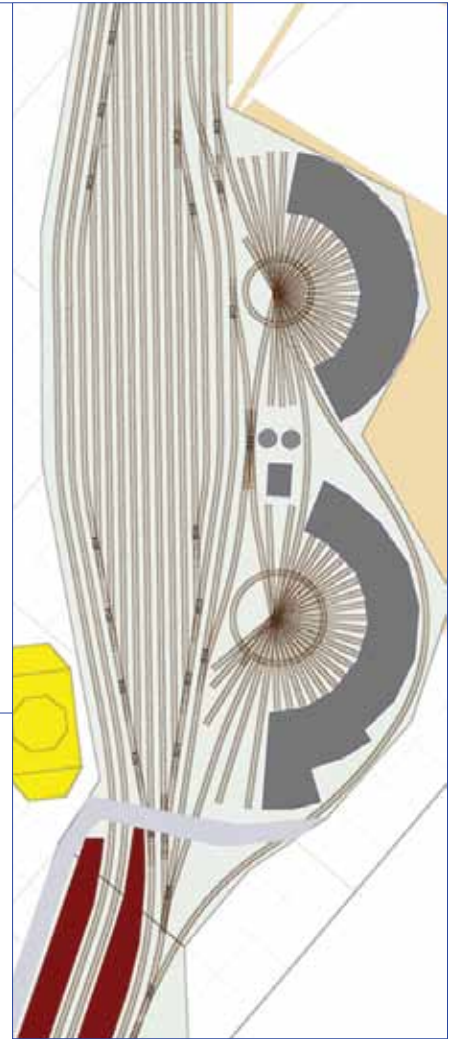


LAYOUT DESIGN



JOURNAL 53

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Looking Forward to New Mistakes
Exhibition "S"witching Layout
Lighting & Benchwork Ideas
LDSIG Board Election
Regional Meetings: NJ, Nor. Cal.

The Layout Design Special Interest Group, Incorporated (LDSIG) is an independent, IRS 501(c)(3) tax-exempt group affiliated with the National Model Railroad Association (NMRA).

The LDSIG's goal is to act as a forum for the members' exchange of information and ideas, and to develop improved ways for hobbyists to learn the art and science of model railroad layout design.

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Fred Kurtz

668 Snyder Hill Road

Lititz, PA 17543

fkurtz@fredbkurtz.com

**LAYOUT DESIGN
Journal**

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We hope you enjoy this special "sampler" of the *Layout Design Journal*. Full issues of the printed magazine are regularly mailed to members. See links above for more information, to subscribe, or to renew.



Seeing More from a New Place

by Byron Henderson, LDJ Editor

So often we learn more by looking at something new or different than we do by examining concepts with which we are familiar. I found that true as I worked on the feature stories for this LDJ. Consider Garry Glazebrook’s Fassifern-Newcastle layout. It’s a coal-hauling line from down south – about 7000 miles south of me! While not many of us are building New South Wales Railway layouts, we can all learn much from Garry’s description of the process of distilling the prototype and representing it in a given space.

Learning from the unfamiliar

In fact, I think I learned more about Garry’s ideas on the process of layout design precisely *because* I was not familiar with the prototype. Since I couldn’t jump to the mental shorthand of familiar Pennsy or Clinchfield designs I had seen or done, I had to follow along with Garry through the steps of analyzing key scenes, lessons learned from the previous layout, and the opportunities and constraints of the space.

Another aspect of Garry’s thinking different from my own: his analytical approach to comparing the different layout footprint options possible in his space. While I often prepare multiple footprints for my own designs, I usually choose between them in a more intuitive and iterative process. Garry’s quantitative methods might not be ideal for everyone, but they give us another tool for thinking about layouts.

Puzzling, in a good way

I also gained insight from the different perspective Lamont Heppe brought to his Calabash Terminal Railroad exhibition layout. When I am designing small switching layouts, I normally leave out the trickier puzzle elements that would require multiple moves in spotting one or a few cars. I’ve found that to become tedious when operating a small

(continued on page 36)

Time to Vote – and Meet!

by Ron Burkhardt, LDSIG President

Wow – September’s here already and I have a new basement to fill with layout – *but*, the lawn needs mowing and all the boxes aren’t unpacked yet. I hope your summer has gone well. Many of you made it to the Cleveland 2014 NMRA National Convention, and we’ll have some photos and detailed reports from the big week in LDJ-54.

