

Basic Model Railroad Scenery Construction Steps

Part 1



By

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Before Scenery Starts

- Build Bench Work
- Add Road Bed
 - Plywood
 - Covered w/ Cork Strips
- Install Track Work

Simulated Roadbed On Risers

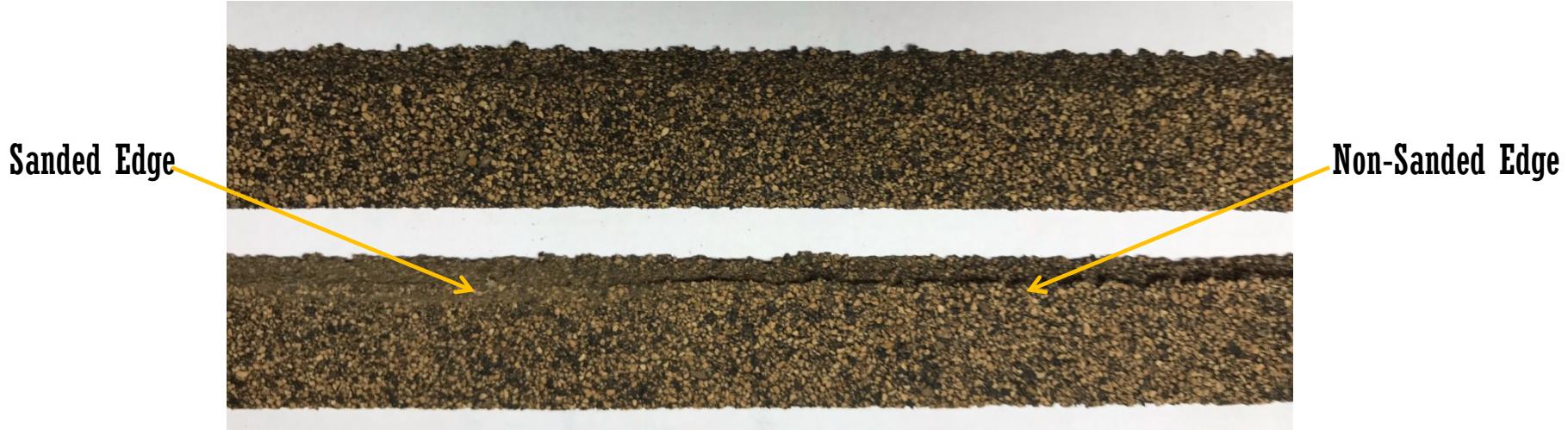


Sample $\frac{1}{2}$ " Plywood Cut 2" wide w/ Pine Risers

Note: Base plywood used to support example

Pine risers would normally be attached to layout frame cross braces

Cork Road Bed Prep



- Separate Cork Strips Along Cut Line
- Sand Cork Edge to Remove Ridge

Cork Installed on Road Bed

Stagger Cork Joints



Cork Road Bed

- Glued to plywood w/ White Glue
- Nailed with 3/8" Brads – Spaced 6" Apart
- Offset Cork End Joints

Track Example: Atlas Code 100 Flex Track



Track Attachment:

- Can be Nailed Down w/ Track Nails
- Can be Held Down w/ Track Spikes
- Can be Glued Down

