Tarmac/Asphalt Roads for Model Railroading – NO Artistic Skill Required

Bruce A. Bowie, LAS (Lacking Artistic Skills)

NMRA, Mid-Central Region, Division 4

"The North Coast Division"

Goals of this clinic

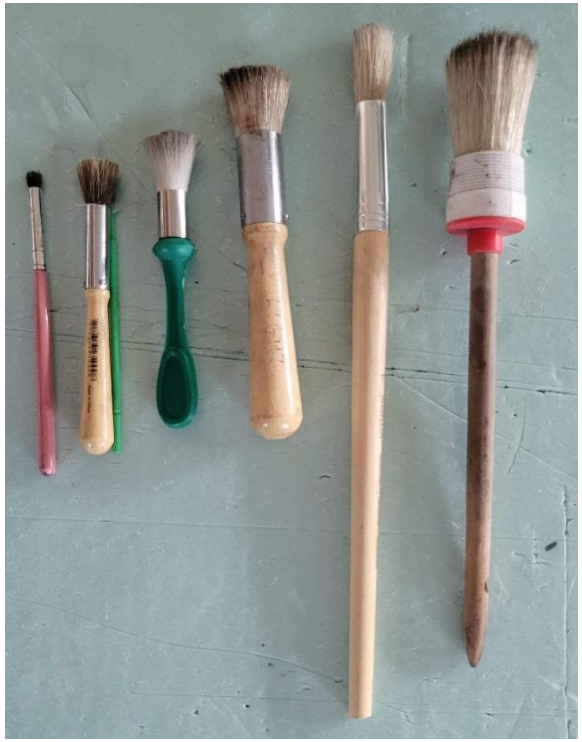
- Provide information on tools and materials used by the clinician
  - There are many tools, techniques and materials, this is just how I do it. Other similar ways:
    - Kathy Millat video – https://www.youtube.com/watch?v=9JEpyGJdxx4
    - Model Railroad Hobbyist project DOC - http://richlawnrailroad.com/wp-content/uploads/2014/05/ModelingAsphaltRdsBySteveS_MRH.pdf
- Show step-by-step methods for making realistic tarmac/asphalt roads

Basic Steps

- Prototype Research
- Cut craft foam to size of area to be asphalted
- Add texture
- Sponge on base color
- Tape lines to be painted
- Sponge on white, or yellow (not 1938 PA), paint
- Apply ASH chalk
- Apply GRIMY BLACK chalk
- Apply DUST chalk
- Apply BROWN chalks & patches
- Detail crack patches
- Glue in place

Tools Used

- Steel wire brush, file card
- Coarse sponges
- Paint mixing tray or cardboard
- Brushes for applying chalks
- Water dish
- Permanent markers
- Painter's tape



Materials Used

- Black 2 mm craft foam
  - Michaels – 12" x 18" Foam Sheet by Creatology™, Item # 10597484
  - Amazon - Darice 2mm Foamie Roll, 36-Inch by 60-Inch, Black Price: $10.88
- Pale Umber Artist Acrylic Paint
- White Artist Acrylic Paint
- Weathering Chalk
  - Ash
  - Grimy Black
  - Dust
  - Brown

STEP 1
PROTOTYPE RESEARCH!

- Accurate modeling requires prototype research
- And as an artistically challenged engineer, I need a lot of material to copy

Internet – 1930's PA Highway

Google Earth SR 994 Rockhill PA (road modeled on my layout)

STEP 1
PROTOTYPE
RESEARCCUT FOAM!

