Digital Reconstructions and Emerging Technologies for Heritage Interpretation
Between 1836 and 1917, the Commonwealth of Kentucky and the US Army Corps of Engineers built a series of 14 locks and dams to improve navigability along the Kentucky River.

The locks and dams were decommissioned in the 1980s.

In the 21st century Shaker Hydro Partners began retrofitting Lock and Dam 12 and Lock and Dam 14 to generate electricity.

Gray & Pape was hired to perform cultural resource tasks associated with the licensing.
Locks and Dams
HABS/HAER Documentation

Typical traditional mitigation for buildings
Kentucky River Lock and Dam 12
Digital Models + Video
3D MODEL

HOUSE 1

digital model
North

site photo
North

Kentucky River Lock and Dam 12
Digital Models + Video
April 4th, 2016
3D MODEL

FACADES - HOUSE 1

Kentucky River Lock and Dam 12
Digital Models + Video
April 4th, 2016
3D MODEL
FACADES - HOUSE 1

digital model
Northwest

site photo
Northwest

Kentucky River Lock and Dam 12
Digital Models + Video
April 4th, 2016
3D MODEL
SCHEMATIC VIEWS

Kentucky River Lock and Dam 12
Digital Models + Video
April 4th, 2016
PROCESS
VANISHED STRUCTURES
3D DIGITAL MODELING

wireframe

datasets
detailed 3d model

virtual grounds
INTERACTIVE
PROCESS
VANISHED STRUCTURES
3D DIGITAL MODELING

digital model
low polygon count
1822 Brethren's Workshop
Albany, NY

virtual groundS
INTERACTIVE
3D WORLD BROWSER
Kentucky River Lock & Dam No.12 - House No.1

Developed for Gray & Pape Inc., this 3-D model was created in support of mitigation efforts for the removal of two lock tender's houses at Kentucky River Lock and Dam No. 12.

Lock and Dam No. 12 originally included three lock tender's houses. Built ca. 1908, the houses were home to lock and dam personnel and their families, who lived on site full-time. The lock tender's houses remained open for commercial vessels into the 1980s, but were primarily used by recreational boaters. Due to their advanced state of deterioration, the lock tender's houses were deemed a risk to public safety.

Project financed by Lock 12 Hydropartners, LLC in consultation with Kentucky River Authority and the...
KY River Lock & Dam No.12 - Lock Tender's Houses

ABOUT THIS MODEL

Developed for Gray & Pape Inc., this 3-D model was created in support of mitigation efforts for the removal of two lock tender's houses at Kentucky River Lock and Dam No. 12.

Their removal is part of a hydroelectric project for the site, FERC Project No. 13214, which includes recreational amenities, including portage facilities for canoes and kayaks, a fishing pier, picnic tables, and interpretative displays.

Project financed by Lock 12 Hydropartners, LLC in consultation with Kentucky River Authority and the Kentucky Heritage Council.

Published 4 months ago
KY River Lock & Dam No.12 - Lock Tender's Houses

**Final Days**

Due to their advanced state of deterioration, the lock tender's houses were deemed a risk to public safety.

About this model:

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VIRTUAL REALITY
AUGMENTED REALITY
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