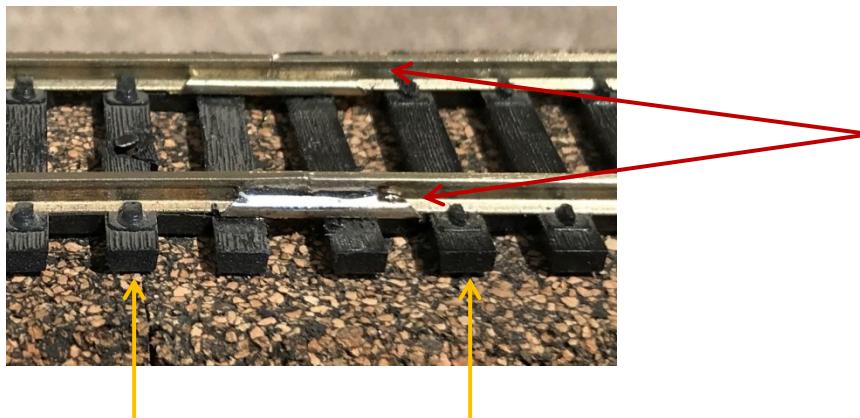
Add Track Electrical Connections



Track Feeders to Power Distribution Buss



Track Power Distribution Buss



Solder Rail Joiners
On Outside Edge of Rail Only

Note: Old Atlas Code 100 Track → New Atlas Code 100 Track

Add Rock / Stone Wall Elements

- **Cast Rock Faces / Stone Walls**
 - Commercial Products
 - or
 - Home Made in Rubber Molds
 - Built w/ Molding Plaster
 - Color w/ Acrylic Washes < 50 % Paint
 - Artist Tube Paints or Latex Paints:
 - Browns, Grays, Reds, etc
 - Brush On Base Color
 - Add High Light Colors Once in Place