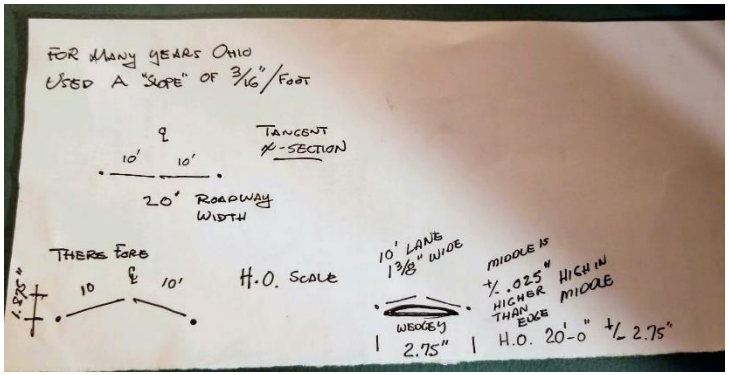
- Local roads

Mason Road, Erie County, Tar & Chip - 2021

Ohio SR 4, Asphalt – 2021

Step 2
Cut Foam to Size & Shape

- Use SHARP Exacto knife and cut foam to size (replace blade frequently as needed)
  - My road is 18’ wide
    - In HO, 2 ½”
  - Crown??
    - Road consultant provided this info



    - Accordingly, crown should be .025” (.64mm)
    - Sometimes model details need to be oversized in order to effectively show
- At same time as cutting roadway, I cut ½” wide strip from 2mm (.079”) foam to use under center of road to create exaggerated (viewable to 1:! Eyes) crown

STEP 3
ADD TEXTRUE TO FOAM

- Use steel wire brush to add texture

STEP 4

ADD CRACKS AS DESIRED

- Use Exacto knife to score lightly asphalt placement crack in foam

STEP 4

ADD CRACKS AS DESIRED

NOTE: CRACKS ARE TYPICALLY ADDED PRIOR TO COLORING THE ROADS. THIS PHOTO HAS THE 1ST STEP OF COLORING TO BETTER SEE THE CENTERLINE CRACK