Please vote

In this issue of the LDJ you’ll find a ballot for the two open slots on the LDSIG Board of Directors (page 35). Please take the time to consider the candidates, or select a write-in candidate, and then vote and return your ballot. If you have updated personal info, please include that so we can keep in touch.

A quorum of LDSIG members voting in LDSIG elections is required by our Bylaws to maintain our corporate status and 501(c)(3) designation. It is also a way for you to show support for the volunteers who serve you on the Board. Thanks to the Election Committee for providing us with this opportunity. Results will be published in LDJ-54.

Meet in New Jersey and California

One of the LDSIG activities I’ve been touting is participation in local and regional LDSIG meetings. We can’t always make a commitment to a week at the National, but a couple of days at a relatively close regional meeting are a great way to get the enthusiasm and creativity going again.

There are two regional meets coming up (page 36): Scotch Plains, New Jersey October 25-6; and Novato, California (North Bay Area) January 23-5, 2105. You might want to consider holding such an event in your area; please contact me or another Board member (page 2) for a regional meet handbook/guide, basic tools, names, etc.

On-line LDJ delivery option now available to all

LDJ-53 is our second issue in full color – thank you to Editor Byron and others for their efforts in making this happen. Our new membership fee structure (page 2) includes an LDJ on-line delivery subscription via personalized Adobe Acrobat (.pdf) option, which is now available to everyone. Current print memberships may be converted to on-line delivery on a 2-for-1 online-for-print basis upon request through Fred Kurtz, Member Services (page 2).

So we enter the fall color season (at least here in the Northern Hemisphere) with the LDJ in color. May you also dream in color of your layout (planned or abuilding), keeping in touch with other members via the webpage or the Yahoo group. So much to learn, so much to share as we return to the basement season (as my wife calls it). Until LDJ-54,

“WM Extra 7495 East OS Highfield” [LDJ](#)

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Looking Forward to New Mistakes

Planning the second Newcastle – Fassifern Railway

by Garry Glazebrook

The Layout Design Special Interest Group's motto is to "make only new mistakes". This seemed to me too good an invitation to turn down! So having got my first Newcastle – Fassifern (New South Wales, Australia) layout fully operational (though with the scenery and structures only 20% completed), I have begun planning a bigger layout on which I could avoid the mistakes of the past – and create some new ones.

A previous article covered the planning of my first layout (LDJ-47, Summer 2012). In addition, an article in the OpSIG *Dispatcher's Office* (July 2012) described how I developed "compressed timetables" based on the actual working timetables for the New South Wales Railway in the Newcastle area in the mid-1960s.

Since then my wife and I have semi-retired and purchased "a small house with a large shed attached" in the southern highlands, about an hour and a half south of Sydney.

The rainfall patterns and rich volcanic soil means you can grow almost anything – ideal for my wife's gardening skills. Nearby are wineries, beautiful beaches and mountains, not to mention the NSW Rail Steam museum. What more could one wish for!

This article covers how I am approaching the design of my second layout. Although the article follows the nice, logical approach outlined in the diagram on the left of Figure 2 (page 5) the actual process has been more like that on the right – a lot more intuitive, iterative and chaotic!

1 – Lessons from my first layout

I think one can learn both from success and from failure. Might as well start with the good news!

Things that worked out as planned

My first layout has given me a lot of satisfaction, along with occasional headaches. I



Figure 1. Some railways in Australia operated steam much later than most US lines. In a scene the author features on both his current and future layouts, non-streamlined Pacific 3830 departs Newcastle Station in 1966. Photo by Robert Kingsford-Smith.

trains on “plywood central”; are you more interested in aesthetics, wanting to create believable scenes to recreate your memories of the prototype; or are you a practical kind of guy who enjoys it when things actually work?

In my case I was equally driven by operations and aesthetics in designing my first layout, but hadn’t fully considered some of the practical aspects. So for the next layout, I’m aiming to give equal balance to all three areas.

The design process then becomes trying to achieve the best overall compromise between what can sometimes be conflicting objectives, all within the space and other constraints. I find the challenge of doing this a real source of satisfaction.

