at the Press Mill and thoroughly dried in the Hot House, the cakes were brought to the Graining Mill (A.K.A. Corning Mill) where they were broken up into smaller chips by wooden hand mallets, or by running them through zinc rollers. The resulting pieces would be sifted by workers through screens and depending on how fine the grain was, it then was classified for various uses.

9. Hydraulic ram





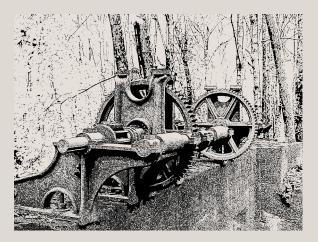
The ram worked by allowing a strong flow of water through a pipe. This force drove the water towards an opening that would close a valve due to the water pressure. When the valve was closed it forced the water into an upper chamber where it flowed out into the higher canal for use.

10. Bridge Foundation

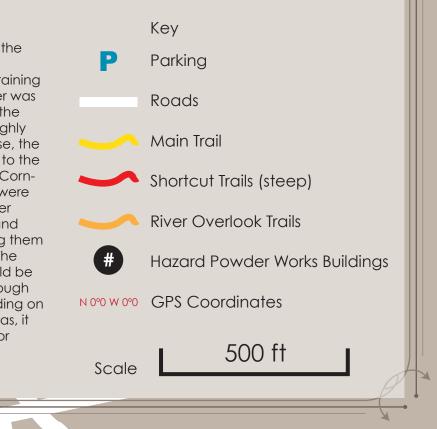


This foundation is viewable from the Rolling Mill along side the river. There was a road that crossed the river here for access to the powder works. The foundation on the powder works side of the river is all that remains.

### 11. Raceway Controls



These controls would have been used to control the water level in the raceway, and to power the hydraulic ram. The ram moved water from the raceway into the canal where it could be used to power the mills.



# Scantic River State Park Enfield, Connecticut **Scitico** Trail Map

Includes a historic tour of the Hazard Powder Company 1835 - 1913





The large openings at the base of the raceway give an indication as to how much water flow was used to power the hydraulic ram. The large raceway was a water storage area that fed the mills in the Scitico powder works. Walking along it can give some idea of the scale of this facility.