Plaster Castings

Metal
Cake
Pan



Paint
Palette
Knife



Stone
Wall
Casting

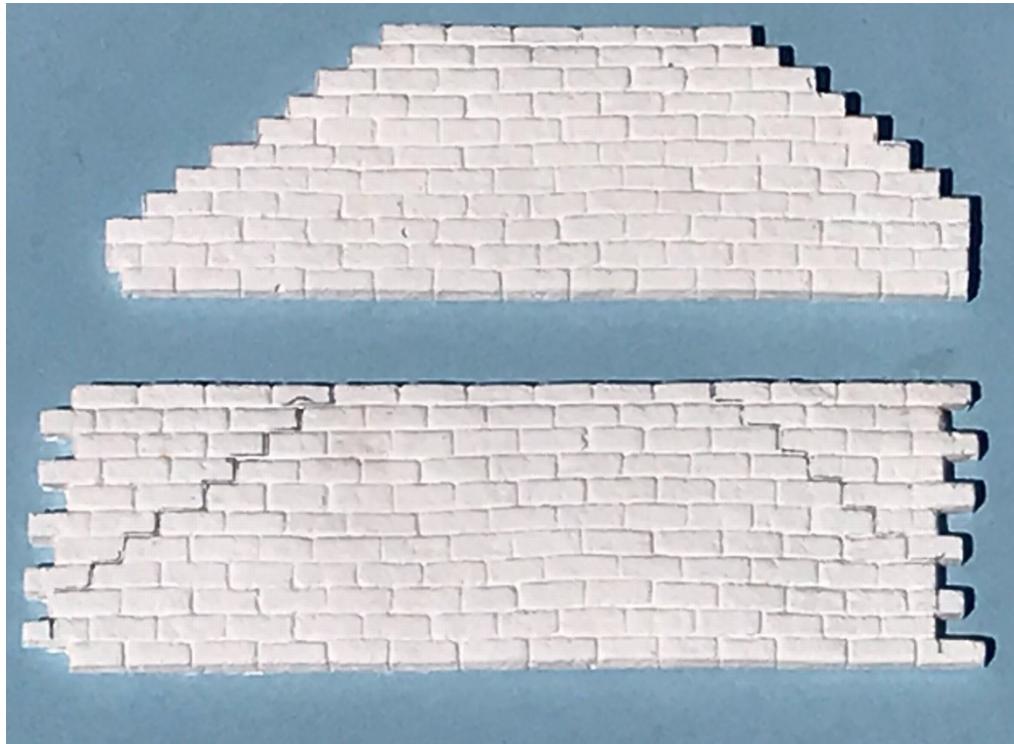


Wall &
Rock
Castings
In
Molds



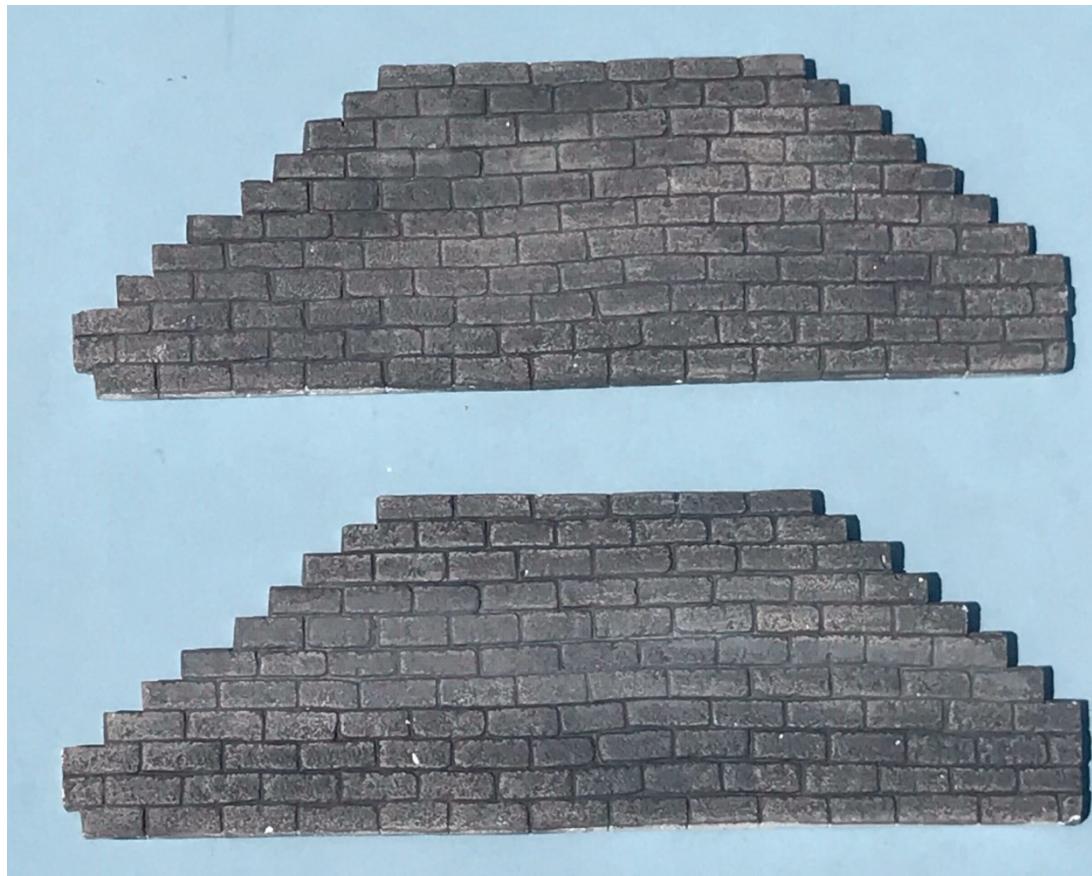
- Mix Molding Plaster as a Soupy Mix in Cake Pan Using Palette Knife
- Spray Water Mist into Rubber Mold – Pre Wets the Mold
- Transfer Plaster to Mold – Let Harden for 4 Hours
- Remove Casting – Clean / Wash Out Mold w/ Water