5 – Overall track scheme

The area to be modeled was the same as for the previous layout - see Figure 10 at right. The track schematic below is directly based on the prototype with selective compression. Quite a few stations were left out, but

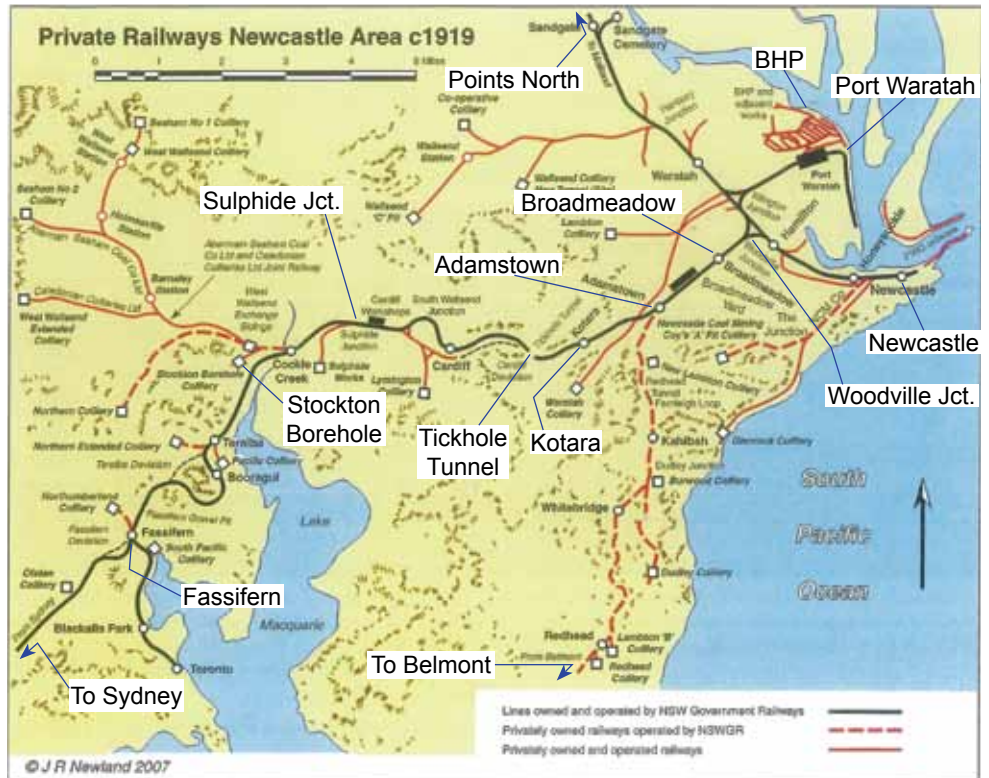


Figure 10. Prototype Railways in the Newcastle – Fassifern Area. (Lines in red are privately owned lines serving the coalfields and steelworks.) McKillop and Sheedy, 2008, used with permission.