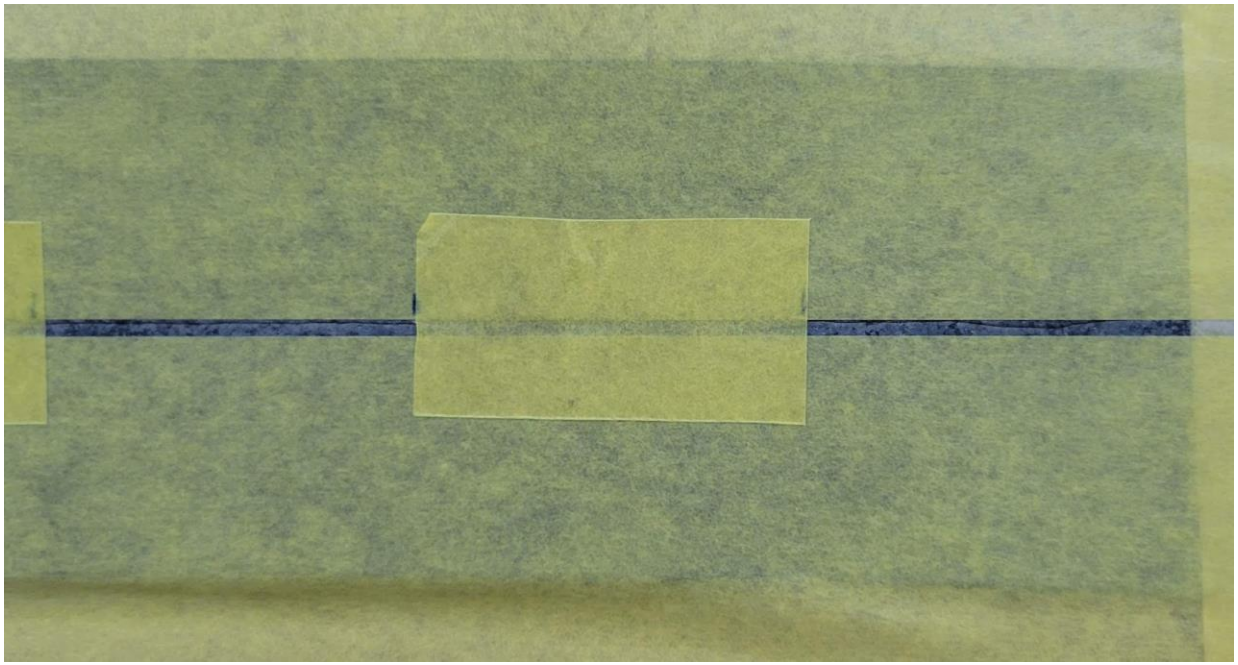
STEP 5
PLACE PRIMARY ROAD COLOR

- Dab on primary road color using rough sponge

Step 6

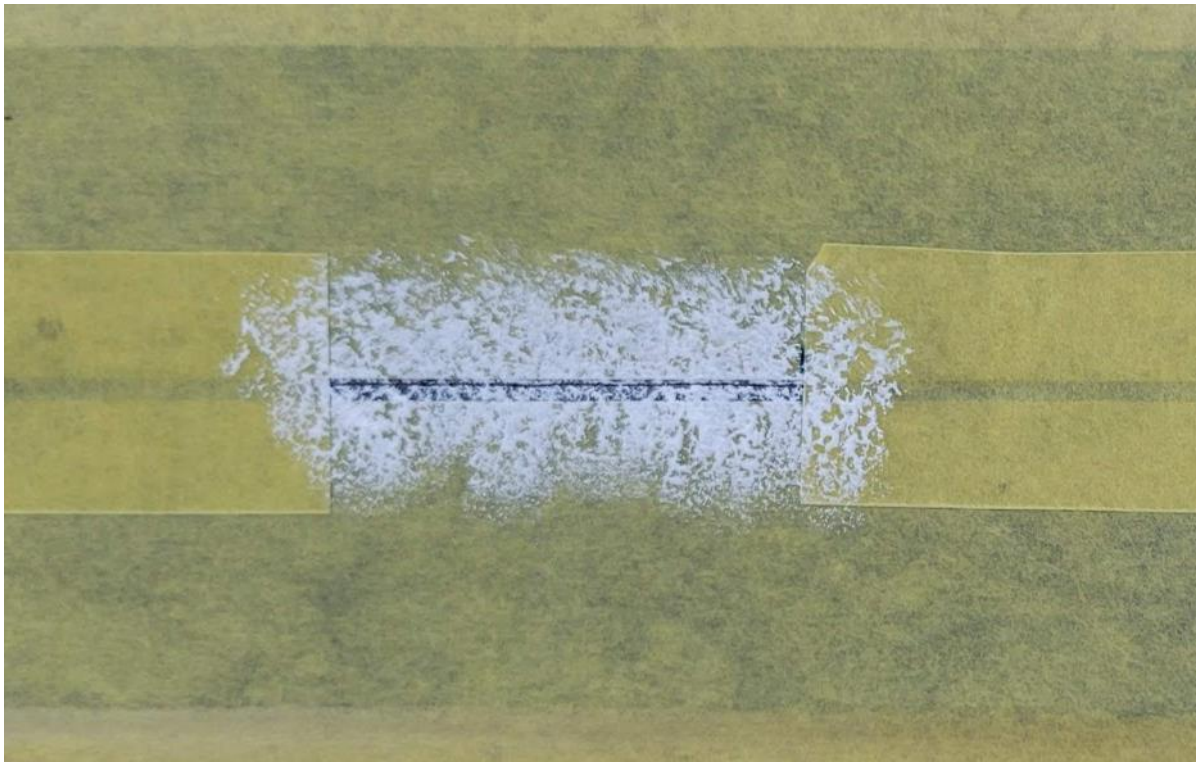
Tape for any painted lines and/or text

- After primary color paint has dryed (overnight for me) use painter's tape and tape stripes and/or text where desired.
  - 1938 era roads only had white center stripes
  - Modern roads have white edge and yellow center stripes



STEP 7
ADD STRIPES

- Dab on stripe color using rough sponge
  - Titanium white but any white will work