Modify Plaster Castings



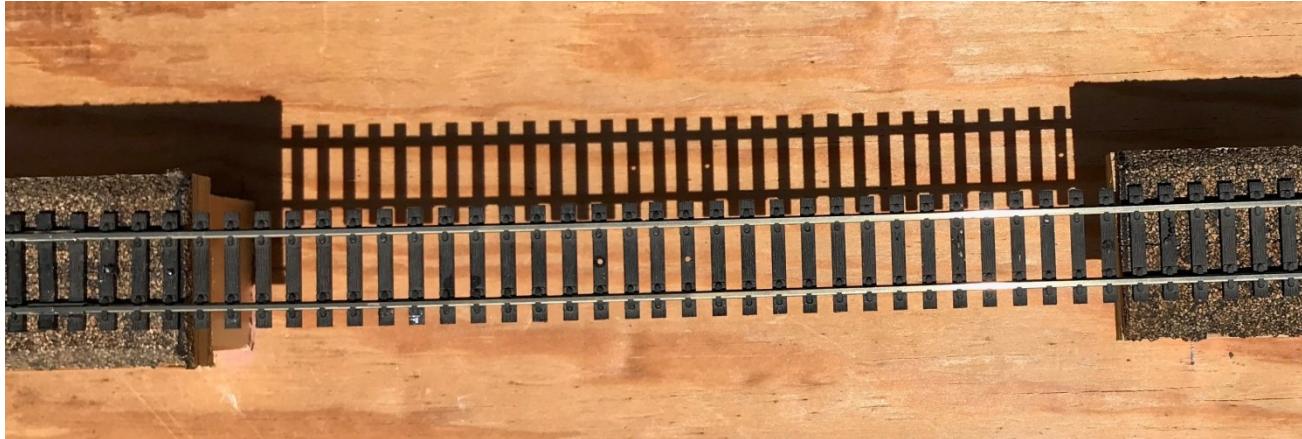
- Cut Casting with Razor Saw
 - Note:
Set Aside One Saw Blade for Cutting Plaster Only

Color Plaster Castings



- Color with Latex Paint Wash
 - 50% Water / 50% Paint

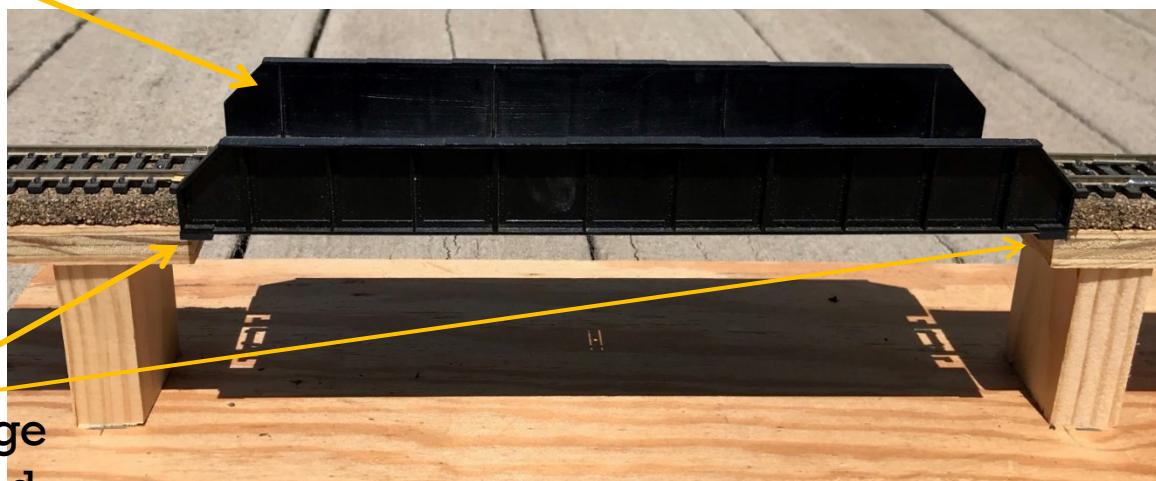
Add Bridges



- Cut Road Bed For Bridge
 - Measure Bridge Spacing
 - Remove Track
 - Cut Road Bed
 - Replace Track Across Road Bed Gap

