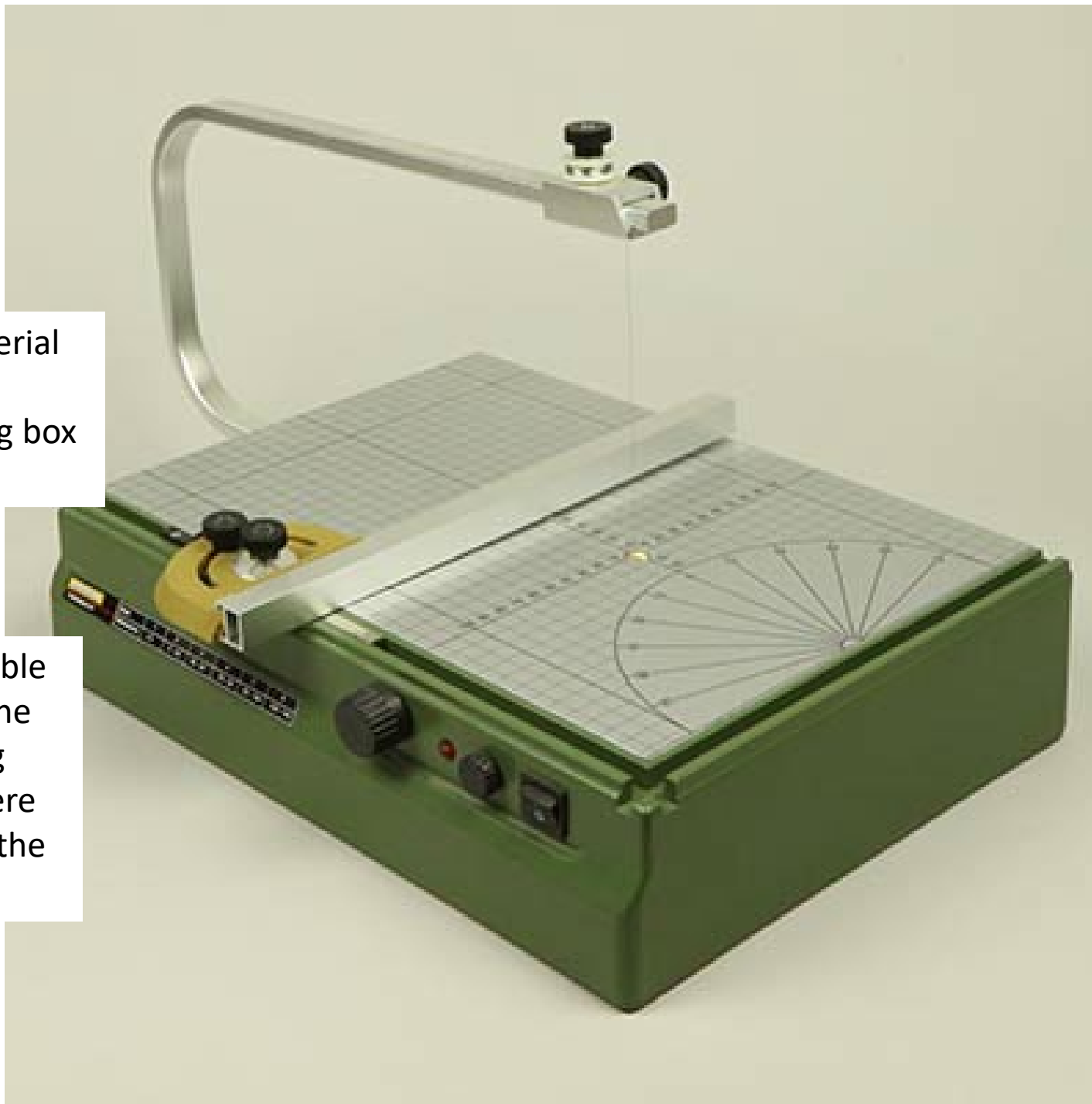# A Concrete Culvert for the GW&C

Using Pink/Blue XPS Insulation Foam to Simulate Concrete

Presented by Cliff Scherer

Pink XPS Foam Sheet Material was used.
(commonly available at big box Building supply Stores)

The Proxxon Hot Wire Table shown was used to cut the foam into parts including the 15-degree bevel where the wing walls attach to the ends of the culvert.

Proxxon Hot Wire Table

Thermocut 115/E

Model 37080

Dremel Sanding Drum

Turned by hand like a drill into the foam to create the top of the arches in the culvert

UHU Glue for XPS Foam

Several glues will work with XPS foam, such as wood glue or foam board adhesive, but UHU is recognized as superior for working with small models.
It is applied to both surfaces, Allowed to become tacky (5-10 Minutes), then the pieces are pressed together. The bond is instant so be sure the pieces are correctly aligned.

INSL-X STIX Acrylic Bonding Primer
was tinted with Khaki Tan
and applied to the assembled
foam culvert. The body of the
Primer gives a more "concrete"
Look to the foam.

Weathering was done with
Varying mixes of Neutral Gray
Acrylic and Khaki Tan Acrylic.
These are inexpensive artists
Acrylics. Remember not to use
oil-based paints as they
will dissolve the foam.

 A black acrylic wash was also
 Applied last.

Weathering

Prototype Culvert, Brookshire Texas, MKT, dated 1929

Model Culvert, GW&C, dated 1915

Metal Typeset Numbers in Spring Clamp

**An inexpensive ($15) complete
Metal typeset was acquired on
Ebay. This set includes about
20 of each letter of the alphabet
and numbers 0-9. It can be re-used
For dating and naming downtown
Stone/brick building facades made
With XPS foam.**

For the culvert, a rectangular
impression was made in the foam
where the date was to be imprinted.
The rectangle was pressed into the
foam using a suitably sized piece of
metal made from a picture hanger.

The date of 1915 was arranged in
the spring clamp and applied
inside the rectangle by pressing
the type Into the foam.

Materials/Tools List

- XPS (Pink) Insulation Foam Board
- Proxxon Hot Wire Foam Cutting Table 115/E
- UHU XPS Foam Glue
- Dremel ½" diameter sanding drum
- INSL-X STIX Acrylic Bonding Primer
- Inexpensive Artists Acrylics – Neutral Gray and Khaki Tan
- Metal Typeset Numbers – 6pt. (Ebay)
- Spring Clamp