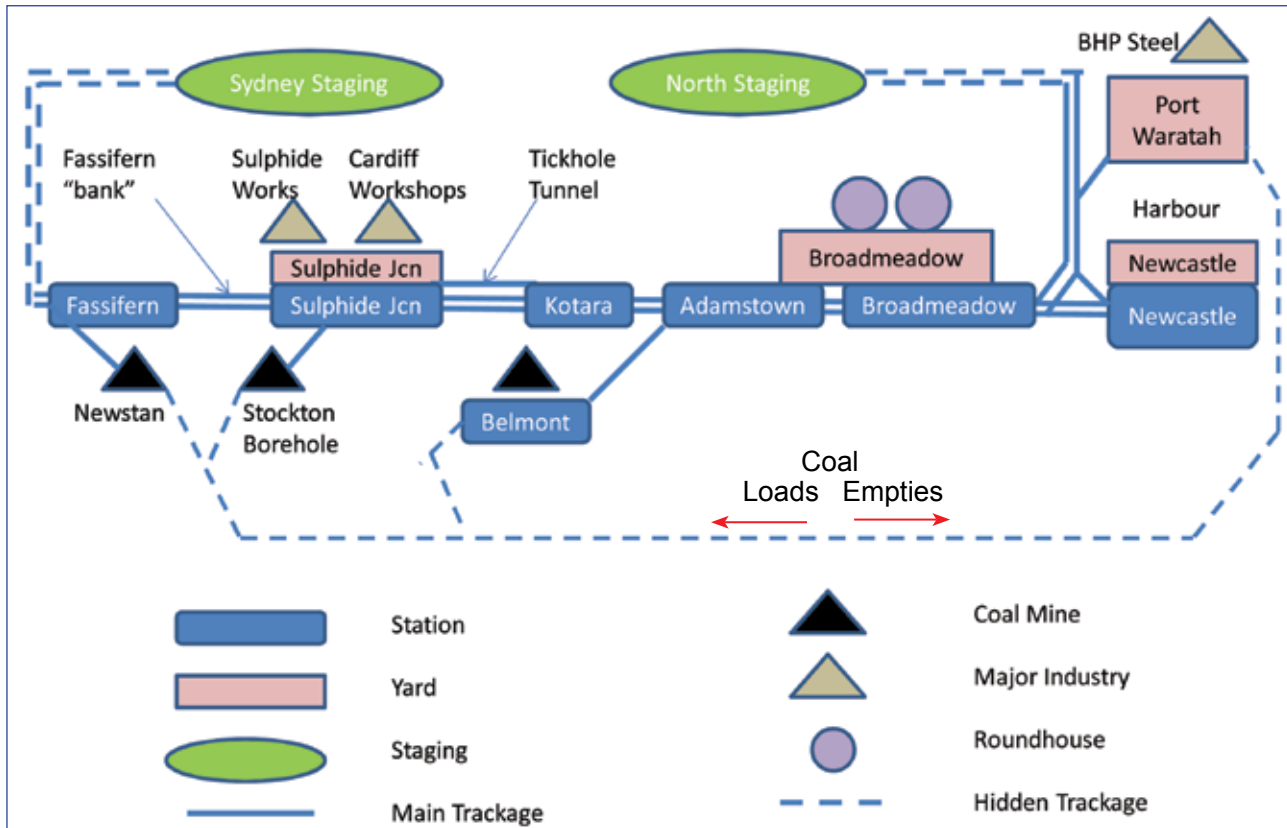
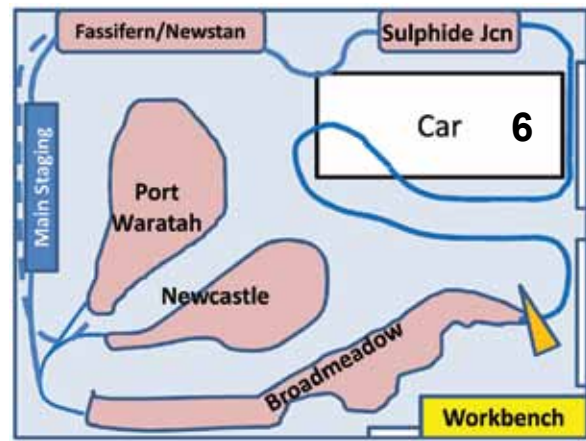
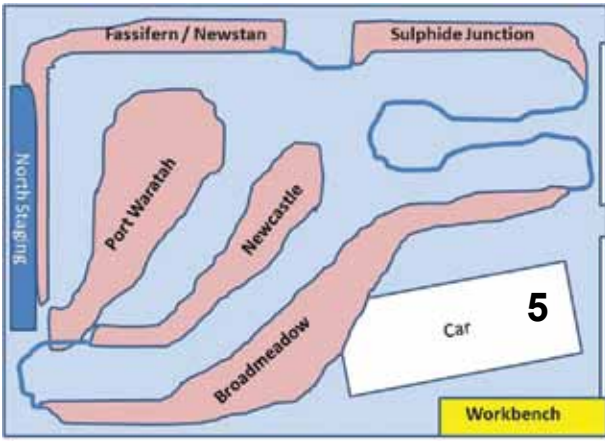