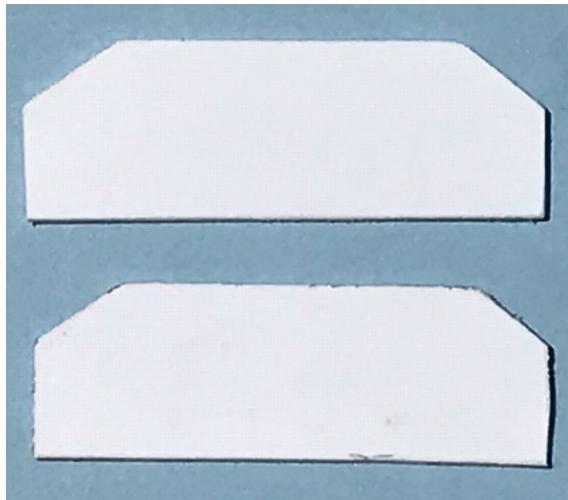
Install Bridge

Atlas Bridge

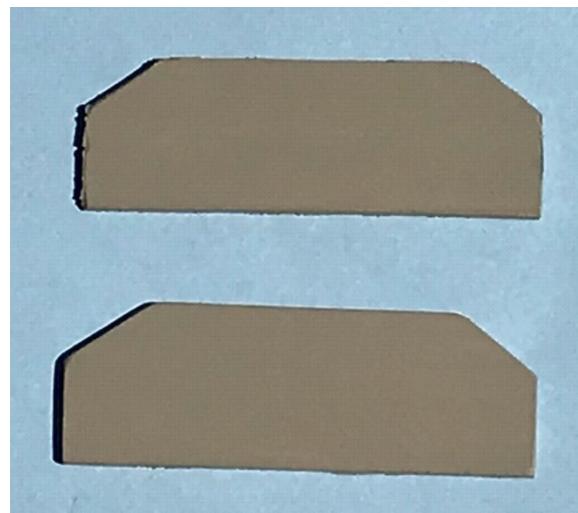


- Cut Out Flex Track Section
 - Add Rail Joiners
 - Reconnect Track to Bridge
 - Track Should be Level Thru Bridge

