

In the spirit of sharing, Master Model Railroader, Chuck Ricketts is creating a series of emails to describe how Jim Elder and he are constructing a sectional layout in the garage. This layout, while a pure fantasy model railroad, is operations oriented. The first email described Chuck's model railroad background with a brief look at some of his previous layouts and why, in his mid-eighties, he is starting a new layout. The second article told the history on Baja Siena (or at least Chuck's version of the history). In the third article, Chuck began to describe the construction of the Baja Siena Railroad and Navigation Company. Article 4 covers the woodworking needed to get the benchwork built.

Fantasy Island Layout - Article 4

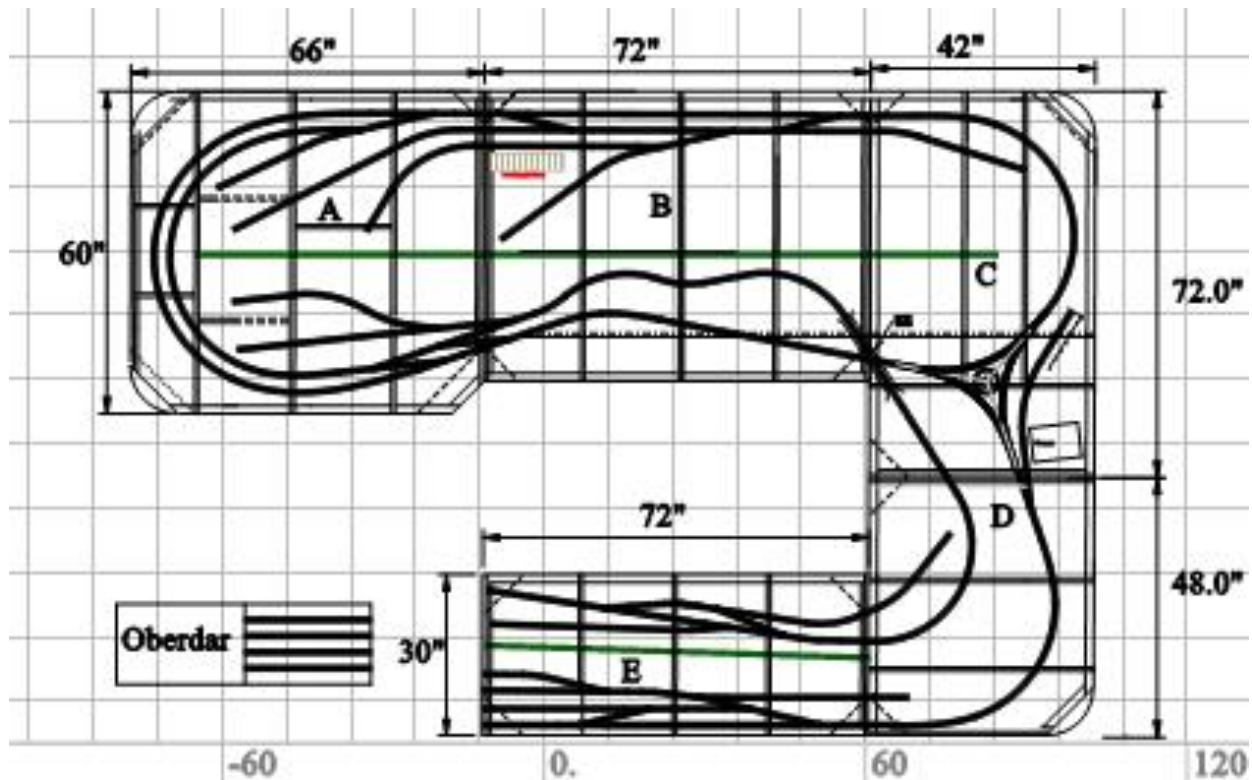
First, a Disclaimer

Some of you may be needing a little more info on where I got the idea for my Baja Siena. I built an MDC narrow gauge HOn3 Shay while we were full timing around the country in our motorcoach. We bought a lot, northwest of Wickenburg, Arizona, as our home base during the winter. It came equipped with a 10 x 12 shed. It was at about this time that I got the inspiration for this Baja Siena layout from an April Fool's issue of MR or following some casual conversation with other RV campers. I was considering the idea for a layout for my HOn3 Shay. This was in the early 90s. Meanwhile, my friend, David Doiron, had a fantasy portion of his Lost Dutchman layout in Tempe, AZ, and I liked the idea of a fantasy layout that I could create around my ideas. I didn't get to build the HOn3 version of the Baja Siena but I kept the idea in the back of my mind for a future time. I found out later that there was a layout called the Puerto Borracho Railway (search Puerto Borracho Railway if you are interested). I found it when I was searching You-Tube for Tequila Distilleries for my layout. Baja Siena is all mine from a long time ago. Okay, that's done!

Changes Already

Maybe some of you have noticed that this plan (below) is a little different from the original one posted. I think these changes will make operation more interesting and

construction easier. Moving the crossings in the village to Section B increases operation challenge by shortening the runaround. It also makes construction easier since the turnouts do not span the joint between Sections A and B.