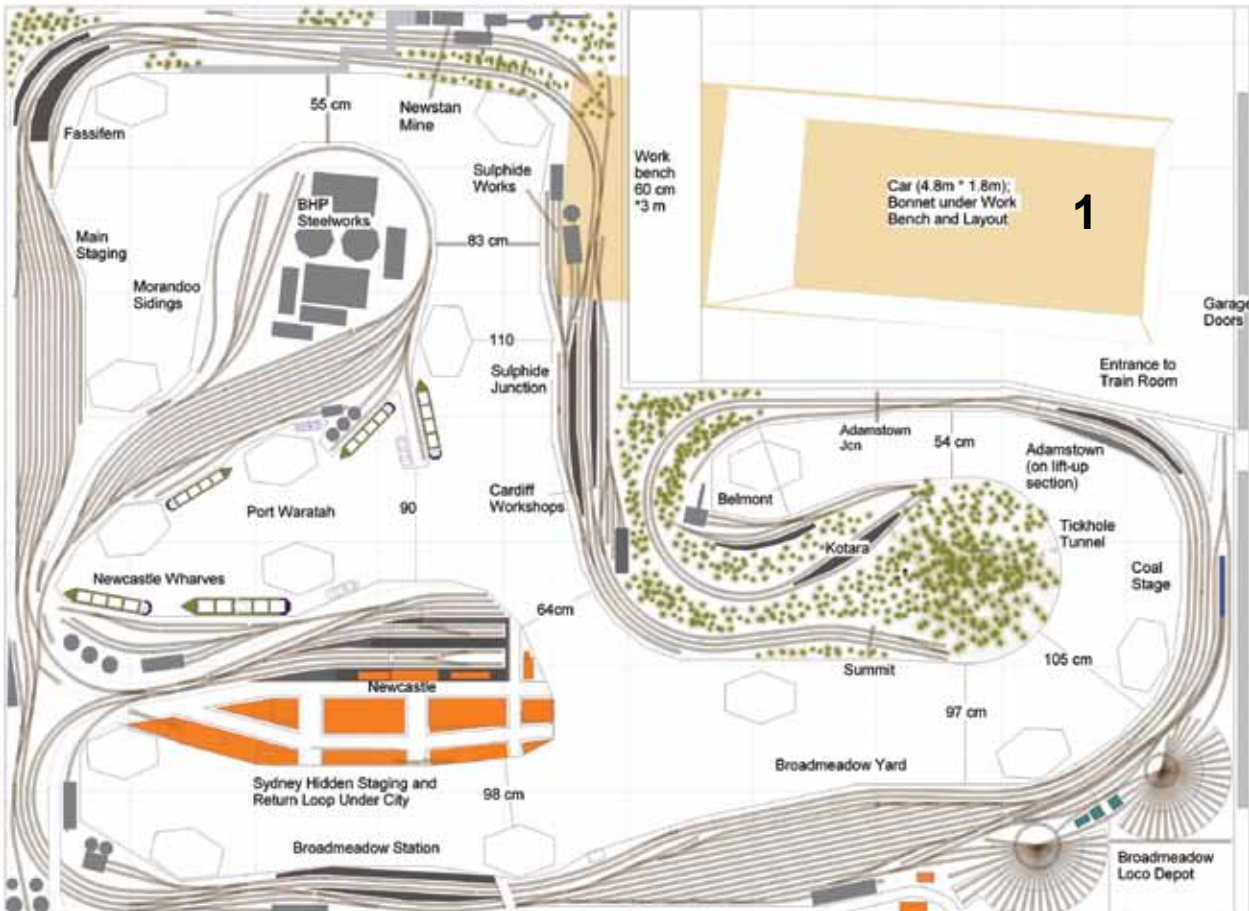
Figure 11. Garry selected key Layout Design Elements from the prototype in creating a schematic diagram of his future layout. Although some stations could not be included, the remaining locations are in correct prototype order and relationship.



Option 5. This is a variant of Option 2, with some subtle changes to the design of Broadmeadow by re-arranging the tracks between there and Sulphide Junction. There is now ample space for both Newcastle and Port Waratah as well as more space for Broadmeadow with a more prototypical track arrangement. This also includes a longer mainline run than Option 2 but retains the open staging for the north staging yard, with Sydney staging under Newcastle. As with most of the other options, the drop-down Newcastle harbor allows access when required to the tracks at Port Waratah and Newcastle Port. If necessary, the layout can be operated with the car still in the garage.

Option 6. The final option is similar to Option 5, but switches the car space back to the right-hand door (but the workshop remains). This allows a long main line run with a longer peninsula, allowing an extra station (Cardiff) to be included. However it requires a 2.7 m (8' 10") long section of the layout behind the roller door to be removable in order for the car to enter the garage. The car would have to be removed to allow operations. While producing significant operator space, the workshop area and visitor space is somewhat cramped.