Road Bed Caps at Bridge Ends



Caps Cut From 0.040" Plastic Sheet



Painted w/ 3 Coats Poly S Concrete

Road Beds Caps Installed

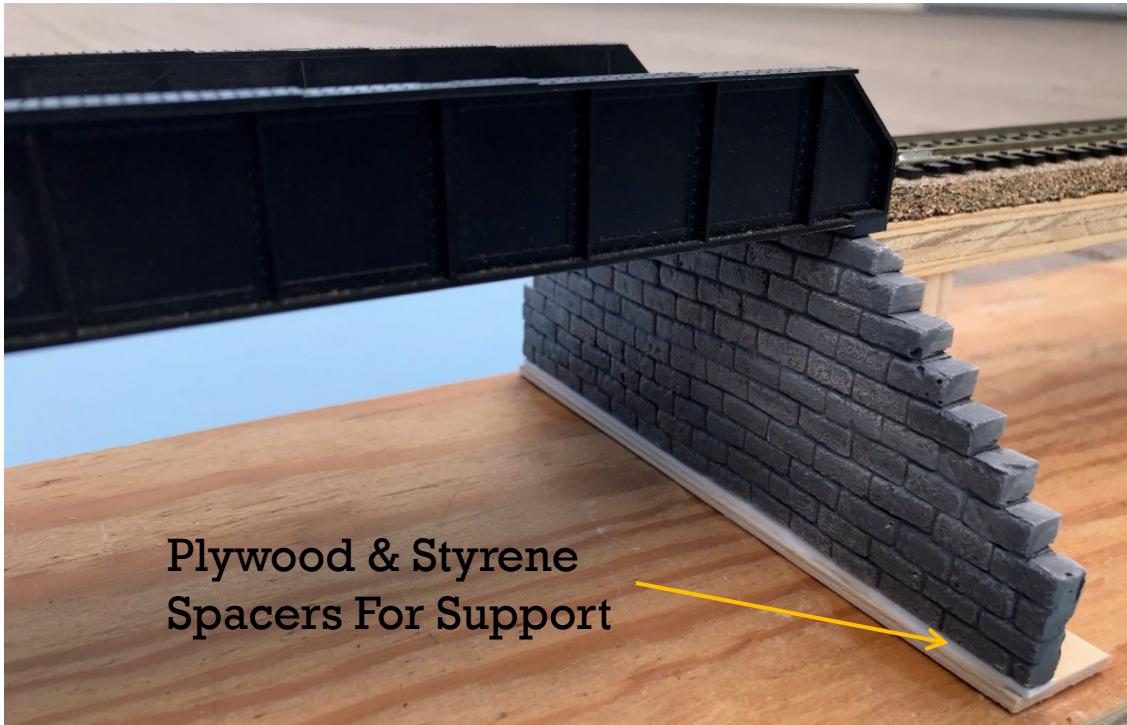
Road Bed Cap

Road Bed Cap



- Road Bed Caps Installed Against Plywood / Cork Edge
 - Hides Road Bed Ends
 - Most Effective on Open Deck Bridges

Bridge w/ Stone Abutments



- Place Stone Abutment Under Bridge
- Add Spacers to Lift Stone => Supports Bridge Ends
- Hold Stone & Spacers in Place with White Glue
- Track Should be Level Across Bridge Span

Rock Castings



- Cut Casting with Razor Saw
- Color with Burnt Umber Wash
 - Thinned Artist Tube Paint

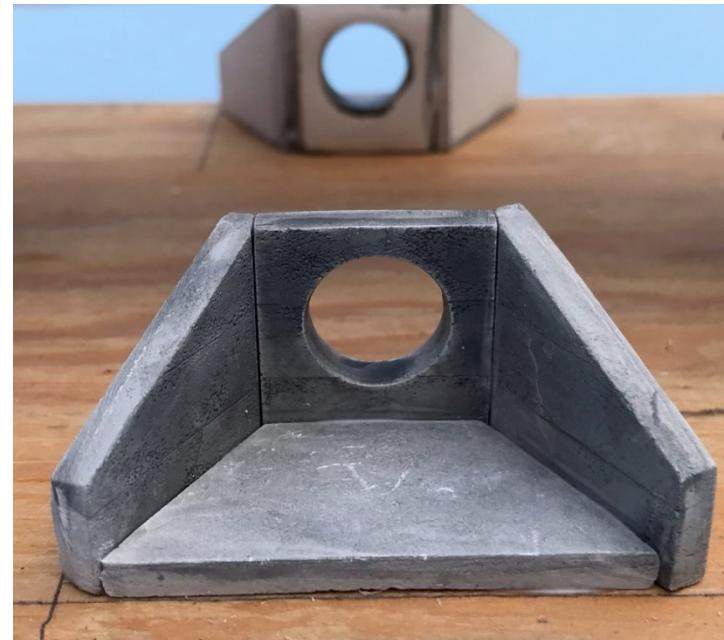
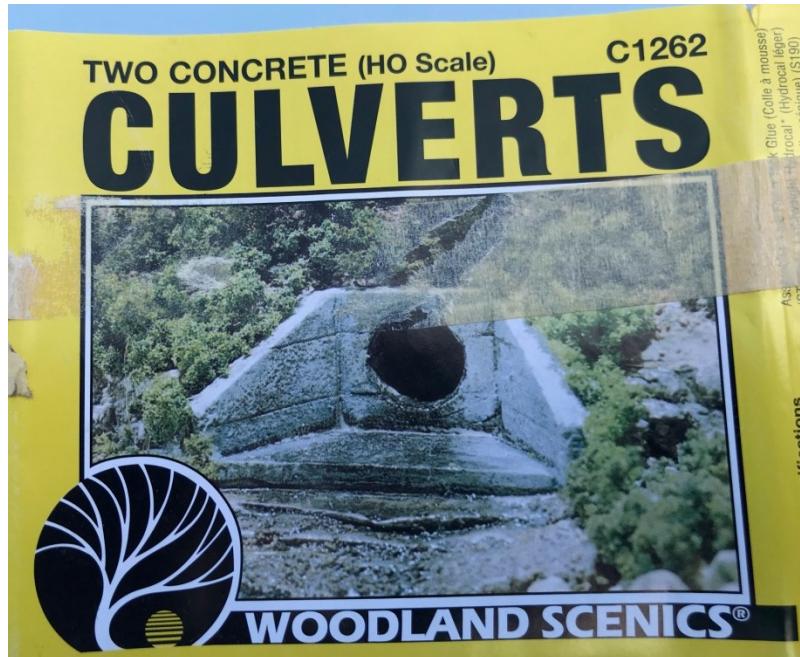
Install Rock Castings