STEP 8
REMOVE STRIPEING TAPE

STEP 9
BEGIN CHALK APPLICATION

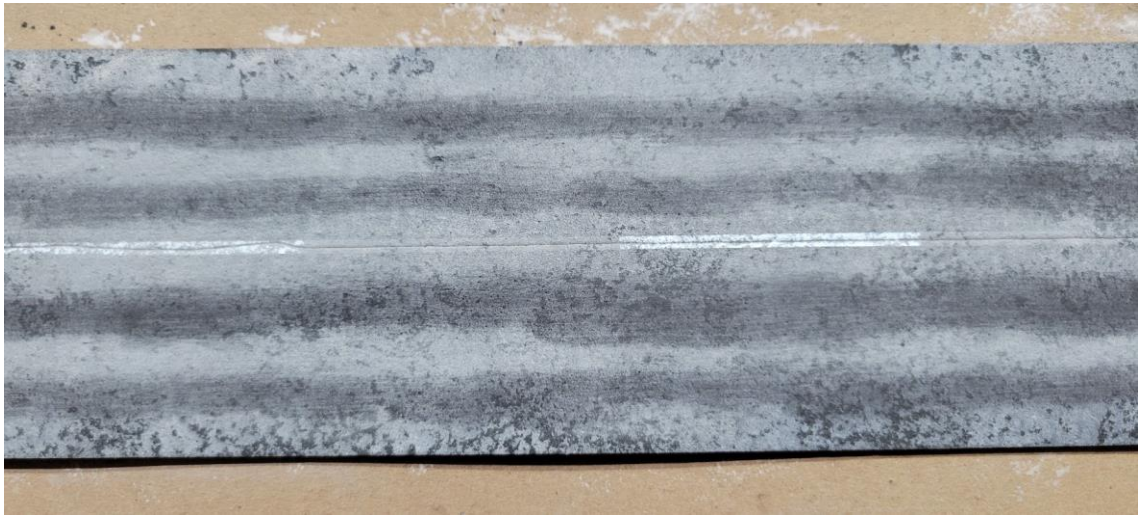
- Use small stiff brush. Dip in ash or grimy black weathering chalk. Then tap it along the roadway making small piles where you want more black showing through

STEP 9
BEGIN CHALK APPLICATION

- Use medium brush. Spread black chalk out where darker “lanes” will appear

STEP 9
BEGIN CHALK APPLICATION

- Blow off (or use a very large soft brush) excess chalk



STEP 10

ADD DUST DIRT CHALKS

- Again, with small stiff brush, add piles of dust chalk with emphasis on center

STEP 10

ADD DUST DIRT CHALKS

- Rub dust chalk in with medium brush
- Blow off or use large soft brush to remove excess

STEP 11

ADD BROWN CHALK

- With small stiff brush, add piles of brown chalk along edges
- Rub in using medium brush
- Blow off or use large soft brush to remove excess

STEP 11

BLEND WITH LIGHT GRAY CHALK

- Again, with medium stiff brush, add piles of light gray chalk
- Rub in using medium brush
- Blow off or use large soft brush to remove excess

STEP 12

BLEND WITH LIGHT GRAY CHALK

- 2mm (.079”) foam is perfect height to place between rails of code 83 track
  - Code 70 (1.79 mm) rail requires slight thinning of 2mm foam or ties where it meets rail
- 1/16” styrene rod used to center asphalt between rails on code 70 narrow gauge track

Aleene's used to attach roadway to scenery base and railroad ties

STEP 13

BLEND WITH LIGHT GRAY CHALK

Any
Questions

CLINIC MATERIALS CHECK LIST:

- 6'-8' Table
- Roll of heavy paper
- Scissors
- Masking tape
- Hand vac (just in case)
- Steel wire brush or file card
- Coarse sponges
- Paint mixing tray
- Brushes for applying chalks
- Water dish
- Painter's tape
- Pale umber paint
- White paint

- Each Kit:
  - (1) 16"x2 ½" 2mm black foam
  - (1) 16"x2 ½" 2mm black foam with Pale Umber applied
  - (1) 16"x2 ½" 2mm black foam with white stripe applied on top of pale umber