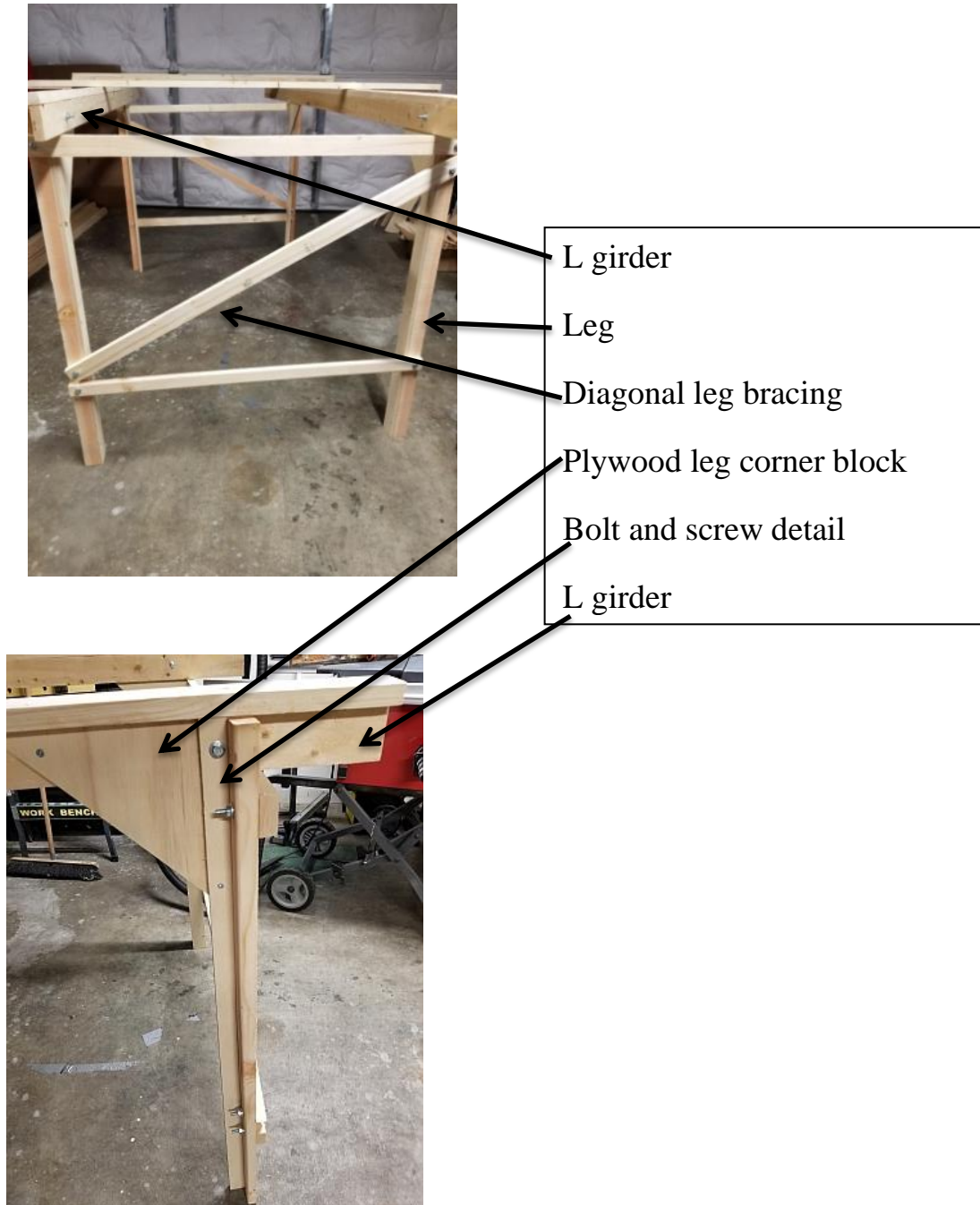
Cutting Wood, Making Sawdust

We have cut nearly all of the lumber for the layout framework. Still some cookie-cutter pieces of 3/8 inch plywood for the curved sub-roadbed remain to be cut as well as pieces for risers and internal framework.

We used a number of different saws to cut the lumber for the layout such as a jig saw and a band saw for the sub-roadbed, a table saw to rip plywood. A chop saw was used to cut blanks of 1 x 2s and 1 x 3s, and a Japanese carpenter's handsaw for a few minor jobs. We made risers out of scrap plywood and short lengths of 1 x 2s.

Legs and L Girders

L girders are built with 1 x 2s screwed to 1 x 3s to form an “L”. The 1 x 3 provides the web (horizontal stiffness), the 1 x 2 creates a flange for attaching the next layer of wood. The legs are built with 1 x 2s and ½ inch plywood. The legs are cross braced with a 1 x 2 diagonals. The legs are bolted to the L girders using plywood corner blocks. This creates a solid base that does not wiggle or flex.



New Techniques

Years ago, in Arizona, when we were starting up a group called the Arizona Modulares, I saw Bill Summerfield turn his module up on its side, so we could do the wiring from the bottom; no working underneath the layout. I didn't get to try this when I built the S.S.& S., which was built in place. Now that we are building this freestanding layout, I decided to merge the flip up modules and some construction techniques, called "flats" that I used when I was designing and building for the theater.

What are "Flats"?

I'm making the layout sectional to provide smaller segments to facilitate this new process. Vertical stage walls are essentially composed of frames called "flats". These flats are made from 1 x 2 dimensional lumber bonded together and reinforced at the corners with gussets. I am using that same frame, a flat, laid horizontally as a base for each section of the layout. Joists will run across the flat to support the sub-roadbed and scenery.