- Sand Casting Base Smooth
- Set In Place With White Glue

Additional Details

- Wood Land Scenics Concrete Culvert



Color With Gray Wash
Assemble With White Glue

Base Contours – Old School

***** Warning *****

- **Do Not Use**
 - Wire Screen
 - Chicken Wire
 - Metal Staples
- **Very Difficult To Modify**
- **Sharp Edges => There Will Be Blood**

Base Contours – Foam

Foam
Sample

WS Hot Wire
Foam Cutter



- **High Density Foam**
 - Great for Modules – Light Weight
 - Easy to Work With
 - Cut With Knife or Hot Wire

Base Contours – Another Approach

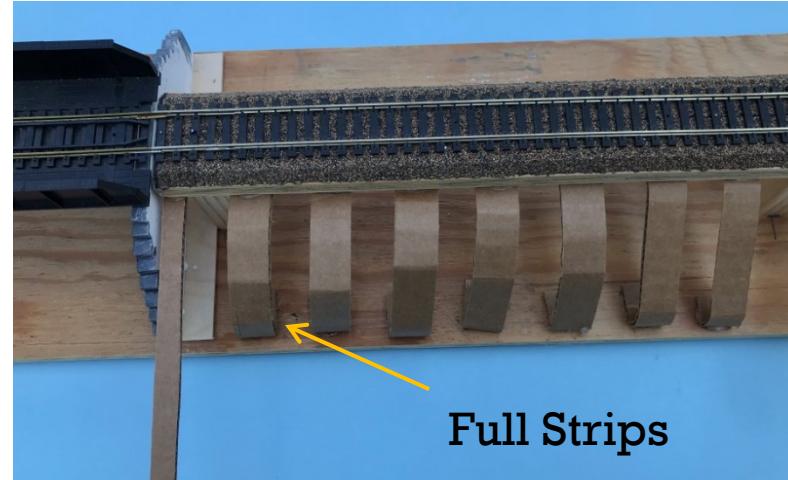
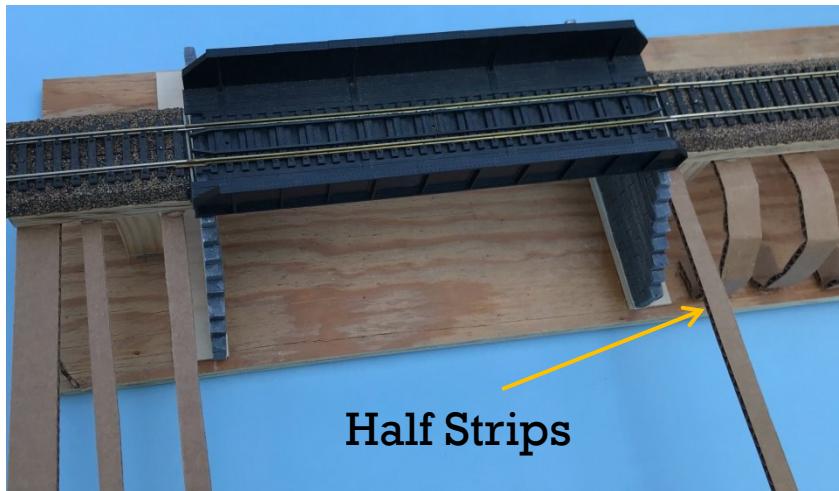


- **Cardboard Strips**
 - Cut to $\frac{3}{4}$ " width
 - Tight Spots:
 - Cut Strips in Half



- **Woodland Scenics Glue Gun**
 - Low Temp Glue Sticks
 - Avoid High Temp Glues

Add Base Contours



- **Cardboard Strips**
 - Hot Glue To Underside of Roadbed
 - Curve To Form Contours
 - Hot Glue To Frame Base