Detailed drawings: Minor grid 200 mm, Major grid 1 meter



The Calabash Terminal Railroad

Exhibition layout demonstrates interesting ops in small space

by Lamont Heppe

The Calabash Terminal Rail Road (CTRR) was designed with the following goals in mind:

- Introduce people to the hobby
- Demonstrate that you don't need lots of space to enjoy the hobby
- Be portable so it could go to local shows and community events
- Be easily set up and fit in the back of my Jeep Liberty

Setting the time and place

The CTRR is set in the coastal area surrounding Calabash, NC, in the late 1950s.



An overall view of the S scale Calabash Terminal Railroad in operation at a show. The most recent addition is the harbor area nearest camera, including a car float for interchange. Note the compromise to save the space otherwise needed for a frog and switch points leading onto the two-track car float: it simply slides from side to side on the "water" surface to access each track. Pilings on either side set the position. All photos by the author.

Historical research showed that the Whiteville Railroad & Lumber Company ran from Whiteville, NC, to the docks at Calabash (then known as Pea Landing). This railroad was gone by the late 1920s, however.

Another railroad, the Wilmington & Brunswick Southern (W&BS), planned on building to Calabash but never quite made it. However, adding the W&BS to the layout gives the CTRR a plausible interconnection to the rest of the world.

Consequently, the S scale CTRR is a free-lanced road developed following Tony Koester's advice that it should be set in a time and place with plausible names to help viewers understand their locale and mission. The name sets the locale and typical local industries reinforce this.

Scenery is Carolina coastal, flat and sandy. In cash-strapped shortline fashion, second-hand engines retain original paint schemes with the CTRR name placed over the blanked-out original. In real life, fresh seafood can be purchased dockside in Calabash and the town bills itself as the "Seafood Capital of the World." This motto is included in the CTRR logo surrounding the image of a shrimp.

Maximizing operating activity

The track plan (page 29) was designed using CadRail to maximize operational challenges with short tail tracks, a diamond, and a single limited runaround track. Building flats and hints of industries that are imagined to extend off the layout expand the number of industries on this compact layout. The two wharves are named for their major use, but allow for many car types. The W&BS connection and the Pea Landing car float provide outlets for traffic and possible through traffic.

There are no grades on the layout. Curves are 27" radius minimum. Track is a mix of S scale flex track from S Helper Service and American Models. Switches are American Models with Caboose Industries ground throws. As this is an industrial area, the track is at ground level with minimum ballast and some ballast on top of the ties.

Lighting and Benchwork Ideas

As seen on LDSIG tours

Photos and text by LDSIG Members



(Left) Bruce Chubb has updated his upper-deck lighting with LED (Light Emitting Diode) Flood Lights. The lights are available in various color temperatures: Bruce elected to use 5000K* (like Chroma 50 fluorescents) and painted the underside of the bench work sky blue to create a natural lighting effect. The layout room stays much cooler as the LEDs dissipate significantly less power as heat. *Photo and text by Seth Neumann from Grand Rapids LDSIG Layout Tour.* (*K refers to “Kelvin”, a measure of the “color temperature” of light. See LDJ-52, page 34, footnote 9 for more explanation. 5000K is closer to sunlight than traditional incandescent or fluorescent lamps.)

(Below) Tom Businger uses CFLs (Compact Fluorescent Lights – “twisty” bulbs) on his Pennsy Elmira Branch concealed behind a valence to even the light. Though hard to appreciate in the photo, in the real world this gives even illumination. The “hot spot” in the center of the photo is from a lamp that will eventually be hidden by scenery.

Upper areas are painted a reflective white so that most of the light falls onto the layout. One can vary intensity and highlight scenes by choosing different wattage lights and adjusting the spacing. [This could also be used with LED lighting. One possibility is to install LEDs facing up and reflect off the white painted valence or upper bench work to diffuse the discrete points of light. Color can be subtly influenced by varying the color of the reflecting paint (as in photo above).] *Photo and text by Seth Neumann from Cleveland LDSIG Layout Tour.*



(Above) White-painted hardboard baffles installed at 12” intervals keep the fluorescent lights out of view behind the valence at Ralph Moxley’s Ann Arbor Railroad. The baffles also help diffuse the light somewhat. *Photo and text by Seth Neumann from Grand Rapids LDSIG Layout Tour.*