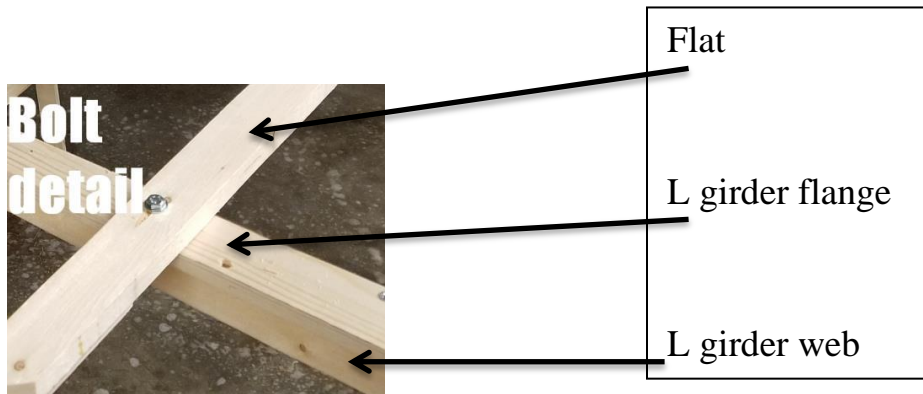


Section A- a stage flat set horizontally

Corner gusset

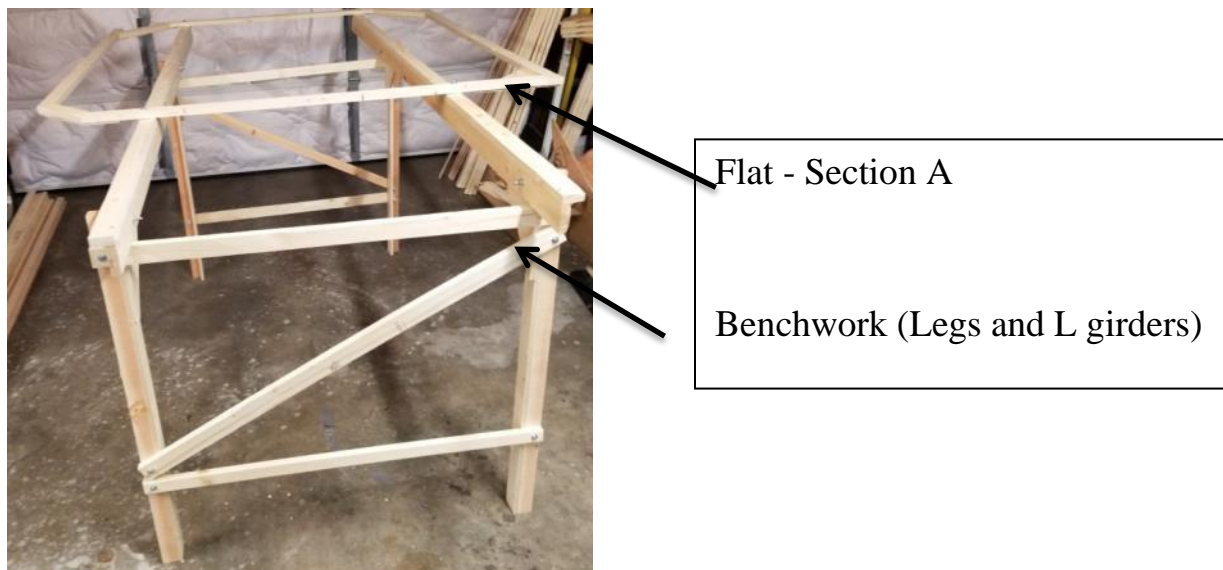
The completed flats are laid across the L girders and attached with bolts. The flat, and anything attached on top of them, can be unbolted, lifted and turned on the side

to attach feeder wires to the tracks without having to crawl underneath the layout. Each section of the layout will have Anderson power pole fittings to connect with the bus. We will cover wiring later in later article. Since we were using 1x2s for joists, we have glued scraps of 1 x 2 to the bottom of the joists where they rest on the L girder (photo below).



Benchwork

The photo below shows the complete first section “benchwork”, composed of: a flat - Section A, the L girders, and the legs. Section A is now ready for joists and then sub-roadbed.



Sub-Roadbed

With the benchwork standing and Section A bolted to the flange of the L girder, we started cutting sub-roadbed.

We placed paper patterns on the plywood and cut them out using a jig saw and a band saw. The pieces of sub-roadbed will be connected with gussets of scrap plywood, screws and glue.



After putting the joists across the top of the flats, the sub-roadbed can be built and attached to the joists just as you would with typical L-girder construction.



Section A flat	Joist	Sub-roadbed	Benchwork	Track outline
----------------	-------	-------------	-----------	---------------

What's Next?

In Fantasy Island - Article 5, Chuck will finish building the L girder benchwork support, attach the more flats, and add the rest of the sub-roadbed. There will be information on a Howe truss bridge and maybe some roadbed. There's a lot to get done for to Chuck to meet his goal of being operational by October!