Work Around Scenic Elements



- **Cardboard Strips**
 - Hot Glue To Underside of Roadbed
 - Hot Glue To Back Side of Elements

Add Horizontal Strips



- **Cardboard Strips**
 - Weave Strips Across Contours
 - Hot Glue At Intersections
 - Review Final Shape – Adjust as Needed

Plaster Cloth



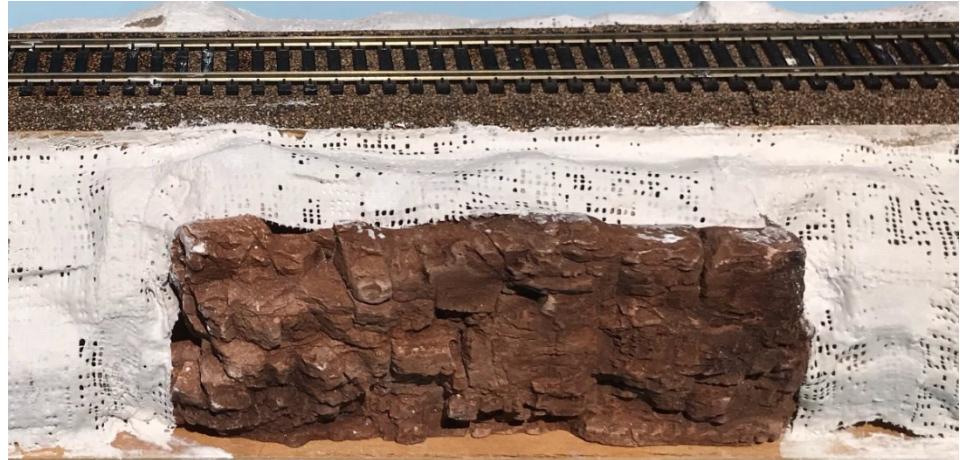
- Either Product Works Well
 - Woodland Scenics – Has a Coarse Weave
 - Scenic Express – Has a Fine Weave

Add Plaster Cloth



- **Cover Track with Painter's Blue Tape**
 - Keeps Plaster Off Track / Ties
- **Cut Strips of Cloth => 2" to 3" Wide**
- **Place in Cake Pan of Water – One at a Time**
- **Over Lay on Top of Cardboard Contours**
- **Example Shows WS Version**

Add Plaster Cloth



- **Wear Latex Gloves**
- **Work Edges to Roadbed / Scenic Elements**
- **Smooth with Fingers / Palette Knife**
- **Forms Basic Earth Works Contours**

Add 2nd Layer of Plaster Cloth



- Over Spray With Water Mister
- Apply 2nd Layer of Plaster Cloth
- Wear Gloves => Smooth with Fingers
- Plaster Should Mostly Fill in Holes in Cloth

Add Plaster Top Coat

- **Forms Final Contours**
 - Hydrocal & Sculptamold: Make a 50/50 Mix
 - Hydrocal Dries Very Hard
 - Sculptamold Is Like Papier-mâché
 - Combination Resembles An Oatmeal Texture
 - Use Plastic Cups To Measure Equal Volumes
 - Start With Half Cups of Each
 - 10 - 15 Minute Work Time – Best Case!
 - Extend Work Time By Using Water Mister
 - Avoid Waste w/ Small Batches

Plaster Top Coat



All Photos w/o Touch Up

Clean Up Surface w/ Light Sanding



Clean Around Elements
w/ Hobby Knife

Future Contour Modifications

- Areas May Be Changed / Cut Out
 - Use Hand Held Key Hole Saw
 - Add New Scenic Elements
 - Stone Wall, Rock Outcropping, etc
 - Blend Open Area into Existing Contours
 - Card Board Strips, Plaster Cloth, Plaster Overlay
 - Changes Are Difficult With Screen Wire Base
 - Metal is Buried in Plaster – Very Hard to Modify
 - You Will **Bleed!**